The O'Leary Series

Microsoft® Office 2007

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ABOUT THE AUTHORS



Tim and Linda O'Leary live in the American Southwest and spend much of their time engaging instructors and students in conversation about learning. In fact, they have been talking about learning for over 25 years. Something in those early conversations convinced them to write a book, to bring their interest in the learning process to the printed page. Today, they are as concerned as ever about learning, about technology, and about the challenges of presenting material in new ways, in terms of both content and method of delivery.

A powerful and creative team, Tim combines his 25 years of classroom teaching experience with Linda's background as a consultant and corporate trainer. Tim has taught courses at Stark Technical College in Canton, Ohio, and at Rochester Institute of Technology in upstate New York, and is currently a professor at Arizona State University in Tempe, Arizona. Linda offered her expertise at ASU for several years as an academic advisor. She also presented and developed materials for major corporations such as Motorola, Intel, Honeywell, and AT&T, as well as various community colleges in the Phoenix area.

Tim and Linda have talked to and taught numerous students, all of them with a desire to learn something about computers and applications that make their lives easier, more interesting, and more productive.

Each new edition of an O'Leary text, supplement, or learning aid has benefited from these students and their instructors who daily stand in front of them (or over their shoulders). The O'Leary Series is no exception.

DEDICATION

We dedicate this edition to Nicole and Katie who have brought love and joy to our lives.

Preface

The 20th century brought us the dawn of the digital information age and unprecedented changes in information technology. There is no indication that this rapid rate of change will be slowing—it may even be increasing. As we begin the 21st century, computer literacy is undoubtedly becoming a prerequisite in whatever career you choose.

The goal of the O'Leary Series is to provide you with the necessary skills to efficiently use these applications. Equally important is the goal to provide a foundation for students to readily and easily learn to use future versions of this software. This series does this by providing detailed step-by-step instructions combined with careful selection and presentation of essential concepts.

Times are changing, technology is changing, and this text is changing too. As students of today, you are different from those of yesterday. You put much effort toward the things that interest you and the things that are relevant to you. Your efforts directed at learning application programs and exploring the Web seem, at times, limitless.

On the other hand, students often can be shortsighted, thinking that learning the skills to use the application is the only objective. The mission of the series is to build upon and extend this interest by not only teaching the specific application skills but by introducing the concepts that are common to all applications, providing students with the confidence, knowledge, and ability to easily learn the next generation of applications.

Instructor's Resource CD-ROM

The **Instructor's Resource CD-ROM** contains a computerized Test Bank, an Instructor's Manual, and PowerPoint Presentation Slides. Features of the Instructor's Resource are described below.

- **Instructor's Manual CD-ROM** The Instructor's Manual, authored by Harry Knight of Franklin University, contains lab objectives, concepts, outlines, lecture notes, and command summaries. Also included are answers to all end-of-chapter material, tips for covering difficult materials, additional exercises, and a schedule showing how much time is required to cover text material.
- **Computerized Test Bank** The test bank, authored by Harry Knight, contains over 1,300 multiple choice, true/false, and discussion questions. Each question will be accompanied by the correct answer, the level of learning difficulty, and corresponding page references. Our flexible EZ Test software allows you to easily generate custom exams.
- **PowerPoint Presentation Slides** The presentation slides, authored by Linda Mehlinger of Morgan State University, include lab objectives, concepts, outlines, text figures, and speaker's notes. Also included are bullets to illustrate key terms and FAQs.

Online Learning Center/Web Site

Found at **www.mhhe.com/oleary,** this site provides additional learning and instructional tools to enhance the comprehension of the text. The OLC/Web Site is divided into these three areas:

- **Information Center** Contains core information about the text, supplements, and the authors.
- **Instructor Center** Offers instructional materials, downloads, and other relevant links for professors.
- **Student Center** Contains data files, chapter competencies, chapter concepts, self-quizzes, flashcards, additional Web links, and more.

Simnet Assessment for Office Applications

Simnet Assessment for Office Applications provides a way for you to test students' software skills in a simulated environment. Simnet is available for Microsoft Office 2007 and provides flexibility for you in your applications course by offering:

Pre-testing options

Post-testing options

Course placement testing

Diagnostic capabilities to reinforce skills

Web delivery of test

MCAS preparation exams

Learning verification reports

For more information on skills assessment software, please contact your local sales representative, or visit us at **www.mhhe.com**.

O'Leary Series

The O'Leary Application Series for Microsoft Office is available separately or packaged with *Computing Essentials*. The O'Leary Application Series offers a step-by-step approach to learning computer applications and is available in both brief and introductory versions. The introductory books are MCAS Certified and prepare students for the Microsoft Certified Applications Specialist exam.

Computing Concepts

Computing Essentials 2008 offers a unique, visual orientation that gives students a basic understanding of computing concepts. *Computing Essentials* encourages "active" learning with exercises, explorations, visual illustrations, and inclusion of screen shots and numbered steps. While combining the "active" learning style with current topics and technology, this text provides an accurate snapshot of computing trends. When bundled with software application lab manuals, students are given a complete representation of the fundamental issues surrounding the personal computing environment.

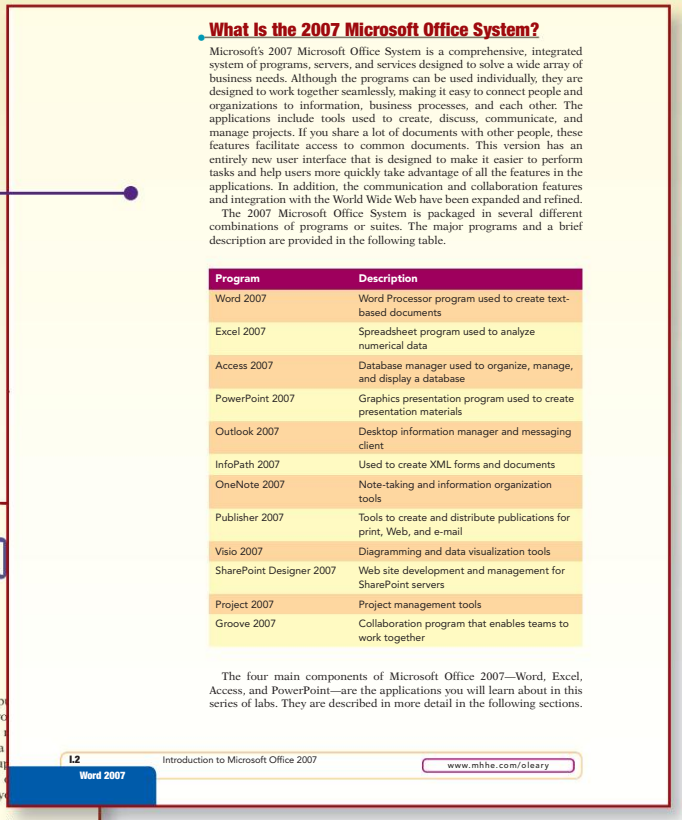
GUIDE TO THE O'LEARY SERIES

The O'Leary Series is full of features designed to make learning productive and hassle free. On the following pages you will see the kind of engaging, helpful pedagogical features that have helped countless students master Microsoft Office Applications.

EASY-TO-FOLLOW INTRODUCTORY MATERIALS

INTRODUCTION TO MICROSOFT OFFICE 2007

Each text in the O'Leary Series opens with an Introduction to Office 2007, providing a complete overview of this version of the Microsoft Office Suite.



What Is the 2007 Microsoft Office System?

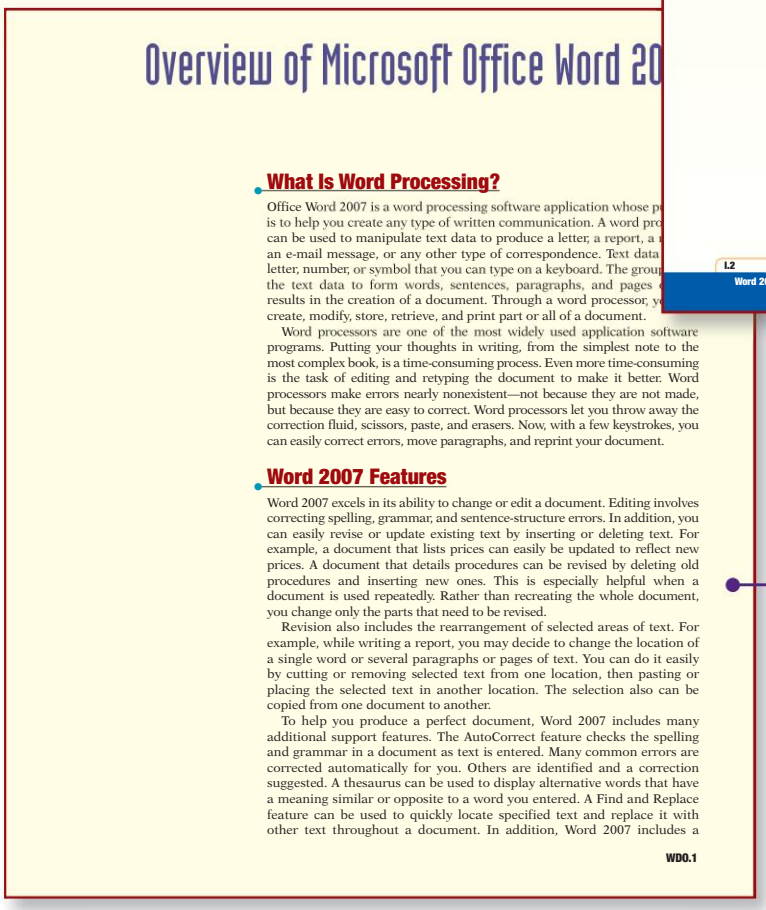
Microsoft's 2007 Microsoft Office System is a comprehensive, integrated system of programs, servers, and services designed to solve a wide array of business needs. Although the programs can be used individually, they are designed to work together seamlessly, making it easy to connect people and organizations to information, business processes, and each other. The applications include tools used to create, discuss, communicate, and manage projects. If you share a lot of documents with other people, these features facilitate access to common documents. This version has an entirely new user interface that is designed to make it easier to perform tasks and help users more quickly take advantage of all the features in the applications. In addition, the communication and collaboration features and integration with the World Wide Web have been expanded and refined.

The 2007 Microsoft Office System is packaged in several different combinations of programs or suites. The major programs and a brief description are provided in the following table.

Program	Description
Word 2007	Word Processor program used to create text-based documents
Excel 2007	Spreadsheet program used to analyze numerical data
Access 2007	Database manager used to organize, manage, and display a database
PowerPoint 2007	Graphics presentation program used to create presentation materials
Outlook 2007	Desktop information manager and messaging client
InfoPath 2007	Used to create XML forms and documents
OneNote 2007	Note-taking and information organization tools
Publisher 2007	Tools to create and distribute publications for print, Web, and e-mail
Visio 2007	Diagramming and data visualization tools
SharePoint Designer 2007	Web site development and management for SharePoint servers
Project 2007	Project management tools
Groove 2007	Collaboration program that enables teams to work together

The four main components of Microsoft Office 2007—Word, Excel, Access, and PowerPoint—are the applications you will learn about in this series of labs. They are described in more detail in the following sections.

L2 Introduction to Microsoft Office 2007 www.mhhe.com/oleary
Word 2007



Overview of Microsoft Office Word 20

What Is Word Processing?

Office Word 2007 is a word processing software application whose p
is to help you create any type of written communication. A word pro
can be used to manipulate text data to produce a letter, a report, a
an e-mail message, or any other type of correspondence. Text data
letter, number, or symbol that you can type on a keyboard. The group
the text data to form words, sentences, paragraphs, and pages
results in the creation of a document. Through a word processor, y
create, modify, store, retrieve, and print part or all of a document.

Word processors are one of the most widely used application software programs. Putting your thoughts in writing, from the simplest note to the most complex book, is a time-consuming process. Even more time-consuming is the task of editing and retyping the document to make it better. Word processors make errors nearly nonexistent—not because they are not made, but because they are easy to correct. Word processors let you throw away the correction fluid, scissors, paste, and erasers. Now, with a few keystrokes, you can easily correct errors, move paragraphs, and reprint your document.

Word 2007 Features

Word 2007 excels in its ability to change or edit a document. Editing involves correcting spelling, grammar, and sentence-structure errors. In addition, you can easily revise or update existing text by inserting or deleting text. For example, a document that lists prices can easily be updated to reflect new prices. A document that details procedures can be revised by deleting old procedures and inserting new ones. This is especially helpful when a document is used repeatedly. Rather than recreating the whole document, you change only the parts that need to be revised.

Revision also includes the rearrangement of selected areas of text. For example, while writing a report, you may decide to change the location of a single word or several paragraphs or pages of text. You can do it easily by cutting or removing selected text from one location, then pasting or placing the selected text in another location. The selection also can be copied from one document to another.

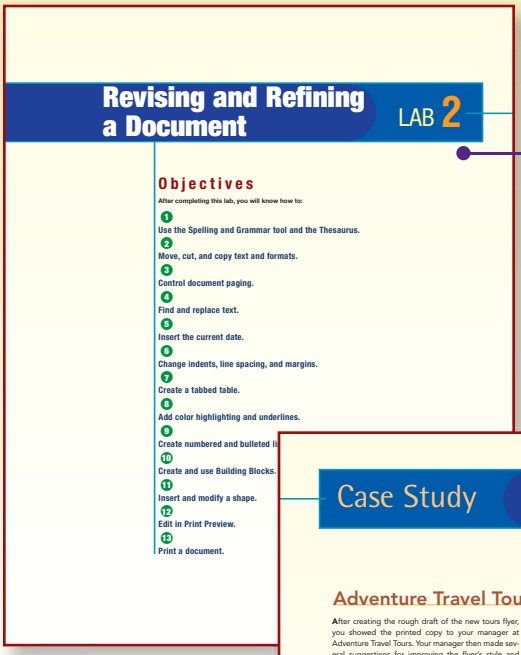
To help you produce a perfect document, Word 2007 includes many additional support features. The AutoCorrect feature checks the spelling and grammar in a document as text is entered. Many common errors are corrected automatically for you. Others are identified and a correction suggested. A thesaurus can be used to display alternative words that have a meaning similar or opposite to a word you entered. A Find and Replace feature can be used to quickly locate specified text and replace it with other text throughout a document. In addition, Word 2007 includes a

WD0.1

INTRODUCTION TO WORD 2007

Each text in the O'Leary Series also provides an overview of the specific application features.

ENGAGING LAB INTRODUCTIONS


Revising and Refining a Document LAB 2

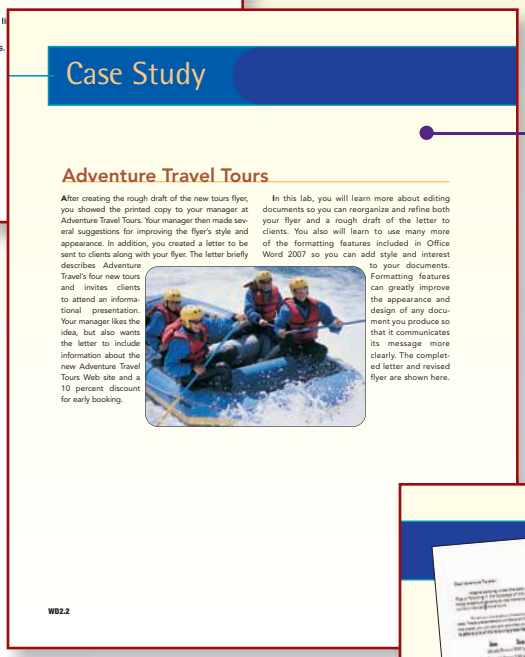
Objectives

After completing this lab, you will know how to:

1. Use the Spelling and Grammar tool and the Thesaurus.
2. Move, cut, and copy text and formats.
3. Control document paging.
4. Find and replace text.
5. Insert the current date.
6. Change indents, line spacing, and margins.
7. Create a tabbed table.
8. Add color highlighting and underlines.
9. Create numbered and bulleted li
10. Create and use Building Blocks.
11. Insert and modify a shape.
12. Edit in Print Preview.
13. Print a document.

OBJECTIVES

Each lab opens with a list of objectives clearly outlining skills covered in each lab.


Case Study

Adventure Travel Tours

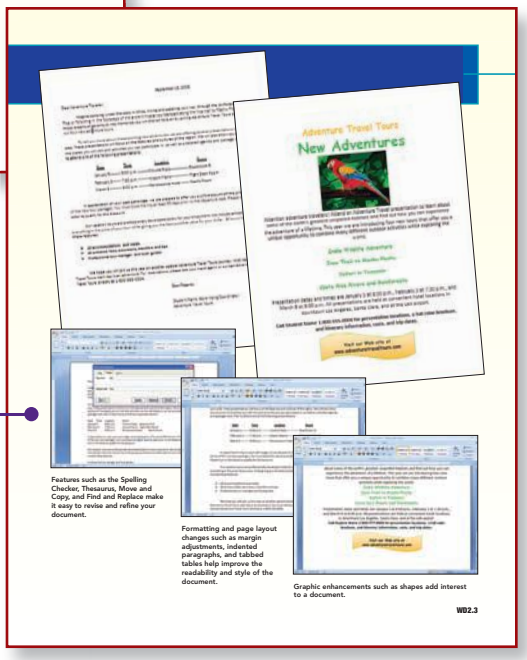
After creating the rough draft of the new tours flyer, you showed the printed copy to your manager at Adventure Travel Tours. Your manager then made several suggestions for improving the flyer's style and appearance. In addition, you created a letter to be sent to clients along with your flyer. The letter briefly describes Adventure Travel's four new tours and invites clients to attend an informational presentation. Your manager likes the idea, but also wants the letter to include information about the new Adventure Travel Tours Web site and a 10 percent discount for early booking.

In this lab, you will learn more about editing documents so you can reorganize and refine both your flyer and a rough draft of the letter to clients. You also will learn to use many more of the formatting features included in Office Word 2007 so you can add style and interest to your documents. Formatting features can greatly improve the appearance and design of any document you produce so that it communicates its message more clearly. The completed letter and revised flyer are shown here.

WD2.2

CASE STUDIES

Case studies introduce a real-life setting that is interwoven throughout the lab. Four separate running cases provide the basis for understanding the use of applications.



FINAL SOLUTION

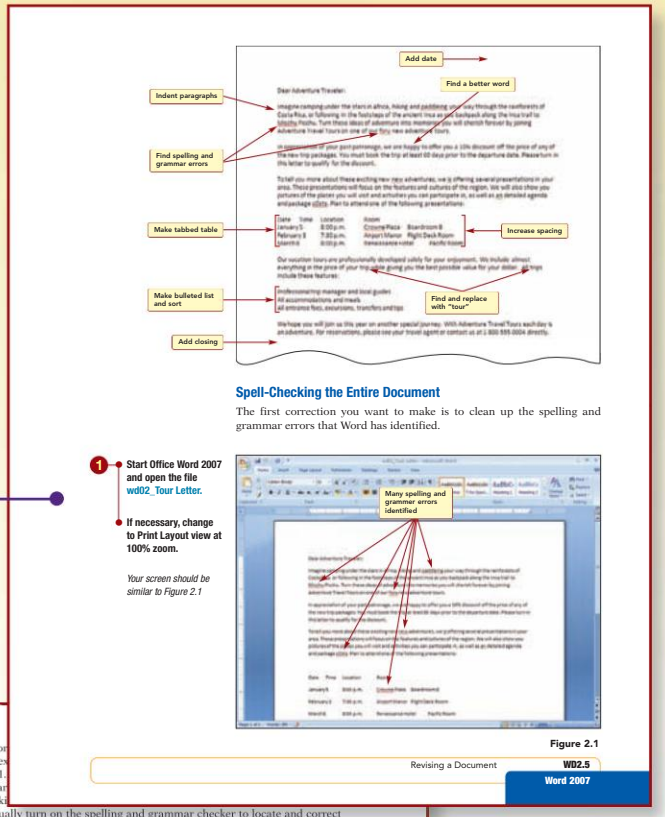
Screen shots of the major features and the final document allow you to preview what will be accomplished.

STEP-BY-STEP INSTRUCTION

NUMBERED AND BULLETED STEPS

Numbered and bulleted steps provide clear step-by-step instructions on how to complete a task, or series of tasks.

All steps and bullets appear in the left-hand margin, making it easy not to miss a step.



Spell-Checking the Entire Document

The first correction you want to make is to clean up the spelling and grammar errors that Word has identified.

1. Start Office Word 2007 and open the file wd02_Tour Letter.
2. If necessary, change to Print Layout view at 100% zoom.

Your screen should be similar to Figure 2.1

Figure 2.1

manually turn on the spelling and grammar checker to locate and correct all the errors in the document at once.

2. Open the Review tab.
   Click .

Another Method

If necessary, select the Check grammar option to turn on grammar checking.

Additional Information
You also can click the Spelling and Grammar status icon to move to the next spelling or grammar error and open the spelling context menu.

Your screen should be similar to Figure 2.2

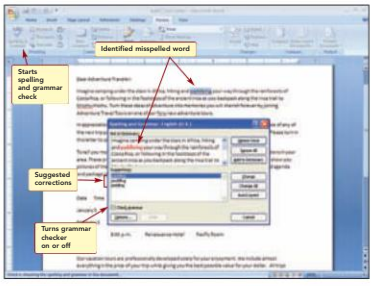


Figure 2.2

Additional Information
Because the contents of the list are determined only by spelling, any instances of terms that seem inappropriate in context are completely coincidental.

The Spelling and Grammar dialog box is displayed, and the spelling and grammar checker has immediately located the first word that may be misspelled, "paddleing." The sentence with the misspelled word in red is displayed in the Not in Dictionary text box, and the word is highlighted in the document.

The Suggestions list box displays the words the spelling checker has located in the dictionary that most closely match the misspelled word. The most likely match is highlighted. Sometimes the spelling checker does not display any suggested replacements. This occurs when it cannot locate any words in the dictionaries that are similar in spelling. If no suggestions are provided, the Not in Dictionary text box simply displays the word that is highlighted in the text.

Additional Information
The Change option replaces the same word throughout the document with the word you select in the Suggestions box.

To change the spelling of the word to one of the suggested spellings, highlight the correct word in the list and then click Change. If there were no suggested replacements, and you did not want to use any of the option buttons, you could edit the word yourself by typing the correction in the Not in Dictionary box. In this case, the correct replacement, "paddling," is already highlighted.

AND EASY-TO-FOLLOW DESIGN

TABLES

Tables provide quick summaries of concepts and procedures for specific tasks.

To Collapse	Do This
Text below a specific heading level	Select the lowest heading you want to display from the drop-down menu.
All subheadings and body text under a heading	Double-click next to the heading.
Text under a heading, one level at a time	Click the heading text, and then click Collapse.
All body text	Select the heading level you want to see from the drop-down menu.
All body text except first line	Click .
To Expand	**Do This**
All headings and body text	Select Show All Levels from the drop-down menu.
All collapsed subheadings and body text under a heading	Double-click next to the heading.
Collapsed text under a heading, one level at a time	Click the heading text; then click Expand.

To change the amount of information displayed, you will collapse the display of the text under the Geography and Climate heading first. Then you will collapse everything below a level 3 heading so you can quickly check the report organization.

1. Double-click of the Tanzania Geography and Climate heading.
2. Open the drop-down list.
3. Choose Level 3.

Your screen should be similar to Figure 3.8

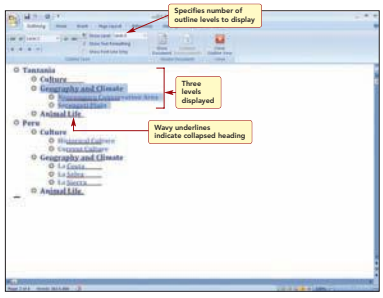


Figure 3.8

To correct the misspelled words and grammatical errors, you can use the context menu to correct each individual word or error, as you learned in Lab 1. However, in many cases, you may find it more efficient to wait until you are finished writing before you correct errors. Rather than continually breaking your train of thought to correct errors as you type, you can manually turn on the spelling and grammar checker to locate and correct all the errors in the document at once.

2. Open the Review tab.
   Click .

Another Method

If necessary, select the Check grammar option to turn on grammar checking.

Additional Information
You also can click the Spelling and Grammar status icon to move to the next spelling or grammar error and open the spelling context menu.

Your screen should be similar to Figure 2.2

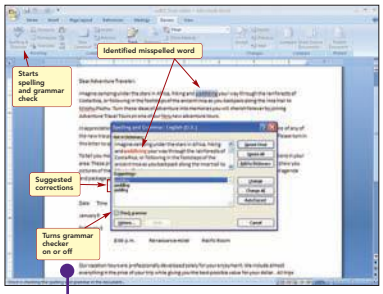


Figure 2.2

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The Spelling and Grammar dialog box is displayed, and the spelling and grammar checker has immediately located the first word that may be misspelled, "paddleing." The sentence with the misspelled word in red is displayed in the Not in Dictionary text box, and the word is highlighted in the document.

The Suggestions list box displays the words the spelling checker has located in the dictionary that most closely match the misspelled word. The most likely match is highlighted. Sometimes the spelling checker does not display any suggested replacements. This occurs when it cannot locate any words in the dictionaries that are similar in spelling. If no suggestions are provided, the Not in Dictionary text box simply displays the word that is highlighted in the text.

Additional Information
The option replaces the same word throughout the document with the word you select in the Suggestions box.

To change the spelling of the word to one of the suggested spellings, highlight the correct word in the list and then click . If there were no suggested replacements, and you did not want to use any of the option buttons, you could edit the word yourself by typing the correction in the Not in Dictionary box. In this case, the correct replacement, "paddling," is already highlighted.

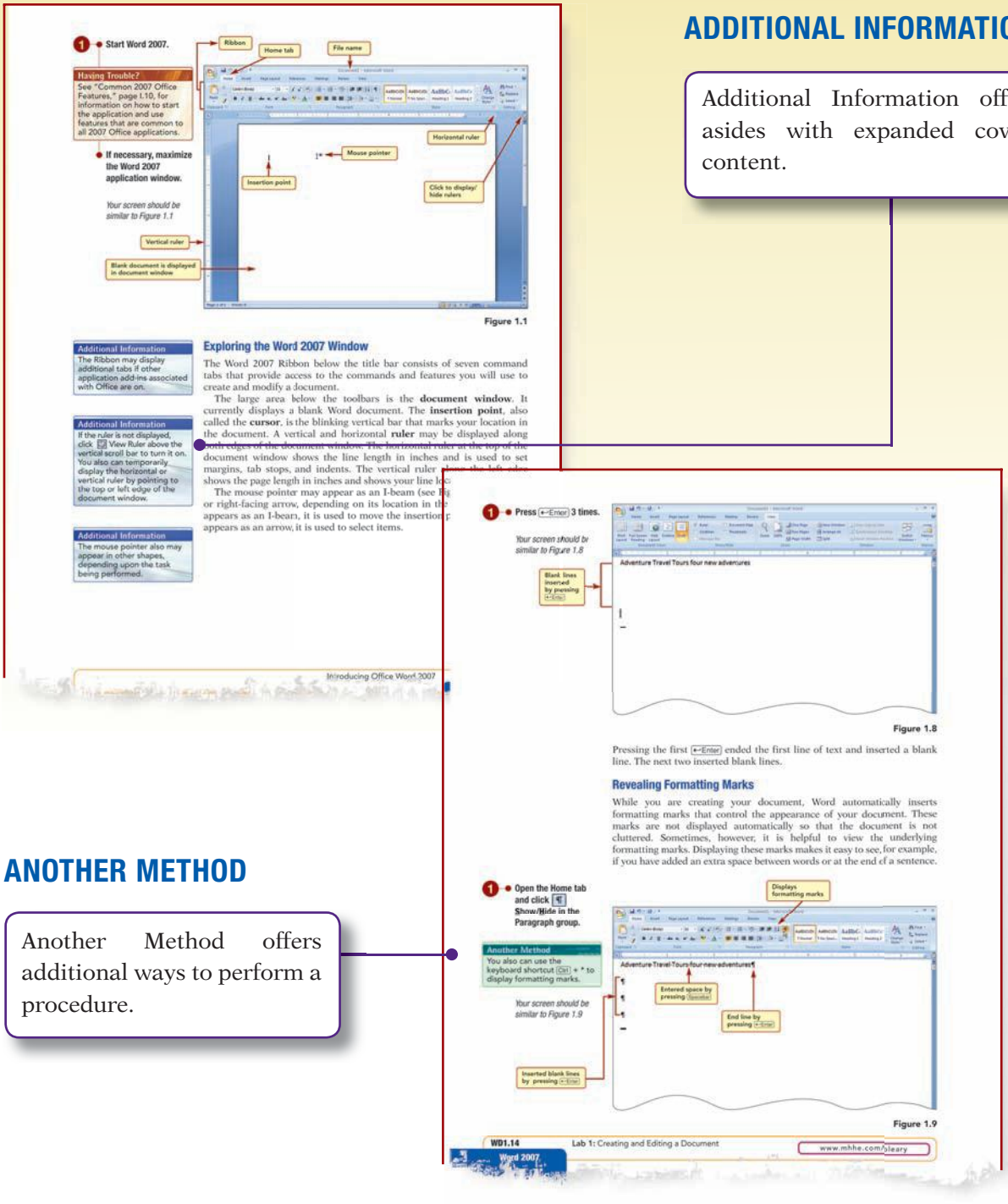
FIGURES

Large screen figures make it easy to identify elements and read screen content.

SCREEN CALLOUTS

Meaningful screen callouts identify the results of the steps as well as reinforce the associated concept.

SUPPORTIVE MARGIN NOTES



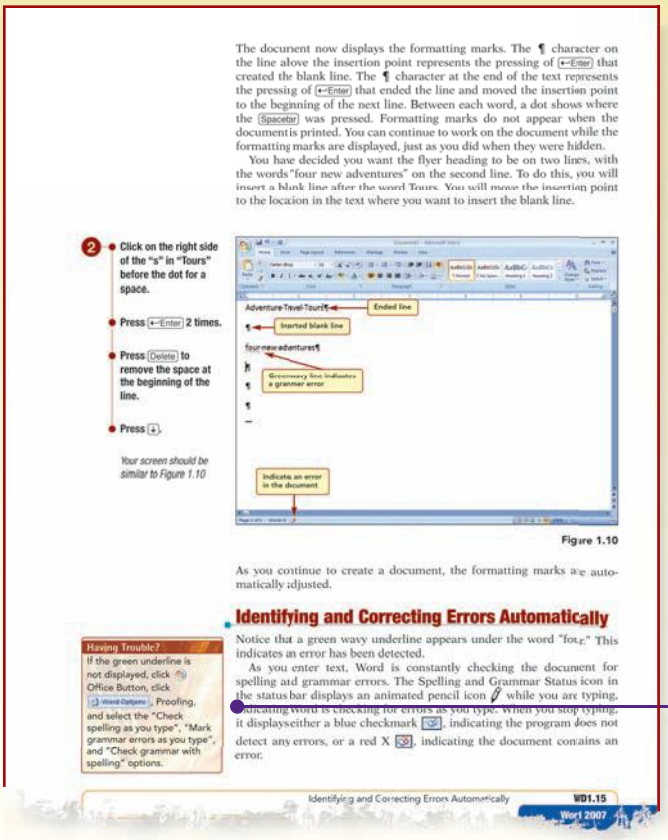
ADDITIONAL INFORMATION

Additional Information offers brief asides with expanded coverage of content.

ANOTHER METHOD

Another Method offers additional ways to perform a procedure.

SUPPORTIVE MARGIN NOTES (CONTINUED)



The document now displays the formatting marks. The ¶ character on the line above the insertion point represents the pressing of Enter that created the blank line. The ¶ character at the end of the text represents the pressing of Enter that ended the line and moved the insertion point to the beginning of the next line. Between each word, a dot shows where the Spacebar was pressed. Formatting marks do not appear when the document is printed. You can continue to work on the document while the formatting marks are displayed, just as you did when they were hidden.

You have decided you want the flyer heading to be on two lines, with the words "four new adventures" on the second line. To do this, you will insert a blank line after the word Tours. You will move the insertion point to the location in the text where you want to insert the blank line.

2 Click on the right side of the "s" in "Tours" before the dot for a space.
Press Enter 2 times.
Press Delete to remove the space at the beginning of the line.
Press ↓.
Your screen should be similar to Figure 1.10

Adventure Travel Tours¶ — Ended line
Inserted blank line
four new adventures¶
Grammar flag indicates a grammar error
Indicates an error in the document

Figure 1.10

As you continue to create a document, the formatting marks are automatically adjusted.

Identifying and Correcting Errors Automatically

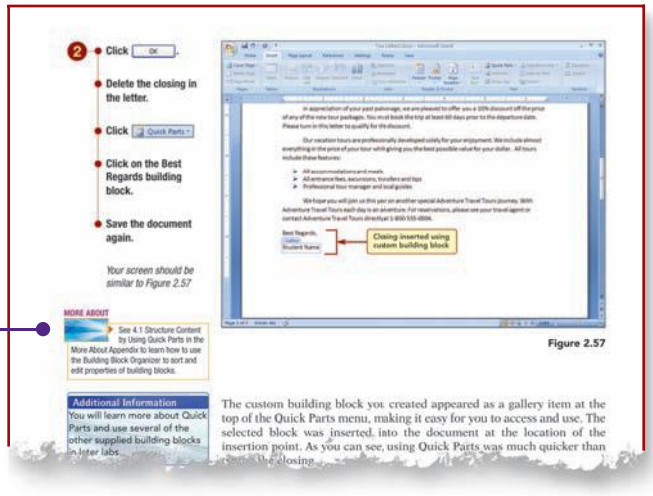
Having Trouble? If the green underline is not displayed, click Office Button, click Word Options, Proofing, and select the "Check spelling as you type", "Mark grammar errors as you type", and "Check grammar with spelling" options.

Notice that a green wavy underline appears under the word "four." This indicates an error has been detected.

As you enter text, Word is constantly checking the document for spelling and grammar errors. The Spelling and Grammar Status icon in the status bar displays an animated pencil icon while you are typing, indicating Word is checking for errors as you type. When you stop typing, it displays either a blue checkmark, indicating the program does not detect any errors, or a red X, indicating the document contains an error.

HAVING TROUBLE

Having Trouble helps resolve potential problems as students work through each lab.



2 Click OK.
Delete the closing in the letter.
Click Quick Parts.
Click on the Best Regards building block.
Save the document again.
Your screen should be similar to Figure 2.57

Closing inserted using custom building block

Figure 2.57

MORE ABOUT — See 4.1 Structure Content by Using Quick Parts in the More About Appendix to learn how to use the Building Block Organizer to sort and edit properties of building blocks.

Additional Information You will learn more about Quick Parts and use several of the other supplied building blocks in later labs.

The custom building block you created appeared as a gallery item at the top of the Quick Parts menu, making it easy for you to access and use. The selected block was inserted into the document at the location of the insertion point. As you can see, using Quick Parts was much quicker than typing the closing

MORE ABOUT

New to this edition, the More About icon directs students to the More About appendix found at the end of the book. Without interrupting the flow of the text, this appendix provides additional coverage required to meet MCAS certification.

REAL-WORLD APPLICATION



The default range setting, All, is the correct setting. In the Copies section, the default setting of one copy of the document is acceptable. You will print using the default print settings.

2. If you need to change the selected printer to another printer, open the Name drop-down list box and select the appropriate printer (your instructor will tell you which printer to select).
   Click OK.

Your printer should be printing the document. The printed copy of the flyer should be similar to the document shown in the Case Study at the beginning of the lab.

Exiting Word

You are finished working on the flyer for now and want to save the last few changes you have made to the document and close the Word application. The Exit Word command in the File menu is used to quit the Word program. Alternatively, you can click the Close button in the application window title bar. If you attempt to close the application without first saving your document, Word displays a warning asking if you want to save your work. If you do not save your work and you exit the application, any changes you made since last saving it are lost.

Another Method

1. Click Close.
   Click Yes to save the changes you made to the file.

The Windows desktop is visible again.

If multiple Word documents are open, clicking closes the application window containing the document you are viewing only.

Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Food Service Manager

Have you noticed flyers around your campus advertising job positions? Many of these jobs are in the food service industry. Food service managers are traditionally responsible for overseeing the kitchen and dining room. However, these positions increasingly involve administrative tasks, including recruiting new employees. As a food service manager, your position would likely include creating newspaper notices and flyers to attract new staff. These flyers should be eye-catching and error-free. The typical salary range of a food service manager is $34,000 to $41,700. Demand for skilled food service managers is expected to increase through 2010.

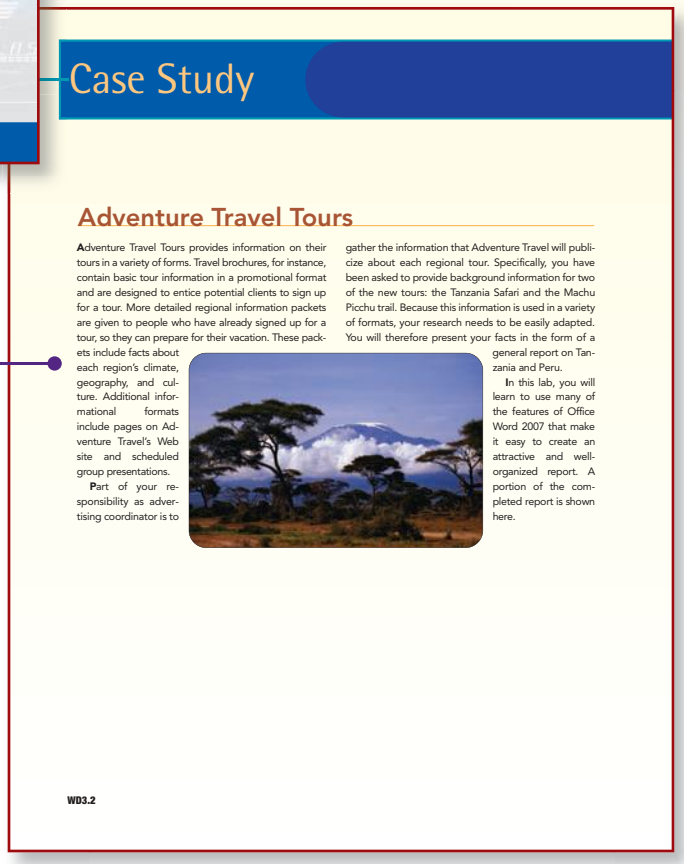
FOCUS ON CAREERS

Focus on Careers provides an example of how the material covered may be applied in the "real world."

Each lab highlights a specific career, ranging from forensic science technician to food services manager, and presents job responsibilities and salary ranges for each.

CONTINUING CASE STUDIES

Within each series application, the same Case Study is used to illustrate concepts and procedures.



Case Study

Adventure Travel Tours

Adventure Travel Tours provides information on their tours in a variety of forms. Travel brochures, for instance, contain basic tour information in a promotional format and are designed to entice potential clients to sign up for a tour. More detailed regional information packets are given to people who have already signed up for a tour, so they can prepare for their vacation. These packets include facts about each region's climate, geography, and culture. Additional informational formats include pages on Adventure Travel's Web site and scheduled group presentations.

Part of your responsibility as advertising coordinator is to gather the information that Adventure Travel will publicize about each regional tour. Specifically, you have been asked to provide background information for two of the new tours: the Tanzania Safari and the Machu Picchu trail. Because this information is used in a variety of formats, your research needs to be easily adapted. You will therefore present your facts in the form of a general report on Tanzania and Peru.

In this lab, you will learn to use many of the features of Office Word 2007 that make it easy to create an attractive and well-organized report. A portion of the completed report is shown here.

WD3.2

AND INTEGRATION

WORKING TOGETHER LABS

At the completion of the brief and introductory texts, a final lab demonstrates the integration of Microsoft Office applications. Each Working Together lab also includes end-of-chapter materials.

Working Together 1: Word 2007 and Your Web Browser

Case Study

Adventure Travel Tours

The Adventure Travel Tours Web site is used to promote its products and broaden its audience of customers. In addition to the obvious marketing and sales potential, it provides an avenue for interaction between the company and the customer to improve customer service. The company also uses the Web site to provide articles of interest to customers. The articles, which include topics such as travel background information and descriptions, changes on a monthly basis as an added incentive for readers to return to the site.

You want to use the flyer you developed to promote the new tours and presentations on the Web site. To do this, you will use Word 2007's Web-editing features that help you create a Web page quickly and easily. While using the Web-editing features, you will be working with Word and with a Web browser application. This capability of all 2007 Microsoft Office applications to work together and with other applications makes it easy to share and exchange information between applications. Your completed Web pages are shown here.

Note: The Working Together tutorial is designed to show how two applications work together and to present a basic introduction to creating Web pages.



2 Switch to the New Tour Presentations window.

Add the following text to the end of the last paragraph: **Find out about presentation locations, dates, and times.**

Select the text "locations, dates, and times."

Open the Insert tab.

Select Hyperlink from the Links group.



Your screen should be similar to Figure 12

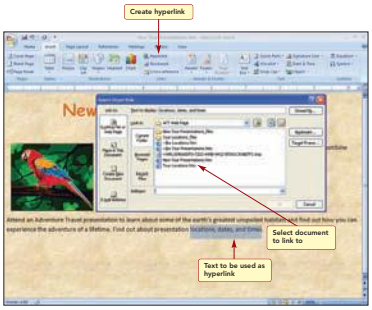


Figure 12

From the Insert Hyperlink dialog box, you need to specify the name of the document you want the link to connect to.

3 Select Tour Locations.htm from the file list.

Click OK.

Save the document.

Your screen should be similar to Figure 13

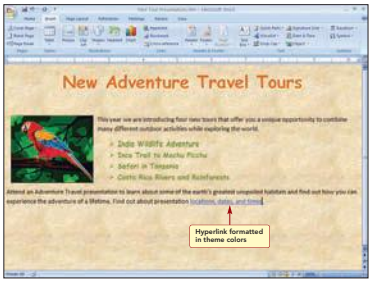


Figure 13

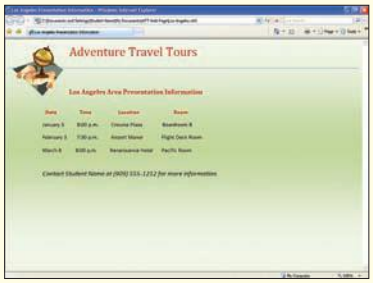
Lab Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Adding a New Web Page ★

1. You want to continue working on the Web pages about the new tour presentations for the Adventure Travel Web site. Your next step is to create links from each location on the Presentation Locations Web page to information about each location's presentation date and times. Your completed Web page for the Los Angeles area should be similar to the one shown here.



   a. In Word, open the Web page file Tour Locations you created in this lab.
   b. Open the document wdwt_LosAngeles. Save the document as a Web page to the ATT Web Page folder with the file name LosAngeles and a page title of **Los Angeles Presentation Information**.
   c. Change the page color to a gradient fill effect of your choice. Change the first title line to the Title style and the second title line to a Heading 1 style. Change the title lines to a color of your choice.
   d. Increase the font size of the table to 12 points. Add color to the table headings. Enhance the Web page with any features you feel are appropriate.
   e. Two lines below the table, add the text **Contact [your name] at (909) 555-1212 for more information.** Apply the Emphasis style to this line and increase the font size to 14 points.
   f. On the Tour Locations page, create a link from the Los Angeles text to the Los Angeles page. Test the link.
   g. Resave both Web pages and preview them in your browser. Print the Los Angeles Web page.
   h. Exit the browser and Word.

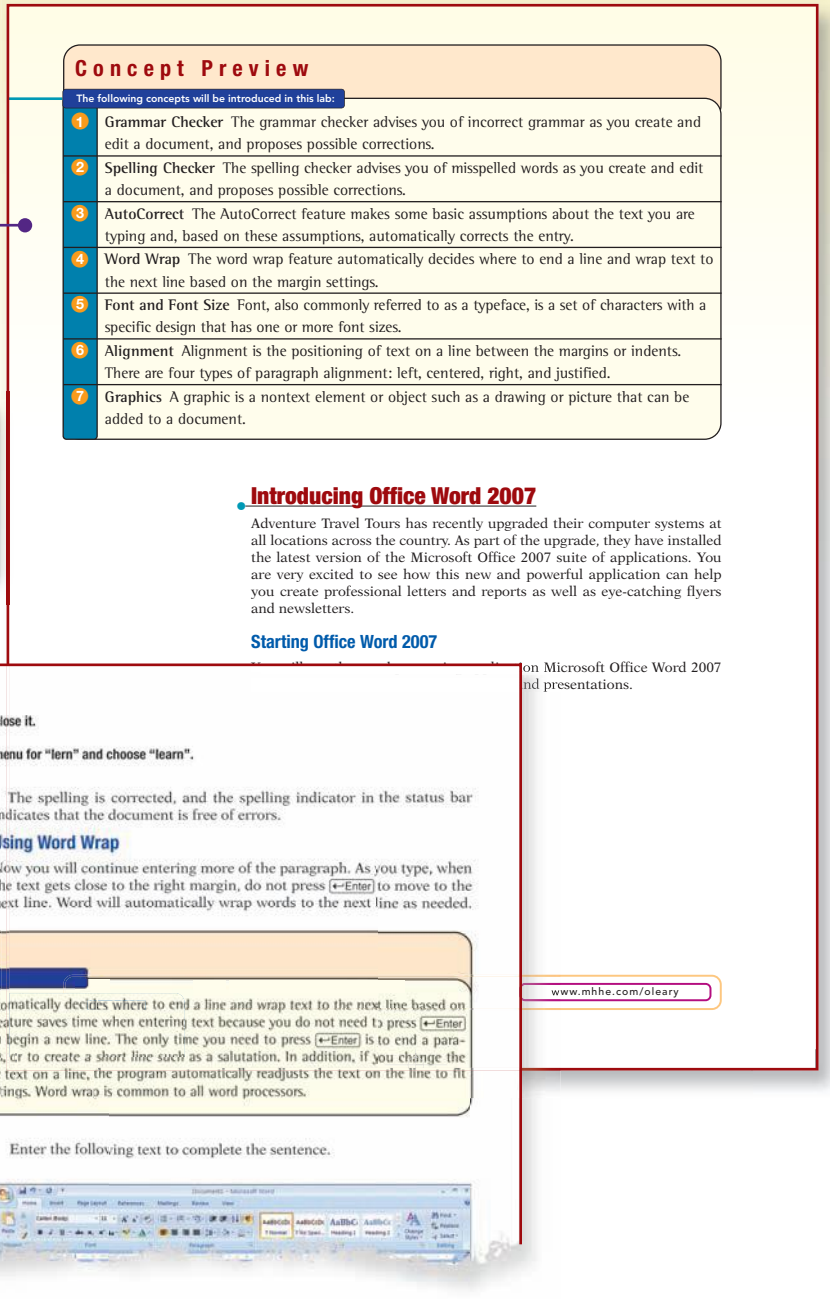
REINFORCED CONCEPTS

CONCEPT PREVIEW

Concept Previews provide an overview to the concepts that will be presented throughout the lab.

CONCEPT BOXES

Concept boxes appear throughout the lab providing clear, concise explanations and serving as a valuable study aid.



Concept Preview

The following concepts will be introduced in this lab:

1. **Grammar Checker** The grammar checker advises you of incorrect grammar as you create and edit a document, and proposes possible corrections.
2. **Spelling Checker** The spelling checker advises you of misspelled words as you create and edit a document, and proposes possible corrections.
3. **AutoCorrect** The AutoCorrect feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.
4. **Word Wrap** The word wrap feature automatically decides where to end a line and wrap text to the next line based on the margin settings.
5. **Font and Font Size** Font, also commonly referred to as a typeface, is a set of characters with a specific design that has one or more font sizes.
6. **Alignment** Alignment is the positioning of text on a line between the margins or indents. There are four types of paragraph alignment: left, centered, right, and justified.
7. **Graphics** A graphic is a nontext element or object such as a drawing or picture that can be added to a document.

Introducing Office Word 2007

Adventure Travel Tours has recently upgraded their computer systems at all locations across the country. As part of the upgrade, they have installed the latest version of the Microsoft Office 2007 suite of applications. You are very excited to see how this new and powerful application can help you create professional letters and reports as well as eye-catching flyers and newsletters.

Starting Office Word 2007

on Microsoft Office Word 2007
nd presentations.

3. Click outside the menu to close it.
- Open the spelling context menu for "lern" and choose "learn".

The spelling is corrected, and the spelling indicator in the status bar indicates that the document is free of errors.

Using Word Wrap

Now you will continue entering more of the paragraph. As you type, when the text gets close to the right margin, do not press ←Enter to move to the next line. Word will automatically wrap words to the next line as needed.

Concept 4

Word Wrap

4 The word wrap feature automatically decides where to end a line and wrap text to the next line based on the margin settings. This feature saves time when entering text because you do not need to press ←Enter at the end of a full line to begin a new line. The only time you need to press ←Enter is to end a paragraph, to insert blank lines, or to create a *short line such* as a salutation. In addition, if you change the margins or insert or delete text on a line, the program automatically readjusts the text on the line to fit within the new margin settings. Word wrap is common to all word processors.

Enter the following text to complete the sentence.

1. Press End to move to the end of the line.

www.mhhe.com/oleary

CONCEPT SUMMARIES

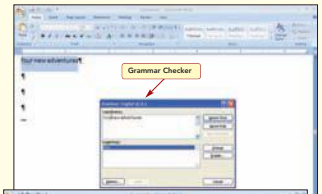
The Concept Summary offers a visual summary of the concepts presented throughout the lab.

Concept Summary

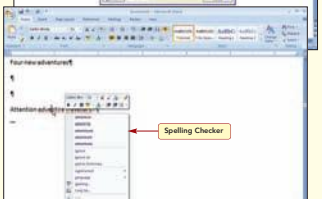
LAB 1
Creating and Editing a Document



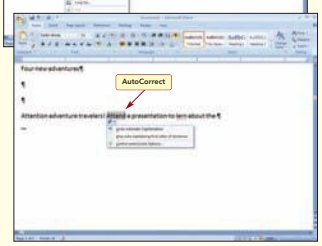
Grammar Checker (WD1.16)
The grammar checker advises you of incorrect grammar as you create and edit a document, and proposes possible corrections.

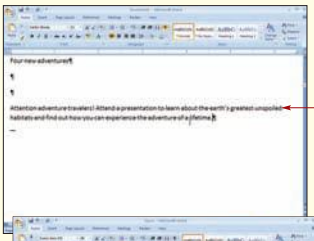


Spelling Checker (WD1.19)
The spelling checker advises you of misspelled words as you create and edit a document, and proposes possible corrections.

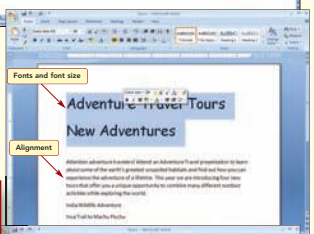


AutoCorrect (WD1.21)
The AutoCorrect feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.



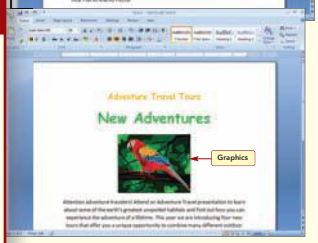


Word Wrap (WD1.23)
The word wrap feature automatically decides where to end a line and wraps text to the next line based on the margin settings.



Fonts and Font Size (WD1.46)
A font, also commonly referred to as a typeface, is a set of characters with a specific design that has one or more font sizes.

Alignment (WD1.56)
Alignment is the positioning of text on a line between the margins or indents. There are four types of paragraph alignment: left, centered, right, and justified.



Graphics (WD1.59)
A graphic is a nontext element or object such as a drawing or picture that can be added to a document.

LAB REVIEW

KEY TERMS

Includes a list of all bolded terms with page references.


Lab Review

LAB 3

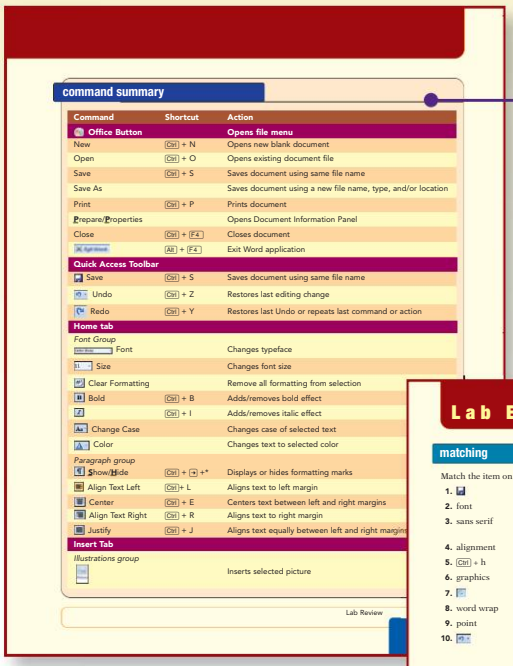
Creating Reports and Tables

key terms

bibliography WD3.41
caption WD3.55
cell WD3.62
citations WD3.41
Click and Type WD3.27
cross-reference WD3.55
Document Map WD3.37
document theme WD3.21
drawing layer WD3.52
endnote WD3.47
floating object WD3.52
footer WD3.79
footnote WD3.47
header WD3.79
heading style WD3.7
inline object WD3.52
navigation window WD3.37
note pane WD3.48
note reference mark WD3.47
note separator WD3.47
note text WD3.47
placeholder WD3.18
quick style WD3.7
section WD3.80
section break WD3.80
sort WD3.66
split window WD3.57
table WD3.62
table of contents WD3.33
table of figures WD3.72
table reference WD3.62
text box WD3.57
text wrapping WD3.52
thumbnails WD3.39

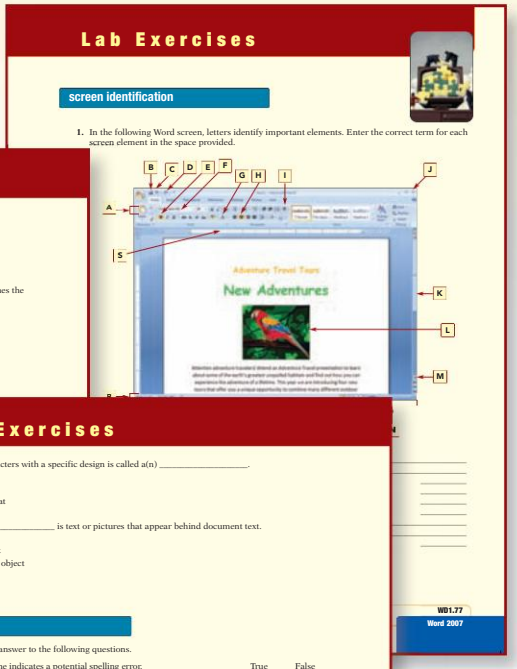
COMMAND SUMMARY

Command Summaries provide a table of commands, shortcuts, and their associated action for all commands used in the lab.


command summary

Command	Shortcut	Action
Office Button		**Opens file menu**
New	Ctrl + N	Opens new blank document
Open	Ctrl + O	Opens existing document file
Save	Ctrl + S	Saves document using same file name
Save As		Saves document using a new file name, type, and/or location
Print	Ctrl + P	Prints document
Prepare/Properties		Opens Document Information Panel
Close	Ctrl + F4	Closes document
	Alt + F4	Exit Word application
Quick Access Toolbar		
Save	Ctrl + S	Saves document using same file name
Undo	Ctrl + Z	Restores last editing change
Redo	Ctrl + Y	Restores last Undo or repeats last command or action
Home tab		
Font Group		
Font		Changes typeface
Size		Changes font size
Clear Formatting		Remove all formatting from selection
Bold	Ctrl + B	Adds/removes bold effect
	Ctrl + I	Adds/removes italic effect
Change Case		Changes case of selected text
Color		Changes text to selected color
Paragraph group		
Show/Hide	Ctrl + Shift + *	Displays or hides formatting marks
Align Text Left	Ctrl + L	Aligns text to left margin
Center	Ctrl + E	Centers text between left and right margins
Align Text Right	Ctrl + R	Aligns text to right margin
Justify	Ctrl + J	Aligns text equally between left and right margins
Insert Tab		
Illustrations group		
		Inserts selected picture

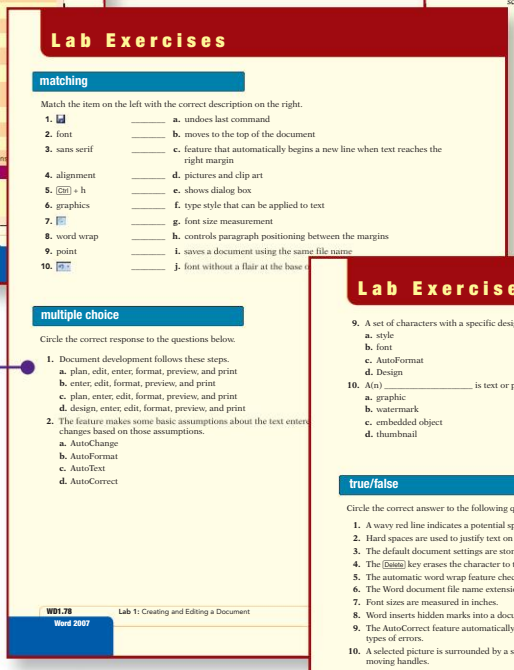
Lab Review


Lab Exercises

screen identification

1. In the following Word screen, letters identify important elements. Enter the correct term for each screen element in the space provided.

WD1.77
Word 2007


Lab Exercises

matching

Match the item on the left with the correct description on the right.

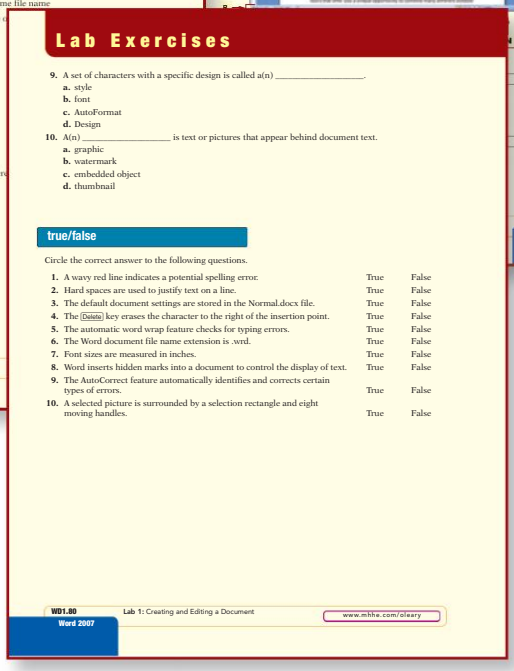
1. _____ a. undoes last command
2. font _____ b. moves to the top of the document
3. sans serif _____ c. feature that automatically begins a new line when text reaches the right margin
4. alignment _____ d. pictures and clip art
5. Ctrl + h _____ e. shows dialog box
6. graphics _____ f. type style that can be applied to text
7. _____ g. font size measurement
8. word wrap _____ h. controls paragraph positioning between the margins
9. point _____ i. saves a document using the same file name
10. _____ j. font without a flair at the base

multiple choice

Circle the correct response to the questions below.

1. Document development follows these steps.
   a. plan, edit, enter, format, preview, and print
   b. enter, edit, format, preview, and print
   c. plan, enter, edit, format, preview, and print
   d. design, enter, edit, format, preview, and print
2. The feature makes some basic assumptions about the text entered changes based on those assumptions.
   a. AutoChange
   b. AutoFormat
   c. AutoText
   d. AutoCorrect

WD1.78 Lab 1: Creating and Editing a Document
Word 2007


Lab Exercises

9. A set of characters with a specific design is called a(n) _____.
   a. style
   b. font
   c. AutoFormat
   d. Design
10. A(n) _____ is text or pictures that appear behind document text.
   a. graphic
   b. watermark
   c. embedded object
   d. thumbnail

true/false

Circle the correct answer to the following questions.

1. A wavy red line indicates a potential spelling error.	True	False
2. Hard spaces are used to justify text on a line.	True	False
3. The default document settings are stored in the Normal.docx file.	True	False
4. The Delete key erases the character to the right of the insertion point.	True	False
5. The automatic word wrap feature checks for typing errors.	True	False
6. The Word document file name extension is .wrd.	True	False
7. Font sizes are measured in inches.	True	False
8. Word inserts hidden marks into a document to control the display of text.	True	False
9. The AutoCorrect feature automatically identifies and corrects certain types of errors.	True	False
10. A selected picture is surrounded by a selection rectangle and eight moving handles.	True	False

WD1.80 Lab 1: Creating and Editing a Document www.mhhe.com/oleary
Word 2007

END-OF-CHAPTER MATERIALS

Lab Exercises reinforce the terminology and concepts presented in the lab through Screen Identification, Matching, Multiple Choice, True/False, and Fill-In questions.

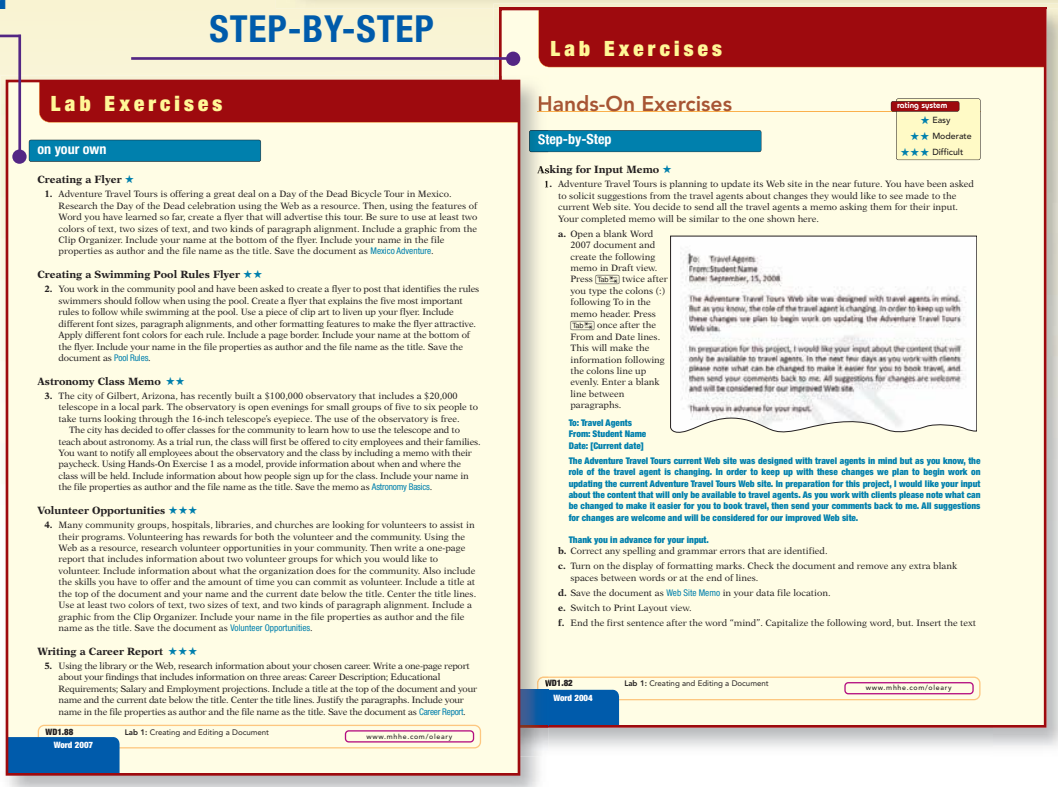
AND SKILL DEVELOPMENT

LAB EXERCISES

Lab Exercises provide hands-on practice and develop critical-thinking skills through step-by-step and on-your-own practice exercises. Many cases in the practice exercises tie to a running case used in another application lab. This helps demonstrate the use of the four applications across a common case setting. For example, the Adventure Tours case used in Word is continued in practice exercises in Excel, Access, and PowerPoint.

ON YOUR OWN

STEP-BY-STEP



Lab Exercises

on your own

Creating a Flyer ★

1. Adventure Travel Tours is offering a great deal on a Day of the Dead Bicycle Tour in Mexico. Research the Day of the Dead celebration using the Web as a resource. Then, using the features of Word you have learned so far, create a flyer that will advertise this tour. Be sure to use at least two colors of text, two sizes of text, and two kinds of paragraph alignment. Include a graphic from the Clip Organizer. Include your name at the bottom of the flyer. Include your name in the file properties as author and the file name as the title. Save the document as Mexico Adventure.

Creating a Swimming Pool Rules Flyer ★★

2. You work in the community pool and have been asked to create a flyer to post that identifies the rules swimmers should follow when using the pool. Create a flyer that explains the five most important rules to follow while swimming at the pool. Use a piece of clip art to liven up your flyer. Include different font sizes, paragraph alignments, and other formatting features to make the flyer attractive. Apply different font colors for each rule. Include a page border. Include your name at the bottom of the flyer. Include your name in the file properties as author and the file name as the title. Save the document as Pool Rules.

Astronomy Class Memo ★★

3. The city of Gilbert, Arizona, has recently built a $100,000 observatory that includes a $20,000 telescope in a local park. The observatory is open evenings for small groups of five to six people to take turns looking through the 16-inch telescope's eyepiece. The use of the observatory is free.
   The city has decided to offer classes for the community to learn how to use the telescope and to teach about astronomy. As a trial run, the class will first be offered to city employees and their families. You want to notify all employees about the observatory and the class by including a memo with their paycheck. Using Hands-On Exercise 1 as a model, provide information about when and where the class will be held. Include information about how people sign up for the class. Include your name in the file properties as author and the file name as the title. Save the memo as Astronomy Basics.

Volunteer Opportunities ★★★

4. Many community groups, hospitals, libraries, and churches are looking for volunteers to assist in their programs. Volunteering has rewards for both the volunteer and the community. Using the Web as a resource, research volunteer opportunities in your community. Then write a one-page report that includes information about two volunteer groups for which you would like to volunteer. Include information about what the organization does for the community. Also include the skills you have to offer and the amount of time you can commit as volunteer. Include a title at the top of the document and your name and the current date below the title. Center the title lines. Use at least two colors of text, two sizes of text, and two kinds of paragraph alignment. Include a graphic from the Clip Organizer. Include your name in the file properties as author and the file name as the title. Save the document as Volunteer Opportunities.

Writing a Career Report ★★★

5. Using the library or the Web, research information about your chosen career. Write a one-page report about your findings that includes information on three areas: Career Description; Educational Requirements; Salary and Employment projections. Include a title at the top of the document and your name and the current date below the title. Center the title lines. Justify the paragraphs. Include your name in the file properties as author and the file name as the title. Save the document as Career Report.

WD1.88 Word 2007 Lab 1: Creating and Editing a Document www.mhhe.com/oleary

Lab Exercises

Hands-On Exercises

Step-by-Step

rating system
★ Easy
★★ Moderate
★★★ Difficult

Asking for Input Memo ★

1. Adventure Travel Tours is planning to update its Web site in the near future. You have been asked to solicit suggestions from the travel agents about changes they would like to see made to the current Web site. You decide to send all the travel agents a memo asking them for their input. Your completed memo will be similar to the one shown here.

   a. Open a blank Word 2007 document and create the following memo in Draft view. Press Tab twice after you type the colons (:) following To in the memo header. Press Tab once after the From and Date lines. This will make the information following the colons line up evenly. Enter a blank line between paragraphs.

   To: Travel Agents
   From: Student Name
   Date: September, 15, 2008

   The Adventure Travel Tours Web site was designed with travel agents in mind. But as you know, the role of the travel agent is changing. In order to keep up with these changes we plan to begin work on updating the Adventure Travel Tours Web site.

   In preparation for this project, I would like your input about the content that will only be available to travel agents. In the next few days as you work with clients please note what can be changed to make it easier for you to book travel, and then send your comments back to me. All suggestions for changes are welcome and will be considered for our improved Web site.

   Thank you in advance for your input.

   To: Travel Agents
   From: Student Name
   Date: [Current date]

   The Adventure Travel Tours current Web site was designed with travel agents in mind but as you know, the role of the travel agent is changing. In order to keep up with these changes we plan to begin work on updating the current Adventure Travel Tours Web site. In preparation for this project, I would like your input about the content that will only be available to travel agents. As you work with clients please note what can be changed to make it easier for you to book travel, then send your comments back to me. All suggestions for changes are welcome and will be considered for our improved Web site.

   Thank you in advance for your input.

   b. Correct any spelling and grammar errors that are identified.
   c. Turn on the display of formatting marks. Check the document and remove any extra blank spaces between words or at the end of lines.
   d. Save the document as Web Site Memo in your data file location.
   e. Switch to Print Layout view.
   f. End the first sentence after the word "mind". Capitalize the following word, but. Insert the text

WD1.82 Word 2004 Lab 1: Creating and Editing a Document www.mhhe.com/oleary

RATING SYSTEM

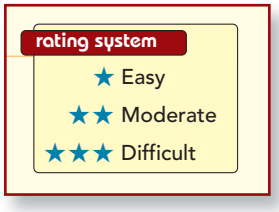
These exercises have a rating system from easy to difficult and test your ability to apply the knowledge you have gained in each lab. Exercises that build off of previous exercises are noted with a Continuing Exercises icon (CONTINUING EXERCISES).



Expanding the Note-Taking Skills Handout ★

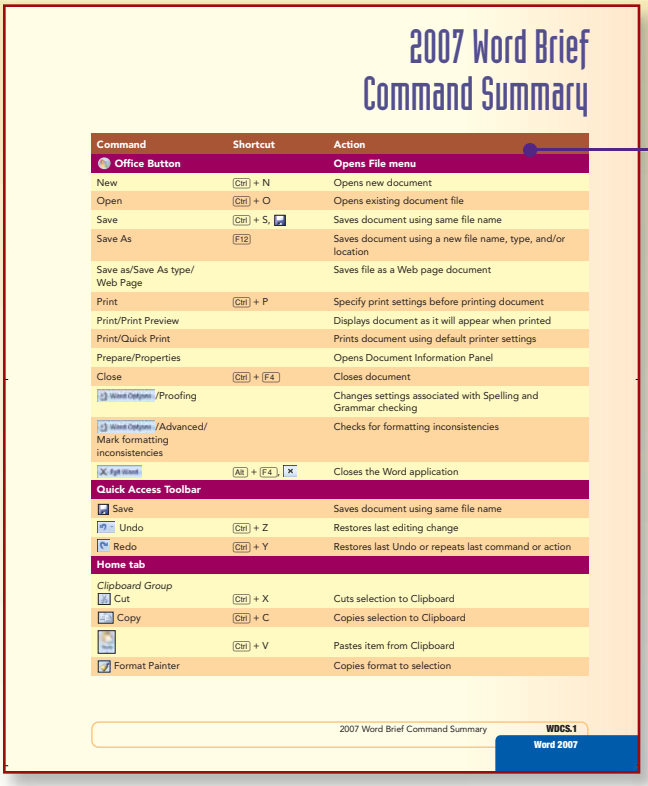
1. You are continuing to work on the handout to supplement your lecture on note-taking skills and tips. Although the content is nearly complete, there are several more tips you need to add to the document. You also want to rearrange the order of the tips. This handout is also going to be included in the freshman orientation information packet and

Tips for Taking Better Classroom Notes



rating system
★ Easy
★★ Moderate
★★★ Difficult

END-OF-BOOK RESOURCES



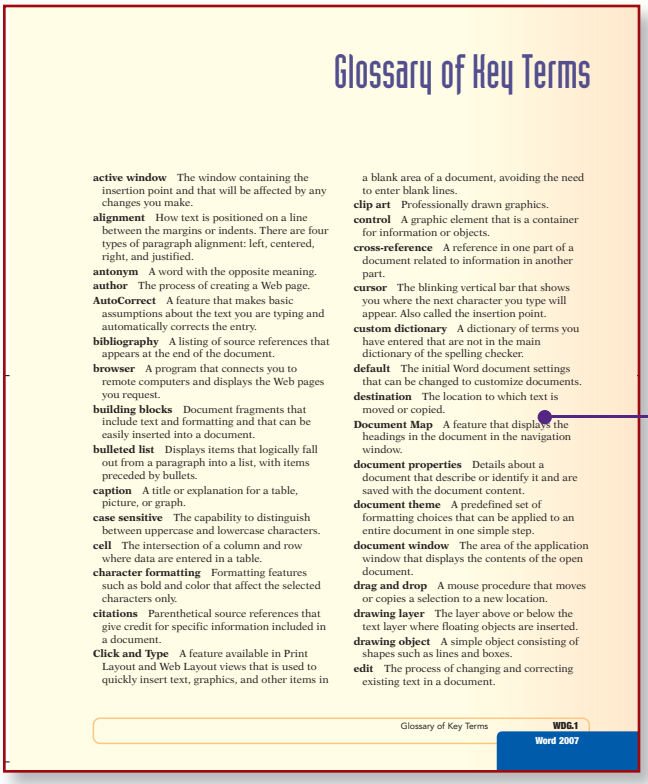
2007 Word Brief Command Summary

Command	Shortcut	Action
Office Button		**Opens File menu**
New	Ctrl + N	Opens new document
Open	Ctrl + O	Opens existing document file
Save	Ctrl + S,	Saves document using same file name
Save As	F12	Saves document using a new file name, type, and/or location
Save as/Save As type/ Web Page		Saves file as a Web page document
Print	Ctrl + P	Specify print settings before printing document
Print/Print Preview		Displays document as it will appear when printed
Print/Quick Print		Prints document using default printer settings
Prepare/Properties		Opens Document Information Panel
Close	Ctrl + F4	Closes document
/Proofing		Changes settings associated with Spelling and Grammar checking
/Advanced/ Mark formatting inconsistencies		Checks for formatting inconsistencies
	Alt + F4,	Closes the Word application
Quick Access Toolbar		
Save		Saves document using same file name
Undo	Ctrl + Z	Restores last editing change
Redo	Ctrl + Y	Restores last Undo or repeats last command or action
Home tab		
Clipboard Group		
Cut	Ctrl + X	Cuts selection to Clipboard
Copy	Ctrl + C	Copies selection to Clipboard
	Ctrl + V	Pastes item from Clipboard
Format Painter		Copies format to selection

2007 Word Brief Command Summary WDCS.1 Word 2007

COMPREHENSIVE COMMAND SUMMARY

Provides a table of commands, shortcuts, and their associated action for all commands used throughout each text in the O'Leary Series.



Glossary of Key Terms

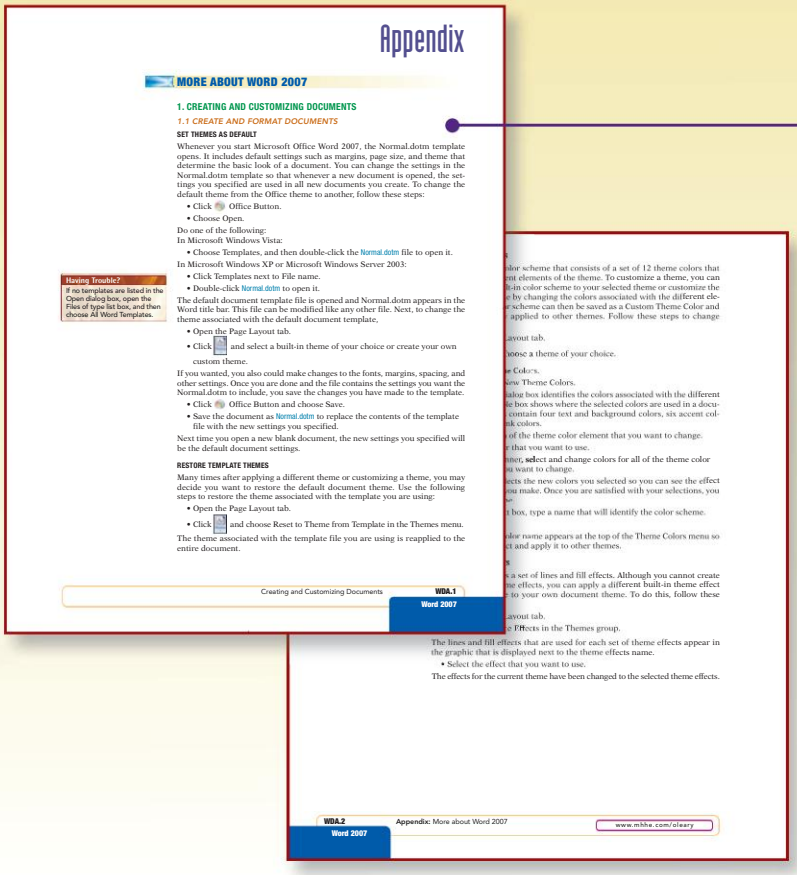
active window The window containing the insertion point and that will be affected by any changes you make.
alignment How text is positioned on a line between the margins or indents. There are four types of paragraph alignment: left, centered, right, and justified.
antonym A word with the opposite meaning.
author The process of creating a Web page.
AutoCorrect A feature that makes basic assumptions about the text you are typing and automatically corrects the entry.
bibliography A listing of source references that appears at the end of the document.
browser A program that connects you to remote computers and displays the Web pages you request.
building blocks Document fragments that include text and formatting and that can be easily inserted into a document.
bulleted list Displays items that logically fall out from a paragraph into a list, with items preceded by bullets.
caption A title or explanation for a table, picture, or graph.
case sensitive The capability to distinguish between uppercase and lowercase characters.
cell The intersection of a column and row where data are entered in a table.
character formatting Formatting features such as bold and color that affect the selected characters only.
citations Parenthetical source references that give credit for specific information included in a document.
Click and Type A feature available in Print Layout and Web Layout views that is used to quickly insert text, graphics, and other items in a blank area of a document, avoiding the need to enter blank lines.
clip art Professionally drawn graphics.
control A graphic element that is a container for information or objects.
cross-reference A reference in one part of a document related to information in another part.
cursor The blinking vertical bar that shows you where the next character you type will appear. Also called the insertion point.
custom dictionary A dictionary of terms you have entered that are not in the main dictionary of the spelling checker.
default The initial Word document settings that can be changed to customize documents.
destination The location to which text is moved or copied.
Document Map A feature that displays the headings in the document in the navigation window.
document properties Details about a document that describe or identify it and are saved with the document content.
document theme A predefined set of formatting choices that can be applied to an entire document in one simple step.
document window The area of the application window that displays the contents of the open document.
drag and drop A mouse procedure that moves or copies a selection to a new location.
drawing layer The layer above or below the text layer where floating objects are inserted.
drawing object A simple object consisting of shapes such as lines and boxes.
edit The process of changing and correcting existing text in a document.

Glossary of Key Terms WDG.1 Word 2007

GLOSSARY

Bolded terms found throughout each text in the O'Leary Series are defined in the glossary.

END-OF-BOOK RESOURCES (CONTINUED)


Appendix

MORE ABOUT WORD 2007

1. CREATING AND CUSTOMIZING DOCUMENTS

1.1 CREATE AND FORMAT DOCUMENTS

SET THEMES AS DEFAULT

Whenever you start Microsoft Office Word 2007, the Normal.dotm template opens. It includes default settings such as margins, page size, and theme that determine the basic look of a document. You can change the settings in the Normal.dotm template so that whenever a new document is opened, the settings you specified are used in all new documents you create. To change the default theme from the Office theme to another, follow these steps:

- Click Office Button.
- Choose Open.

Do one of the following:

In Microsoft Windows Vista:

- Choose Templates, and then double-click the Normal.dotm file to open it.

In Microsoft Windows XP or Microsoft Windows Server 2003:

- Click Templates next to File name.
- Double-click Normal.dotm to open it.

Having Trouble?
If no templates are listed in the Open dialog box, open the Files of type list box, and then choose All Word Templates.

The default document template file is opened and Normal.dotm appears in the Word title bar. This file can be modified like any other file. Next, to change the theme associated with the default document template,

- Open the Page Layout tab.
- Click and select a built-in theme of your choice or create your own custom theme.

If you wanted, you also could make changes to the fonts, margins, spacing, and other settings. Once you are done and the file contains the settings you want the Normal.dotm to include, you save the changes you have made to the template.

- Click Office Button and choose Save.
- Save the document as Normal.dotm to replace the contents of the template file with the new settings you specified.

Next time you open a new blank document, the new settings you specified will be the default document settings.

RESTORE TEMPLATE THEMES

Many times after applying a different theme or customizing a theme, you may decide you want to restore the default document theme. Use the following steps to restore the theme associated with the template you are using:

- Open the Page Layout tab.
- Click and choose Reset to Theme from Template in the Themes menu.

The theme associated with the template file you are using is reapplied to the entire document.

Creating and Customizing Documents WDA.1 Word 2007

The lines and fill effects that are used for each set of theme effects appear in the graphic that is displayed next to the theme effects name.

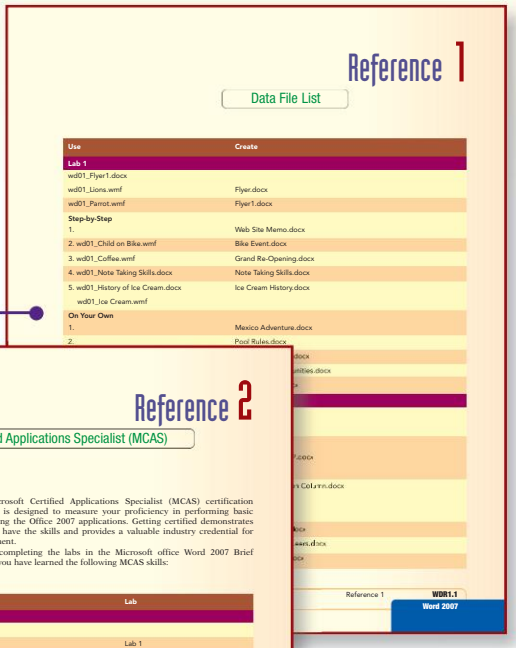
- Select the effect that you want to use.

The effects for the current theme have been changed to the selected theme effects.

WDA.2 Appendix: More about Word 2007 www.mhhe.com/oleary Word 2007

MORE ABOUT APPENDICES

A More About appendix appears at the end of the brief and introductory texts. This appendix offers students additional coverage needed to meet MCAS requirements. Skills pertaining to additional MCAS coverage are denoted by a More About icon in the margins of the text.


Reference 1

Data File List

Use	Create
Lab 1	
wd01_Flyer1.docx	
wd01_Lions.wmf	Flyer.docx
wd01_Parrot.wmf	Flyer1.docx
Step-by-Step	
1.	Web Site Memo.docx
2. wd01_Child on Bike.wmf	Bike Event.docx
3. wd01_Coffee.wmf	Grand Re-Opening.docx
4. wd01_Note Taking Skills.docx	Note Taking Skills.docx
5. wd01_History of Ice Cream.docx	Ice Cream History.docx
wd01_Ice Cream.wmf	
On Your Own	
1.	Mexico Adventure.docx
2.	Pool Rules.docx

Reference 1 WDR1.1 Word 2007

REFERENCE 1 - DATA FILE LIST

The Data File List is a reference guide that helps organize data and solution files. It identifies the names of the original and saved files.


Reference 2

Microsoft Certified Applications Specialist (MCAS)

Microsoft Office Word 2007

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment.

After completing the labs in the Microsoft office Word 2007 Brief edition, you have learned the following MCAS skills:

Description	Lab
1. Creating and Customizing Documents	
1.1 Create and Format documents	
Work with templates	Lab 1
Apply Quick Styles to documents	Lab 3
Format documents by using themes	Lab 3, More About
Customize themes	Lab 3, More About
Format document backgrounds	Lab 1
Insert blank pages or cover pages	Lab 3
1.2 Layout Documents	
Format Pages	Lab 1, 2, More About
Create and modify headers and footers	Lab 3
1.3 Make Documents and content Easier to find	
Create, modify, and update tables of contents	Lab 3, More About
Create, modify, and update indexes	More About
Modify document properties	Lab 1
Insert document navigation tools	Lab 3, Working together 1
1.4 Personalize Office Word 2007	
Customize Word options	Lab 1

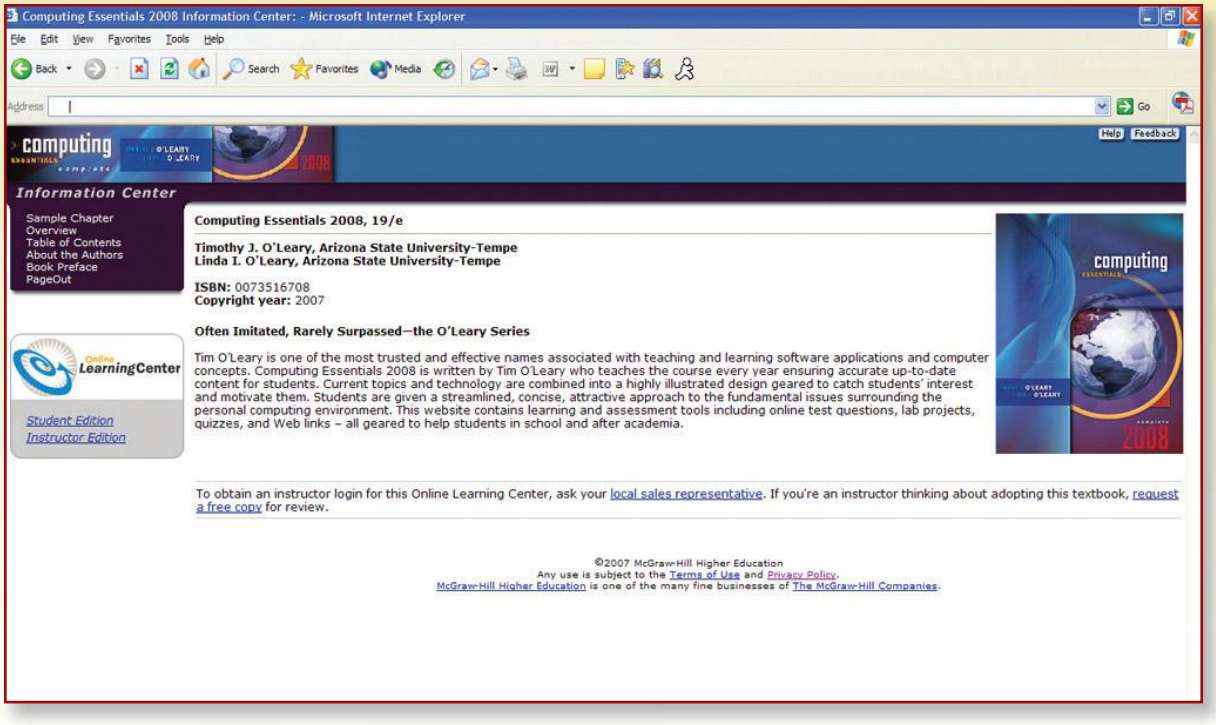
Reference 2 WDR2.1 Word 2007

REFERENCE 2 - MCAS CERTIFICATION GUIDE

Links all MCAS objectives to text content and end-of-lab exercises. You will always know which MCAS objectives are being covered. Introductory texts are MCAS certified.

ONLINE LEARNING CENTER (OLC)

www.mhhe.com/oleary



The Online Learning Center follows The O'Leary Series lab by lab, offering all kinds of supplementary help for you. OLC features include:

- Learning Objectives
- Student Data Files
- Chapter Competencies
- Chapter Concepts
- Self-Grading Quizzes
- Additional Web Links

INTRODUCTION TO COMPUTER ESSENTIALS



OBJECTIVES

After you have read this introduction, you should be able to:

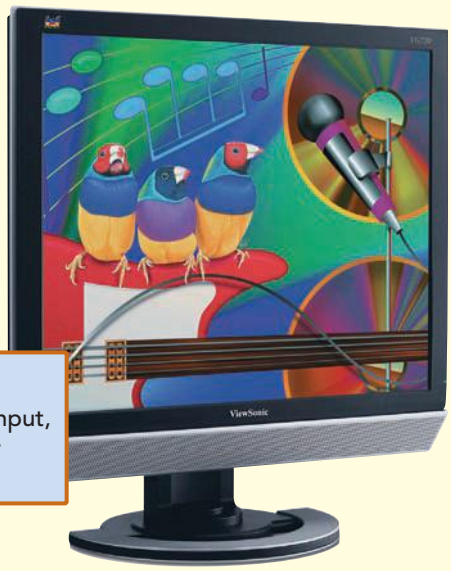
1. **Explain the five parts of an information system: people, procedures, software, hardware, and data.**
2. **Distinguish between system software and application software.**
3. **Discuss the three kinds of system software programs.**
4. **Distinguish between basic and specialized application software.**
5. **Identify the four types of computers and the four types of microcomputers.**
6. **Describe the different types of computer hardware including the system unit, input, output, storage, and communication devices.**
7. **Define data and describe document, worksheet, database, and presentation files.**
8. **Explain computer connectivity, the wireless revolution, and the Internet.**



Information Systems
consist of people, procedures, software, hardware, and data



Software
or programs control computer operations



Hardware
includes system unit, input, output, and secondary storage devices

Introduction

The purpose of this book is to help you become competent with computer technology. **Computer competency** refers to acquiring computer-related skills—indispensable tools for today. They include how to effectively use popular application packages and the Internet.

In this introduction, we present an overview of an information system: people, procedures, software, hardware, and data. It is essential to understand these basic parts and how connectivity through the Internet and the Web expands the role of information technology in our lives. Fifteen years ago, most people had little to do with computers, at least directly. Of course, they filled out computerized forms, took computerized tests, and paid computerized bills. But the real work was handled by specialists. Then microcomputers came along and changed everything. Today it is easy for nearly everybody to use a computer.

- Microcomputers are common tools in all areas of life. Writers write, artists draw, engineers and scientists calculate—all on microcomputers. Students and businesspeople do all this, and more.
- New forms of learning have developed. People who are homebound, who work odd hours, or who travel frequently may take Web courses. A college course need not fit within a quarter or a semester.
- New ways to communicate, to find people with similar interests, and to buy goods are available. People use electronic mail, electronic commerce, and the Internet to meet and to share ideas and products.

To be competent with computer technology, you need to know the five parts of an information system: people, procedures, software, hardware, and data. You also need to understand connectivity, the wireless revolution, the Internet, and the Web and to recognize the role of information technology in your personal and professional life.



Wireless Revolution
is dramatically affecting communications and computing

INFORMATION SYSTEMS

When you think of a microcomputer, perhaps you think of just the equipment itself. That is, you think of the monitor or the keyboard. Yet, there is more to it than that. The way to think about a microcomputer is as part of an information system. An **information system** has six parts: *people, procedures, software, hardware, data,* and *connectivity.* (See Figure 1.)

- **People:** It is easy to overlook people as one of the five parts of an information system. Yet this is what microcomputers are all about—making **people, end users** like you, more productive.
- **Procedures:** The rules or guidelines for people to follow when using software, hardware, and data are **procedures.** These procedures are typically documented in manuals written by computer specialists. Software and hardware manufacturers provide manuals with their products. These manuals are provided either in printed or electronic form.
- **Software:** A **program** consists of the step-by-step instructions that tell the computer how to do its work. **Software** is another name for a program or programs. The purpose of software is to convert **data** (unprocessed facts) into **information** (processed facts). For example, a payroll program would

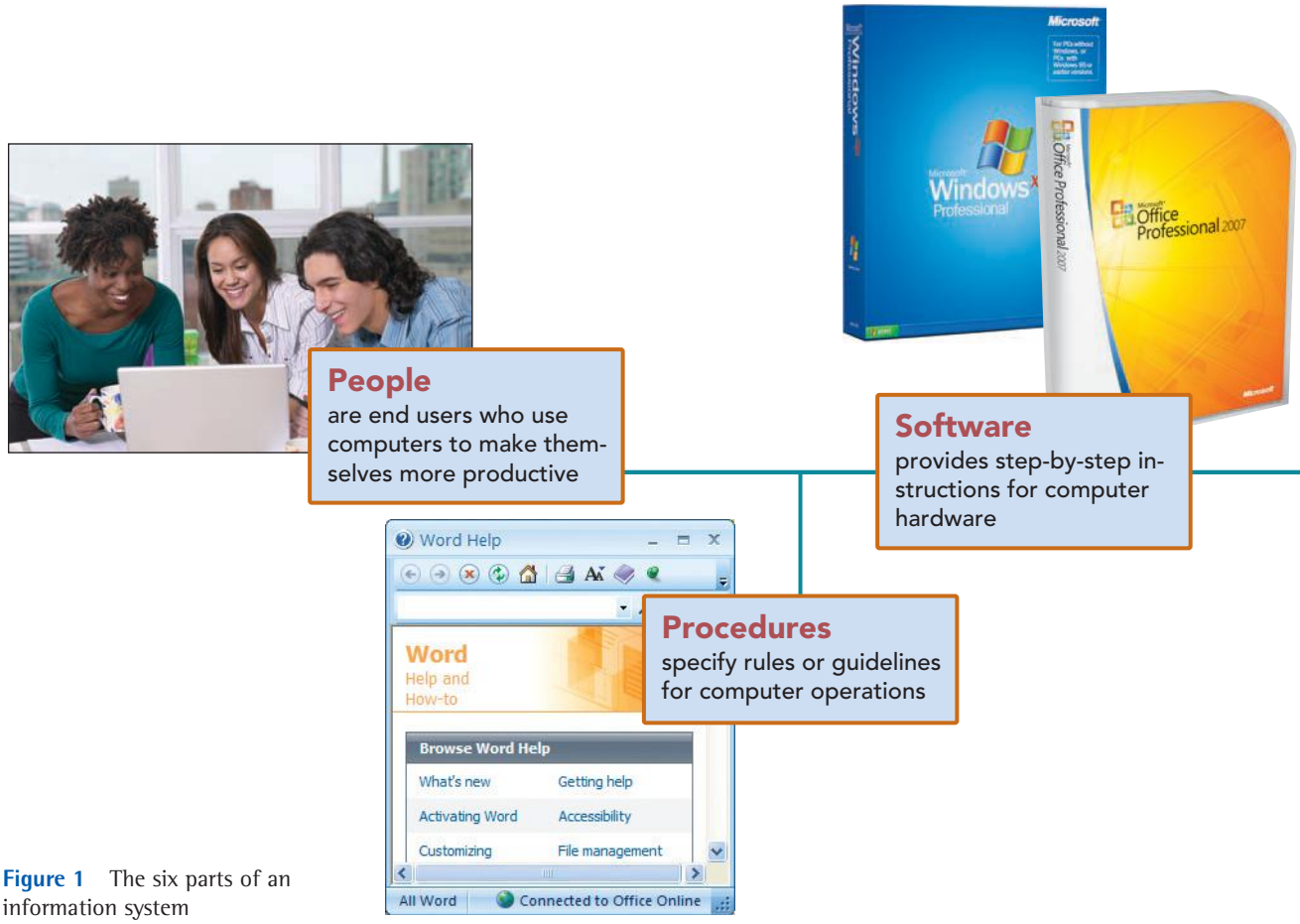


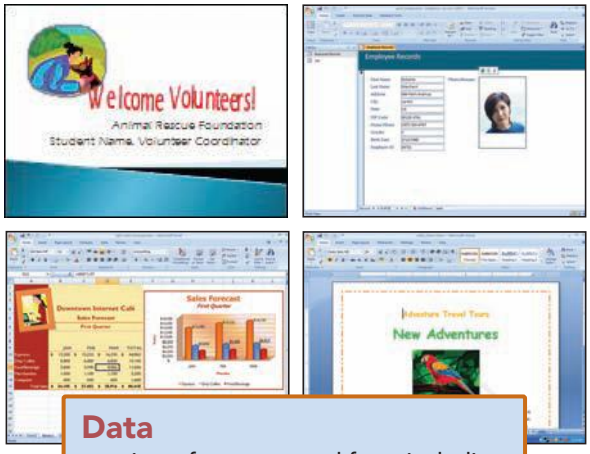
Figure 1 The six parts of an information system

instruct the computer to take the number of hours you worked in a week (data) and multiply it by your pay rate (data) to determine how much you are paid for the week (information).

- **Hardware:** The equipment that processes the data to create information is called **hardware.** It includes the keyboard, mouse, monitor, system unit, and other devices. Hardware is controlled by software.
- **Data:** The raw, unprocessed facts, including text, numbers, images, and sounds, are called data. Processed data yields information. Using the previous example of a payroll program, the data (number of hours worked and pay rate) is processed (multiplied) to yield information (weekly pay).

Almost all of today's computer systems add an additional part to the information system. This part, called **connectivity,** allows computers to connect and to share information. These connections, including Internet connections, can be by telephone lines, by cable, or through the air. Connectivity allows users to greatly expand the capability and usefulness of their information systems.

In large computer systems, there are specialists who write procedures, develop software, and capture data. In microcomputer systems, however, end users often perform these operations. To be a competent end user, you must understand the essentials of **information technology (IT),** including software, hardware, and data.



Data
consists of unprocessed facts including text, numbers, images, and sounds

Hardware
includes keyboard, mouse, monitor, system unit, and other devices



Connectivity
allows computers to share information and to connect to the Internet



PEOPLE

Although easy to overlook, people are surely the most important part of any information system. Our lives are touched every day by computers and information systems. Many times the contact is direct and obvious, such as when we create documents using a word processing program or when we connect to the Internet. Other times, the contact is not as obvious. Consider just the four examples in Figure 2.

SOFTWARE

Software, as we mentioned, is another name for programs. Programs are the instructions that tell the computer how to process data into the form you want. In most cases, the words *software* and *programs* are interchangeable. There are two major kinds of software: *system software* and *application software*. You can think of application software as the kind you use. Think of system software as the kind the computer uses.

SYSTEM SOFTWARE

The user interacts primarily with application software. **System software** enables the application software to interact with the computer hardware. System software is "background" software that helps the computer manage its own internal resources.

System software is not a single program. Rather it is a collection of programs, including the following:

- **Operating systems** are programs that coordinate computer resources, provide an interface between users and the computer, and run applications.









Figure 2 Computers in entertainment, business, education, and medicine



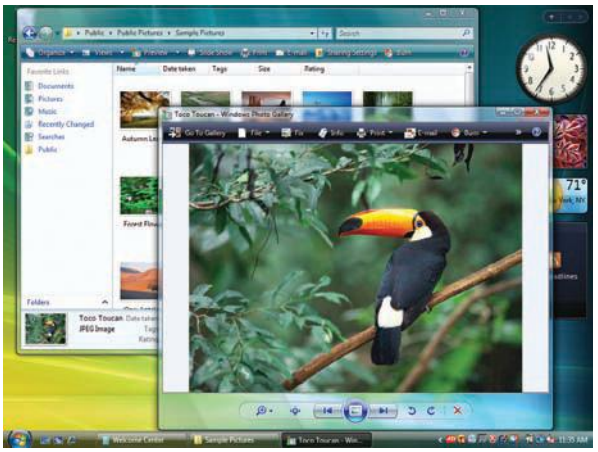


Figure 3 Windows XP, Windows Vista, and Mac operating systems



Windows XP, Windows Vista, and the Mac OS X are three of the best-known operating systems for today's microcomputer users. (See Figure 3.)

- **Utilities** perform specific tasks related to managing computer resources. For example, the Windows utility called Disk Defragmenter locates and eliminates unnecessary file fragments and rearranges files and unused disk space to optimize computer operations.
- **Device drivers** are specialized programs designed to allow particular input or output devices to communicate with the rest of the computer system.

APPLICATION SOFTWARE

Application software might be described as end user software. These programs can be categorized as either *basic* or *specialized applications*.

Basic applications are widely used in nearly all career areas. They are the kinds of programs you have to know to be considered computer competent. One of these basic applications is a browser to navigate, explore, and find information on the Internet. (See Figure 4.) The two most widely used browsers are Microsoft's Internet Explorer and Netscape's Navigator. For a summary of the basic applications, see Figure 5.



Figure 4 Internet Explorer browser

Type	Description
Browser	Connect to Web sites and display Web pages
Word processor	Prepare written documents
Spreadsheet	Analyze and summarize numerical data
Database management system	Organize and manage data and information
Presentation graphics	Communicate a message or persuade other people

Figure 5 Basic applications

Specialized applications include thousands of other programs that are more narrowly focused on specific disciplines and occupations. Some of the best known are graphics, audio, video, multimedia, Web authoring, and artificial intelligence programs.

HARDWARE

Computers are electronic devices that can follow instructions to accept input, process that input, and produce information. This introduction focuses principally on microcomputers. However, it is almost certain that you will come in contact, at least indirectly, with other types of computers.



Figure 6 IBM's Blue Gene supercomputer



Figure 7 Microcomputers

TYPES OF COMPUTERS

There are four types of computers: supercomputers, mainframe computers, minicomputers, and microcomputers.

- **Supercomputers** are the most powerful type of computer. These machines are special high-capacity computers used by very large organizations. IBM's Blue Gene is considered by many to be the fastest computer in the world. (See Figure 6.)
- **Mainframe computers** occupy specially wired, air-conditioned rooms. Although not nearly as powerful as supercomputers, mainframe computers are capable of great processing speeds and data storage. For example, insurance companies use mainframes to process information about millions of policyholders.
- **Minicomputers,** also known as **midrange computers,** are refrigerator-sized machines. Medium-sized companies or departments of large companies typically use them for specific purposes. For example, production departments use minicomputers to monitor certain manufacturing processes and assembly-line operations.
- **Microcomputers** are the least powerful, yet the most widely used and fastest-growing, type of computer. There are four types of microcomputers: *desktop, notebook, tablet PC,* and *handheld computers.* (See Figure 7.) **Desktop computers** are small enough to fit on top of or alongside a desk yet are too big to carry around. **Notebook computers,** also known as *laptop computers,* are portable, lightweight, and fit into most briefcases. A **tablet PC** is a type of notebook computer that accepts your handwriting. This input is digitized and converted to standard text that can be further processed by programs such as a word processor. **Handheld computers** are the smallest and are designed to fit into the palm of one hand. Also known as **palm computers,** these systems typically combine pen input, writing recognition, personal organizational tools, and communications capabilities in a very small package. **Personal digital assistants (PDAs)** are the most widely used handheld computer.

MICROCOMPUTER HARDWARE

Hardware for a microcomputer system consists of a variety of different devices. See Figure 8 for a typical desktop system. This physical equipment falls into four basic categories: system unit, input/output, secondary storage, and communication.

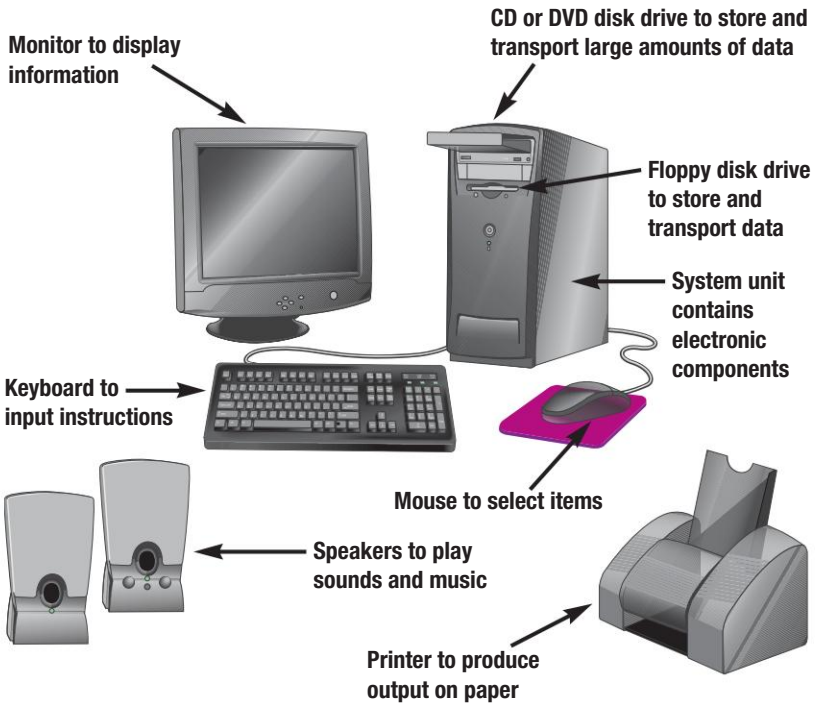


Figure 8 Microcomputer system

- **System unit:** The **system unit** is a container that houses most of the electronic components that make up a computer system. Two important components of the system unit are the *microprocessor* and *memory*. (See Figure 9.) The **microprocessor** controls and manipulates data to produce information. Many times the microprocessor is contained within a protective cartridge. **Memory,** also known as **primary storage** or **random access memory (RAM),** holds data and program instructions for processing the data. It also holds the processed information before it is output. Memory is sometimes referred to as *temporary storage* because its contents will typically be lost if the electrical power to the computer is disrupted.
- **Input/output: Input devices** translate data and programs that humans can understand into a form that the computer can process. The most common input devices are the **keyboard** and the **mouse. Output devices** translate the processed information from the computer into a form that humans can understand. The most common output devices are **monitors** and **printers.**

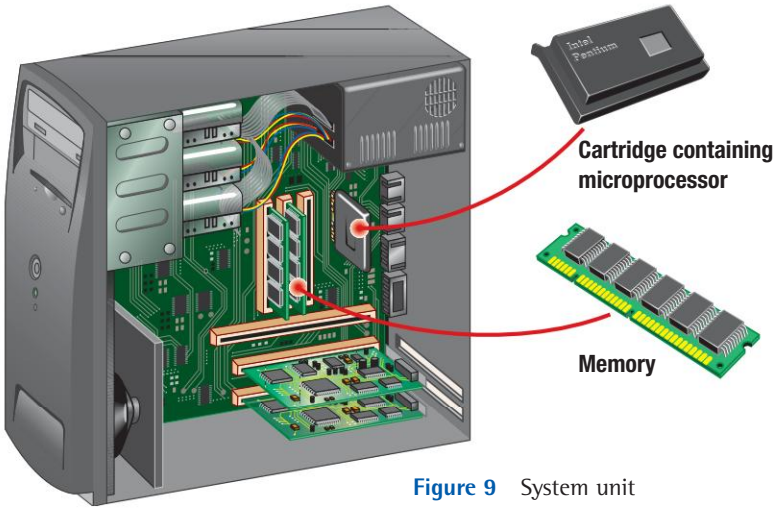


Figure 9 System unit

- **Secondary storage:** Unlike memory, **secondary storage** holds data and programs even after electrical power to the computer system has been turned off. The most important kinds of secondary media are *floppy, hard,* and *optical disks*. **Floppy disks** are often used to store and transport data from one computer to another. They are called floppy because data is stored on a very thin flexible, or floppy, plastic disk. **Hard disks** are typically used to store programs and very large data files. Using a rigid metallic platter, hard disks have a much greater capacity and are able to access information much faster than floppy disks. **Optical discs** use laser technology and have the greatest capacity. (See Figure 10.) Three types of optical discs are **compact discs (CDs), digital versatile** (or **video**) **discs (DVDs),** and **high-definition (hi def)** discs.



Figure 10 Optical disc

- **Communication:** At one time, it was uncommon for a microcomputer system to communicate with other computer systems. Now, using **communication devices,** a microcomputer can communicate with other computer systems located as near as the next office or as far away as halfway around the world using the Internet. The most widely used communication device is a **modem,** which modifies telephone communications into a form that can be processed by a computer. Modems also modify computer output into a form that can be transmitted across standard telephone lines.

DATA

Data is raw, unprocessed facts, including text, numbers, images, and sounds. As we have mentioned earlier, processed data becomes information. When stored electronically in files, data can be used directly as input for the system unit.

Four common types of files (see Figure 11) are

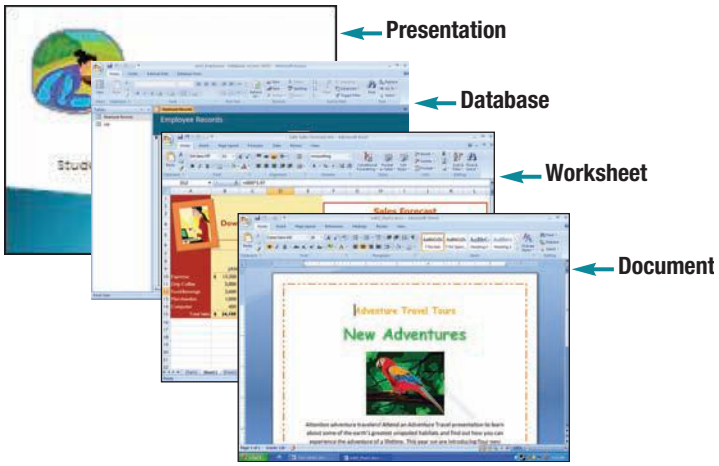


Figure 11 Four types of files: presentation, database, worksheet, and document

- **Document files,** created by word processors to save documents such as memos, term papers, and letters.
- **Worksheet files,** created by electronic spreadsheets to analyze things like budgets and to predict sales.
- **Database files,** typically created by database management programs to contain highly structured and organized data. For example, an employee database file might contain all the workers' names, social security numbers, job titles, and other related pieces of information.
- **Presentation files,** created by presentation graphics programs to save presentation materials. For example, a file might contain audience handouts, speaker notes, and electronic slides.

CONNECTIVITY, THE WIRELESS REVOLUTION, AND THE INTERNET



Figure 12 Wireless communication devices

Connectivity is the capability of your microcomputer to share information with other computers. The single most dramatic change in connectivity in the past five years has been the widespread use of mobile or wireless communication devices. For just a few of these devices, see Figure 12. Many experts predict that these wireless applications are just the beginning of the **wireless revolution,** a revolution that is expected to dramatically affect the way we communicate and use computer technology.

Central to the concept of connectivity is the **network.** A network is a communications system connecting two or more computers. The largest network in the world is the **Internet.** It is like a giant highway that connects you to millions of other people and organizations located throughout the world. The **Web** provides a multimedia interface to the numerous resources available on the Internet.

VISUAL SUMMARY

INTRODUCTION TO COMPUTER ESSENTIALS

INFORMATION SYSTEMS



The way to think about a microcomputer is to realize that it is one part of an **information system.** There are five parts of an information system:

1. **People** are an essential part of the system. The purpose of information systems is to make people, or **end users** like you, more productive.
2. **Procedures** are rules or guidelines to follow when using software, hardware, and data. They are typically documented in manuals written by computer professionals.
3. **Software (programs)** provides step-by-step instructions to control the computer to convert data into information.
4. **Hardware** consists of the physical equipment. It is controlled by software and processes data to create information.
5. **Data** consists of unprocessed facts including text, numbers, images, and sound. **Information** is data that has been processed by the computer.

Connectivity is an additional part to today's information systems. It allows computers to connect and share information. To be **computer competent,** end users need to understand **information technology (IT).**

PEOPLE



People are the most important part of an information system. People are touched hundreds of times daily by computers. Some examples of how information technology can work for you:





To prepare for your future as a competent end user, you need to understand the basic parts of an information system: people, procedures, software, hardware, and data. Also you need to understand connectivity through the Internet and the Web and to recognize the role of technology in your professional and personal life.

SOFTWARE



Software, or **programs,** consists of system and application software.

System Software

System software enables application software to interact with computer hardware. It consists of a variety of programs:

- **Operating systems** coordinate resources, provide an interface for users and computer hardware, and run applications. Windows XP, Windows Vista, and Mac OS X are operating systems.
- **Utilities** perform specific tasks to manage computer resources.
- **Device drivers** are specialized programs to allow input and output devices to communicate with the rest of the computer system.

Application Software

Application software includes basic and specialized applications.

- **Basic applications** are widely used in nearly all career areas. Programs include browsers, word processors, spreadsheets, database management systems, and presentation graphics.
- **Specialized applications** focus on specific disciplines and occupations. These programs include graphics, audio, video, multimedia, Web authoring, and artificial intelligence programs.

HARDWARE



Hardware is the physical equipment in an information system.

Types of Computers

Supercomputer, mainframe, minicomputer (midrange), and **microcomputer** are four types of computers. Microcomputers can be **desktop, notebook, tablet PC,** or **handheld (palm). PDAs** are the most widely used handheld computer.

Microcomputer Hardware

There are four basic categories of hardware devices.

- **System unit** contains the electronic circuitry, including the **microprocessor** and **memory (primary storage, random access memory [RAM],** temporary storage**).**
- **Input/output devices** are translators between humans and computers. **Input devices** include the **keyboard** and **mouse. Output devices** include **monitors** and **printers.**
- **Secondary storage** holds data and programs. Typical media include **floppy disks, hard disks,** and **optical discs** (**CD, DVD,** and **hi def**).
- **Communication devices** connect the system unit to other computers and the Internet. A **modem** modifies signals for processing and communication.

DATA

Data is the raw facts unprocessed about something. Common file types include

- **Document files** created by word processors.



- **Worksheet files** created by spreadsheet programs.



- **Database files** created by database management programs.



- **Presentation files** created by presentation graphics programs.



CONNECTIVITY AND THE INTERNET



Connectivity

Connectivity is a concept describing the ability of end users to tap into resources well beyond their desktops. **Networks** are connected computers that share data and resources.

The Wireless Revolution

The **wireless revolution** is the widespread and increasing use of mobile (wireless) communication devices.

Internet

The **Internet** is the world's largest computer network. The **Web** provides a multimedia interface to resources available on the Internet.



KEY TERMS

application software (7)
basic application (7)
communication device (10)
compact disc (CD) (9)
computer competency (3)
connectivity (5, 10)
data (4)
database file (10)
desktop computer (8)
device driver (7)
digital versatile disc (DVD) (9)
digital video disc (DVD) (9)
document file (10)
end user (4)
floppy disk (9)
handheld computer (8)
hard disk (9)
hardware (5)
high definition (hi def) (9)
information (4)
information system (4)
information technology (IT) (5)
input device (9)
Internet (10)
keyboard (9)
mainframe computer (8)
memory (9)
microcomputer (8)
microprocessor (9)
midrange computer (8)
minicomputer (8)
modem (10)
monitor (9)
mouse (9)
network (10)
notebook computer (8)
operating system (6)
optical disc (9)
output device (9)
palm computer (8)
people (4)
personal digital assistant (PDA) (8)
presentation file (10)
primary storage (9)
printer (9)
procedures (4)
program (4)
random access memory (RAM) (9)
secondary storage (9)
software (4)
specialized application (8)
supercomputer (8)
system software (6)
system unit (9)
tablet PC (8)
utility (7)
Web (10)
wireless revolution (10)
worksheet file (10)

MATCHING

Match each numbered item with the most closely related lettered item. Write your answers in the spaces provided.

a. microcomputers
b. optical discs
c. input device
d. primary storage
e. procedures
f. program
g. secondary storage
h. supercomputers
i. system software
j. the Internet

1. Guidelines people follow when using software. ____
2. Consists of the step-by-step instructions that tell the computer how to do its work. ____
3. Software that enables the application software to interact with the computer hardware. ____
4. The most powerful type of computer. ____
5. The least powerful and most widely used type of computer. ____
6. Translates data and programs that humans can understand into a form that the computer can process. ____
7. Holds data and programs even after electrical power to the system has been turned off. ____
8. Uses laser technology. ____
9. Holds data and program instructions for processing data. ____
10. The largest network in the world. ____

TRUE/FALSE

Circle the correct answer to the following questions.

1. The equipment that processes the data to create information is called hardware. True False
2. Personal digital assistants (PDAs) are a type of microcomputer. True False
3. Memory holds the processed information before it is output. True False
4. Connectivity is the capability of your microcomputer to share information with other computers. True False
5. Programs are the instructions that tell the computer how to process data into the form you want. True False
6. The Web is a multimedia interface to numerous resources available on the Internet. True False
7. System software might be described as "end-user" software. True False
8. The most common output devices are the mouse and keyboard. True False
9. Procedures are the rules or guidelines people follow when using software, hardware, and data. True False
10. System software is the most important part of an information system. True False

FILL-IN

Complete the following statements by filling in the blanks with the correct terms.

1. Microcomputer _____, the physical equipment, falls into four categories: the system unit, input/output, secondary storage, and communication devices.
2. Also known as midrange computers, _____ are frequently used by departments within larger organizations.
3. _____ are guidelines or rules to follow when using software, hardware, and data.
4. _____ storage devices are used to store data and programs even after electrical power has been turned off.
5. _____ are programs used to navigate, explore, and find information on the Internet.
6. _____ software might be described as end-user software.
7. A word processor is an example of a _____ application.
8. A _____ program is used to analyze and summarize numerical data.
9. Documents such as memos, term papers, and letters are created using a _____.
10. _____ files are created by spreadsheet programs.

MULTIPLE CHOICE

Circle the letter or fill in the correct answer.

1. A common term that describes the combination of traditional computer and communication technologies is
   - **a.** management of information systems
   - **b.** information technology
   - **c.** information superhighway
   - **d.** computer competency
2. Procedures are typically documented in manuals written by
   - **a.** end users
   - **b.** computer specialists
   - **c.** Microsoft
   - **d.** service providers
3. Which of the following is an example of connectivity?
   - **a.** Internet
   - **b.** floppy disk
   - **c.** power cord
   - **d.** data
4. Windows XP, Windows Vista, and Macintosh OS X are all examples of
   - **a.** application software
   - **b.** operating systems
   - **c.** browsers
   - **d.** shareware
5. Because of their size and cost, these computers are relatively rare.
   - **a.** minicomputers
   - **b.** mainframe computers
   - **c.** microcomputers
   - **d.** supercomputers
6. The system component that controls and manipulates data in order to produce information is called the
   - **a.** monitor
   - **b.** mouse
   - **c.** keyboard
   - **d.** microprocessor
7. A system component that translates data and programs that humans can understand into a form that the computer can process is called a(n)
   - **a.** input device
   - **b.** pointer
   - **c.** output device
   - **d.** display
8. A CD is an example of a(n)
   - **a.** output device
   - **b.** floppy disk
   - **c.** optical disc
   - **d.** hard disk
9. If you want to communicate a message or persuade other people, you would typically use this type of software.
   - **a.** worksheet
   - **b.** document
   - **c.** database
   - **d.** presentation
10. Many experts are predicting that this revolution is expected to dramatically affect the way we communicate and use computer technology.
    - **a.** FTP
    - **b.** World Wide Web
    - **c.** Telnet
    - **d.** wireless

Introduction to Microsoft Office 2007

Objectives

After completing the Introduction to Microsoft Office 2007, you should be able to:

1. Describe the 2007 Microsoft Office System.
2. Describe the Office 2007 applications.
3. Start an Office 2007 application.
4. Recognize the basic application features.
5. Use menus, context menus, and shortcut keys.
6. Use the Ribbon, dialog boxes, and task panes.
7. Use Office Help.
8. Exit an Office 2007 application.

What Is the 2007 Microsoft Office System?

Microsoft's 2007 Microsoft Office System is a comprehensive, integrated system of programs, servers, and services designed to solve a wide array of business needs. Although the programs can be used individually, they are designed to work together seamlessly, making it easy to connect people and organizations to information, business processes, and each other. The applications include tools used to create, discuss, communicate, and manage projects. If you share a lot of documents with other people, these features facilitate access to common documents. This version has an entirely new user interface that is designed to make it easier to perform tasks and help users more quickly take advantage of all the features in the applications. In addition, the communication and collaboration features and integration with the World Wide Web have been expanded and refined.

The 2007 Microsoft Office System is packaged in several different combinations of programs or suites. The major programs and a brief description are provided in the following table.

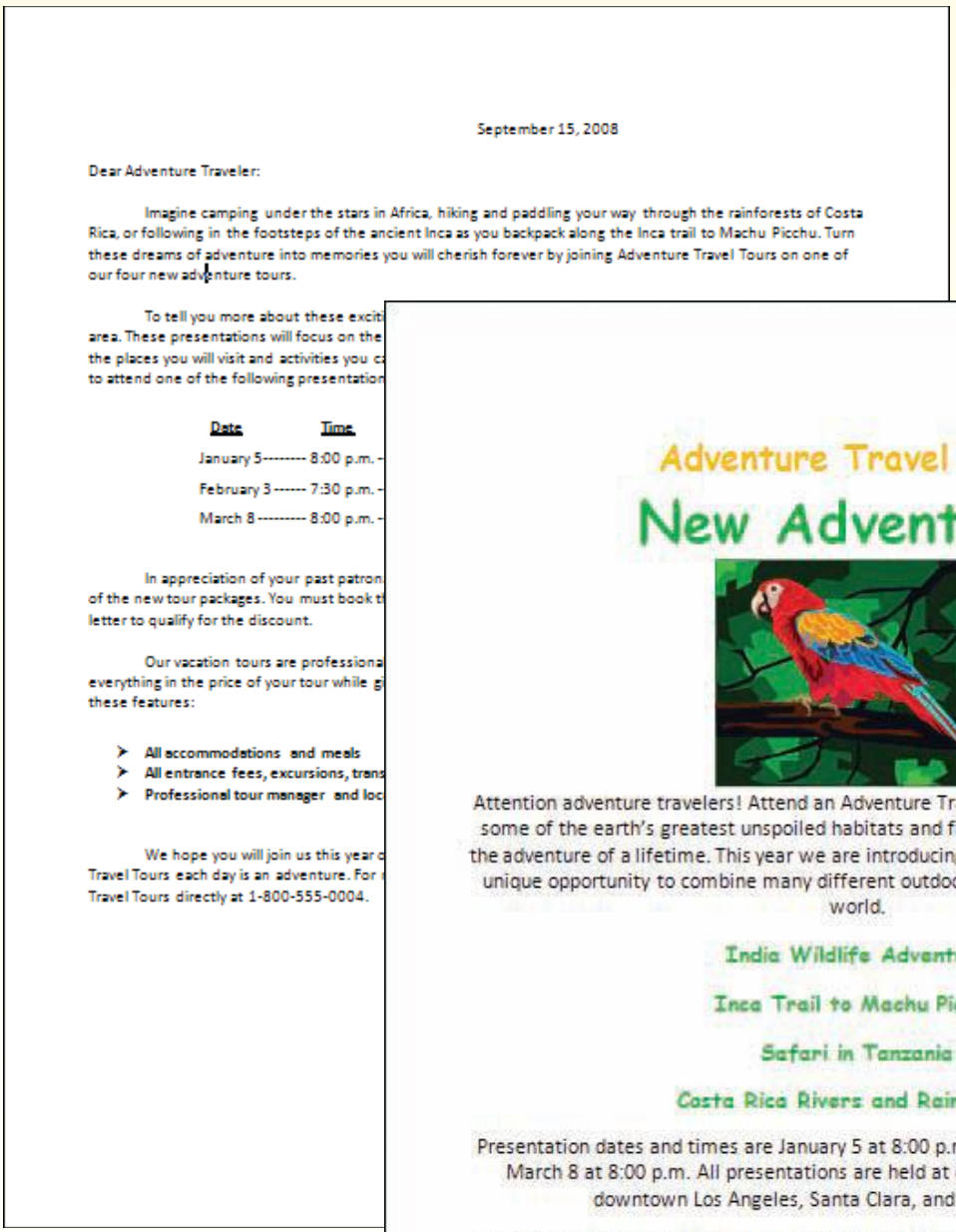
Program	Description
Word 2007	Word Processor program used to create text-based documents
Excel 2007	Spreadsheet program used to analyze numerical data
Access 2007	Database manager used to organize, manage, and display a database
PowerPoint 2007	Graphics presentation program used to create presentation materials
Outlook 2007	Desktop information manager and messaging client
InfoPath 2007	Used to create XML forms and documents
OneNote 2007	Note-taking and information organization tools
Publisher 2007	Tools to create and distribute publications for print, Web, and e-mail
Visio 2007	Diagramming and data visualization tools
SharePoint Designer 2007	Web site development and management for SharePoint servers
Project 2007	Project management tools
Groove 2007	Collaboration program that enables teams to work together

The four main components of Microsoft Office 2007—Word, Excel, Access, and PowerPoint—are the applications you will learn about in this series of labs. They are described in more detail in the following sections.

Word 2007

Word 2007 is a word processing software application whose purpose is to help you create text-based documents. Word processors are one of the most flexible and widely used application software programs. A word processor can be used to manipulate text data to produce a letter, a report, a memo, an e-mail message, or any other type of correspondence.

Two documents you will produce in the first two Word 2007 labs, a letter and flyer, are shown here.



September 15, 2008

Dear Adventure Traveler:

Imagine camping under the stars in Africa, hiking and paddling your way through the rainforests of Costa Rica, or following in the footsteps of the ancient Inca as you backpack along the Inca trail to Machu Picchu. Turn these dreams of adventure into memories you will cherish forever by joining Adventure Travel Tours on one of our four new adventure tours.

To tell you more about these exciti
area. These presentations will focus on the
the places you will visit and activities you c
to attend one of the following presentation

Date	Time
January 5	8:00 p.m.
February 3	7:30 p.m.
March 8	8:00 p.m.

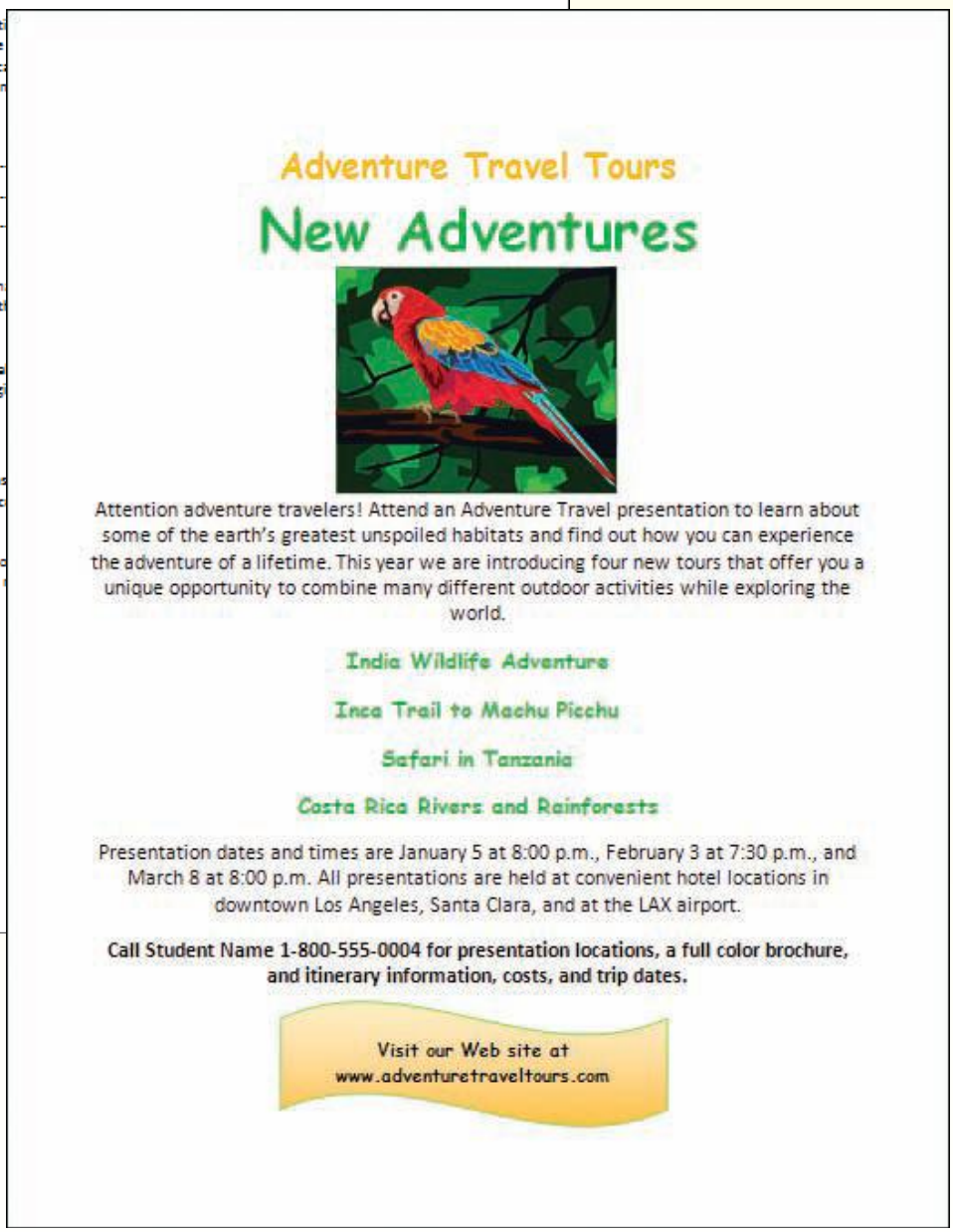
In appreciation of your past patron
of the new tour packages. You must book t
letter to qualify for the discount.

Our vacation tours are professiona
everything in the price of your tour while g
these features:

- All accommodations and meals
- All entrance fees, excursions, trans
- Professional tour manager and loc

We hope you will join us this year
Travel Tours each day is an adventure. For
Travel Tours directly at 1-800-555-0004.

A letter containing a tabbed table, indented paragraphs, and text enhancements is quickly created using basic Word features.



Adventure Travel Tours

New Adventures

Attention adventure travelers! Attend an Adventure Travel presentation to learn about some of the earth's greatest unspoiled habitats and find out how you can experience the adventure of a lifetime. This year we are introducing four new tours that offer you a unique opportunity to combine many different outdoor activities while exploring the world.

India Wildlife Adventure

Inca Trail to Machu Picchu

Safari in Tanzania

Costa Rica Rivers and Rainforests

Presentation dates and times are January 5 at 8:00 p.m., February 3 at 7:30 p.m., and March 8 at 8:00 p.m. All presentations are held at convenient hotel locations in downtown Los Angeles, Santa Clara, and at the LAX airport.

Call Student Name 1-800-555-0004 for presentation locations, a full color brochure, and itinerary information, costs, and trip dates.

Visit our Web site at
www.adventuretraveltours.com

A flyer incorporating many visual enhancements such as colored text, varied text styles, and graphic elements is both eye-catching and informative.

The beauty of a word processor is that you can make changes or corrections as you are typing. Want to change a report from single spacing to double spacing? Alter the width of the margins? Delete some paragraphs and add others from yet another document? A word processor allows you to do all these things with ease.

Word 2007 includes many group collaboration features to help streamline how documents are developed and changed by group members. You also can create and send e-mail messages directly from within Word using all its features to create and edit the message. In addition, you can send an entire document as your e-mail message, allowing the recipient to edit the document directly without having to open or save an attachment.

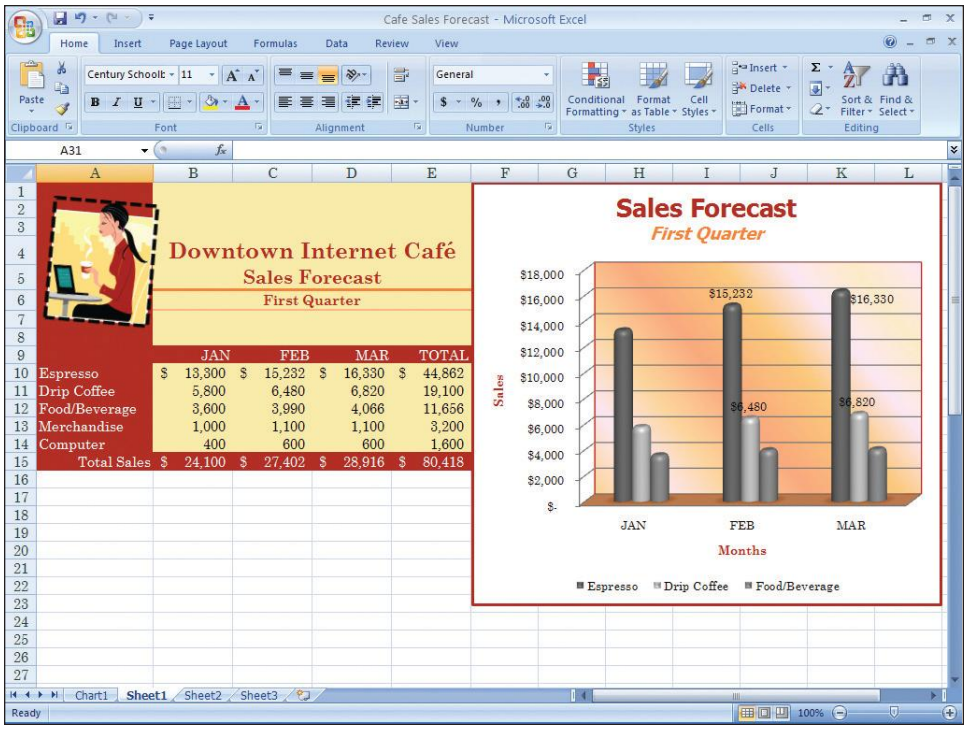
Word 2007 is closely integrated with the World Wide Web, detecting when you type a Web address and automatically converting it to a hyperlink. You also can create your own hyperlinks to locations within documents, or to other documents, including those at external locations such as a Web site or file server. It also includes features that help you quickly create Web pages and blog entries.

Excel 2007

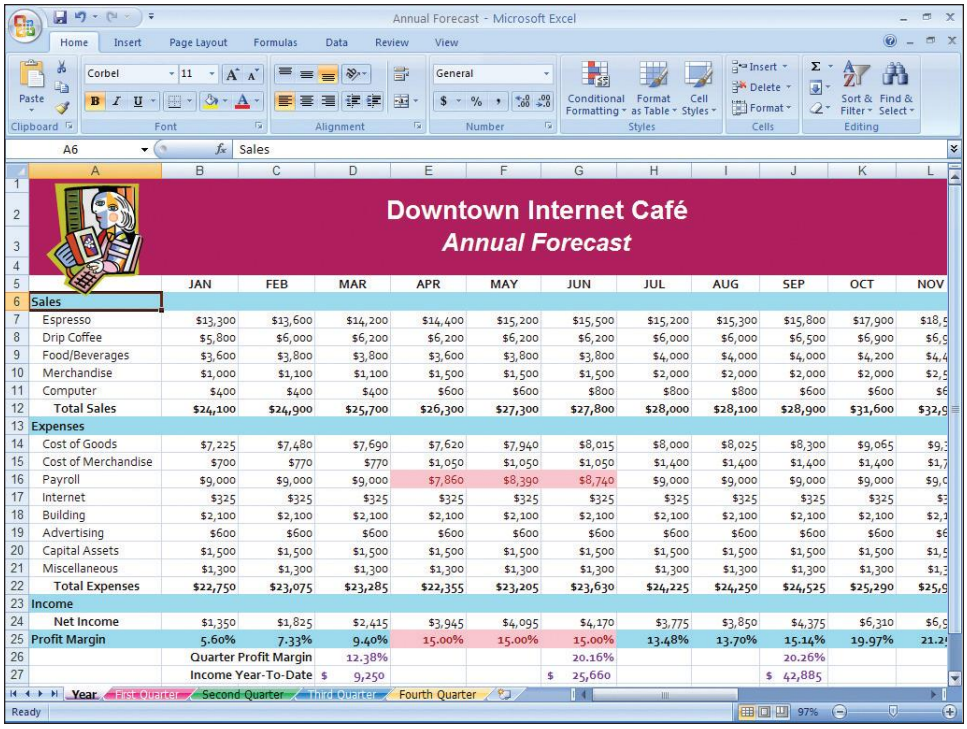
Excel 2007 is an electronic worksheet that is used to organize, manipulate, and graph numeric data. Once used almost exclusively by accountants, worksheets are now widely used by nearly every profession. Marketing professionals record and evaluate sales trends. Teachers record grades and calculate final grades. Personal trainers record the progress of their clients.

Excel 2007 includes many features that not only help you create a well-designed worksheet, but one that produces accurate results. Formatting features include visual enhancements such as varied text styles, colors, and graphics. Other features help you enter complex formulas and identify and correct formula errors. You also can produce a visual display of data in the form of graphs or charts. As the values in the worksheet change, charts referencing those values automatically adjust to reflect the changes.

Excel 2007 also includes many advanced features and tools that help you perform what-if analysis and create different scenarios. And like all Office 2007 applications, it is easy to incorporate data created in one application into another. Two worksheets you will produce in Labs 2 and 3 of Excel 2007 are shown on the next page.

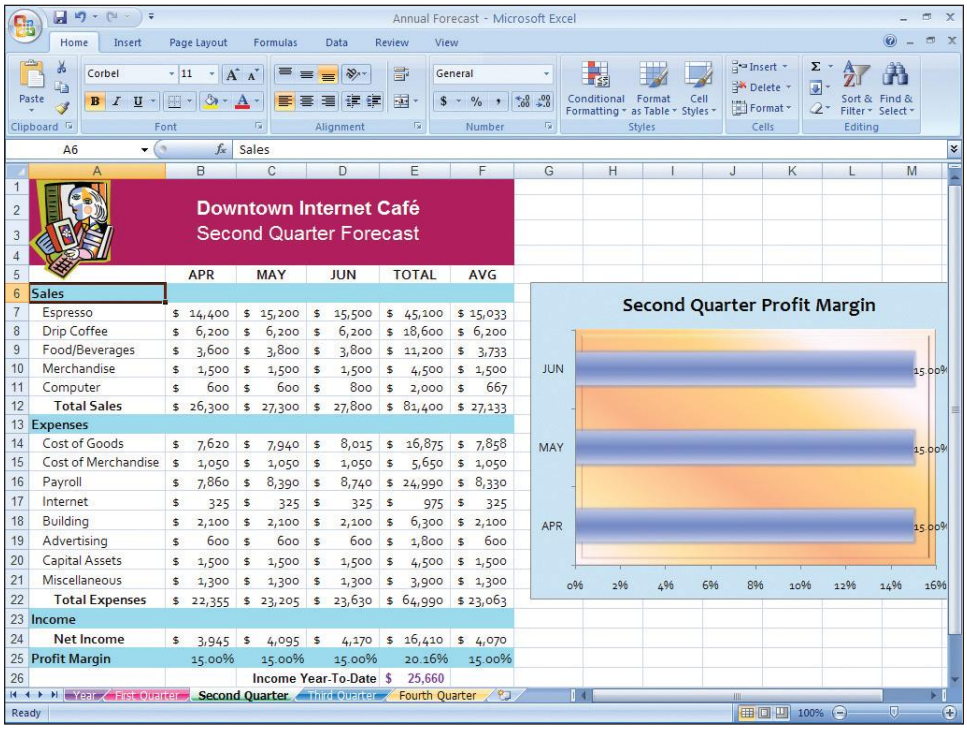


A worksheet showing the quarterly sales forecast containing a graphic, text enhancements, and a chart of the data is quickly created using basic Excel 2007 features.

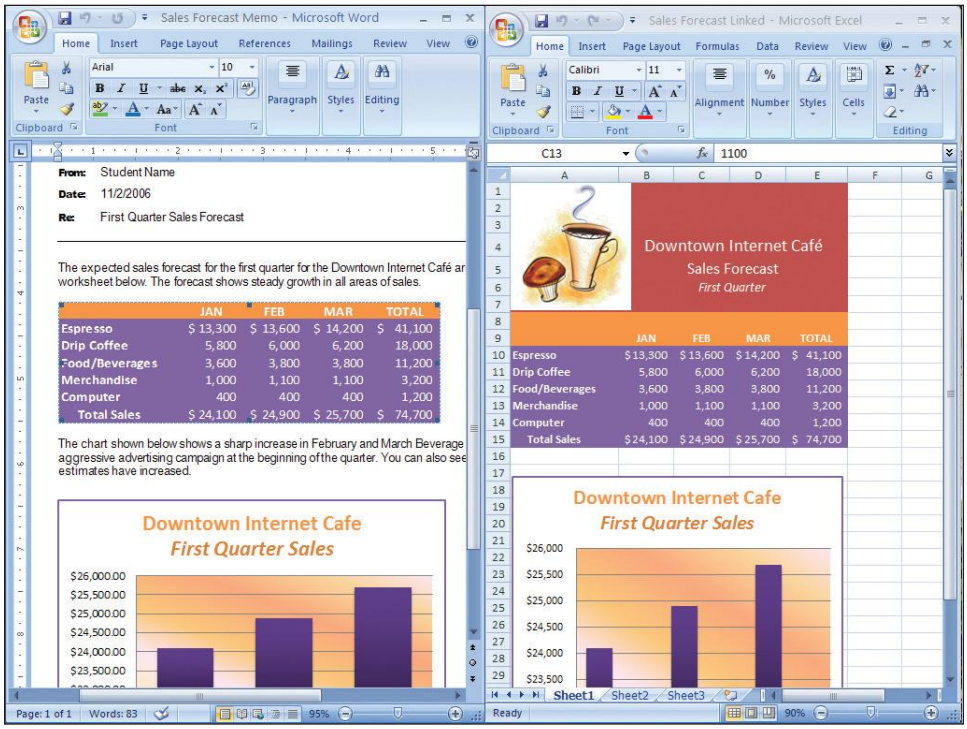


A large worksheet incorporating more complex formulas, visual enhancements such as colored text, varied text styles, and graphic elements is both informative and attractive.

You will see how easy it is to analyze data and make projections using what-if analysis and what-if graphing in Lab 3 and to incorporate Excel data in a Word document as shown in the following figures.



Changes you make in worksheet data while performing what-if analysis are automatically reflected in charts that reference that data.

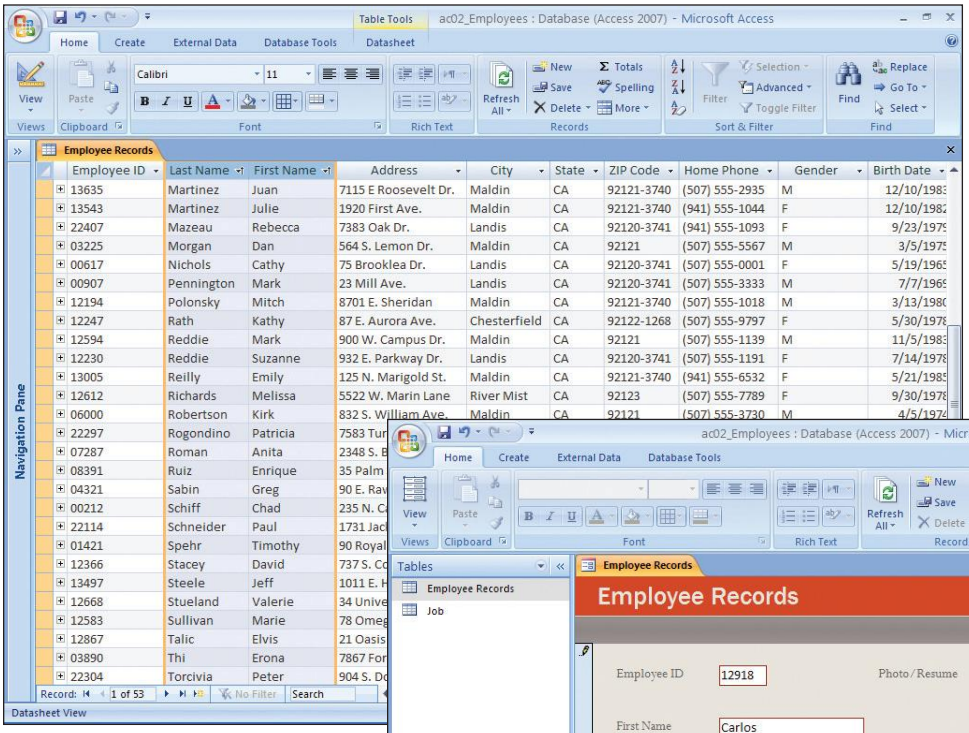


Worksheet data and charts can be copied and linked to other Office documents such as a Word document.

Access 2007

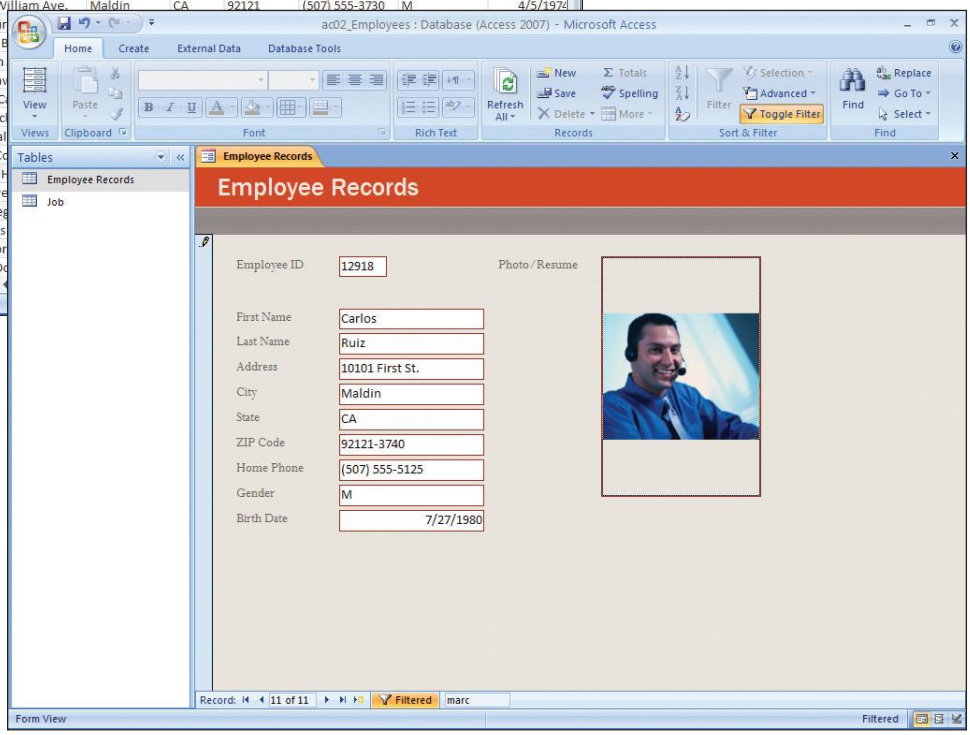
Access 2007 is a relational database management application that is used to create and analyze a database. A database is a collection of related data. In a relational database, the most widely used database structure, data is organized in linked tables. Tables consist of columns (called *fields*) and rows (called *records*). The tables are related or linked to one another by a common field. Relational databases allow you to create smaller and more manageable database tables, since you can combine and extract data between tables.

The program provides tools to enter, edit, and retrieve data from the database as well as to analyze the database and produce reports of the output. One of the main advantages of a computerized database is the ability to quickly add, delete, and locate specific records. Records also can be easily rearranged or sorted according to different fields of data, resulting in multiple table arrangements that provide more meaningful information for different purposes. Creation of forms makes it easier to enter and edit data as well. In the Access labs, you will create and organize the database table shown below.



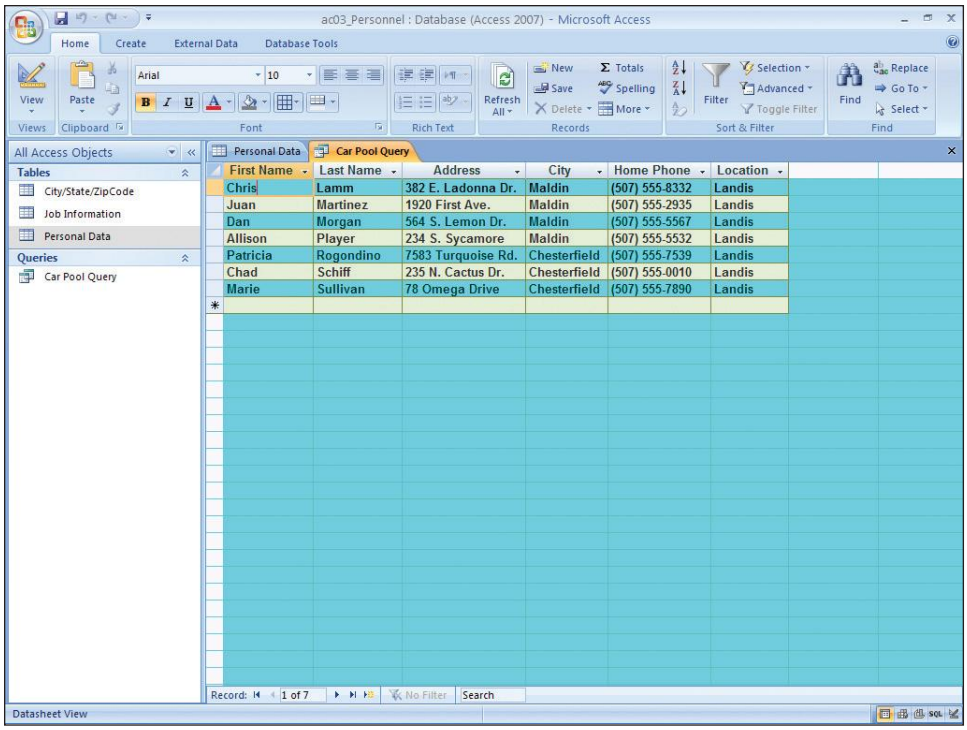
A relational database can be created and modified easily using basic Access 2007 features.

Organizing records into sorted order in a database makes the information more meaningful and easier to use.

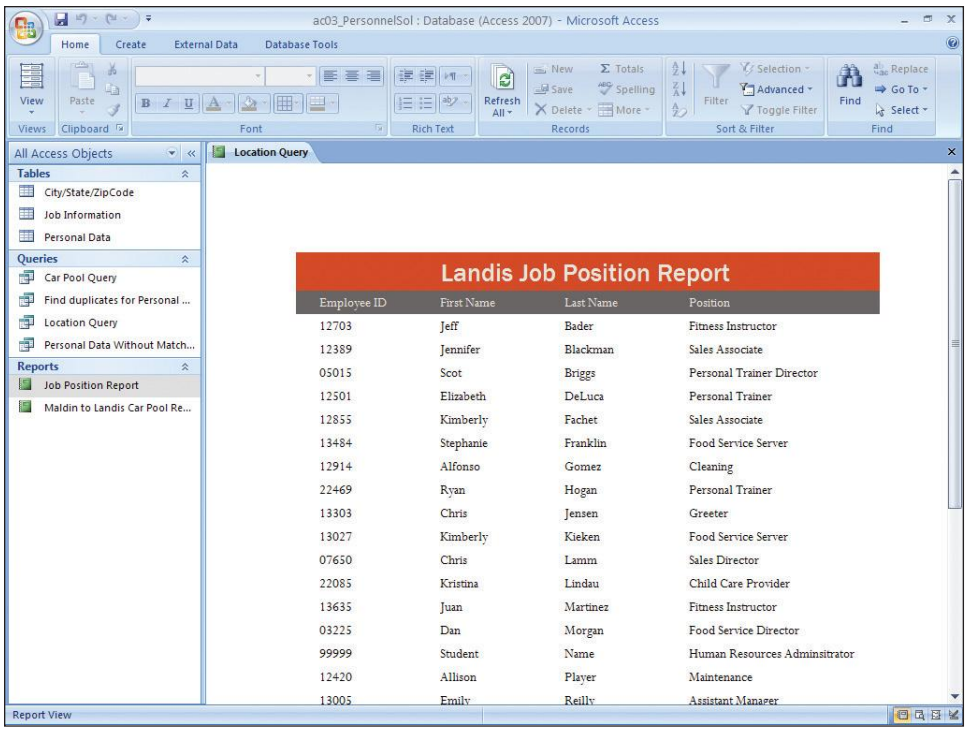


Forms make entering and editing data easy.

Another feature is the ability to analyze the data in a table and perform calculations on different fields of data. Additionally, you can ask questions or query the table to find only certain records that meet specific conditions to be used in the analysis. Information that was once costly and time-consuming to get is now quickly and readily available. This information can then be quickly printed out in the form of reports ranging from simple listings to complex, professional-looking reports in different layout styles, or with titles, headings, subtotals, or totals.



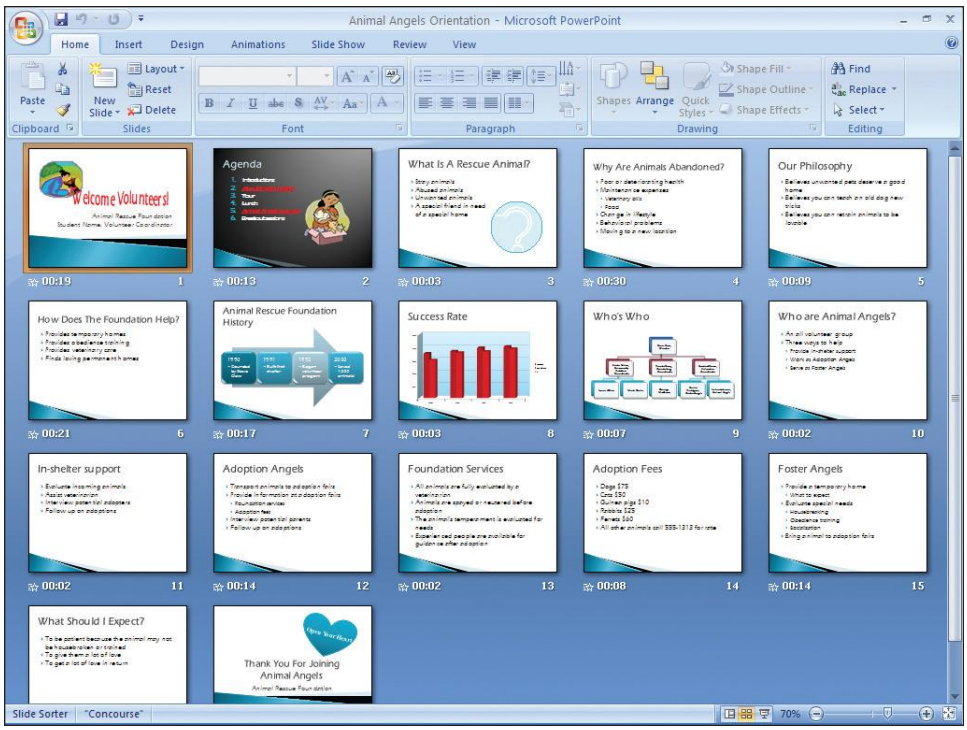
A database can be queried to locate and display only specified information.



A professional-looking report can be quickly generated from information contained in a database.

PowerPoint 2007

PowerPoint 2007 is a graphics presentation program designed to help you produce a high-quality presentation that is both interesting to the audience and effective in its ability to convey your message. A presentation can be as simple as overhead transparencies or as sophisticated as an on-screen electronic display. In the first two PowerPoint labs, you will create and organize the presentation shown below.



A presentation consists of a series of pages or "slides" presenting the information you want to convey in an organized and attractive manner.



When running an on-screen presentation, each slide of the presentation is displayed full-screen on your computer monitor or projected onto a screen.

Common Office 2007 Interface Features

Additional Information
Please read the Before You Begin and Instructional Conventions sections in the Overview of Microsoft Office Word 2007 (WDO.3) before starting this section.

Now that you know a little about each of the applications in Microsoft Office 2007, we will take a look at some of the interface features that are common to all Office 2007 applications. This is a hands-on section that will introduce you to the features and allow you to get a feel for how Office 2007 works. Although Word 2007 will be used to demonstrate how the features work, only common **user interface** features, a set of graphical images that represent various features, will be addressed. These features include using the File menu, Ribbon, Quick Access Toolbar, task panes, and Office Help, and starting and exiting an application. The features that are specific to each application will be introduced individually in each application text.

Starting an Office 2007 Application

There are several ways to start a Office 2007 application. The two most common methods are by using the Start menu or by clicking a desktop shortcut for the program if it is available. If you use the Start menu, the steps will vary slightly depending on the version of Windows you are using.

1. Click start to display the Start menu.

Having Trouble?
In Windows Vista, click

- Choose Microsoft Office Word 2007.

Having Trouble?
If you do not see the program name on the Start menu, select All Programs, select Microsoft Office, and then choose Microsoft Office Word 2007.

OR

1. Double-click the shortcut on the desktop.

2. If necessary, click Maximize in the title bar to maximize the window.

Your screen should be similar to Figure 1

Having Trouble?
Your screen may look slightly different based on your Windows operating system settings.

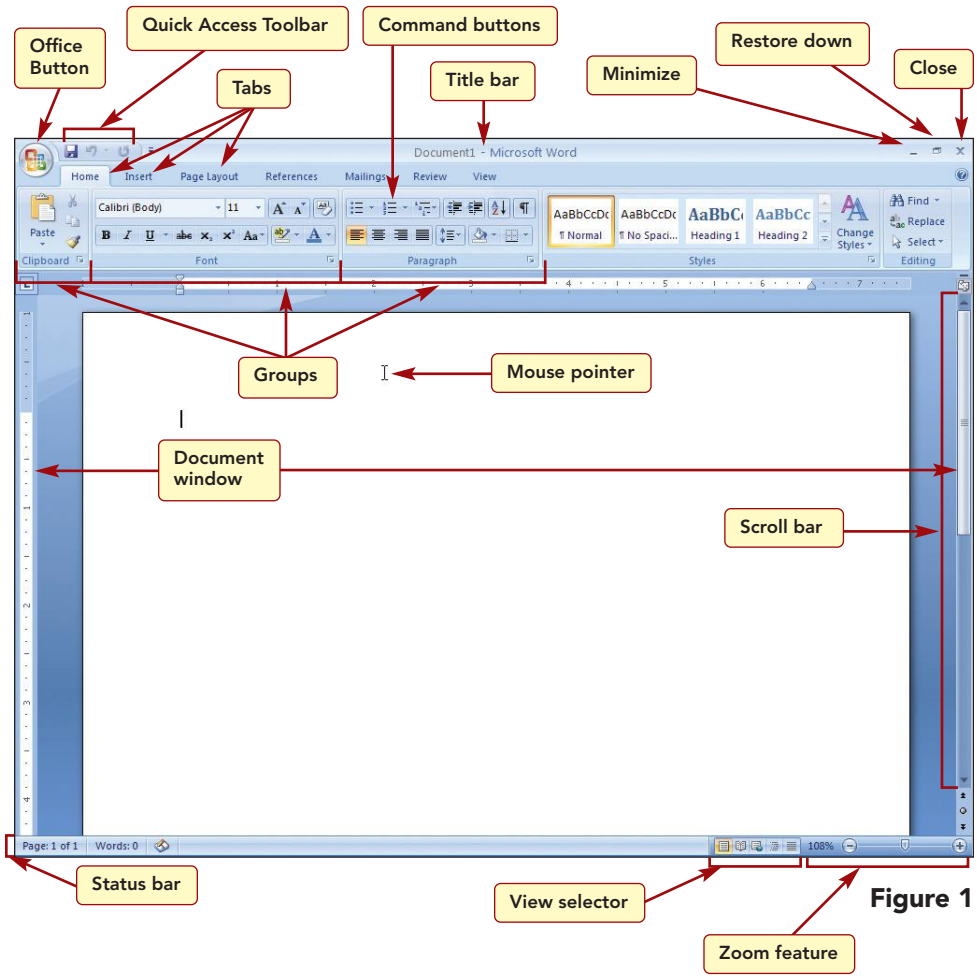


Figure 1

Additional Information
Application windows can be sized, moved, and otherwise manipulated like any other windows on the desktop.

The Word 2007 program is started and displayed in a window on the desktop. The application window title bar displays the file name followed by the program name, Microsoft Word. The right end of the title bar displays the Minimize, Restore Down, and Close buttons. They perform the same functions and operate in the same way as all Windows versions.

Below the title bar is the **Ribbon**, which provides a centralized area that makes it easy to find ways to work in your document. The Ribbon has three basic parts: tabs, groups, and commands. **Tabs** are used to divide the Ribbon into major activity areas. Each tab is then organized into **groups** that contain related items. The related items are commands that consist of command buttons, a box to enter information, or a menu. As you use the Office applications, you will see that the Ribbon contains many of the same groups and commands across the applications. You also will see that many of the groups and commands are specific to an application.

Additional Information
Because the Ribbon can adapt to the screen resolution and orientation, your Ribbon may look slightly different.

The upper left area of the window's title bar displays the Office Button and the Quick Access Toolbar. Clicking Office Button opens the File menu of commands that allows you to work *with* your document, unlike the Ribbon that allows you to work *in* your document. For example, it includes commands to open, save, and print files. The **Quick Access Toolbar** (QAT) provides quick access to frequently used commands. By default, it includes the Save, Undo, and Redo buttons, commands that Microsoft considers to be crucial. It is always available and is a customizable toolbar to which you can add your own favorite buttons.

The large center area of the program window is the **document window** where open application files are displayed. Currently, there is a blank Word document open. In Word, the mouse pointer appears as I when positioned in the document window and as a when it can be used to select items.

On the right of the document window is a vertical scroll bar. A **scroll bar** is used with a mouse to bring additional lines of information into view in a window. The vertical scroll bar is used to move up or down. A horizontal scroll bar is also displayed when needed and moves side to side in the window. At the bottom of the window is the **status bar**, a view selector, and a document zoom feature. Similar information and features are displayed in this area for different Office applications. You will learn how these features work in each individual application.

Using the File Menu

Clicking the Office Button opens the File menu of commands that are used to work with files.

1 **Click Office Button to open the File menu.**

Your screen should be similar to Figure 2

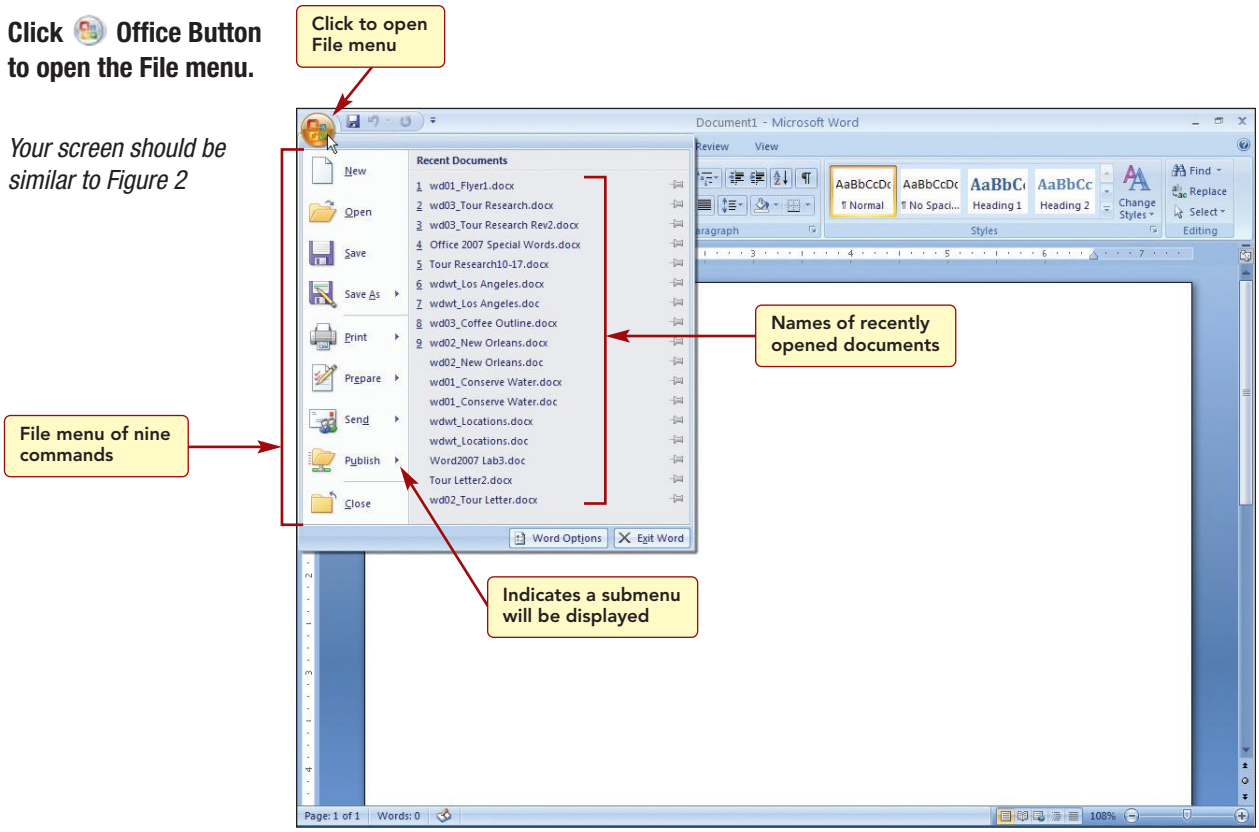


Figure 2

Additional Information

Clicking the pin next to a file name pins the file and permanently keeps the file name in the recently used list until it is unpinned.

The menu lists nine commands that are used to perform tasks associated with files. Notice that each command displays an underlined letter. This identifies the letter you can type to choose the command. Five commands display a ▶, which indicates the command includes a submenu of options. The right side of the command list currently displays the names of recently opened files (your list will display different file names). The default program setting displays a maximum of 17 file names. Once the maximum number of files is listed, when a new file is opened, the oldest is dropped from the list.

Once the File menu is open, you can select a command from the menu by pointing to it. A colored highlight bar, called the **selection cursor**, appears over the selected command.

2 **Point to the Open command.**

Your screen should be similar to Figure 3

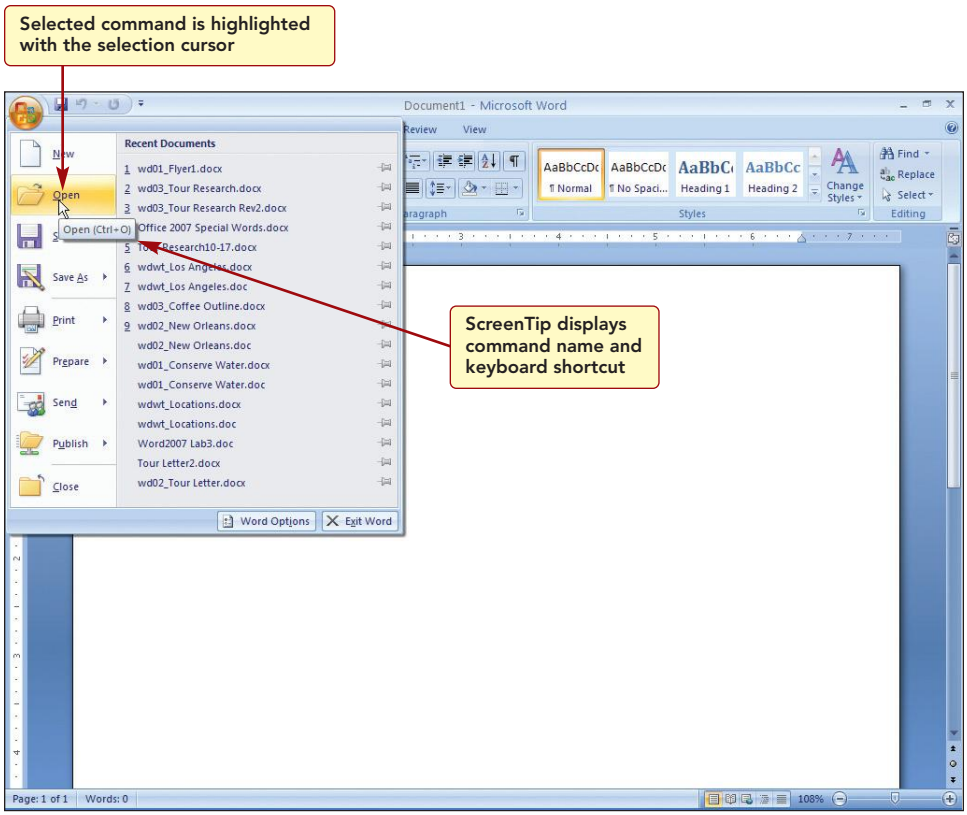


Figure 3

A **ScreenTip**, also called a **tooltip**, briefly appears displaying the command name and the keyboard shortcut, Ctrl + O. The keyboard shortcut can be used to execute this command without opening the menu. In this case, if you hold down the Ctrl key while typing the letter O, you will access the Open command without having to open the File menu first. ScreenTips also often include a brief description of the action a command performs.

Next you will select a command that will display a submenu of options.

3 **Point to the Prepare command.**

Point to the Mark as Final submenu option.

Your screen should be similar to Figure 4

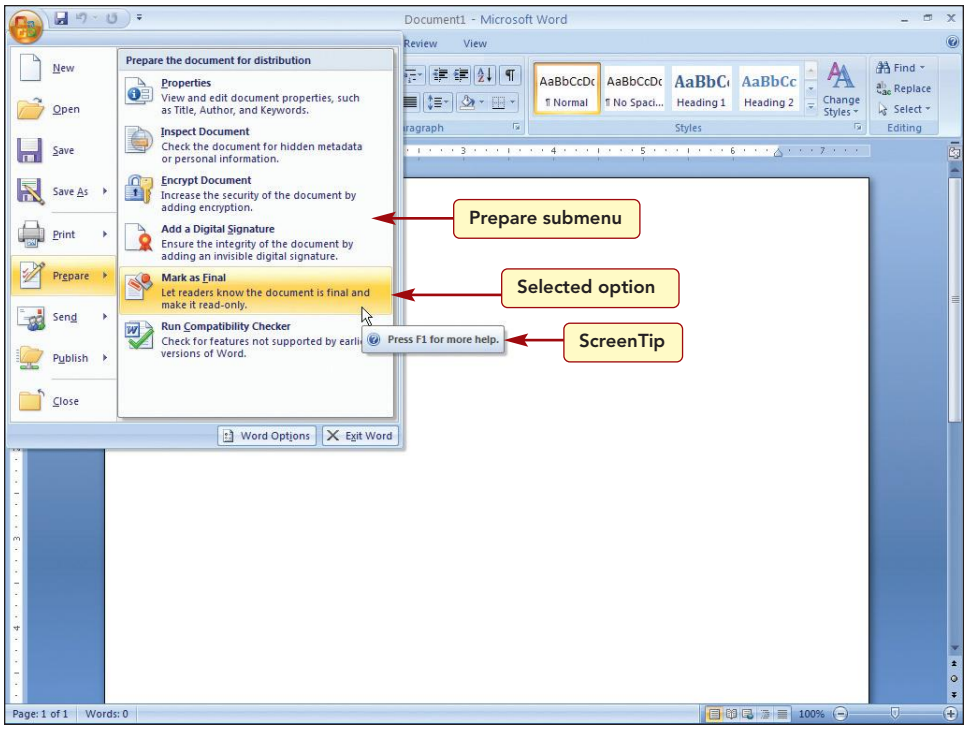


Figure 4

The submenu lists the six Prepare command submenu options and the Mark as Final option is selected. A ScreenTip provides information about how to get help on this feature. You will learn about using Help shortly.

4 **Point to the Print command.**

Point to the ▸ of the Print command.

Your screen should be similar to Figure 5

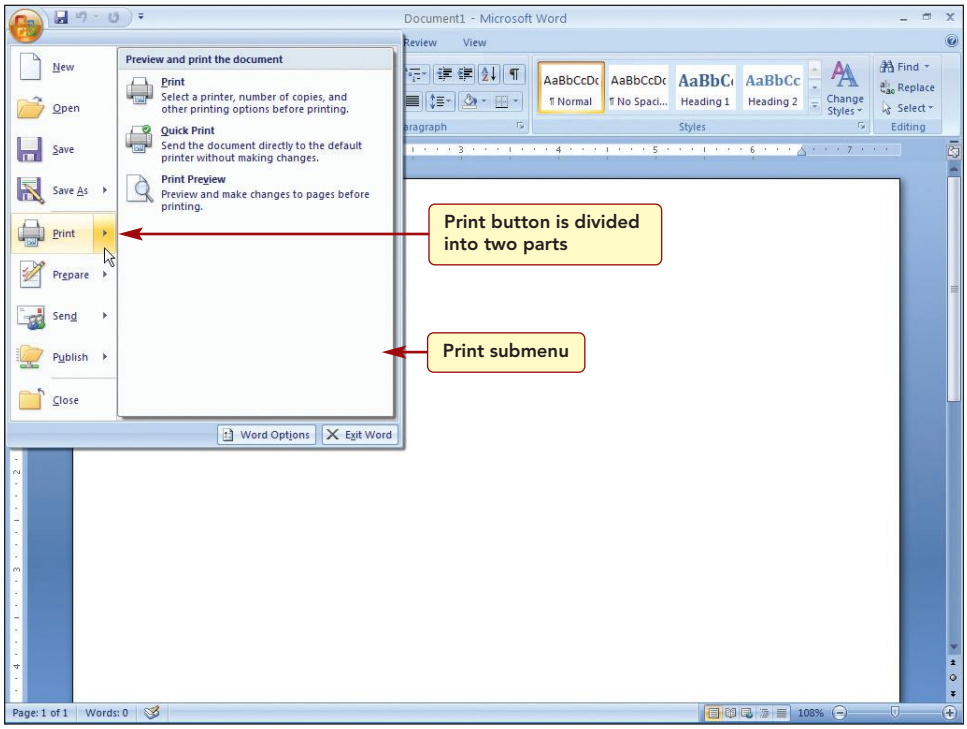


Figure 5

Another Method

You also can use the directional keys to move up, down, left, or right within the menu.

Another Method

You also can press ↵Enter to choose a selected command.

5 **Click the Print command.**

Your screen should be similar to Figure 6

So far you have only selected commands; you have not chosen them. To choose a command, you click on it. When the command is chosen, the associated action is performed. Notice the Print command is divided into two parts. Clicking the Print section on the left will choose the command and open the Print dialog box. Clicking ▸ in the right section has no effect and only the submenu to displayed.

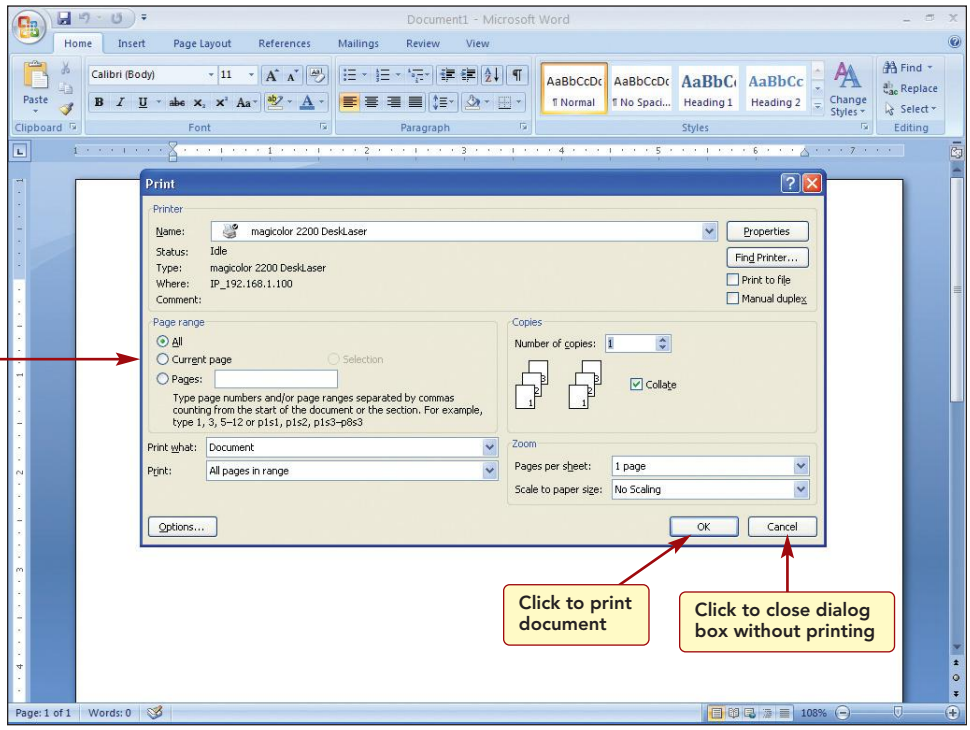


Figure 6

In the Print dialog box, you would specify the print settings and click OK to actually print a document. In this case, you will cancel the action and continue to explore other features of the Office 2007 application.

6 **Click** Cancel.

Another Method

You also can press Esc to cancel an action.

Using Context Menus

Another way to access some commands is to use a context menu. A **context menu** is opened by right-clicking on an item on the screen. This menu is context sensitive, meaning it displays only those commands relevant to the item. For example, right-clicking on the Quick Access Toolbar will display the commands associated with using the Quick Access Toolbar only. You will use this method to move the Quick Access Toolbar.

1. **Point to the Quick Access Toolbar and right-click.**

Another Method

You also can click ▾ at the end of the Quick Access toolbar to open the menu.

2. **Click the Show Quick Access Toolbar below the Ribbon option.**

Your screen should be similar to Figure 7

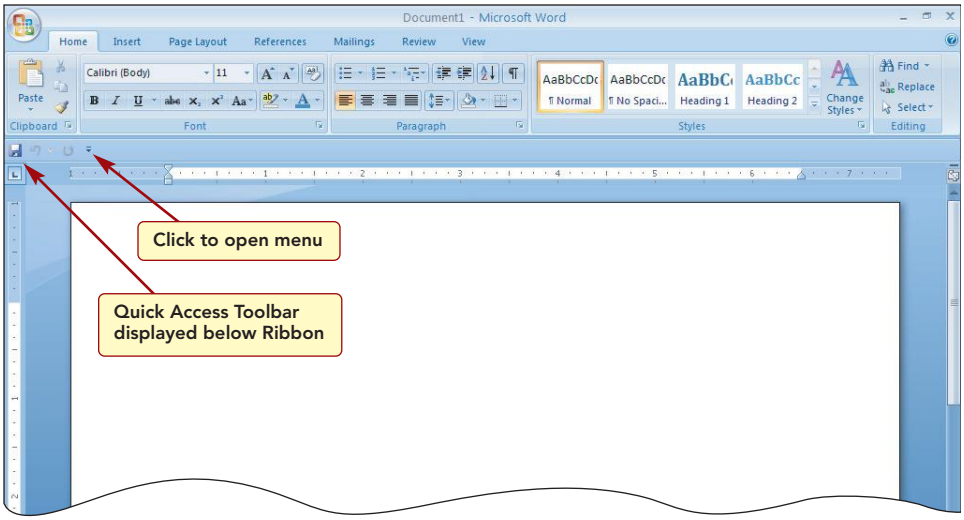


Figure 7

The Quick Access Toolbar is now displayed full size below the Ribbon. This is useful if you have many buttons on the toolbar; however, it takes up document viewing space. You will return it to its compact size using the toolbar's drop-down menu.

1. **Click ▾ on the right end of the Quick Access Toolbar.**

2. **Choose Show Above the Ribbon.**

Your screen should be similar to Figure 8

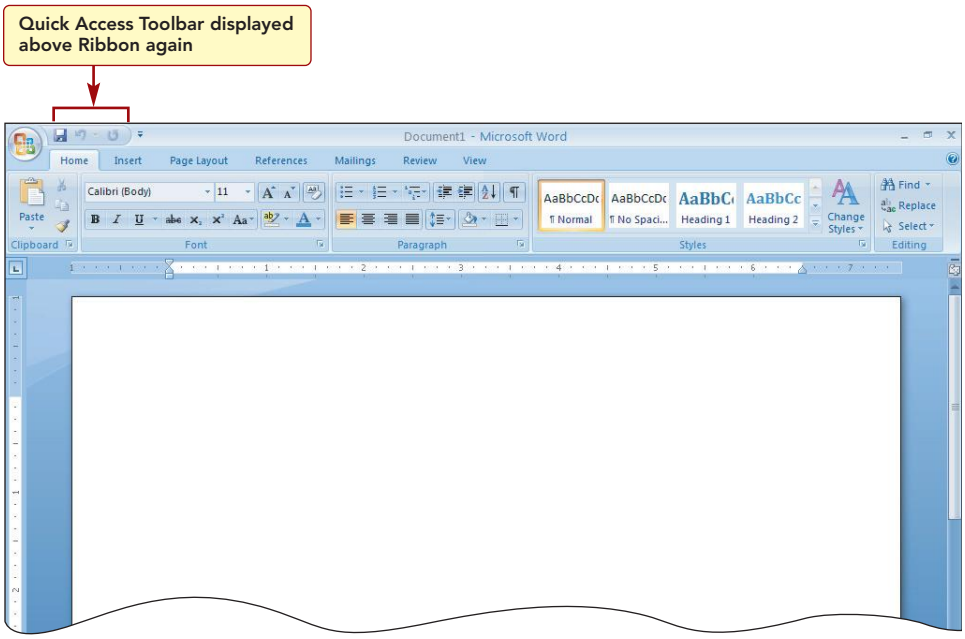


Figure 8

MORE ABOUT

See the More About appendix to learn how to customize the Quick Access Toolbar.

The Quick Access Toolbar is displayed above the Ribbon again. The toolbar's drop-down menu contains a list of commands that are often added to the toolbar. Clicking on the command selects it and adds it to the toolbar.

Using the Ribbon

The Ribbon displays tabs that organize similar features into groups. In Word, there are seven tabs displayed. To save space, some tabs, called **contextual** or **on-demand tabs**, are displayed only as needed. For example,

when you are working with a picture, the Picture Tools tab appears. The contextual nature of this feature keeps the work area uncluttered when the feature is not needed and provides ready access to it when it is needed.

Opening Tabs

The Home tab is open when you first start the application or open a file. It consists of five groups: Clipboard, Font, Paragraph, Styles, and Editing. Each group contains command buttons that when clicked on perform their associated action or display a list of additional commands. The commands in the Home tab help you perform actions related to creating the content of your document.

1 **Click on the Insert tab.**

Additional Information
The open tab appears highlighted.

Your screen should be similar to Figure 9

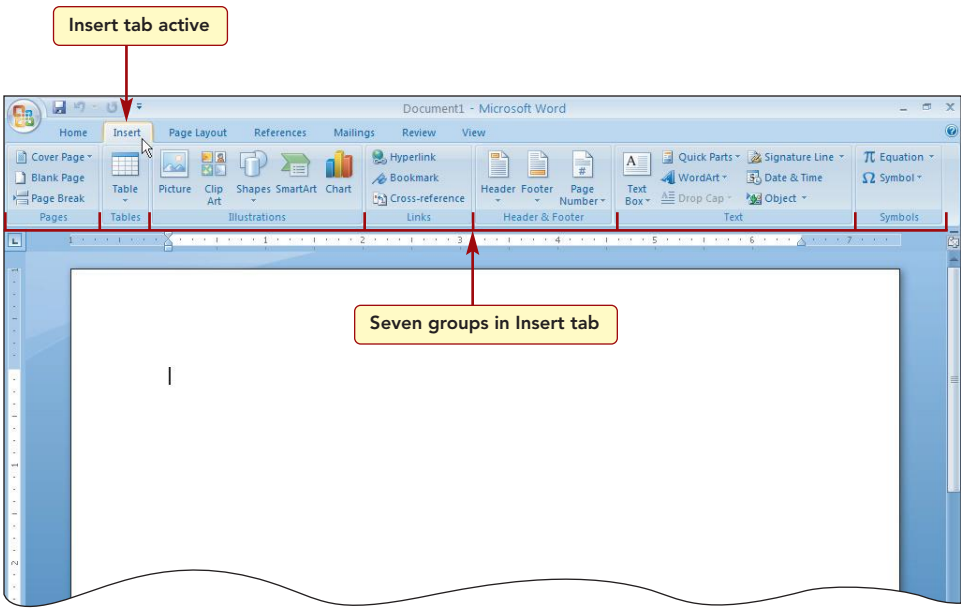


Figure 9

This Insert tab is now the active tab. It contains seven groups whose commands have to do with inserting items into a document.

2 **Click on each of the other tabs, ending with the View tab, to see their groups and commands.**

Your screen should be similar to Figure 10

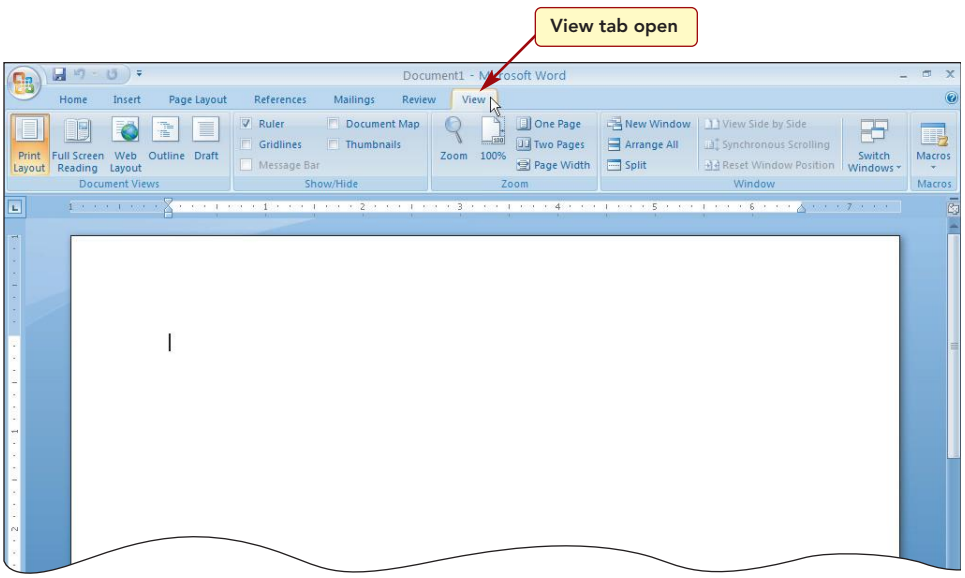


Figure 10

Each tab relates to a type of activity; for example, the View tab commands perform activities related to viewing the document. Within each tab, similar commands are grouped together to make finding the commands you want to use much easier.

Displaying Super Tooltips

Many command buttons immediately perform the associated action when you click on them. The buttons are graphic representations of the action they perform. To help you find out what a button does, you can display the button's ScreenTip.

1. **Open the Home tab.**
- **Point to the upper part of the Paste button in the Clipboard group.**
- **Point to the lower part of the Paste button in the Clipboard group.**
- **Point to Format Painter in the Clipboard group.**

Your screen should be similar to Figure 11

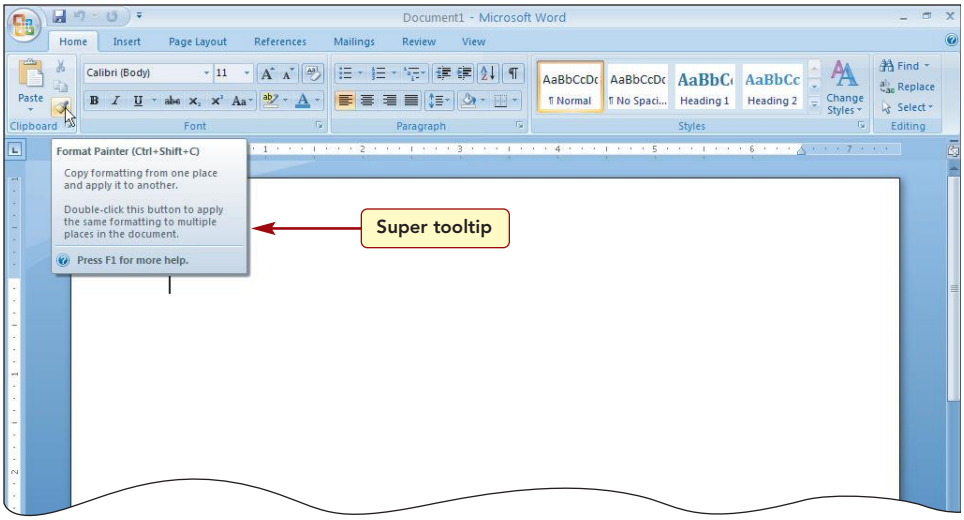


Figure 11

Additional Information
Not all commands have shortcut keys.

Additional Information
You will learn about using Help shortly.

The Paste button is a **split button.** Both parts of the button display tooltips containing the button name, the shortcut key combination, Ctrl + V, and a brief description of what clicking the button does. Pointing to Format Painter displays a **super tooltip** that provides more detailed information about the command. Super tooltips may even display information such as procedures or illustrations. You can find out what the feature does without having to look it up in Help. If a feature has a Help article, you can automatically access it by pressing F1 while the super tooltip is displayed.

Using Galleries and Lists

Many commands in the groups appear as a **gallery** that displays small graphics that represent the result of applying a command. For example, in the Styles group, the command buttons to apply different formatting styles to text display examples of how the text would look if formatted using that command. These are called **in-Ribbon galleries** because they appear directly in the Ribbon. Other commands include multiple options that appear in **drop-down galleries** or drop-down lists that are accessed by clicking the in the split button. To see an example of a drop-down gallery, you will open the Bullets drop-down gallery.

1. **Click ▾ in the Bullets button.**

Your screen should be similar to Figure 12

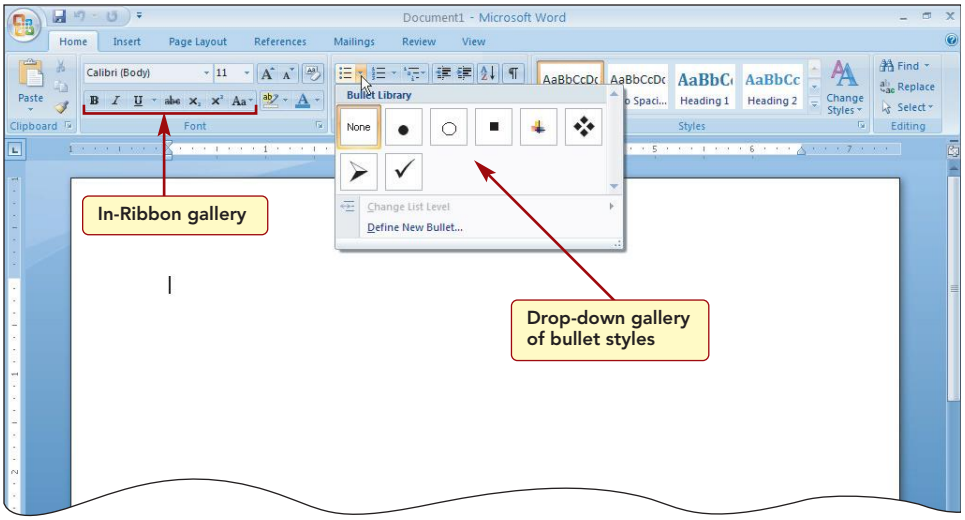


Figure 12

A drop-down gallery of different bullets is displayed. The drop-down gallery will disappear when you make a selection or click on any other area of the window. To see an example of a drop-down list, you will open the 11 ▾ Font Size drop-down list.

2. **Click outside the Bullet gallery to clear it.**

3. **Click ▾ in the 11 Font Size button.**

Your screen should be similar to Figure 13

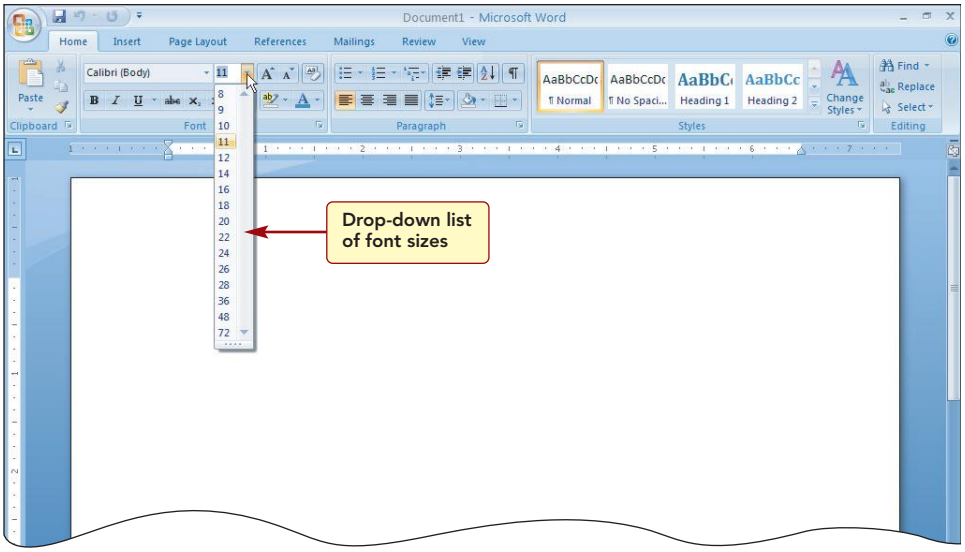


Figure 13

If you click on the button itself, not the ▾ section of the button, the associated command is performed.

Using the Dialog Box Launcher

Because there is not enough space, only the most used commands are displayed in the Ribbon. If there are more commands available, a ↘ button, called the **dialog box launcher**, is displayed in the lower-right corner of the group. Clicking ↘ opens a dialog box or **task pane** of additional options.

1. **Click outside the Font size list to clear it.**
2. **Point to the ⧉ of the Paragraph group to see the tooltip.**
3. **Click ⧉ of the Paragraph group.**

Your screen should be similar to Figure 14

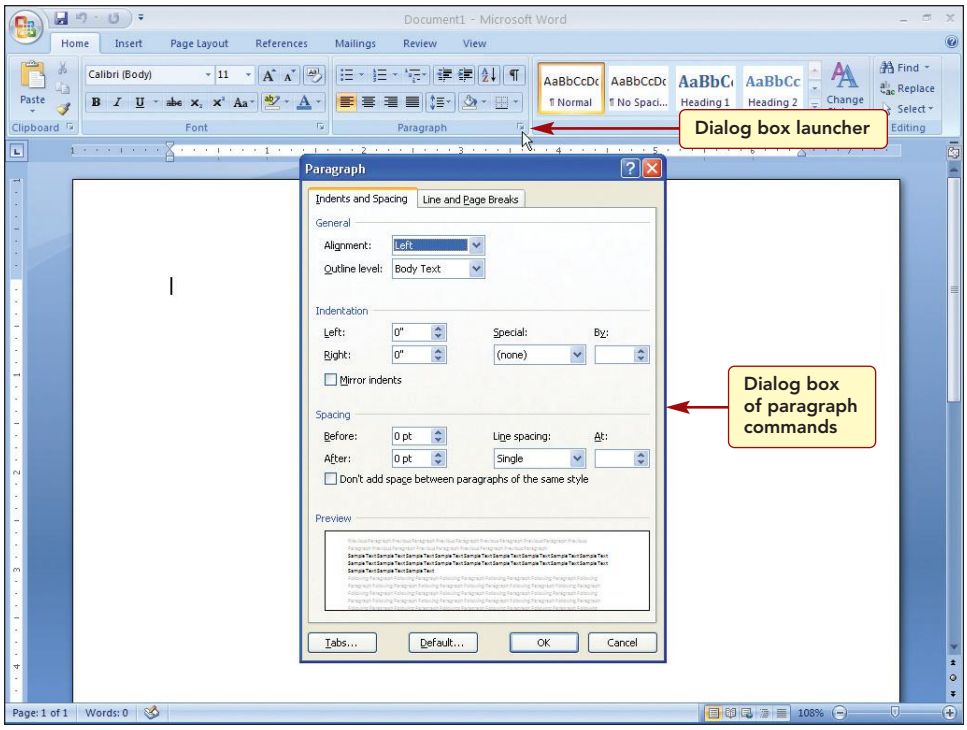


Figure 14

The Paragraph dialog box appears. It provides access to the more advanced paragraph settings features. Selecting options from the dialog box and clicking OK will close the dialog box and apply the settings as specified. To cancel the dialog box, you can click Cancel or ✕ in the dialog box title bar.

2. **Click Cancel to close the dialog box.**
3. **Click ⧉ in the Clipboard group.**

Your screen should be similar to Figure 15

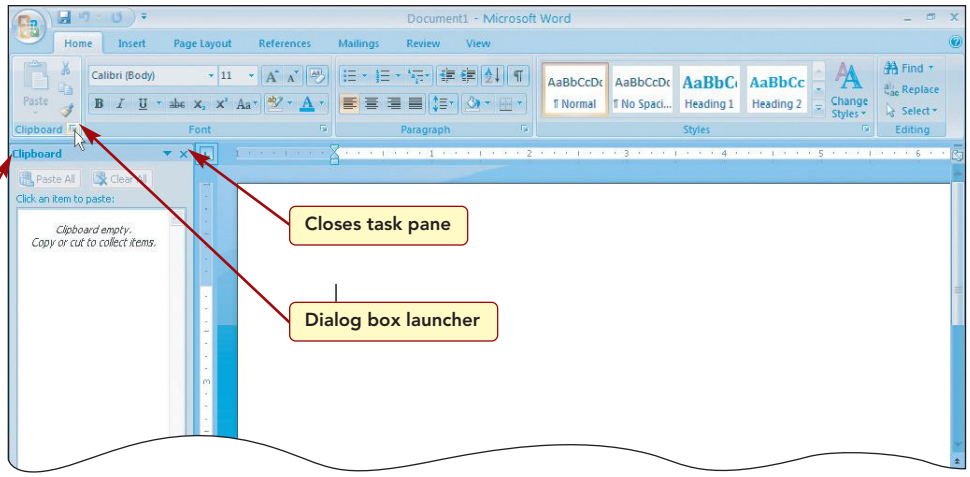


Figure 15

Additional Information
You will learn about using dialog boxes, task panes, and the Clipboard as they are used in the labs.

A task pane is open that contains features associated with the Clipboard. Unlike dialog boxes, task panes remain open until you close them. This allows you to make multiple selections from the task pane while continuing to work on other areas of your document.

4. **Click ✕ in the upper-right corner of the task pane to close it.**

Using Access Key Shortcuts

Another way to use commands on the Ribbon is to display the access key shortcuts by pressing the Alt key and then typing the letter for the feature you want to use. Every Ribbon tab, group, and command has an access key.

1 **Press Alt.**

Another Method

You also can press F10 to display the access keys.

Your screen should be similar to Figure 16

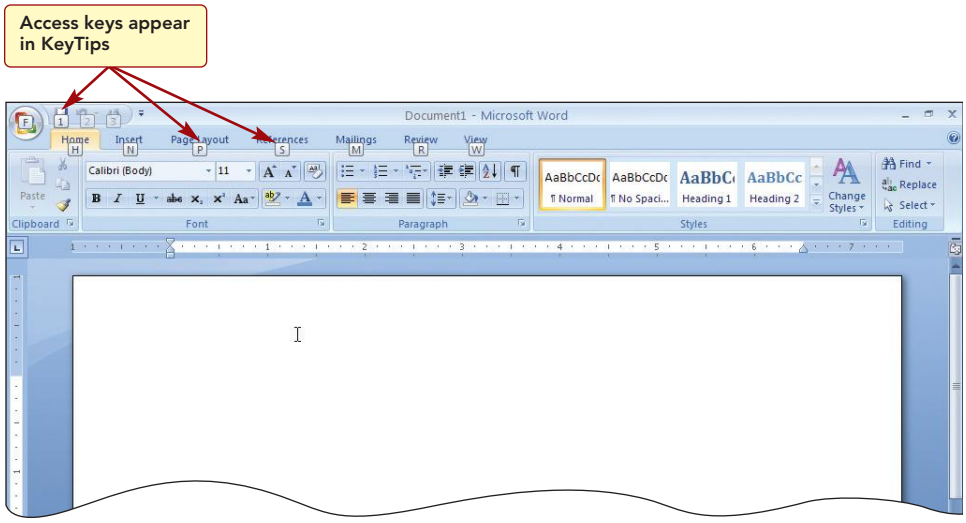


Figure 16

The letters are displayed in **KeyTips** over each available feature. Now typing a letter will access that feature. Then, depending on which letter you pressed, additional KeyTips may appear. To use a Ribbon command, press the key of the tab first, then the group, and then continue pressing letters until you press the letter of the specific command you want to use. You will use KeyTips to display the Paragraph dialog box again.

2 **Type the letter H to access the Home tab.**

Type the letters PG to access the Paragraph group and open the dialog box.

Your screen should be similar to Figure 17

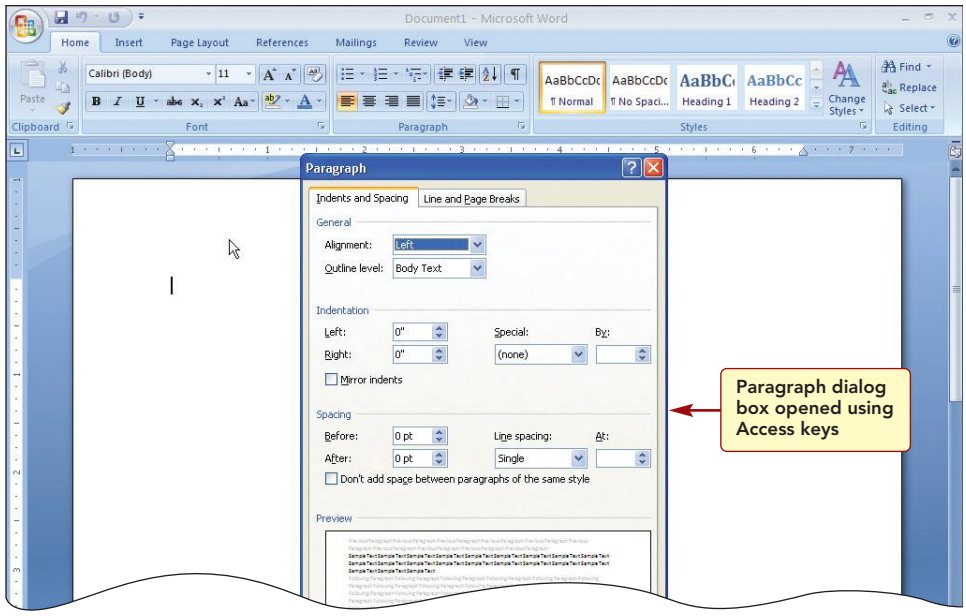


Figure 17

Three keystrokes opened the Paragraph dialog box.

Another Method

You also can press F6 to change the focus from the Ribbon to the document area to the View Toolbar.

Once the Access key feature is on, you can also use the ← or → directional key to move from one tab to another, and the ↓ key to move from a tab to a group and the ↑ key to move from a group to a tab. You can use all four directional keys to move among the commands in a Ribbon. Tab and Shift + Tab also can be used to move right or left. Once a command is selected, you can press Spacebar or Enter to activate it.

Another Method

You also can use the keyboard shortcut Ctrl + F1 to minimize and redisplay the Ribbon.

Minimizing the Ribbon

Sometimes you may not want to see the entire Ribbon so that more space is available in the document area. You can minimize the Ribbon by double-clicking the active tab.

1. **Click ⊠ to close the Paragraph dialog box.**
2. **Double-click the Home tab.**

Another Method

You also can choose Minimize the Ribbon from the Quick Access Toolbar menu.

Your screen should be similar to Figure 18

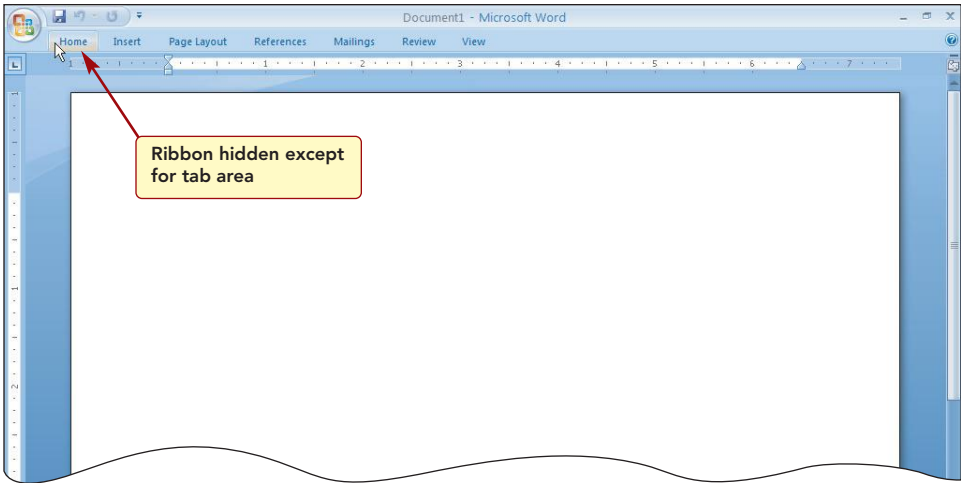


Figure 18

Now, the only part of the Ribbon that is visible is the tab area. This allows you to quickly reopen the Ribbon and, at the same time, open the selected tab.

2. **Double-click the Insert tab.**

Your screen should be similar to Figure 19

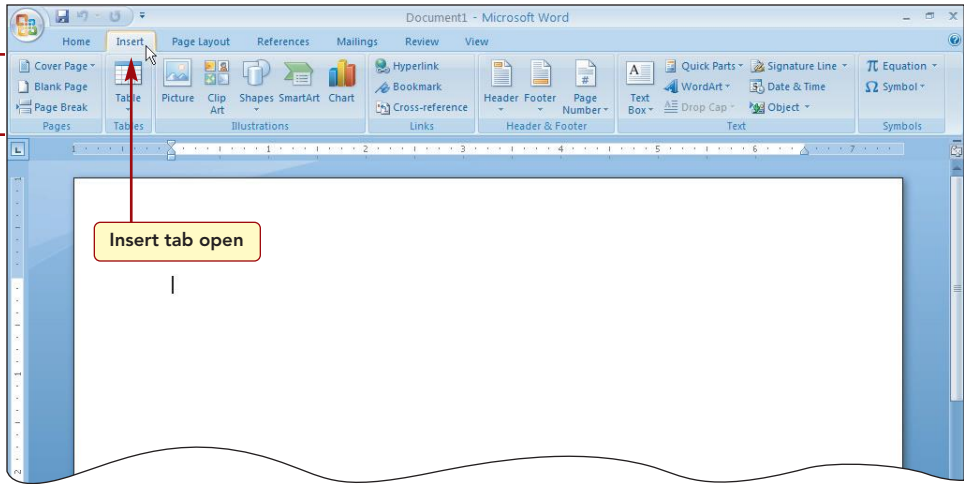


Figure 19

Additional Information

If you single-click a tab, the Ribbon reappears temporarily, but minimizes again as you continue to work.

The full Ribbon reappears and the Insert tab is open and ready for use.

Using the Mini Toolbar

Another method of accessing commands is through the Mini toolbar. The **Mini toolbar** appears automatically when you select text in a document and provides commands that are used to format (enhance) text. It also appears along with the context menu when you right-click an item in a document. Both the Mini toolbar and context menus are designed to make it more efficient to execute commands.

You can see what these features look like by right-clicking in a blank area of the document window.

1. **Right-click the blank document window space.**

Your screen should be similar to Figure 20

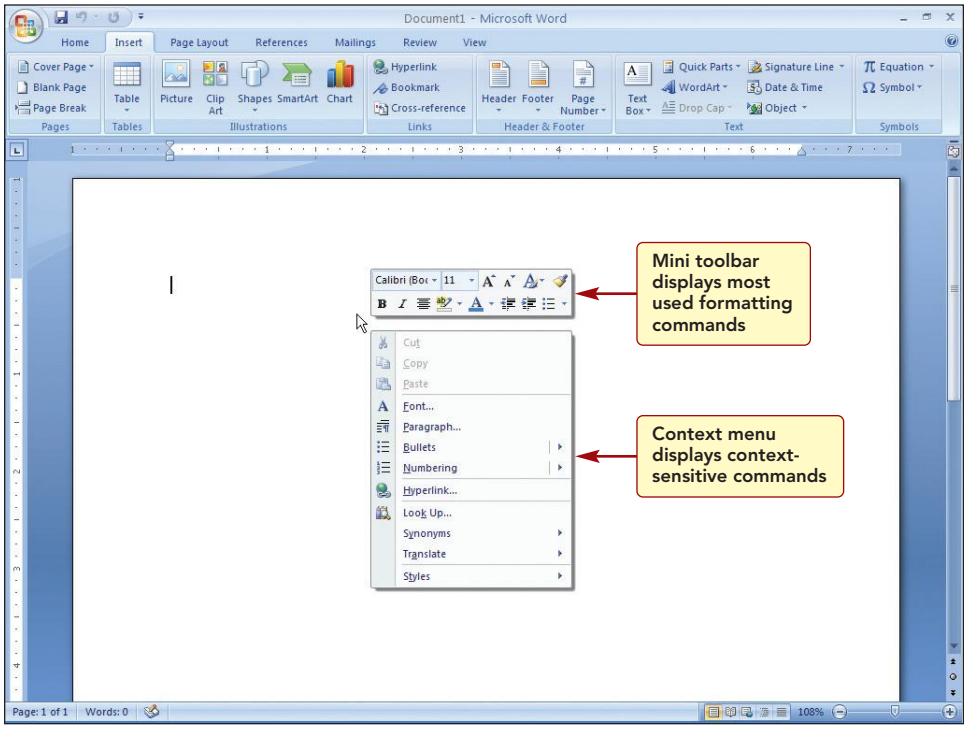


Figure 20

The Mini toolbar displays the most frequently used formatting commands. For example, when the Home tab is closed, you can use the commands in the Mini toolbar to quickly change selected text without having to reopen the Home tab to access the command. When the Mini toolbar appears automatically, it is faded so that it does not interfere with what you are doing, but changes to solid (as it is here) when you point at it.

The context menu below the Mini toolbar displays a variety of commands that are quicker to access than locating the command on the Ribbon. The commands that appear on this menu change depending on what you are doing at the time.

Using Office Help

Another Method
You also can press F1 to access Help.

Notice the  in the upper-right corner of the Ribbon. This button is used to access the Microsoft Help system. The Help button is always visible even when the Ribbon is hidden. Because you are using the Office Word 2007 application, Office Word Help will be accessed.

1. Click Microsoft Office Word Help.

- If a Table of Contents list is displayed along the left side of the Help window, click in the Help window toolbar to close it.

Additional Information
You will learn about using the Table of Contents shortly.

Your screen should be similar to Figure 21

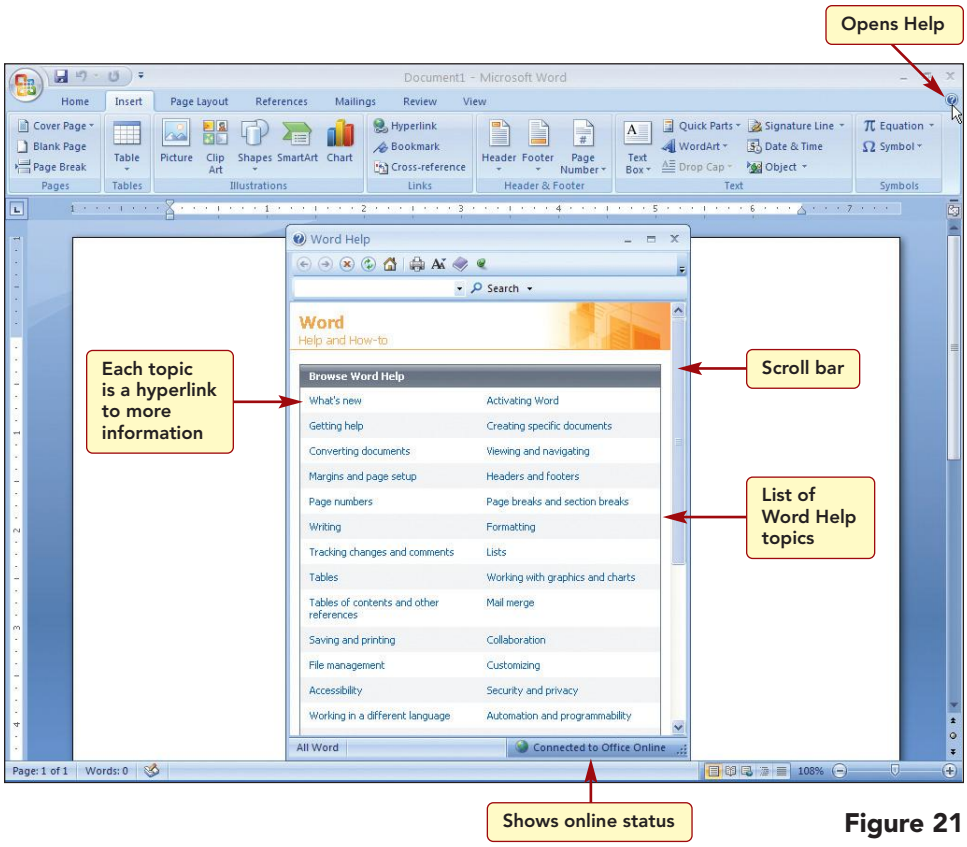


Figure 21

Additional Information
Clicking the scroll arrows scrolls the text in the window line by line, and dragging the scroll bar up or down moves to a general location within the window area.

Additional Information
Because Help is an online feature, the information is frequently updated. Your screens may display slightly different information than those shown in the figures in this lab.

Having Trouble?
In addition to being connected to the Internet, the feature to show content from the Internet must be selected. If necessary, click the Offline button at the bottom of the Help window and choose Show content from Office Online.

The Microsoft Word Help feature is opened and displayed in a separate window. The Help window on your screen will probably be a different size and arrangement than in Figure 21. Depending on the size of your Help window, you may need to scroll the window to see all the Help information provided.

It displays a listing of Help topics. If you are connected to the Internet, the Microsoft Office Online Web site is accessed and help information from this site is displayed in the window. If you are not connected, the offline help information that is provided with the application and stored on your computer is located and displayed. Generally, the listing of topics is similar but fewer in number.

Selecting Help Topics

There are several ways you can get help. The first is to select a topic from the listing displayed in the Help window. Each topic is a **hyperlink** or connection to the information located on the Online site or in Help on your computer. When you point to the hyperlink, it appears underlined and the mouse pointer appears as . Clicking the hyperlink accesses and displays the information associated with the hyperlink.

1 **Click "Getting help."**

Your screen should be similar to Figure 22

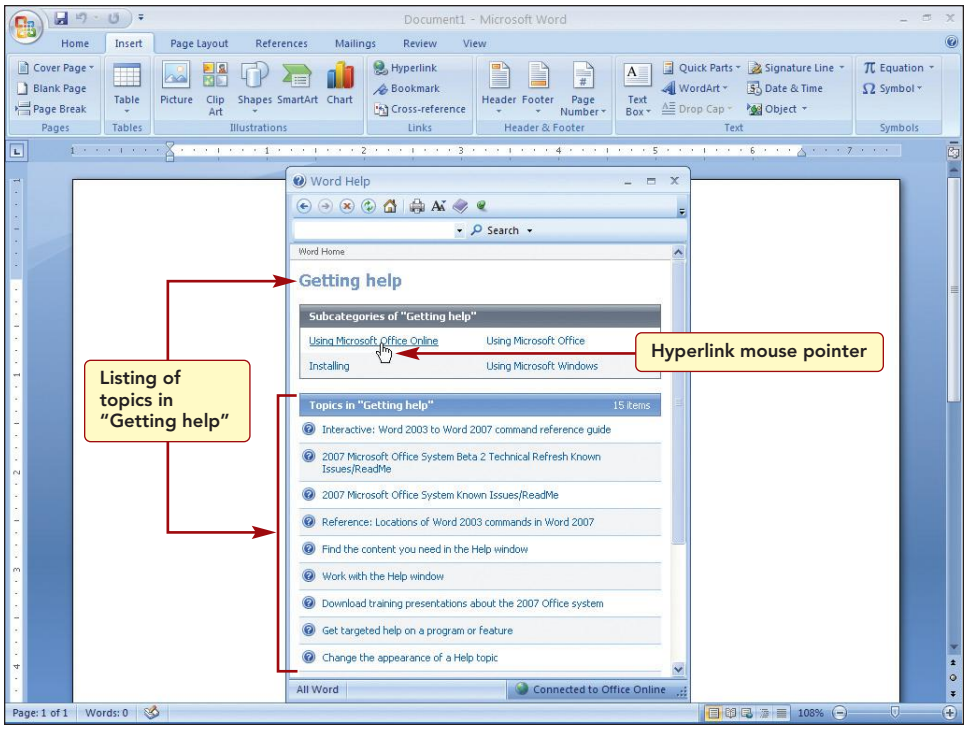


Figure 22

A listing of topics about getting help is displayed. You will get help on using Microsoft Office and the Ribbon.

2 **Click "Using Microsoft Office."**

Click "Use the Ribbon."

Your screen should be similar to Figure 23

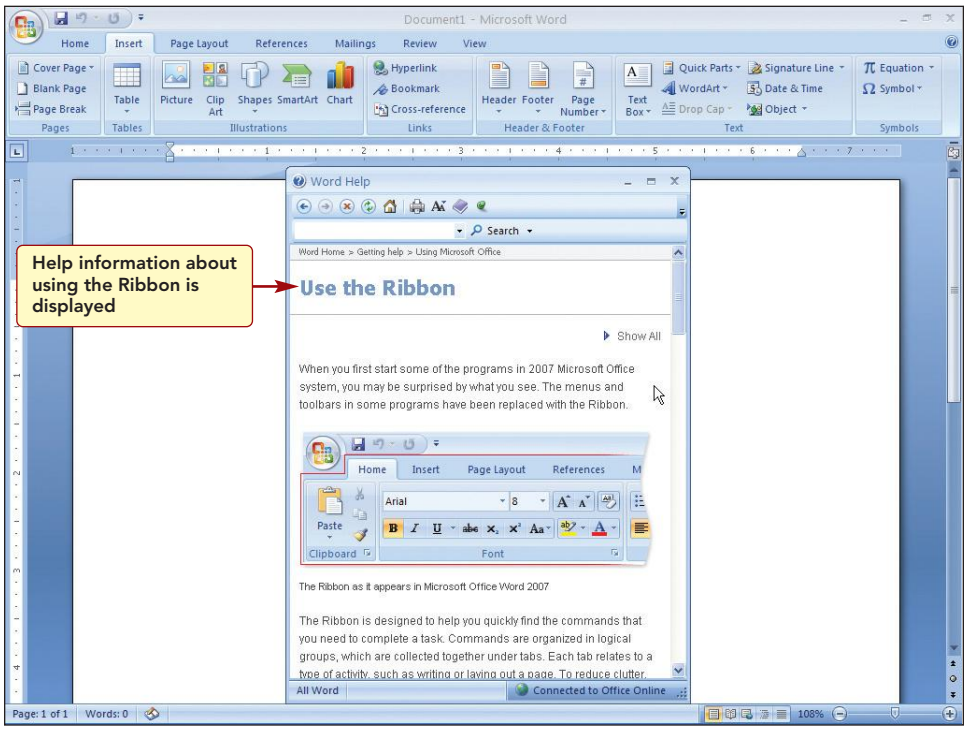


Figure 23

The information on the selected topic is displayed in the window.

3. **Use the scroll bar to scroll the Help window to read the information about the Ribbon.**

- **Display the "In this article" section of the window.**

Your screen should be similar to Figure 24

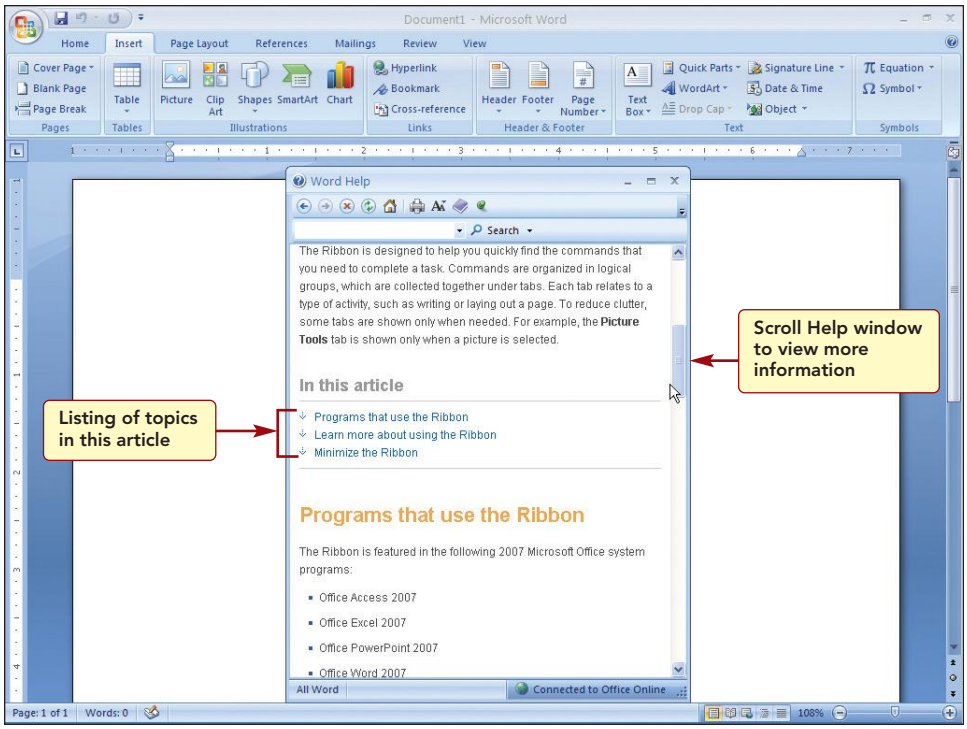


Figure 24

Additional Information

In Windows Vista, an unopened topic heading is preceded with +.

This area of the Help window provides a table of contents listing of the information in this window. Clicking on a link will take you directly to that location in the Help window. As you are reading the information in the window, you will see many topics preceded with ▶. This indicates the information in the topic is not displayed. Clicking on the topic heading displays the information about the topic.

4. **Click "Learn more about using the Ribbon."**

- **Click "Microsoft Office Word 2007."**

- **If necessary, scroll the window to see all the information on this topic.**

Your screen should be similar to Figure 25

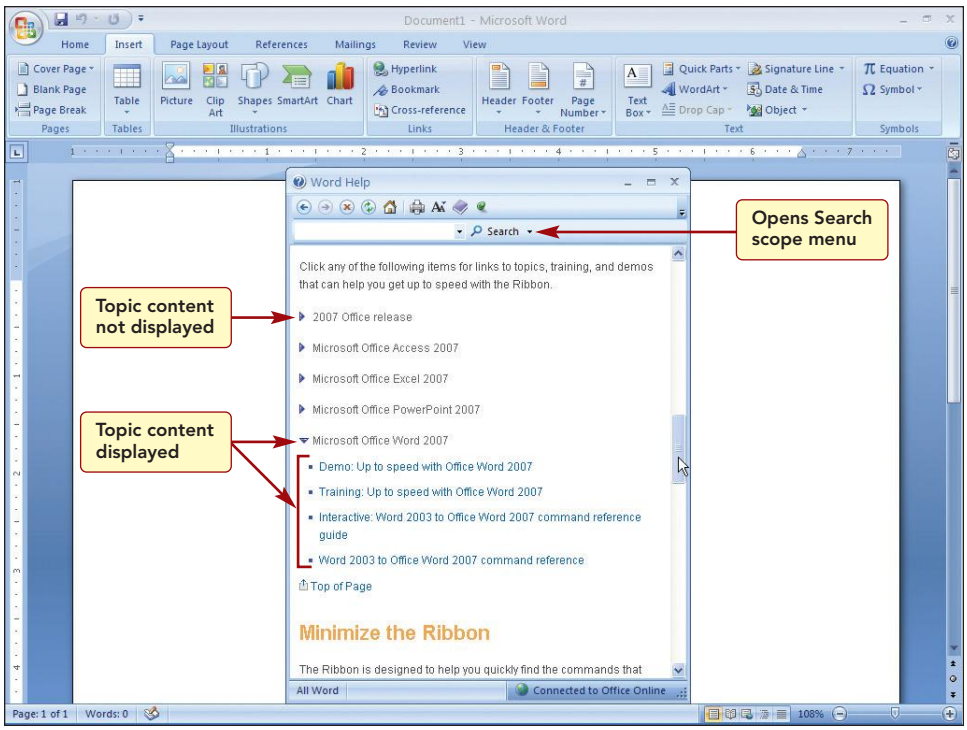


Figure 25

The information on the selected subtopic is displayed. Clicking the table of contents link jumped directly to this section of the window, saving you time by not having to scroll. The ▶ preceding the subtopic has changed to ▼, indicating the subtopic content is displayed.

You can continue to click on the subtopic headings to display the information about each topic individually. Likewise, clicking on an expanded topic hides the information. Additionally you can click Show All located at the top of the window to display all the available topic information and Hide All to hide all expanded information.

Additional Information
In Windows Vista, these buttons are Show All and Hide All.

Searching Help Topics

Another method to find Help information is to conduct a search by entering a sentence or question you want help on in the Search text box of the Help window. Although you also can simply enter a word in the Search box, the best results occur when you type a phrase, complete sentence, or question. A very specific search with 2–7 words will return the most accurate results.

When searching, you can specify the scope of the search by selecting from the Search scope drop-down menu. The broadest scope for a search, All Word, is preselected. You will narrow the scope to search Word Help only.

1. **Open the Search drop-down list.**
2. **Click "Word Help."**
3. **Click in the Search text box to display the insertion point.**
4. **Type What is the Ribbon.**
5. **Click Search.**

Additional Information
You also could press Enter to start the search.

Your screen should be similar to Figure 26

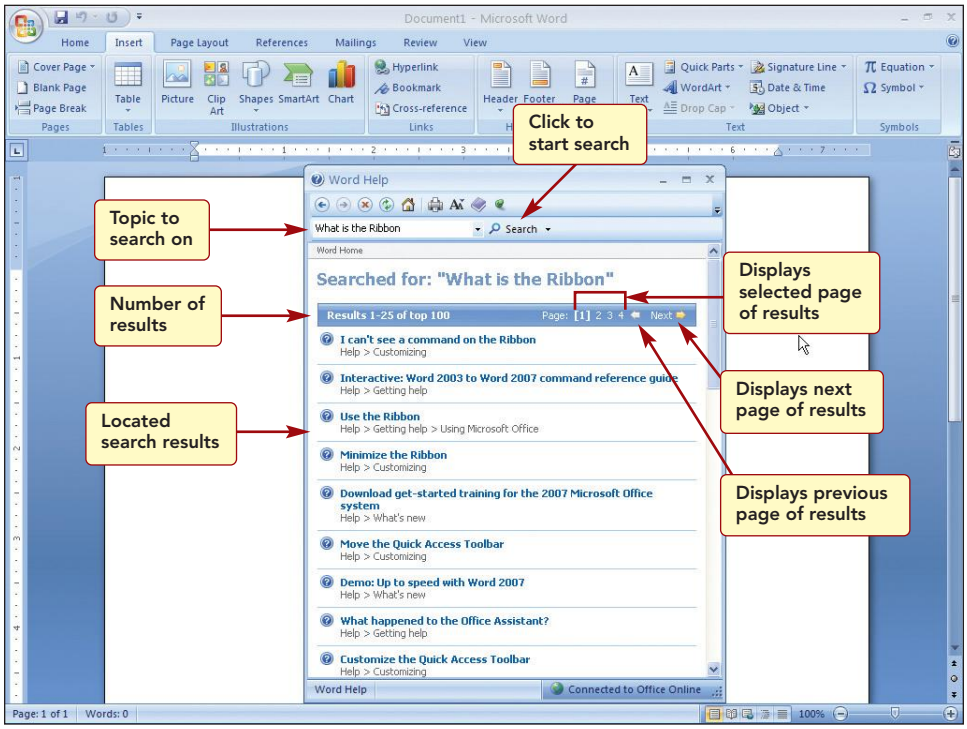


Figure 26

The first 25 located results of the top 100 are displayed in a window. There are four pages of results. The results are shown in order of relevance, with the most likely matches at the top of the list. Now you can continue to locate the information you need by selecting from the topic links provided. To see the next page of results, you can click Next or ▶ or click the specific page number you want to see from the Page count area. To see the previous page of results, click ◀.

Topics preceded with indicate the window will display the related Help topic. Those preceded with a indicate a tutorial about the topic is available from the Microsoft Training Web site.

2 **Click "Use the Ribbon."**

Your screen should be similar to Figure 27

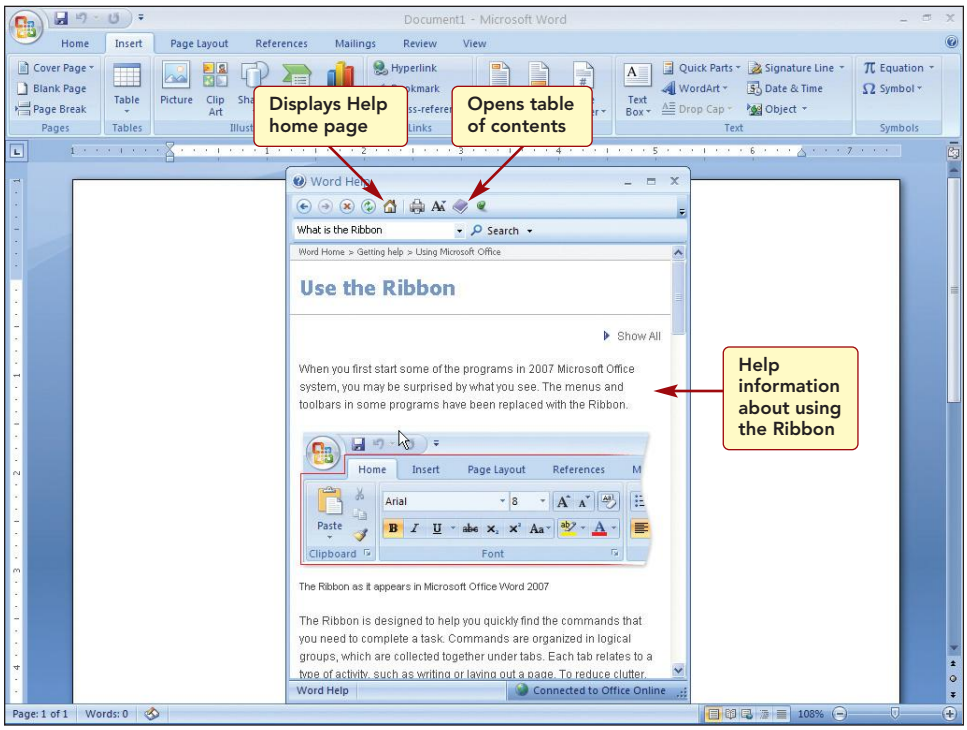


Figure 27

The same Help information you saw previously is displayed.

Using the Help Table of Contents

A third source of help is to use the Help table of contents. Using this method allows you to browse the entire list of Help topics to locate topics of interest to you.

1. **Click Home in the Help window toolbar to return to the opening Help window.**
2. **Click Show Table of Contents from the Help window toolbar.**

Additional Information

You also could click Back in the Help window toolbar to return to the previous page, page by page.

Your screen should be similar to Figure 28

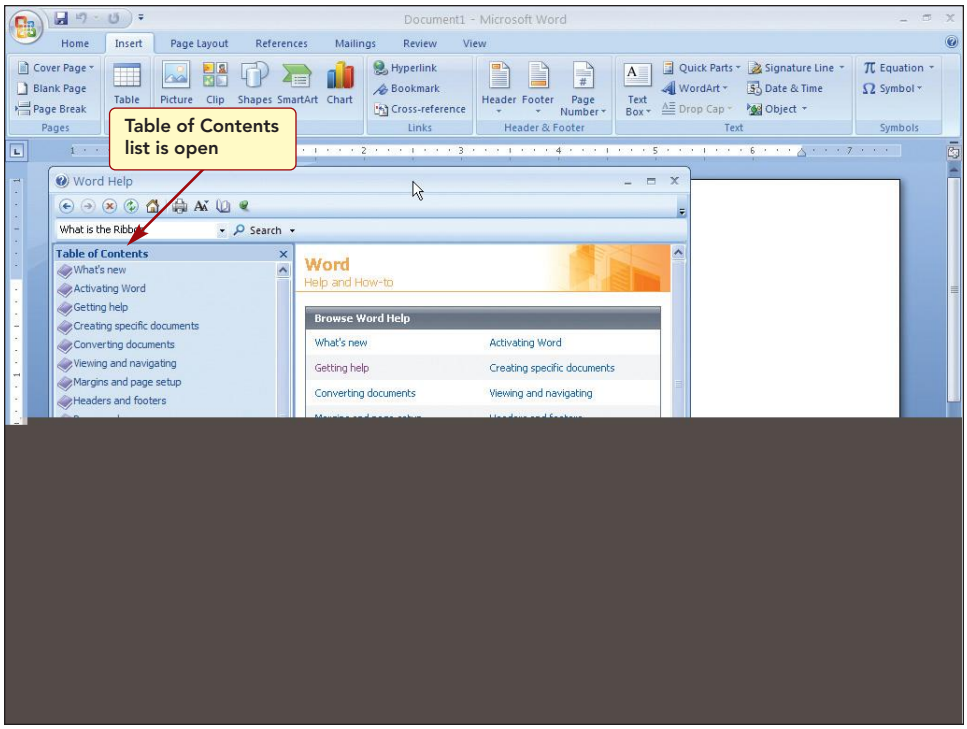


Figure 28

Additional Information

Pointing to an item in the Table of Contents displays a ScreenTip of the entire topic heading.

The entire Word Help Table of Contents is displayed in a pane on the left side of the Help window. Clicking on an item preceded with a Closed Book icon opens a chapter, which expands to display additional chapters or topics. The Open Book icon identifies those chapters that are open. Clicking on an item preceded with displays the specific Help information.

2. **Click "Getting help" to open this chapter.**
3. **Click "Using Microsoft Office."**
4. **Scroll the table of contents list and click "Use the Ribbon."**

Your screen should be similar to Figure 29

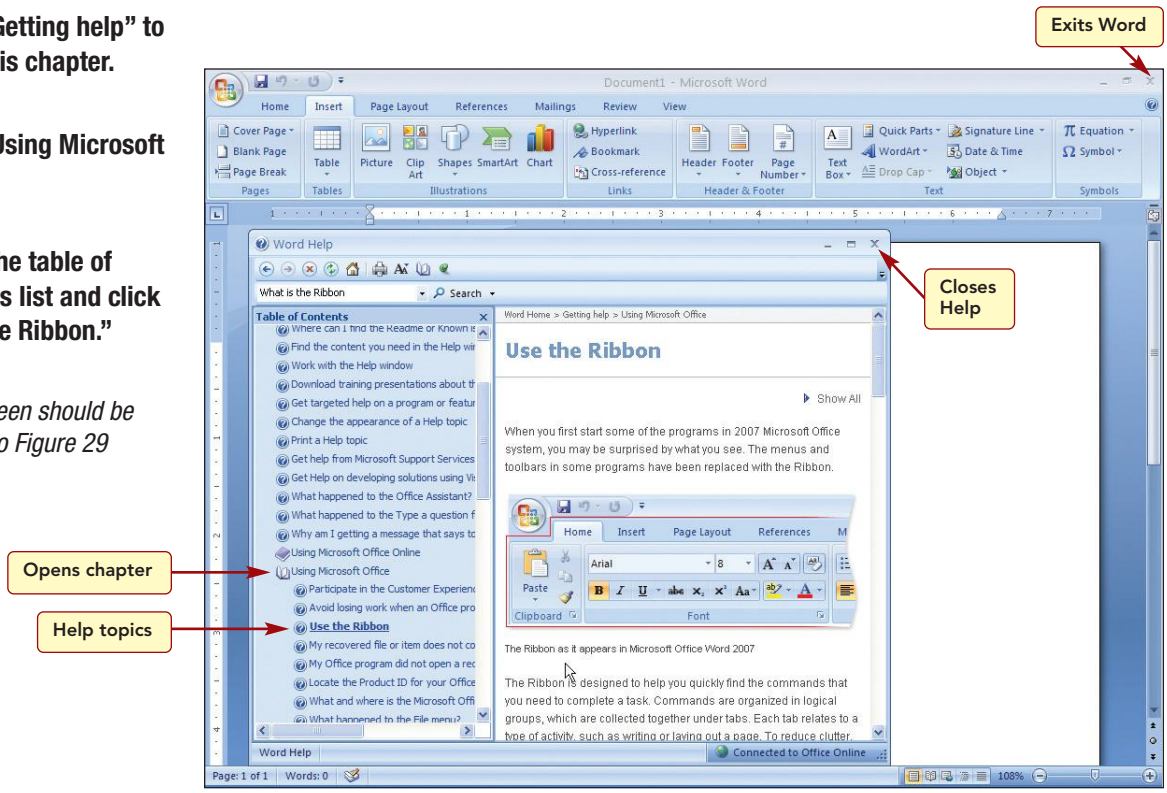


Figure 29

The right side of the Help window displays the same Help information about the Ribbon. To close a chapter, click the icon.

3 **Click to close the Using Microsoft Office chapter.**

Click Hide Table of Contents in the Help window toolbar to hide the table of contents list again.

Exiting an Office 2007 Application

Now you are ready to close the Help window and exit the Word program. The Close button located on the right end of the window title bar can be used to exit most application windows.

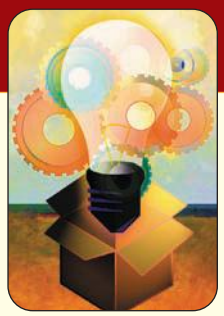
1 **Click Close in the Help window title bar to close the Help window.**

Click Close in the Word window title bar to exit Word.

Another Method

You also could choose / Exit Word or press Alt + F4 to exit an Office application.

The program window is closed and the desktop is visible again.



Introduction to Microsoft Office 2007

key terms

context menu I.15
contextual tabs I.16
dialog box launcher I.19
document window I.11
drop-down gallery I.18
gallery I.18
group I.11
hyperlink I.24
in-Ribbon gallery I.18
KeyTips I.21
Mini toolbar I.23
on-demand tab I.16
Quick Access Toolbar I.11
Ribbon I.11
ScreenTip I.13
scroll bar I.11
selection cursor I.12
split button I.18
status bar I.11
super tooltip I.18
tab I.11
task pane I.19
tooltip I.13
user interface I.10

command summary

Command/Button	Shortcut	Action
start		Opens the Start menu
Microsoft Office Word 2007		Starts the Word 2007 program
Office Button/ Exit Word	Alt + F4	Exits Office program
	F1	Opens Help window

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Using an Office Application ★

1. All Office 2007 applications have a common user interface. You will explore the Excel 2007 application and use many of the same features you learned about while using Word 2007 in this lab.

   a. Use the Start menu or a shortcut icon on your desktop to start Office Excel 2007.

   b. What shape is the mouse pointer when positioned in the document window area? _____

   c. Excel has _____ tabs. Which tabs are not the same as in Word?

   _____

   d. Open the Formulas tab. How many groups are in the Formulas tab? _____

   e. Which tab contains the group to work with charts? _____

   f. From the Home tab, click the Number group dialog box launcher. What is the name of the dialog box that opens? How many number categories are there? _____ Close the dialog box.

   g. Display ToolTips for the following buttons located in the Alignment group of the Home tab and identify what action they perform.

    _____

    _____

    _____

   h. Open the Excel Help window. Open the table of contents and locate the topic "What's new in Microsoft Office Excel 2007?" Open this topic and find information on the number of rows and columns in a worksheet. Answer the following questions:

   How many rows are in a worksheet? _____

   How many columns are in a worksheet? _____

   What are the letters of the last column? _____

   i. Close the table of contents. Close the Help window. Exit Excel.

on your own

Exploring Microsoft Help ★

1. In addition to the Help information you used in this lab, Office 2007 Online Help also includes many interactive tutorials. Selecting a Help topic that starts a tutorial will open the browser program on your computer. Both audio and written instructions are provided. You will use one of these tutorials to learn more about using Word 2007.

   Start Word 2007. Open Help and open the topic "What's New?" Click on the topic "Up to speed with Word 2007." Follow the directions in your browser to run the tutorial. When you are done, close the browser window, close Help, and exit Word 2007.

Overview of Microsoft Office Word 2007

What Is Word Processing?

Office Word 2007 is a word processing software application whose purpose is to help you create any type of written communication. A word processor can be used to manipulate text data to produce a letter, a report, a memo, an e-mail message, or any other type of correspondence. Text data is any letter, number, or symbol that you can type on a keyboard. The grouping of the text data to form words, sentences, paragraphs, and pages of text results in the creation of a document. Through a word processor, you can create, modify, store, retrieve, and print part or all of a document.

Word processors are one of the most widely used application software programs. Putting your thoughts in writing, from the simplest note to the most complex book, is a time-consuming process. Even more time-consuming is the task of editing and retyping the document to make it better. Word processors make errors nearly nonexistent—not because they are not made, but because they are easy to correct. Word processors let you throw away the correction fluid, scissors, paste, and erasers. Now, with a few keystrokes, you can easily correct errors, move paragraphs, and reprint your document.

Word 2007 Features

Word 2007 excels in its ability to change or edit a document. Editing involves correcting spelling, grammar, and sentence-structure errors. In addition, you can easily revise or update existing text by inserting or deleting text. For example, a document that lists prices can easily be updated to reflect new prices. A document that details procedures can be revised by deleting old procedures and inserting new ones. This is especially helpful when a document is used repeatedly. Rather than recreating the whole document, you change only the parts that need to be revised.

Revision also includes the rearrangement of selected areas of text. For example, while writing a report, you may decide to change the location of a single word or several paragraphs or pages of text. You can do it easily by cutting or removing selected text from one location, then pasting or placing the selected text in another location. The selection also can be copied from one document to another.

To help you produce a perfect document, Word 2007 includes many additional support features. The AutoCorrect feature checks the spelling and grammar in a document as text is entered. Many common errors are corrected automatically for you. Others are identified and a correction suggested. A thesaurus can be used to display alternative words that have a meaning similar or opposite to a word you entered. A Find and Replace feature can be used to quickly locate specified text and replace it with other text throughout a document. In addition, Word 2007 includes a

variety of tools that automate the process of many common tasks, such as creating tables, form letters, and columns.

You also can easily control the appearance or format of the document. Formatting includes such operations as changing the line spacing and margin widths, adding page numbers, and displaying page headers and footers. You also can quickly change how your text is aligned with the left or right margin. For example, text can be centered between the margins, or justified—evenly aligned on both the left and right margins. Perhaps the most noticeable formatting feature is the ability to apply different fonts (type styles and sizes) and text appearance changes such as bold, italics, and color to all or selected portions of the document. Additionally, you can add color shading behind individual pieces of text or entire paragraphs and pages to add emphasis.

To make formatting even easier, Word 2007 includes Document Themes and Quick Styles. Document Themes apply a consistent font, color, and line effect to an entire document. Quick Styles apply the selected style design to a selection of text. Further, Word 2007 includes a variety of built-in preformatted content that help you quickly produce modern-looking, professional documents. Among these are galleries of cover page designs, pull quotes, and header and footer designs. While selecting many of these design choices, a visual live preview is displayed, making it easy to see how the design would look in your document. In addition, you can select from a wide variety of templates to help you get started on creating many common types of documents such as flyers, calendars, faxes, newsletters, and memos.

To further enhance your documents, you can insert many different types of graphic elements. These include drawing objects, SmartArt, charts, pictures, and clip art. The drawing tools supplied with Word 2007 can be used to create your own drawings, or you can select from over 100 adjustable shapes and modify them to your needs. All drawings can be further enhanced with 3-D effects, shadows, colors, and textures. SmartArt graphics allow you to create a visual representation of your information. They include many different layouts such as a process or cycle that are designed to help you communicate an idea. Once created, you can quickly enhance them using a Quick Style. Charts can be inserted to illustrate and compare data. Complex pictures can be inserted in documents by scanning your own, using supplied or purchased clip art, or downloading images from the World Wide Web. Additionally, you can produce fancy text effects using the WordArt tool.

Word 2007 is closely integrated with the World Wide Web. It detects when you are typing a Web address and converts it to a hyperlink automatically for you. You also can create your own hyperlinks to locations within documents, or to other documents, including those at external locations such as a Web site or file server. Word's many Web-editing features help you quickly create a Web page. Frames can be created to make your Web site easier for users to navigate. Pictures, graphic elements, animated graphics, sound, and movies can all be used to increase the impact of your Web pages.

Group collaboration on projects is common in industry today. Word 2007 includes many features to help streamline how documents are developed and changed by group members. A discussion feature allows multiple people to insert remarks in the same document without having to route the document to each person or reconcile multiple reviewers' comments. You can easily consolidate all changes and comments from different reviewers in one simple step and accept or reject changes as needed.

You also can create and send an entire document by e-mail or Internet Fax service directly from within Word 2007, using all its features to create and edit the message.

Case Study for Office Word 2007 Labs

As a recent college graduate, you have accepted a job as advertising coordinator for Adventure Travel Tours, a specialty travel company that organizes active adventure vacations. The company is headquartered in Los Angeles and has locations in other major cities throughout the country. Your duties include the creation of brochures, flyers, form letters, news releases, advertisements, and a monthly newsletter, all of which promote Adventure Travel's programs. You are also responsible for working on the company Web site.

Brief Version

Lab 1: Adventure Travel Tours has developed four new tours for the upcoming year and needs to promote them, partly through informative presentations held throughout the country. Your first job as advertising coordinator is to create a flyer advertising the four new tours and the presentations about them.

Lab 2: Your next project is to create a letter to be sent to past clients. The letter briefly describes Adventure Travel's four new tours and invites clients to attend an informational presentation.

Lab 3: Part of your responsibility as advertising coordinator is to gather background information about the various tour locations. You will write a report that includes a cover page, table of contents list, and footnotes, providing information about Tanzania and Peru for two of the new tours.

Working Together: Adventure Travel Tours has a company Web site. You will convert the flyer you developed to promote the new tours and presentations to be used on the Web site.

Before You Begin

To the Student

The following assumptions have been made:

- Microsoft Office Word 2007 has been properly installed on your computer system.
- You have the data files needed to complete the series of Word 2007 labs and practice exercises. These may be supplied by your instructor and are also available at the online learning center Web site found at www.mhhe.com/oleary.
- You are already familiar with how to use Microsoft Windows XP or Vista and a mouse.

To the Instructor

A complete installation of Microsoft Office 2007 is required in which all components are available to students while completing the labs. In several labs, an online connection to the Web is needed to fully access a feature.

Please be aware that the following settings are assumed to be in effect for the Office Word 2007 program. These assumptions are necessary so that the screens and directions in the labs are accurate. These settings are made using Office Button/ Word Options in the categories shown below. Features are on when there is a check mark in the check box.

Popular

- The Mini Toolbar feature is selected.
- Always use ClearType is on.
- The Live Preview feature is enabled.
- The color scheme is set to blue.
- Show feature descriptions in ScreenTips is selected.
- Language is set to English (US).

Display

- Show white space between pages in Print Layout view is on.
- Show highlighter marks is on.
- Show document tooltips on hover is on.
- Print drawings created in Word is on.

Proofing

- In the AutoCorrect Options dialog box, all options are on in both the AutoCorrect and AutoFormat tabs. In the AutoFormat as you type tab, all options are on except: Bold and italic with real formatting, Built-in Heading styles, and Define styles based on your formatting.
- Ignore words in Uppercase is on.
- Ignore words that contain numbers is on.
- Ignore Internet and file addresses is on.
- Flag repeated words is on.
- Check spelling as you type is on.
- Check grammar as you type is on.
- Check grammar with spelling is on.

Advanced/Editing options

- Typing replaces selected text is on.
- When selecting, automatically select entire word is on.
- Allow text to be dragged and dropped is on.
- Use Ctrl+Click to follow hyperlink is on.
- Use smart paragraph selection is on.
- Use smart cursoring is on.
- Keep track of formatting is on.
- Mark Formatting Inconsistencies is off.
- Enable Click and type is on.

Advanced/Cut, Copy, and Paste

- The four Pasting options are set to their default settings.
- The Insert/paste pictures as option is set to In line with text.
- Keep bullets and numbers when pasting text with Keep Text Only option is on.
- Show Paste Options button is on.
- Use smart cut and paste is on.

Advanced/Show document content

- Show drawings and text boxes on screen is on.
- Show text animation is on.
- Show Smart Tags is on.

Advanced/Display

- Show 17 Recent Documents.
- Show all windows in the Taskbar is on.
- Show shortcut keys in ScreenTips is on.
- Show horizontal and vertical scroll bars is on.
- Show vertical ruler in Print Layout view is on.

Additionally, the following assumptions are made:

- The feature to access Online Help is on. (From the Help window, open the Connection Status menu and choose Show Content from Office Online.)
- All default settings for the Normal document template are in effect.
- All figures in the text reflect the use of a display monitor set at 1024 by 768 and the Windows XP opearting system. If other monitor settings are used, there may be more or fewer lines of information displayed in the windows than in the figures. If the Windows Vista operating system is used, some features may look slightly different.

Instructional Conventions

Hands-on instructions you are to perform appear as a sequence of numbered steps. Within each step, a series of bullets identifies the specific actions that must be performed. Step numbering begins over within each topic heading throughout the lab. Four types of marginal notes appear throughout the labs. Another Method notes provide alternate ways of performing the same command. Having Trouble? notes provide advice or cautions for steps that may cause problems. Additional Information notes provide more information about a topic. More About notes refer you to the More About Word 2007 appendix for additional information about related features.

Commands

Commands that are initiated using a command button and the mouse appear following the word "Click." The icon (and the icon name if the icon does not include text) is displayed following "Click." If there is another way to perform the same action, it appears in an Another Method margin note when the action is first introduced as shown in Example A.

When a feature has already been covered and you are more familiar with using the application, commands will appear as shown in Example B.

Example A

1. Select the list of four tours.
   - Open the Home tab.
   - Click B Bold in the Font group.

Another Method
The keyboard shortcut is Ctrl+B.

Example B

1. Select the list of four tours.
   - Click B Bold in the Font group of the Home tab.

OR

1. Bold the list of four tours.

File Names and Information to Type

Plain blue text identifies file names you need to select or enter. Information you are asked to type appears in blue and bold. (See Example C.)

Example C

1. Open the document wd01_Flyer.
   - Type **Adventure Travel presents four new trips**.

Office Button

Clicking Office Button opens the File menu of commands. File menu commands that you are to use by clicking on the menu option appear following the word "Choose." Items that are to be selected (highlighted) will follow the word "Select" and will appear in black text. You can select items with the mouse or directional keys. Initially these commands will appear as in Example A. As you become more familiar with the application, commands will appear as shown in Example B.

Example A

1. Click Office Button.
   - Choose Open.
   - Select My Documents from the Look In drop-down menu.
   - Choose Flyer1.docx.
   - Click Open.

Example B

1. Choose Open from the File menu.
   - Choose Flyer1.docx.

Creating and Editing a Document

LAB 1

Objectives

After completing this lab, you will know how to:

1. Develop a document as well as enter and edit text.
2. Insert and delete text and blank lines.
3. Use spelling and grammar checking.
4. Use AutoCorrect.
5. Set file properties.
6. Save, close, and open files.
7. Select text.
8. Undo and redo changes.
9. Change fonts and type sizes.
10. Bold and color text.
11. Change alignment.
12. Insert and size pictures.
13. Add page borders and watermarks.
14. Print a document.

Case Study

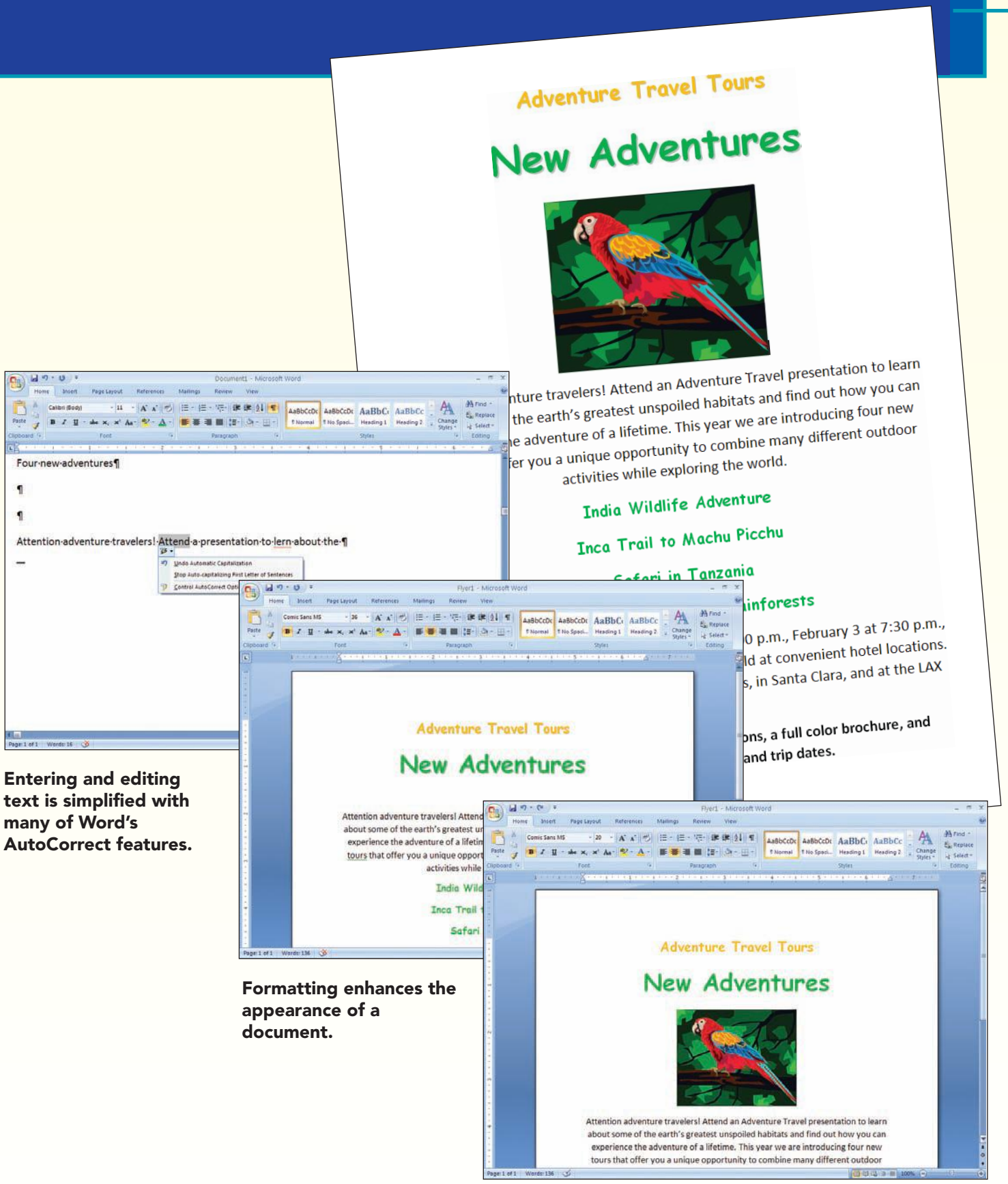
Adventure Travel Tours

As a recent college graduate, you have accepted a job as advertising coordinator for Adventure Travel Tours, a specialty travel company that organizes active adventure vacations. The company is headquartered in Los Angeles and has locations in other major cities throughout the country. You are responsible for coordination of the advertising program for all locations. This includes the creation of many kinds of promotional materials: brochures, flyers, form letters, news releases, advertisements, and a monthly newsletter. You are also responsible for creating Web pages for the company Web site.

Adventure Travel is very excited about four new tours planned for the upcoming year. They want to promote them through informative presentations held throughout the country. Your first job as advertising coordinator will be to create a flyer advertising the four new tours and the presentations about them. The flyer will be modified according to the location of the presentation.



The software tool you will use to create the flyer is the word processing application Microsoft Office Word 2007. It helps you create documents such as letters, reports, and research papers. In this lab, you will learn how to enter, edit, and print a document while you create the flyer (shown right) to be distributed in a mailing to Adventure Travel Tours clients.



Entering and editing text is simplified with many of Word's AutoCorrect features.

Formatting enhances the appearance of a document.

Pictures add visual interest to a document.

Concept Preview

The following concepts will be introduced in this lab:

1. **Grammar Checker** The grammar checker advises you of incorrect grammar as you create and edit a document, and proposes possible corrections.
2. **Spelling Checker** The spelling checker advises you of misspelled words as you create and edit a document, and proposes possible corrections.
3. **AutoCorrect** The AutoCorrect feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.
4. **Word Wrap** The word wrap feature automatically decides where to end a line and wrap text to the next line based on the margin settings.
5. **Font and Font Size** Font, also commonly referred to as a typeface, is a set of characters with a specific design that has one or more font sizes.
6. **Alignment** Alignment is the positioning of text on a line between the margins or indents. There are four types of paragraph alignment: left, centered, right, and justified.
7. **Graphics** A graphic is a nontext element or object such as a drawing or picture that can be added to a document.

Introducing Office Word 2007

Adventure Travel Tours has recently upgraded their computer systems at all locations across the country. As part of the upgrade, they have installed the latest version of the Microsoft Office 2007 suite of applications. You are very excited to see how this new and powerful application can help you create professional letters and reports as well as eye-catching flyers and newsletters.

Starting Office Word 2007

You will use the word processing application Microsoft Office Word 2007 to create a flyer promoting the new tours and presentations.

1 **Start Word 2007.**

Having Trouble?
See "Common 2007 Office Features," page I.10, for information on how to start the application and use features that are common to all Office 2007 applications.

If necessary, maximize the Word 2007 application window.

Your screen should be similar to Figure 1.1

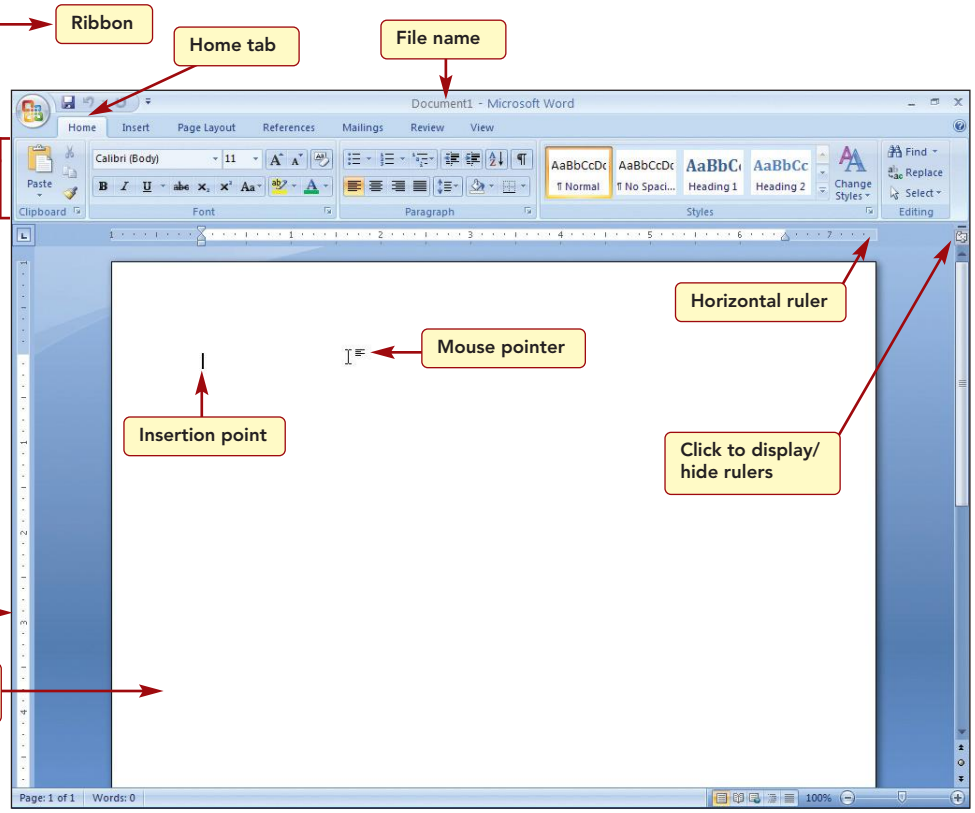


Figure 1.1

Additional Information
The Ribbon may display additional tabs if other application add-ins associated with Office are on.

Additional Information
If the ruler is not displayed, click View Ruler above the vertical scroll bar to turn it on. You also can temporarily display the horizontal or vertical ruler by pointing to the top or left edge of the document window.

Additional Information
The mouse pointer also may appear in other shapes, depending upon the task being performed.

Exploring the Word 2007 Window

The Word 2007 Ribbon below the title bar consists of seven command tabs that provide access to the commands and features you will use to create and modify a document.

The large area below the toolbars is the **document window**. It currently displays a blank Word document. The **insertion point**, also called the **cursor**, is the blinking vertical bar that marks your location in the document. A vertical and horizontal **ruler** may be displayed along both edges of the document window. The horizontal ruler at the top of the document window shows the line length in inches and is used to set margins, tab stops, and indents. The vertical ruler along the left edge shows the page length in inches and shows your line location on the page.

The mouse pointer may appear as an I-beam (see Figure 1.1) or a left- or right-facing arrow, depending on its location in the window. When it appears as an I-beam, it is used to move the insertion point, and when it appears as an arrow, it is used to select items.

1. **Move the mouse pointer into the left edge of the blank document to see it appear as .**

2. **Move the mouse pointer to the Ribbon to see it appear as .**

Your screen should be similar to Figure 1.2

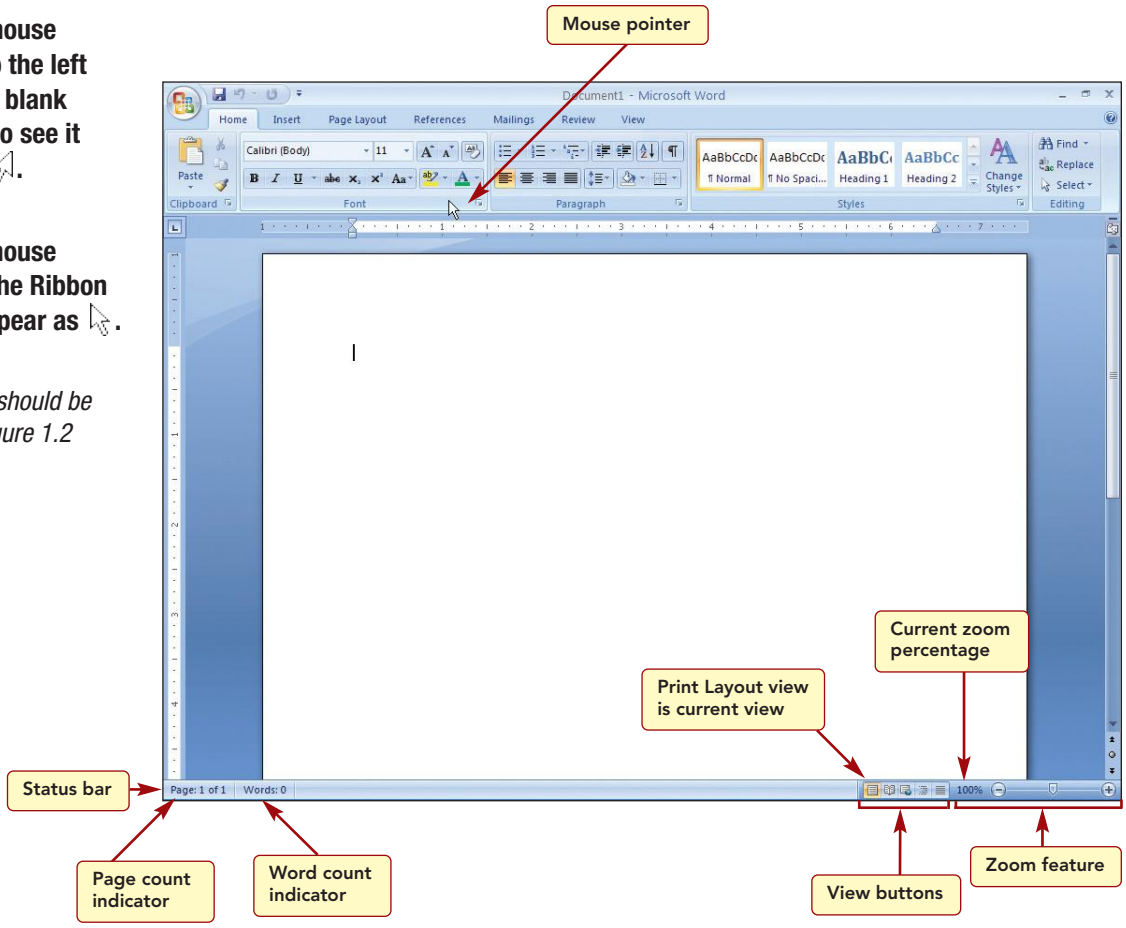


Figure 1.2

Viewing and Zooming a Document

The status bar at the bottom of the window displays the page and word count indicators. The page indicator identifies the page of text that is displayed onscreen of the total number of pages in the document. The word count indicator displays the number of words in a document. When you first start Word, a new blank document consisting of a single page and zero words is opened.

The right end of the status bar displays five buttons that are used to change the document view and a document zoom feature. Word includes

Additional Information

You also can change views using commands in the Document Views group of the View tab.

several views that are used for different purposes. The different document views are described in the table below.

Document View	Button	Effect on Text
Print Layout		Shows how the text and objects will appear on the printed page. This is the view to use when adjusting margins, working in columns, drawing objects, and placing graphics.
Full Screen Reading		Shows the document only, without Ribbon, status bar, or any other features. Useful for viewing and reading large documents. Use to review a document and add comments and highlighting.
Web Layout		Shows the document as it will appear when viewed in a Web browser. Use this view when creating Web pages or documents that will be displayed on the screen only.
Outline		Shows the structure of the document. This is the view to use to plan and reorganize text in a document.
Draft		Shows text formatting and simple layout of the page. This is the best view to use when typing, editing, and formatting text.

Additional Information

Pointing to the items on the status bar displays a ScreenTip that identifies the feature.

Additional Information

If you have a mouse with a scroll wheel, you can use it to zoom in or out by holding down Ctrl while turning the wheel forward or backward.

Print Layout view is the view you see when first starting Word or opening a document. You can tell which view is in use by looking at the view buttons. The button for the view that is in use appears highlighted.

The document zoom feature is used to change the amount of information displayed in the document window by "zooming in" to get a close-up view or "zooming out" to see more of the document at a reduced view. The default display, 100 percent, shows the characters the same size they will be when printed. You can increase the onscreen character size up to five times the normal display (500 percent) or reduce the character size to 10 percent. The zoom setting for each view is set independently and remains in effect until changed to another zoom setting.

You will "zoom out" on the document to see the entire page so you can better see the default document settings.

1 **Drag the Zoom Slider to the left to reduce the zoom until the entire page is visible.**

Your screen should be similar to Figure 1.3

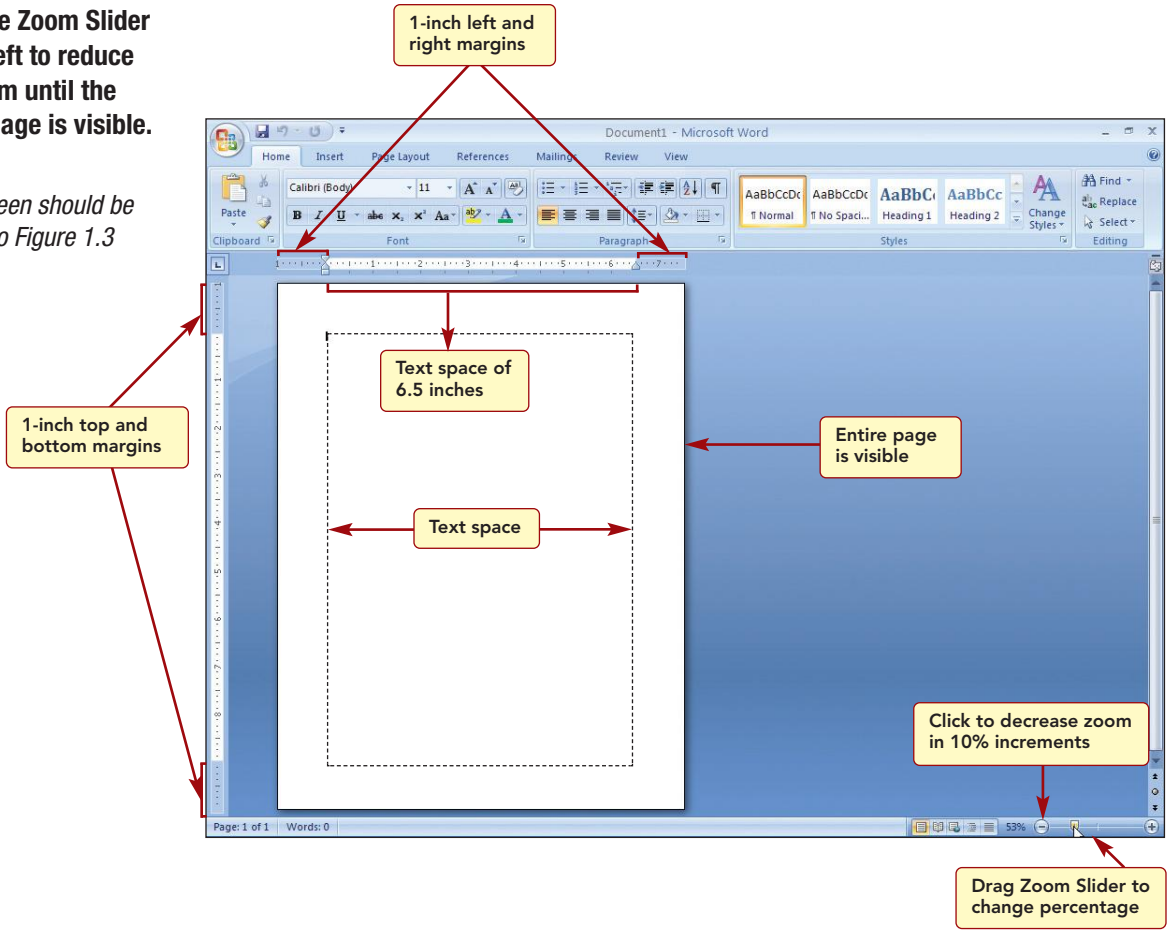


Figure 1.3

Additional Information

You also can click the ⊖ or ⊕ on the Zoom Slider to increase or decrease the zoom percentage by 10 percent increments.

At this zoom percentage, the entire page is displayed and all four edges of the paper are visible. It is like a blank piece of paper that already has many predefined settings. These settings, called **default** settings, are generally the most commonly used settings. The default document settings are stored in the Normal.dotm template file. A **template** is a document that contains many predefined settings that is used as the basis for the document you are creating. The Normal.dotm file is automatically opened whenever you start Word 2007. The default settings include a standard paper-size setting of 8.5 by 11 inches, 1-inch top and bottom margins, and 1-inch left and right margins.

You can verify many of the default document settings by looking at the information displayed in the rulers. The shaded area of the ruler identifies the margins and the white area identifies the text space. The text space occupies 6.5 inches of the page. Knowing that the default page size is 8.5 inches wide, this leaves 2 inches for margins: 1 inch for equal-sized left and right margins. The vertical ruler shows the entire page length is 11 inches with 1-inch top and bottom margins, leaving 9 inches of text space.

You will use Draft view to create the flyer about this year's new tours. You will use the View tab to change both the view and the Zoom percentage.

2. **Open the View tab.**
   - **From the Document Views group, click Draft.**
   - **If necessary, click to display the ruler.**
   - **From the Zoom group, click Zoom to open the Zoom dialog box.**

Additional Information
Pointing to the items on the Ribbon displays a ScreenTip that identifies the feature.

Your screen should be similar to Figure 1.4

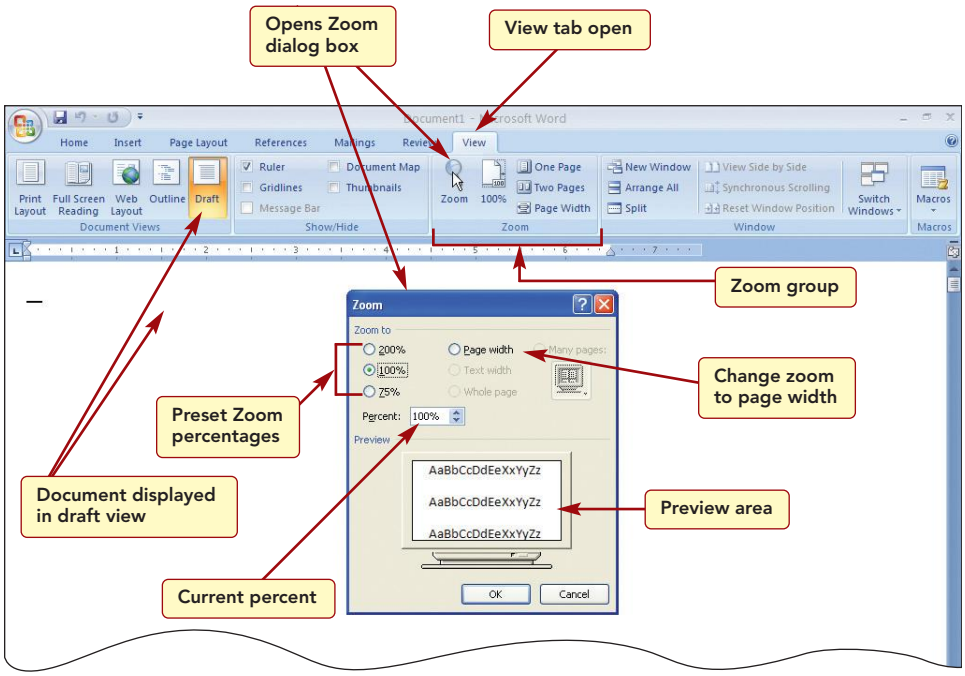


Figure 1.4

Additional Information
The Preview area shows the effects on the screen as you select different zoom options.

From the Zoom dialog box, you can choose from several preset zoom percentages, or set a precise percentage using the Percent scroll box. You want to zoom the window so that the full page width spans the document window. The page width is the area of the paper where the text is displayed.

3. **Choose Page width.**
   - **Click OK.**

Another method
You also could use Page Width in the Zoom group to change to page width.

Your screen should be similar to Figure 1.5

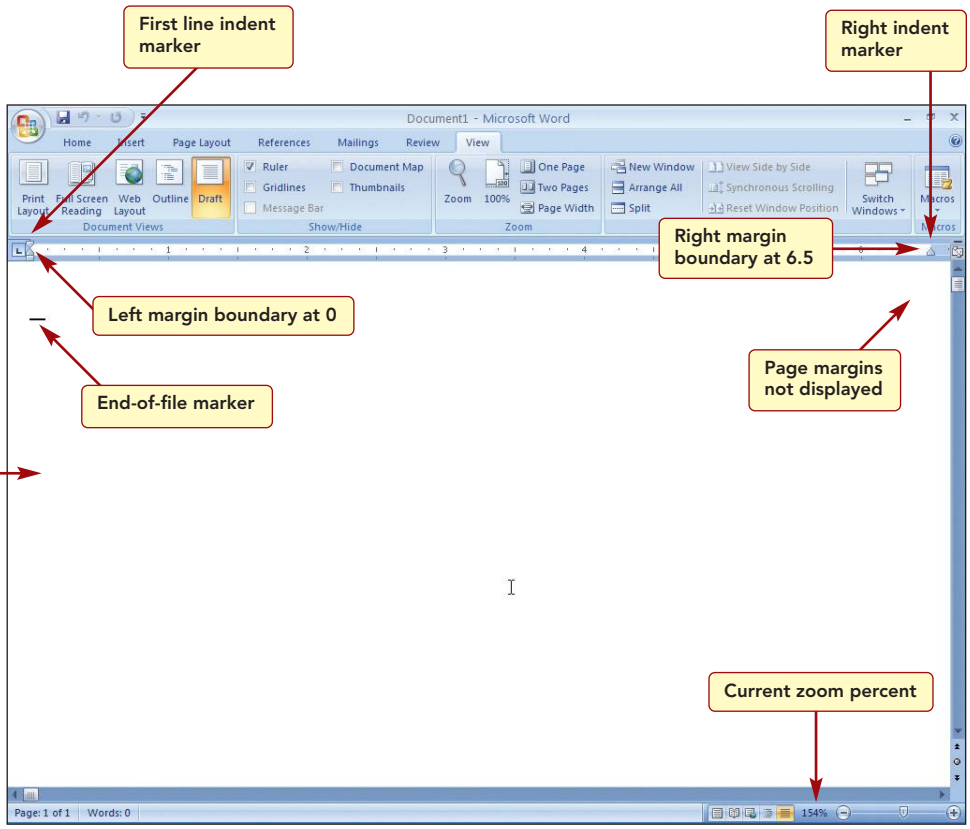


Figure 1.5

Increasing the zoom to page width increases the magnification to 154% and displays the full text area in the document window. In Draft view, the margins and the edges of the page are not displayed. This allows more space on the screen to display document content. This view also displays the **end-of-file marker**, the solid horizontal line that marks the last-used line in a document.

Additional Information
The vertical ruler is not displayed in Draft view.

The ruler also displays other default settings. The symbol at the zero position is the first-line indent marker and marks the location of the left paragraph indent. The symbol on the right end of the ruler line at the 6.5-inch position marks the right paragraph indent. Currently, the indent locations are the same as the left and right margin settings.

Creating New Documents

Your first project with Adventure Travel Tours is to create a flyer about four new tours. You will use the blank document to create the flyer for Adventure Travel Tours.

Developing a Document

The development of a document follows several steps: plan, enter, edit, format, and preview and print.

Step	Description
Plan	The first step in the development of a document is to understand the purpose of the document and to plan what your document should say.
Enter	After planning the document, you enter the content of the document by typing the text using the keyboard. Text also can be entered using the handwriting feature.
Edit	Making changes to your document is called **editing**. While typing, you probably will make typing and spelling errors that need to be corrected. This is one type of editing. Another is to revise the content that you have entered to make it clearer, or to add or delete information.
Format	Enhancing the appearance of the document to make it more readable or attractive is called **formatting**. This is usually performed when the document is near completion, after all editing and revising have been done. It includes many features such as boldfaced text, italics, and bulleted lists.
Preview and Print	The last step is to preview and print the document. When previewing, you check the document's overall appearance and make any final changes before printing.

You will find that you will generally follow these steps in the order listed above for your first draft of a document. However, you will probably retrace steps such as editing and formatting as the final document is developed.

During the planning phase, you spoke with your manager regarding the purpose of the flyer and the content in general. The primary purpose of the flyer is to promote the new tours. A secondary purpose is to advertise the company in general.

You plan to include specific information about the new tours in the flyer as well as general information about Adventure Travel Tours. The content also needs to include information about the upcoming new tour presentations. Finally, you want to include information about the Adventure Travel Web site.

Entering Text

Now that you understand the purpose of the flyer and have a general idea of the content, you are ready to enter the text.

Text is entered using the keyboard. As you type, you will probably make simple typing errors that you want to correct. Word includes many features that make entering text and correcting errors much easier. These features include checking for spelling and grammar errors, auto correction, and word wrap. You will see how these features work while entering the title and first paragraph of the flyer.

Typing Text

To enter text in a new document, simply begin typing the text. The first line of the flyer will contain the text "Adventure Travel Tours New Adventures." As you begin to enter this line of text, include the intentional error identified in italic.

1. **Type Adventure *Traveel* (do not press space after typing the last letter).**

Your screen should be similar to Figure 1.6

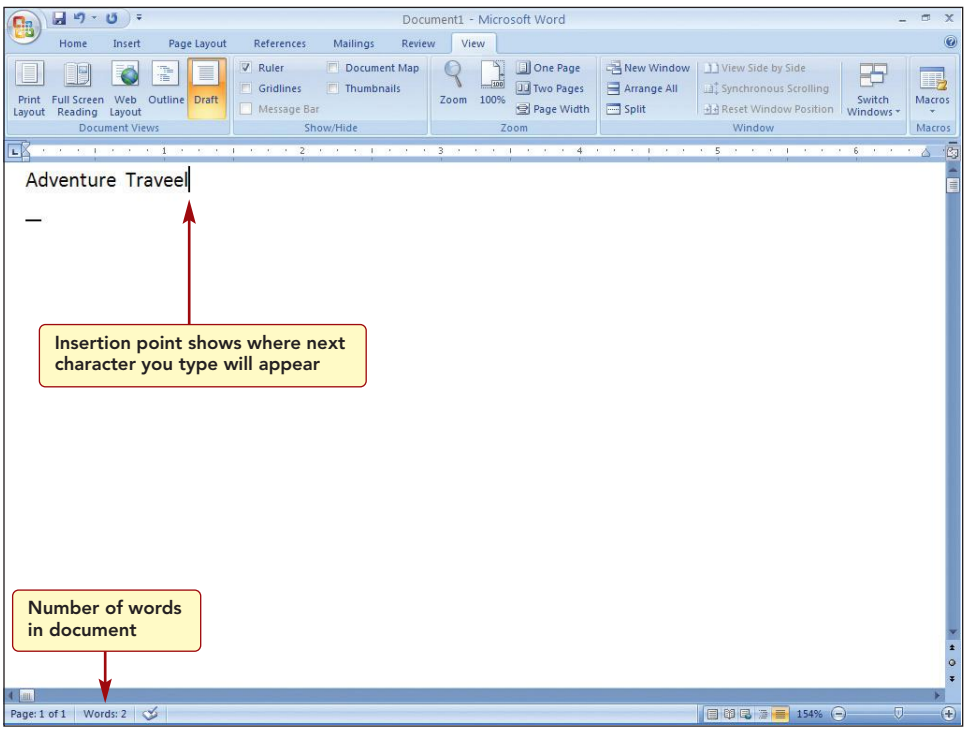


Figure 1.6

Additional Information
The status bar also can display additional information such as the horizontal position of the insertion point on the line and the line number. To customize the status bar, right-click the status bar and select the features you want displayed from the status bar context menu.

Notice that, as you type, the insertion point moves to the right and the character appears to the left of the insertion point. The location of the insertion point shows where the next character will appear as you type. Also, the status bar now tells you that there are two words in the document.

Moving through Text

After text is entered into a document, you need to know how to move around within the text to correct errors or make changes. You see you have made a typing error by typing an extra e in the word travel. To correct this error, you first need to move the insertion point back to the correct position on the line. The keyboard or mouse can be used to move through the text in the document window. Depending on what you are doing, one method may be more efficient than another. For example, if your hands are already on the keyboard as you are entering text, it may be quicker to use the keyboard rather than take your hands off to use the mouse.

You use the mouse to move the insertion point to a specific location in a document simply by clicking on the location. When you can use the mouse to move the insertion point, it is shaped as an I-beam. However, when the mouse pointer is positioned in the unmarked area to the left of a line (the left margin), it changes to an arrow. When the mouse is in this area, it can be used to highlight (select) text.

Additional Information
You will learn about selecting text using this feature shortly.

You use the arrow keys located on the numeric keypad or the directional keypad to move the insertion point in a document. The keyboard directional keys are described in the following table.

Key	Movement
→	One character to right
←	One character to left
↑	One line up
↓	One line down
Ctrl + →	One word to right
Ctrl + ←	One word to left
Home	Beginning of line
End	End of line

1 **Press ← or position the I-beam between the e and l and click.**

The insertion point is positioned between the e and l.

Holding down a directional key or key combination moves quickly in the direction indicated, saving multiple presses of the key. Many of the Word insertion point movement keys can be held down to execute multiple moves.

Additional Information

You can use the directional keys on the numeric keypad or the dedicated directional keypad area. If using the numeric keypad, make sure the Num Lock feature is off; otherwise, numbers will be entered in the document. The Num Lock indicator light above the keypad is lit when on. Press Num Lock to turn it off.

Using Backspace and Delete

Removing typing entries to change or correct them is one of the basic editing tasks. Corrections may be made in many ways. Two of the most important editing keys are the Backspace key and the Delete key. The Backspace key removes a character or space to the left of the insertion point. It is particularly useful when you are moving from right to left (backward) along a line of text. The Delete key removes the character or space to the right of the insertion point and is most useful when moving from left to right along a line.

You will correct the error and continue typing the first line.

1. **Press Backspace to remove the extra e.**
2. **Press → or click at the end of the line.**
3. **Press Spacebar.**
4. **Type Tours four new adventures and correct any typing errors as you make them using Backspace or Delete.**

Your screen should be similar to Figure 1.7

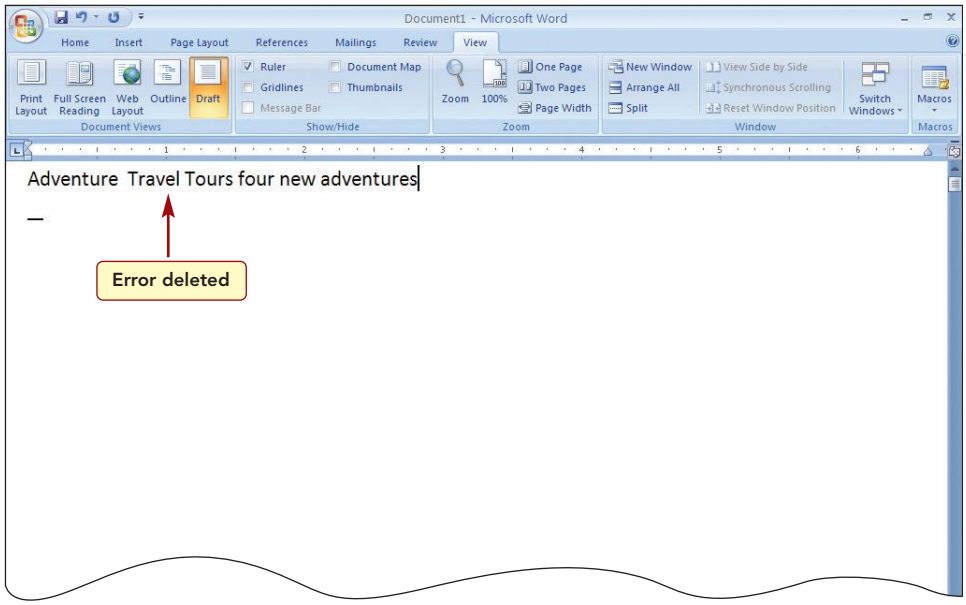


Figure 1.7

Ending a Line and Inserting Blank Lines

Now you are ready to complete the first line of the announcement. To end a line and begin another line, you simply press ↵Enter. The insertion point moves to the beginning of the next line. If you press ↵Enter at the beginning of a line, a blank line is inserted into the document. If the insertion point is in the middle of a line of text and you press ↵Enter, all the text to the right of the insertion point moves to the beginning of the next line.

1 **Press Enter 3 times.**

Your screen should be similar to Figure 1.8

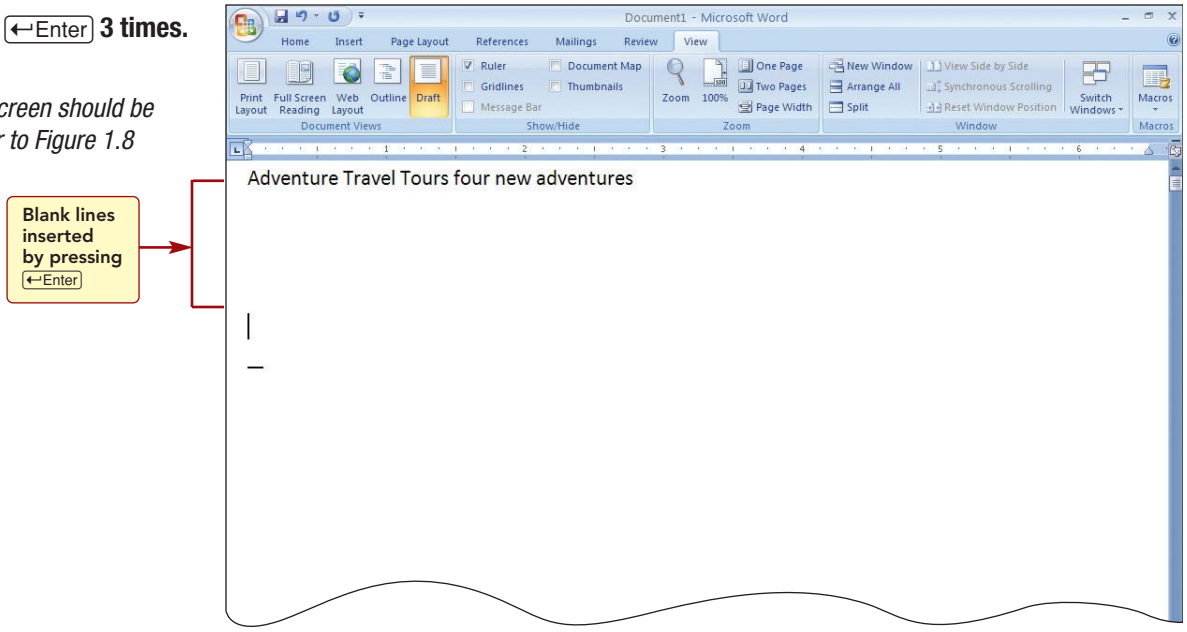


Figure 1.8

Pressing the first Enter ended the first line of text and inserted a blank line. The next two inserted blank lines.

Revealing Formatting Marks

While you are creating your document, Word automatically inserts formatting marks that control the appearance of your document. These marks are not displayed automatically so that the document is not cluttered. Sometimes, however, it is helpful to view the underlying formatting marks. Displaying these marks makes it easy to see, for example, if you have added an extra space between words or at the end of a sentence.

1 **Open the Home tab and click ¶ Show/Hide in the Paragraph group.**

Another Method

You also can use the keyboard shortcut Ctrl + * to display formatting marks.

Your screen should be similar to Figure 1.9

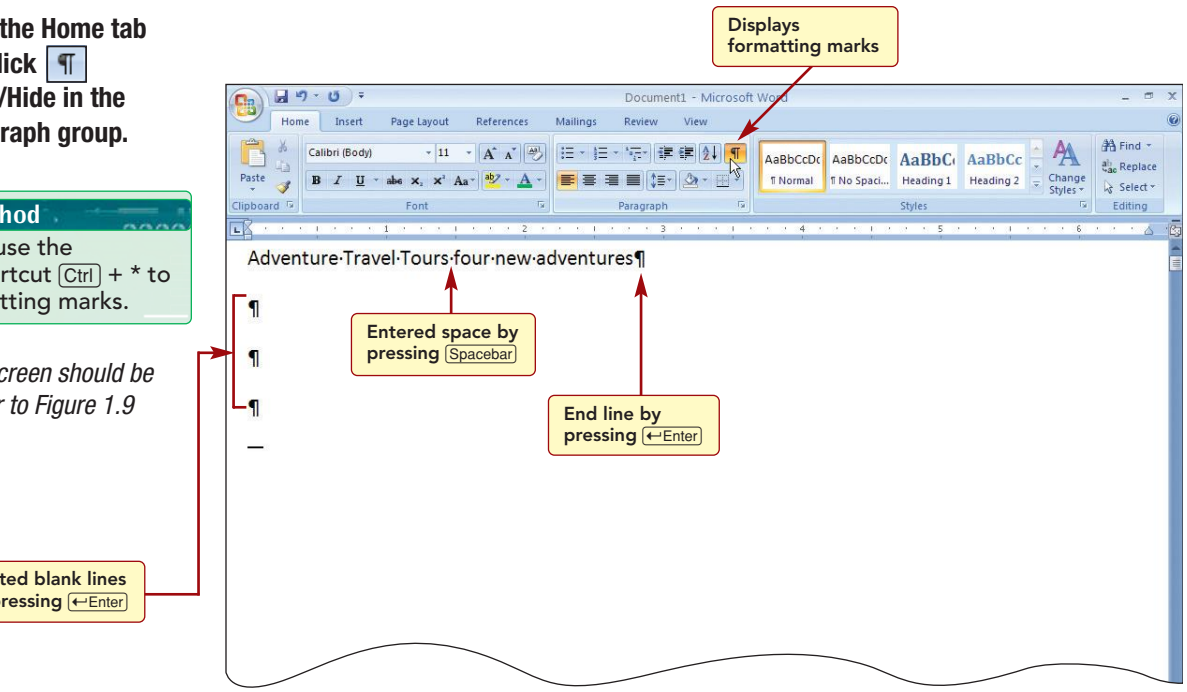


Figure 1.9

The document now displays the formatting marks. The ¶ character on the line above the insertion point represents the pressing of Enter that created the blank line. The ¶ character at the end of the text represents the pressing of Enter that ended the line and moved the insertion point to the beginning of the next line. Between each word, a dot shows where the Spacebar was pressed. Formatting marks do not appear when the document is printed. You can continue to work on the document while the formatting marks are displayed, just as you did when they were hidden.

You have decided you want the flyer heading to be on two lines, with the words "four new adventures" on the second line. To do this, you will insert a blank line after the word Tours. You will move the insertion point to the location in the text where you want to insert the blank line.

2. **Click on the right side of the "s" in "Tours" before the dot for a space.**
- **Press Enter 2 times.**
- **Press Delete to remove the space at the beginning of the line.**
- **Press ↓.**

Your screen should be similar to Figure 1.10

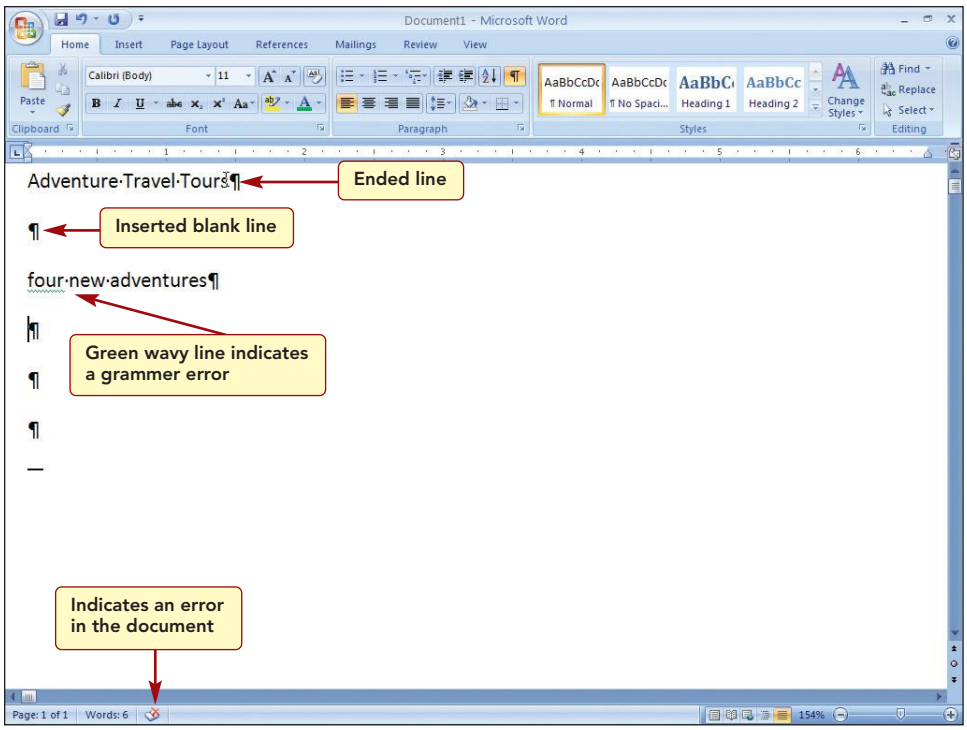


Figure 1.10

As you continue to create a document, the formatting marks are automatically adjusted.

Identifying and Correcting Errors Automatically

Notice that a green wavy underline appears under the word "four." This indicates an error has been detected.

As you enter text, Word is constantly checking the document for spelling and grammar errors. The Spelling and Grammar Status icon in the status bar displays an animated pencil icon while you are typing, indicating Word is checking for errors as you type. When you stop typing, it displays either a blue checkmark, indicating the program does not detect any errors, or a red X, indicating the document contains an error.

Having Trouble?
If the green underline is not displayed, click Office Button, click Word Options, Proofing, and select the "Check spelling as you type", "Mark grammar errors as you type", and "Check grammar with spelling" options.

In many cases, Word will automatically correct errors for you. In other cases, it identifies the error by underlining it. The different colors and designs of underlines indicate the type of error that has been identified. In addition to identifying the error, Word provides suggestions as to the possible correction needed.

Checking Grammar

In addition to the green wavy line under "four," the Spelling and Grammar Status icon appears as  in the status bar. This indicates that a spelling or grammar error has been located. The green wavy underline below the error indicates it is a grammar error.

Concept 1

Grammar Checker

1 The **grammar checker** advises you of incorrect grammar as you create and edit a document, and proposes possible corrections. Grammar checking occurs after you enter punctuation or end a line. If grammatical errors in subject-verb agreements, verb forms, capitalization, or commonly confused words, to name a few, are detected, they are identified with a wavy green line. You can correct the grammatical error by editing it or you can open the context menu for the identified error and display a suggested correction. Because not all identified grammatical errors are actual errors, you need to use discretion when correcting the errors.

1 **Right-click the word "four" to open the context menu.**

Having Trouble?

Review context menus in the "Common Office 2007 Features" section (page I.15). If the wrong context menu appears, you probably did not have the I-beam positioned on the error with the green wavy line. Press Esc or click outside the menu to cancel it and try again.

Your screen should be similar to Figure 1.11

Additional Information

A dimmed menu option means it is currently unavailable.

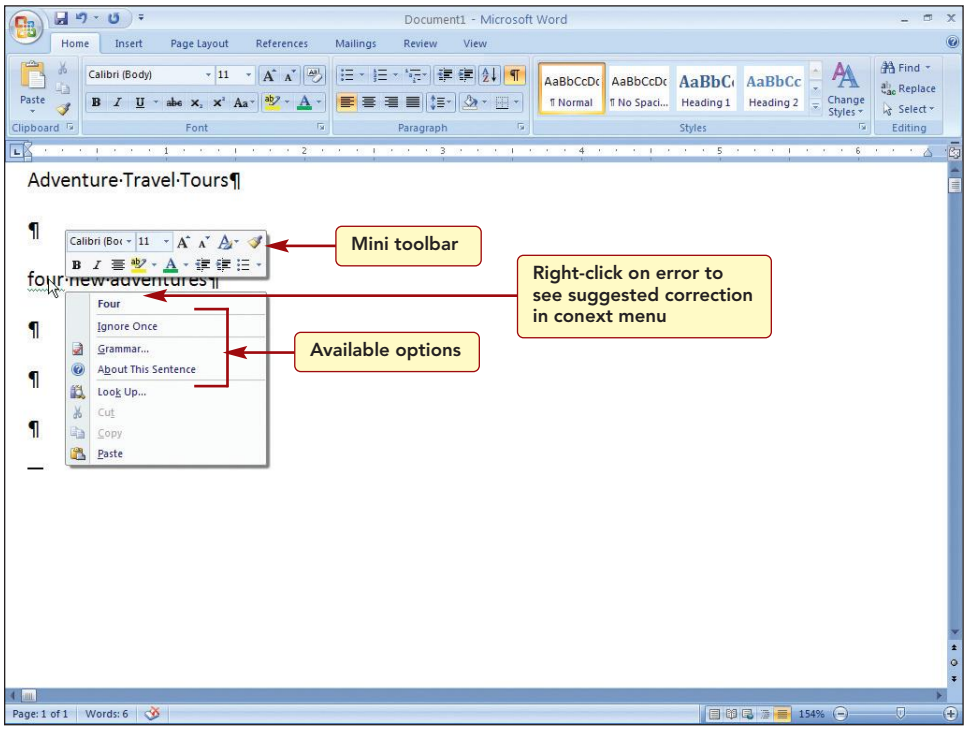


Figure 1.11

Additional Information
You will learn about using the Mini toolbar shortly.

The Word Mini toolbar and a context menu containing commands related to the grammar error are displayed. The first item on the menu is the suggested correction, "Four." The grammar checker indicates you should capitalize the first letter of the word because it appears to be the beginning of a sentence. It also includes four available commands that are relevant to the item, described below.

Command	Effect
Ignore Once	Instructs Word to ignore the grammatical error in this sentence.
Grammar	Opens the grammar checker and displays an explanation of the error.
About This Sentence	Provides help about the grammatical error.
Look up	Looks up word in dictionary.

To make this correction, you could simply choose the correction from the menu and the correction would be inserted into the document. Although, in this case, you can readily identify the reason for the error, sometimes the reason is not so obvious. In those cases, you can open the grammar checker to find out more information.

2 **Choose Grammar.**

Your screen should be similar to Figure 1.12

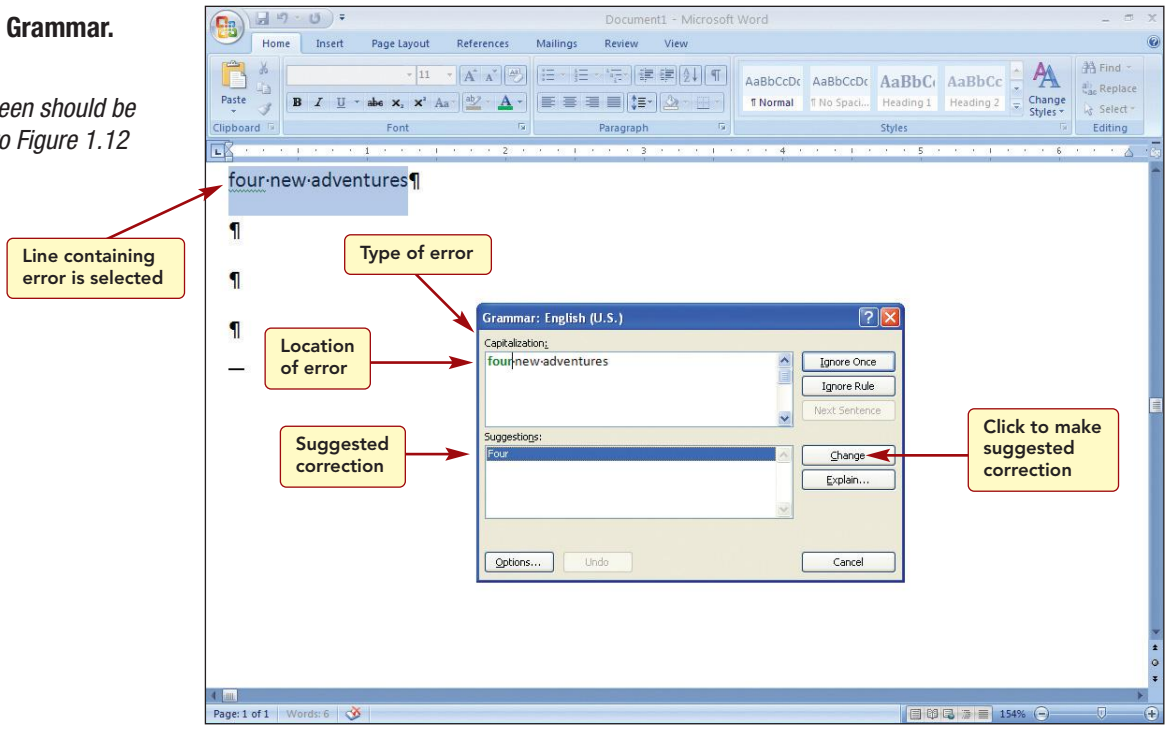


Figure 1.12

The Grammar dialog box identifies the type and location of the grammatical error in the upper text box and the suggested correction in the Suggestions box. The line in the document containing the error is also highlighted (selected) to make it easy for you to see the location of the error. You will make the suggested change.

3. Click Change.

- Move to the blank line at the end of the document.

Additional Information

Moving the insertion point using the keyboard or mouse deselects or removes the highlight from text that is selected.

Your screen should be similar to Figure 1.13

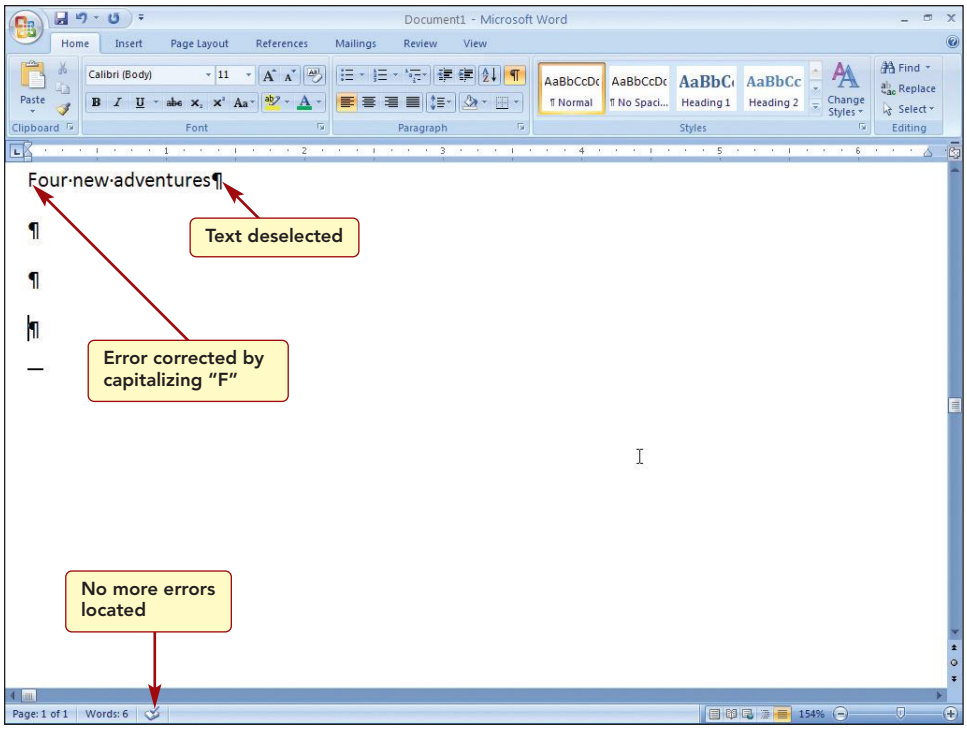


Figure 1.13

The error is corrected, the wavy green line is removed, and the Spelling and Grammar Status icon returns to .

Checking Spelling

Now you are ready to type the text for the first paragraph of the flyer.

Enter the following text, including the intentional spelling errors.

1. Type Attention adventire travellars!

- Press Spacebar.

Your screen should be similar to Figure 1.14

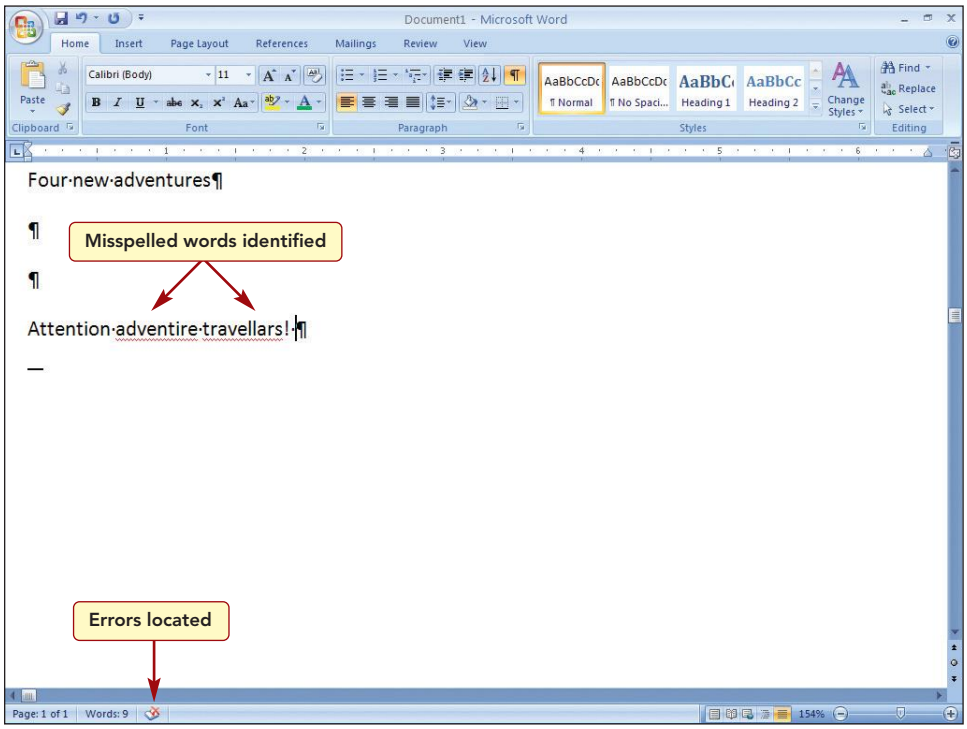


Figure 1.14

As soon as you complete a word by entering a space, the program checks the word for spelling accuracy.

Concept 2

Spelling Checker

2 The **spelling checker** advises you of misspelled words as you create and edit a document, and proposes possible corrections. The spelling checker compares each word you type to a **main dictionary** of words supplied with the program. The main dictionary includes most common words. If the word does not appear in the main dictionary, it then checks the **custom dictionary**. The custom dictionary consists of a list of words such as proper names, technical terms, and so on, that are not in the main dictionary and that you want the spelling checker to accept as correct. Adding words to the custom dictionary prevents the flagging as incorrect of specialized words that you commonly use. Word shares custom dictionaries with other Microsoft Office applications such as PowerPoint.

If the word does not appear in either dictionary, the program identifies it as misspelled by displaying a red wavy line below the word. You can then correct the misspelled word by editing it. Alternatively, you can display a list of suggested spelling corrections for that word and select the correct spelling from the list to replace the misspelled word in the document.

Word automatically identified the two words "adventire travellars" as misspelled by underlining them with a wavy red line. The quickest way to correct a misspelled word is to select the correct spelling from a list of suggested spelling corrections displayed on the context menu.

2 **Right-click on "adventire" to display the context menu.**

Another Method

You also can position the insertion point on the item you want to display a context menu for and press ⇧Shift + F10 to open the menu.

Your screen should be similar to Figure 1.15

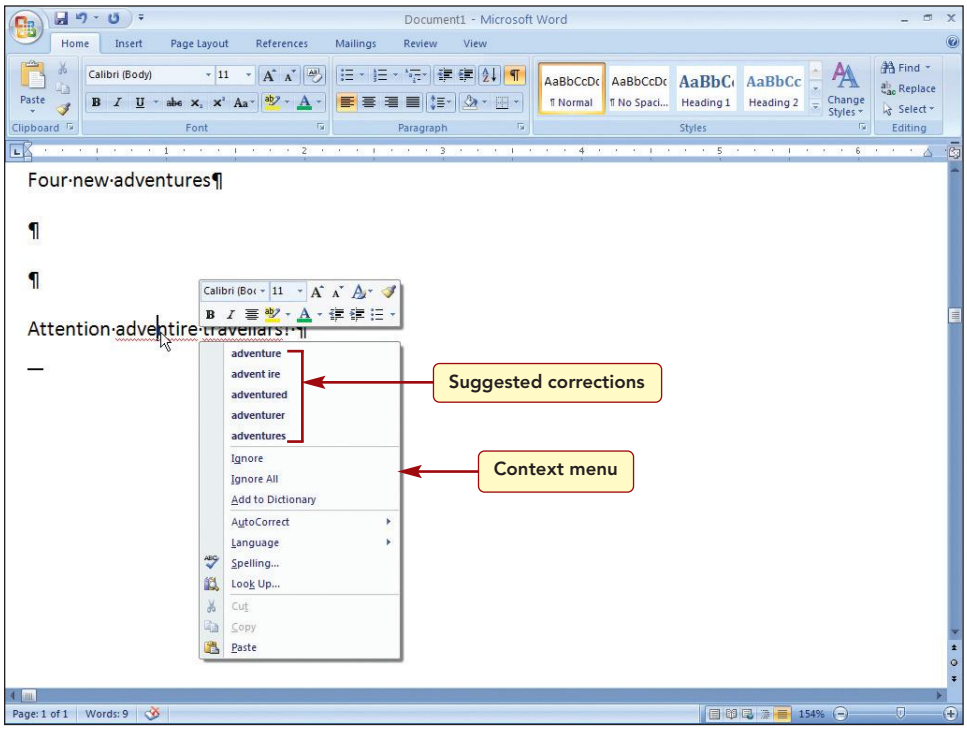


Figure 1.15

A context menu containing suggested correct spellings is displayed. The context menu also includes several related menu options, described in the following table.

Option	Effect
Ignore	Instructs word to ignore the misspelling of this word for this occurrence only.
Ignore All	Instructs Word to ignore the misspelling of this word throughout the rest of this session.
Add to Dictionary	Adds the word to the custom dictionary list. When a word is added to the custom dictionary, Word will always accept that spelling as correct.
AutoCorrect	Adds the word to the AutoCorrect list so Word can correct misspellings of it automatically as you type.
Language	Sets the language format, such as French, English, or German, to apply to the word.
Spelling	Starts the spell-checking program to check the entire document. You will learn about this feature in Lab 2.
Look Up	Searches reference tools to locate similar words and definitions.

Sometimes there are no suggested replacements because Word cannot locate any words in its dictionary that are similar in spelling; or the suggestions are not correct. If this occurs, you need to edit the word manually. In this case, the first suggestion is correct.

3 **Choose "adventure".**

Correct the spelling for "travellars".

Your screen should be similar to Figure 1.16

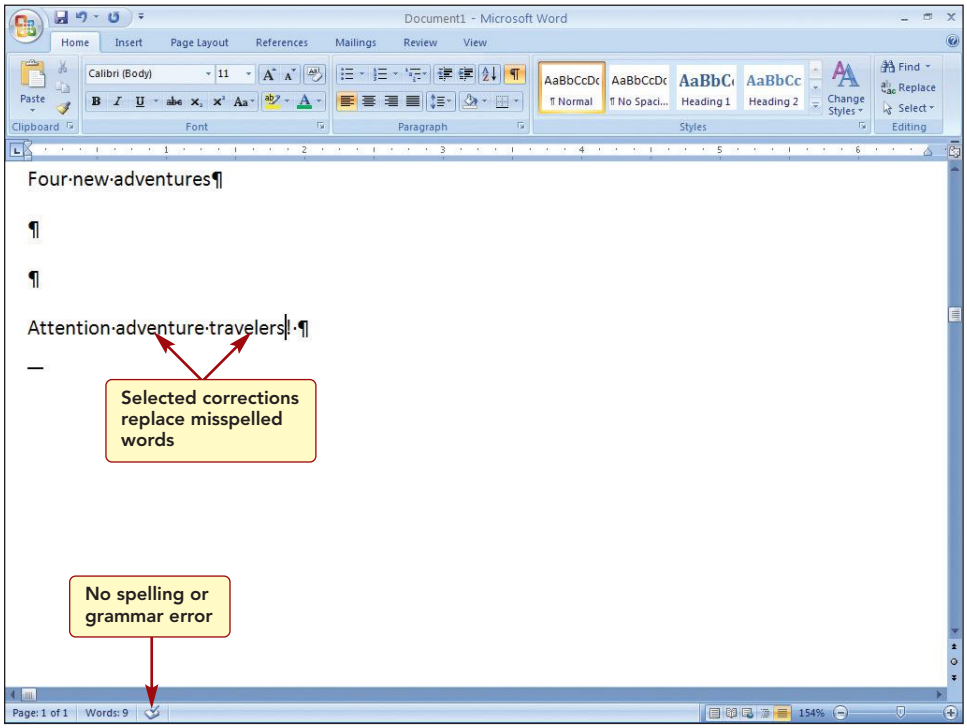


Figure 1.16

The spelling corrections you selected replace the misspelled words in the document. The Spelling and Grammar status icon returns to , indicating that, as far as Word is able to detect, the document is free from errors.

Using AutoCorrect

As you have seen, as soon as you complete a word by entering a space or punctuation, the program checks the word for grammar and spelling accuracy. Also, when you complete a sentence and start another, additional checks are made. Many spelling and grammar corrections are made automatically for you as you type. This is part of the AutoCorrect feature of Word.

Concept 3

AutoCorrect

3 The **AutoCorrect** feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry. The AutoCorrect feature automatically inserts proper capitalization at the beginning of sentences and in the names of days of the week. It also will change to lowercase letters any words that were incorrectly capitalized because of the accidental use of the ⇧Shift key. In addition, it also corrects many common typing and spelling errors automatically.

One way the program automatically makes corrections is by looking for certain types of errors. For example, if two capital letters appear at the beginning of a word, Word changes the second capital letter to a lowercase letter. If a lowercase letter appears at the beginning of a sentence, Word capitalizes the first letter of the first word. If the name of a day begins with a lowercase letter, Word capitalizes the first letter. When Spelling Checker provides a single suggested spelling correction for the word, the program will automatically replace the incorrect spelling with the suggested replacement.

Another way the program makes corrections is by checking all entries against a built-in list of AutoCorrect entries. If it finds the entry on the list, the program automatically replaces the error with the correction. For example, the typing error "withthe" is automatically changed to "with the" because the error is on the AutoCorrect list. You also can add words to the AutoCorrect list that you want to be automatically corrected.

Enter the following text, including the errors (identified in italics).

1. **Press End to move to the end of the line.**
2. **Type attend a presentaation to lern aboutthe**
3. **Press Spacebar.**

Your screen should be similar to Figure 1.17

Having Trouble?

The "Capitalize first letter of sentences" and "Replace text as you type" AutoCorrect features must be on. Use Office Button/ Word Options / Proofing/ AutoCorrect Options... and select these options if necessary.

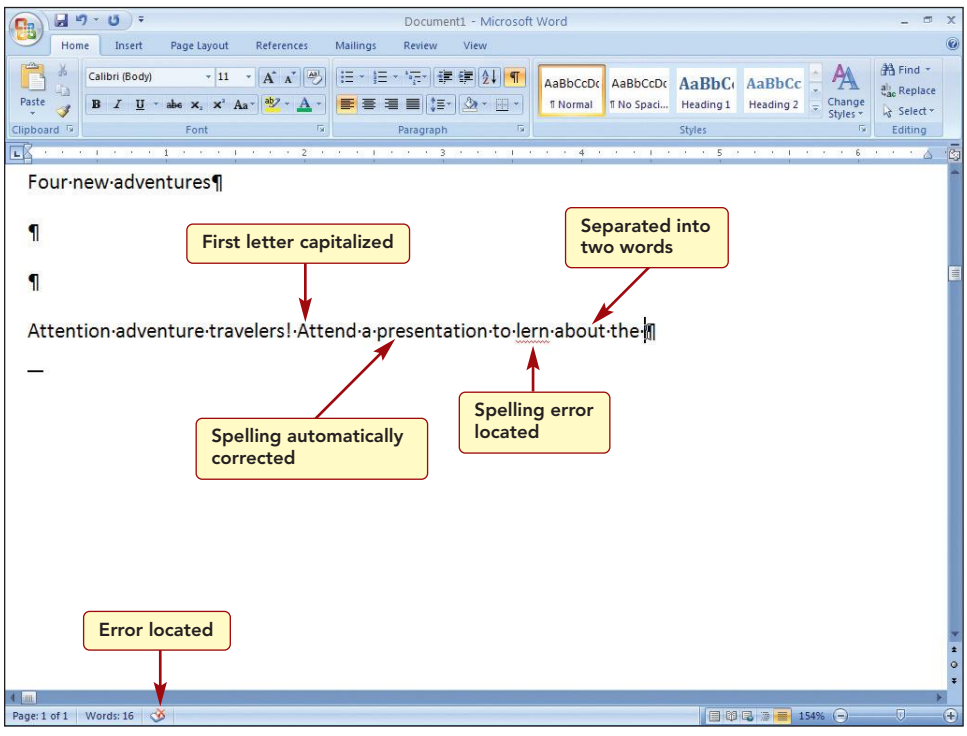


Figure 1.17

MORE ABOUT

See 1.4 Personalize Office Word 2007, Customize Autocorrect Options in the More About appendix to learn how to customize the AutoCorrect feature.

The first letter of the word "attend" was automatically capitalized because, as you were typing, the program determined that it is the first word in a sentence. In a similar manner, it corrected the spelling of "presentation" and separated the words "about the" with a space. The AutoCorrect feature corrected the spelling of "presentation" because it was the only suggested correction for the word supplied by the Spelling Checker. The word "lern" was not corrected because there are several suggested spelling corrections.

When you rest the mouse pointer near text that has been corrected automatically or move the insertion point onto the word, a small blue box appears under the first character of the word. The blue box changes to the AutoCorrect Options button when you point directly to it.

2 **Point to the word "Attend" to display the blue box.**

Having Trouble?

If your screen does not display the blue box, click Office Button, choose Proofing, AutoCorrect Options, and select the Show AutoCorrect Options buttons check box.

Point to the blue box.

Click AutoCorrect Options.

Your screen should be similar to Figure 1.18

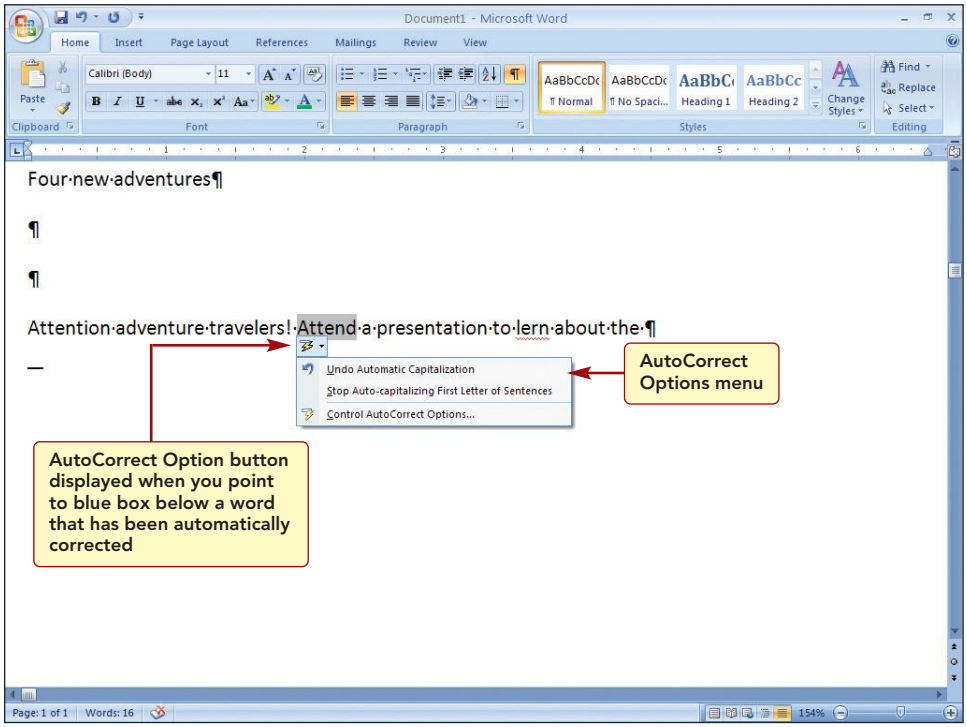


Figure 1.18

Another Method

Use Office Button/ Word Options /Proofing/ AutoCorrect Options/ Exceptions to add a word to the exceptions list.

Each time Word uses the AutoCorrect feature, the AutoCorrect Options button is available. The AutoCorrect Options menu allows you to undo the AutoCorrection or to permanently disable the AutoCorrection for the remainder of your document. The Control AutoCorrect Options command is used to change the settings for this feature. In some cases, you may want to exclude a word from automatic correction. You can do this by adding the word to the exceptions list so the feature will be disabled for that word. If you use Backspace to delete an automatic correction and then type it again the way you want it to appear, the word will be automatically added to the exceptions list.

You want to keep all the AutoCorrections that were made and correct the spelling for "lern".

3. **Click outside the menu to close it.**

- **Open the spelling context menu for "lern" and choose "learn".**

The spelling is corrected, and the spelling indicator in the status bar indicates that the document is free of errors.

Using Word Wrap

Now you will continue entering more of the paragraph. As you type, when the text gets close to the right margin, do not press ↵Enter to move to the next line. Word will automatically wrap words to the next line as needed.

Concept 4

Word Wrap

4 The **word wrap** feature automatically decides where to end a line and wrap text to the next line based on the margin settings. This feature saves time when entering text because you do not need to press ↵Enter at the end of a full line to begin a new line. The only time you need to press ↵Enter is to end a paragraph, to insert blank lines, or to create a short line such as a salutation. In addition, if you change the margins or insert or delete text on a line, the program automatically readjusts the text on the line to fit within the new margin settings. Word wrap is common to all word processors.

Enter the following text to complete the sentence.

1. **Press End to move to the end of the line.**

- **Type earth's greatest unspoiled habitats and find out how you can experience the adventure of a lifetime.**

- **Correct any spelling or grammar errors that are identified.**

Your screen should be similar to Figure 1.19

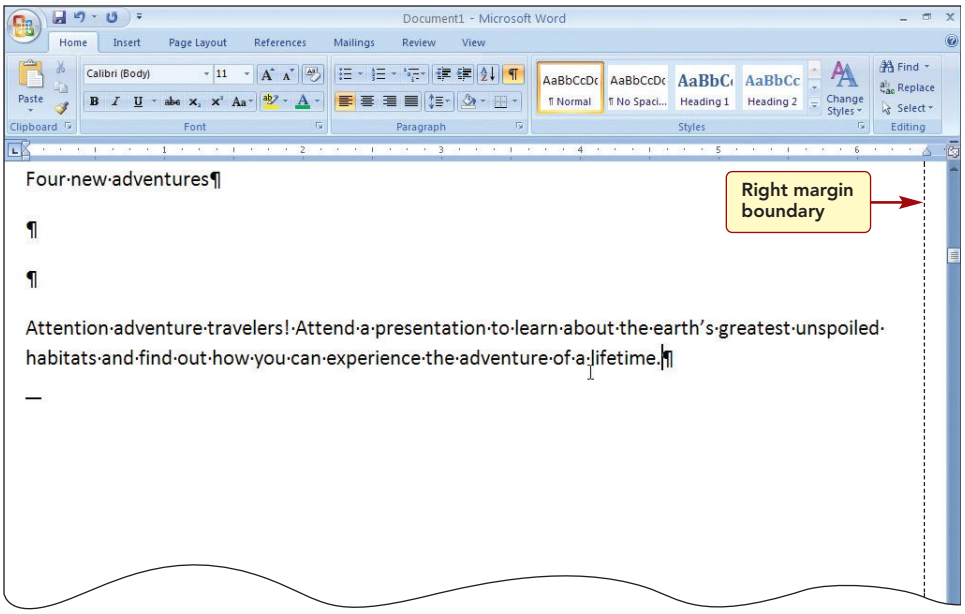


Figure 1.19

Additional Information

Generally, when using a word processor, separate sentences with one space after a period rather than two spaces, which was common when typewriters were used.

The program has wrapped the text that would overlap the right margin to the beginning of the next line.

Additional Information
You can continue typing to ignore the date suggestion.

You have a meeting you need to attend in a few minutes and want to continue working on the document when you get back. You decide to add your name and the current date to the document. As you type the first four characters of the month, Word will recognize the entry as a month and display a ScreenTip suggesting the remainder of the month. You can insert the suggested month by pressing ↵Enter. Then enter a space to continue the date and another ScreenTip will appear with the complete date. Press ↵Enter again to insert it.

2 **Move to the end of the sentence and press ↵Enter twice.**

- **Type your name.**
- **Press ↵Enter.**
- **Type the current date beginning with the month and when the ScreenTips appear for the month and the complete date, press ↵Enter to insert them.**
- **Press ↵Enter twice.**
- **Click ¶ Show/Hide to turn off the display of formatting marks.**

Your screen should be similar to Figure 1.20

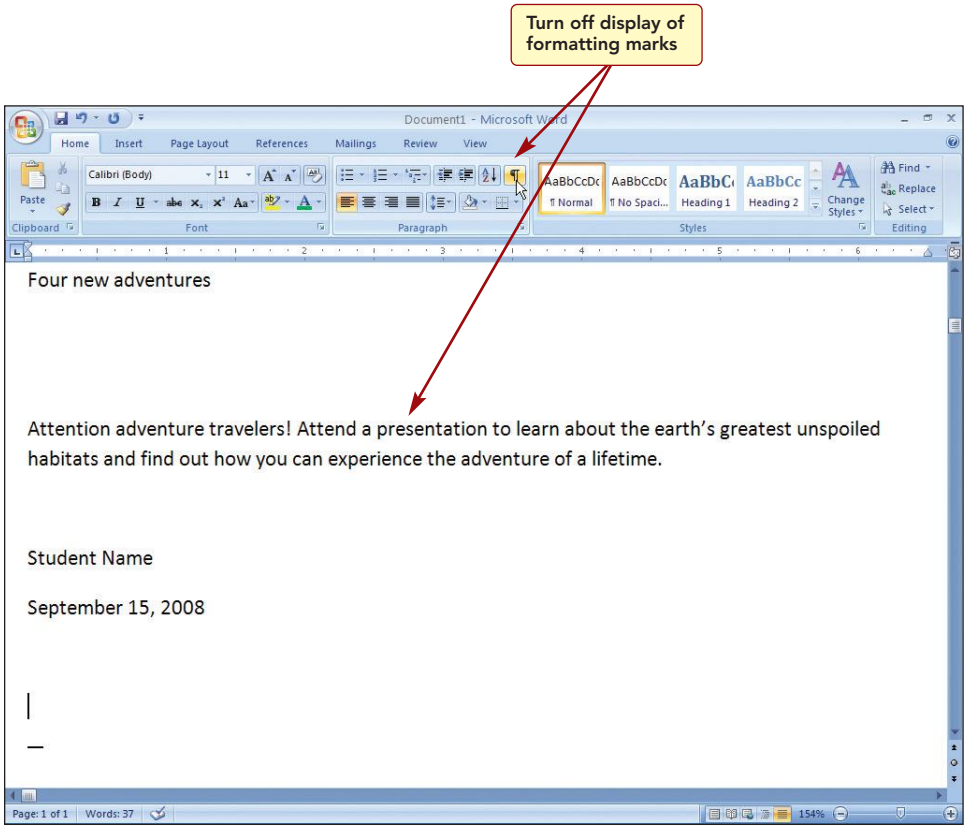


Figure 1.20

As you have seen, in many editing situations, it is helpful to display the formatting marks. However, for normal entry of text, you will probably not need the marks displayed. Now that you know how to turn this feature on and off, you can use it whenever you want when entering and editing text.

Specifying Document Properties

In addition to the content of the document that you create, Word automatically includes details about the document that describe or identify it called **document properties**. Document properties include details such as title, author name, subject, and keywords that identify the document's topic or contents. Some of these properties are automatically generated. These include statistics such as the number of words in the file and general information such as the date the document was created and last modified. Others such as author name and keywords are properties that you can specify. By specifying relevant information as document properties, you can easily organize, identify, and search for your documents later.

Modifying Document Properties

You will look at the document properties that are automatically included and add documentation to identify you as the author, and specify a document title and keywords to describe the document.

1. **Click Office Button.**
2. **Point to Prepare to select it and click on Properties in the submenu to choose it.**

Your screen should be similar to Figure 1.21

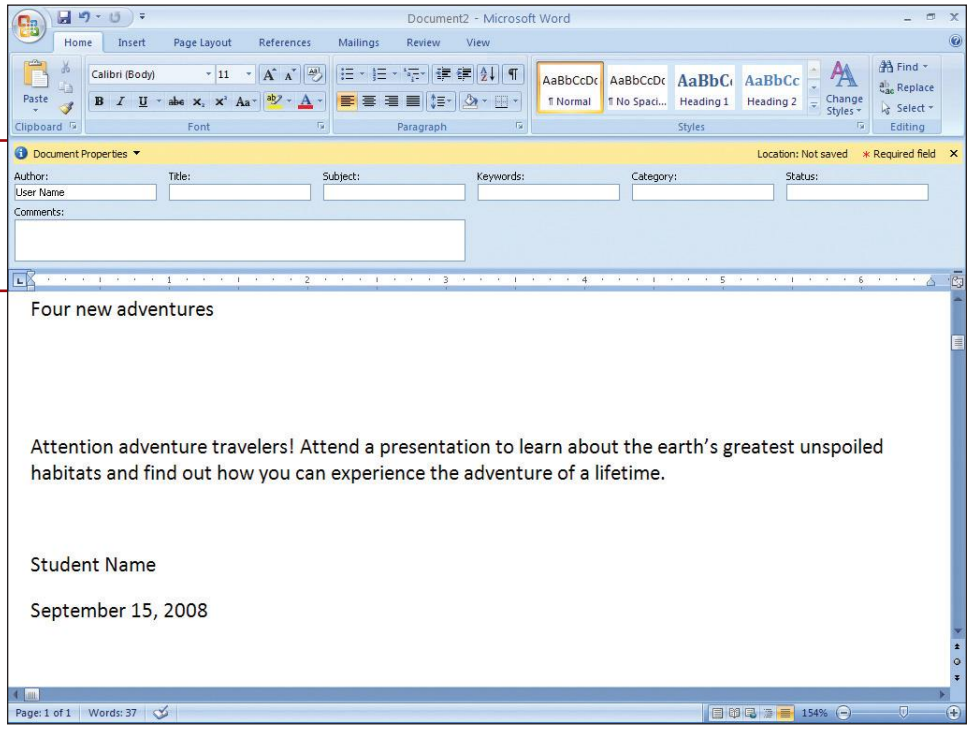


Figure 1.21

MORE ABOUT



See Personalize User Name and Initials in the 1.4 Personalize Office Word 2007 section of the More About appendix to learn how to personalize your copy of Word to include your name and initials.

The Document Information Panel opens and displays the standard properties associated with the document. Most of these properties are blank waiting for you to specify your own information. The Author property may display the user name that is associated with the copy of Word you are using. You will change the author name to your name and add information to fill in the other standard properties.

2. **If necessary, select the existing text in the Author text box by triple-clicking on it.**

Additional Information
You will learn all about selecting text shortly.

- **Type your name in the Author text box.**
- **Enter New Tours Flyer as the title.**
- **Enter Four new tours as the subject.**
- **Enter Flyer as the keyword.**
- **Enter Advertising as the category.**
- **Enter First Draft as the status.**

Your screen should be similar to Figure 1.22

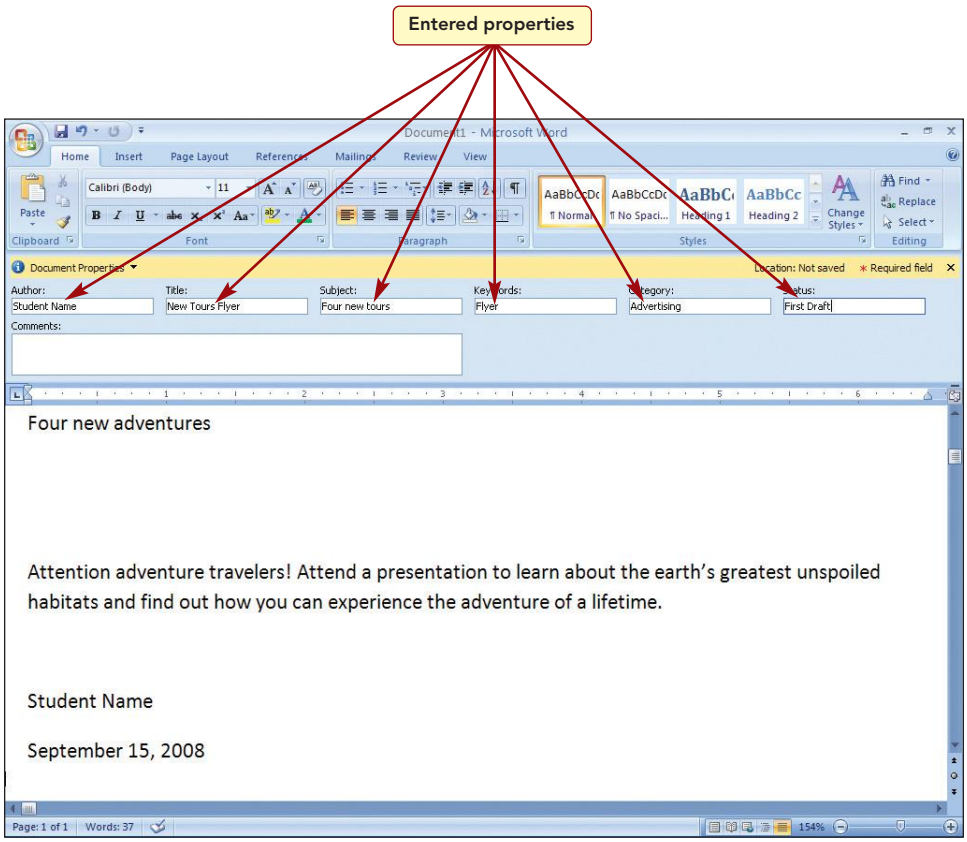


Figure 1.22

Next, you will quickly look at the additional information that is stored as document properties.

3 **Click** Document Properties **and choose Advanced Properties from the menu.**

Your screen should be similar to Figure 1.23

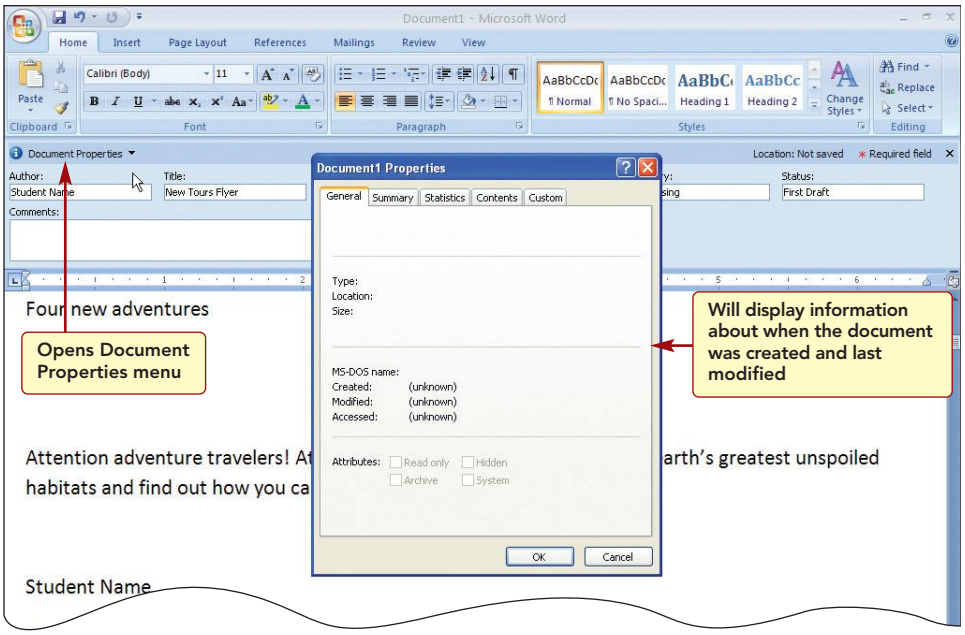


Figure 1.23

The General tab displays file system information about the type, location, and size of the document as well as information about when the document was created and modified. This information is automatically generated by the program. Because your document has not been saved yet, this information is blank. Next you will look at the document statistics.

4 **Open the Statistics tab.**

Your screen should be similar to Figure 1.24

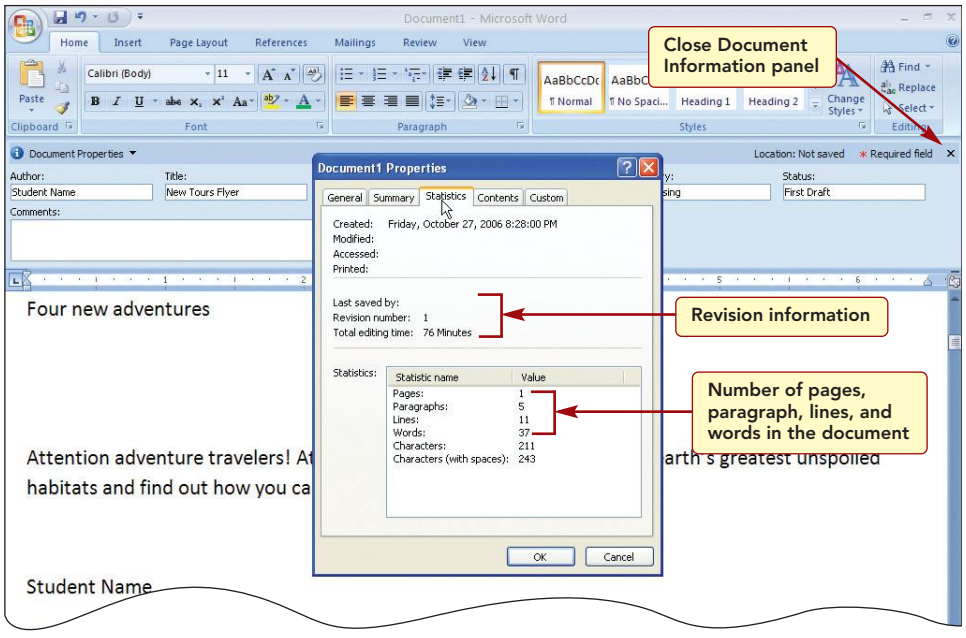


Figure 1.24

This tab includes revision information that identifies who last saved the document, the revision number, and the total editing time in minutes. The Statistics table shows the number of pages, words, lines, paragraphs, and so forth that are in the document. This information also is automatically generated and cannot be changed. The remaining three tabs—Contents, Custom, and Summary—include additional document property information.

You have added all the properties to the document that are needed at this time.

5 **Open the Contents, Custom, and Summary tabs to see the content.**

Click OK **to close the Properties dialog box.**

Click × **to close the Document Information Panel.**

Once the standard document properties are specified, you can use them to identify and locate documents. You also can use the automatically updated properties for the same purpose. For example, you can search for all files created by a specified user or on a certain date.

Saving, Closing, and Opening Files

Before leaving to attend your meeting, you want to save your work to a file. As you enter and edit text to create a new document, the changes you make are immediately displayed onscreen and are stored in your computer's memory. However, they are not permanently stored until you save your work to a file on a disk. After a document has been saved as a file, it can be closed and opened again at a later time to be edited further.

As a backup against the accidental loss of work from power failure or other mishap, Word includes an AutoRecover feature. When this feature is on, as you work you may see a pulsing disk icon briefly appear in the status bar. This icon indicates that the program is saving your work to a temporary recovery file. The time interval between automatic saving can be set to any period you specify; the default is every 10 minutes. After a problem has occurred, when you restart the program, the recovery file is automatically opened containing all changes you made up to the last time it was saved by AutoRecover. You then need to save the recovery file. If you do not save it, it is deleted when closed. AutoRecover is a great feature for recovering lost work but should not be used in place of regularly saving your work.

Additional Information

Use Office Button/ Word Options /Save/ Save AutoRecover Information to set the AutoRecovery options.

Saving a File

You will save the work you have done so far on the flyer. You can use the Save or Save As command on the Office Button File menu to save files. The Save command or the Save button on the Quick Access Toolbar will save the active file using the same file name by replacing the contents of the existing disk file with the document as it appears on your screen. The Save As command is used to save a file using a new file name or to a new location. This leaves the original file unchanged. When you create a new document, you can use either of the Save commands to save your work to a file on the disk. It is especially important to save a new document very soon after you create it because the AutoRecover feature does not work until a file name has been specified.

1 **Click Save in the Quick Access Toolbar.**

Another Method

The keyboard shortcut is Ctrl + S.

Your screen should be similar to Figure 1.25

Having Trouple?

In Windows Vista, the Save As dialog box layout will be different; however, the same information is displayed.

Additional Information

Depending on the dialog box view, the files may be displayed differently and file details such as the size, type, and date modified may be listed.

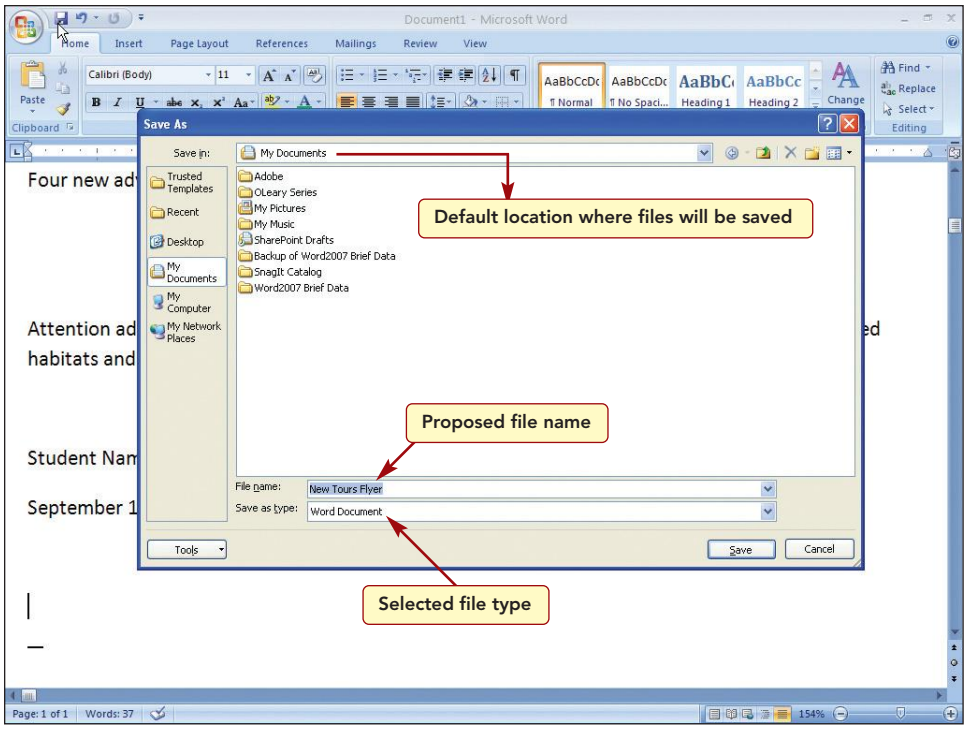


Figure 1.25

MORE ABOUT

See Set a Default Save Location in the 1.4 Personalize Office Word 2007 section of the More About appendix to learn how to change the default save location.

The Save As dialog box is used to specify the location where you will save the file and the file name. The Save In drop-down list box displays the default folder as the location where the file will be saved, and the File Name text box displays the proposed file name. The file list box displays the names of any Word documents in the default location. Only Word-type documents are listed, because Word Document is the specified file type in the Save as Type list box.

First you need to change the location where the file will be saved to the location where you save your files.

2 **Open the Save In drop-down list box.**

Select the location where you want to save your file.

Your screen should be similar to Figure 1.26

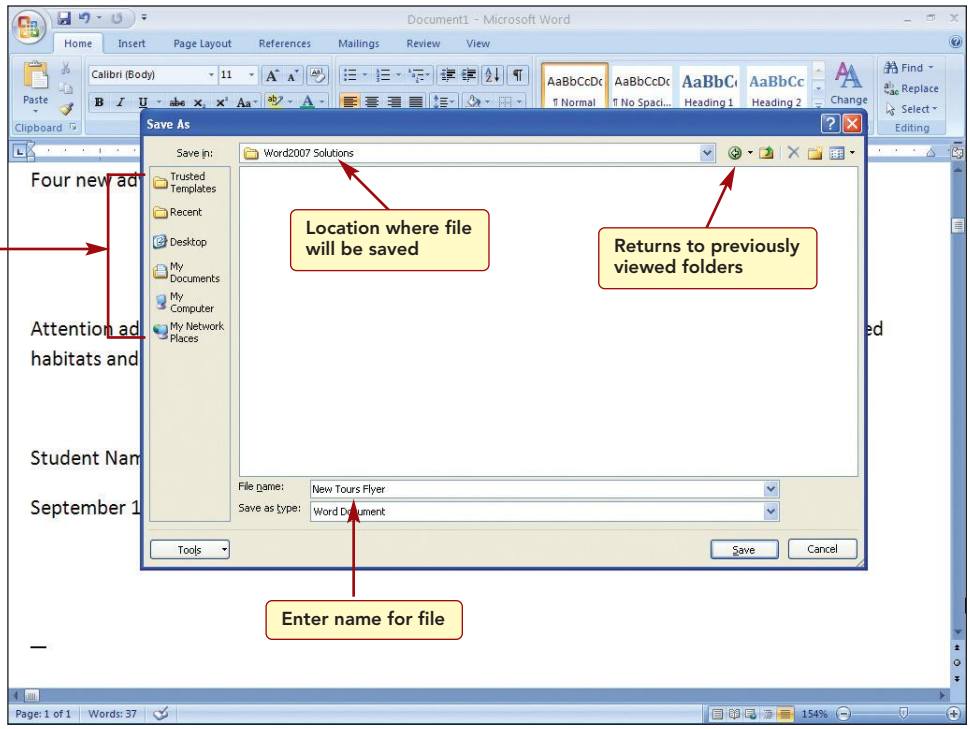


Figure 1.26

MORE ABOUT

In addition to the .docx file type, Word documents also can be saved in several different file formats that have different file extensions depending upon the format. See Save to Appropriate Formats in the More About appendix.

Additional Information

Windows files can have up to 256 characters in the file name. Names can contain letters, numbers, and spaces; however, the symbols \, /, ?, :, *, ", <, and > cannot be used. The file name can be entered in either uppercase or lowercase letters and will appear exactly as you type it.

MORE ABOUT

See Use the Compatibility Checker in the 6.1 Prepare Documents for Sharing section of the More About appendix to learn how to identify document features that are not supported by previous versions.

Now the large list box displays the names of all Word files, if any, at that location. You also can select the location to save your file from the Places bar along the left side of the dialog box. The icons bring up a list of recently accessed files and folders (My Recent Documents), the contents of the My Documents folder, items on the Windows desktop, and the locations on your computer or on a network. You also can click the button in the toolbar to return to folders that were previously opened.

Next, you need to enter a file name and specify the file type. The File Name box displays the default file name, consisting of the first few words from the document. The Save as Type box displays "Word Document" as the default format in which the file will be saved. Word 2007 documents are identified by the file extension .docx. The file type you select determines the file extension that will be automatically added to the file name when the file is saved. The default extension .docx saves the file in XML format. Previous versions of Word used the .doc file extension. If you plan to share a file with someone using Word 2003 or earlier, you can save the document using the .doc file type; however, some features may be lost. Otherwise, if you save it as a .docx file type, the recipient may not be able to view all features.

You will change the file name to Flyer and use the default document type (.docx).

3 **Triple-click in the File Name text box to highlight the proposed file name.**

Type Flyer.

Additional Information

The file name can be entered in either uppercase or lowercase letters and will appear exactly as you type it.

Click Save.

Your screen should be similar to Figure 1.27

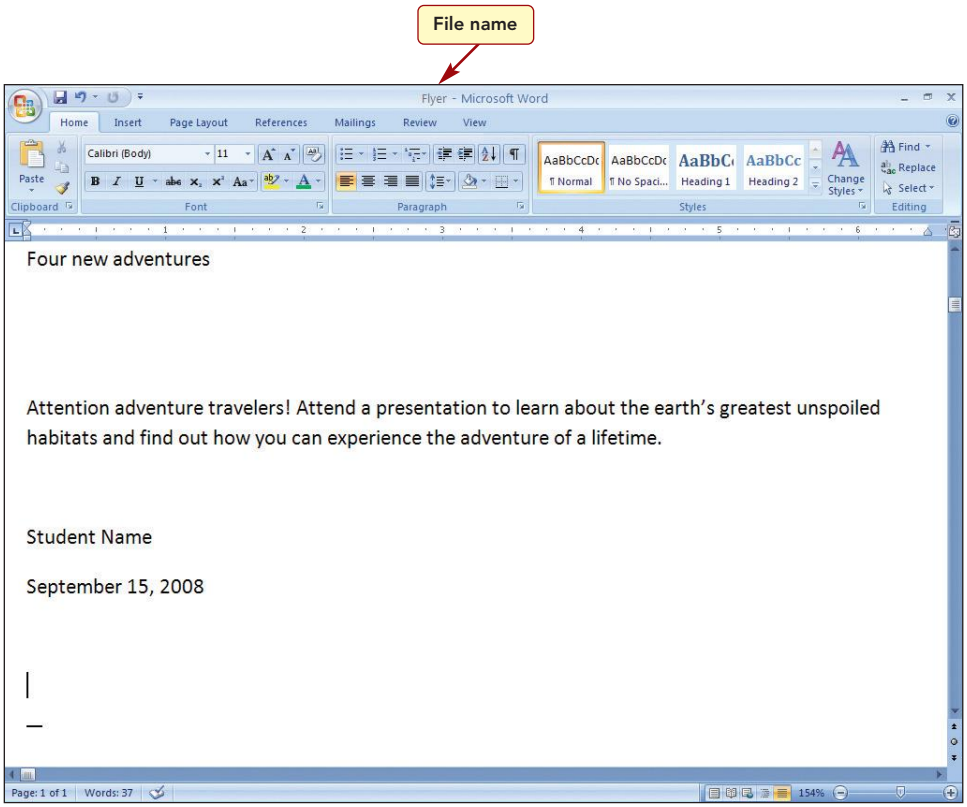


Figure 1.27

The document is saved as Flyer.docx at the location you selected, and the new file name is displayed in the Word title bar.

Closing a File

Finally, you want to close the document while you attend your meeting.

1 **Click Office Button and choose Close.**

Another Method

The keyboard shortcut is Ctrl + F4.

Additional Information

Do not click × Close in the window title bar as this closes the application.

Your screen should be similar to Figure 1.28

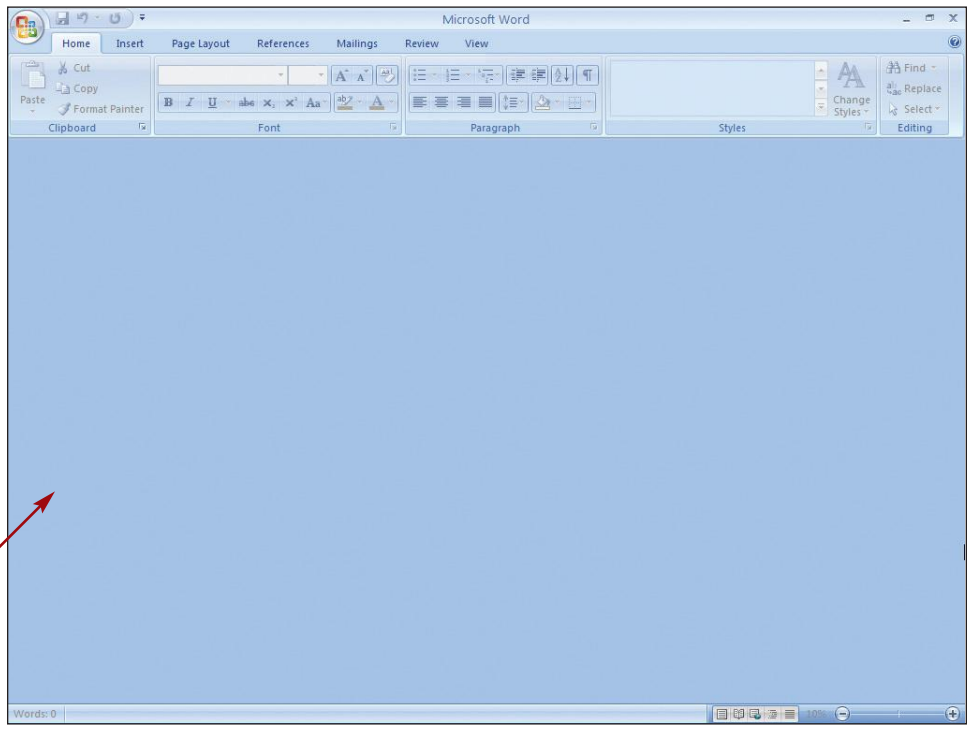


Figure 1.28

Now the Word window displays an empty document window. Because you did not make any changes to the document since saving it, the document window closed immediately. If you had made additional changes, the program would ask whether you wanted to save the file before closing it. This prevents the accidental closing of a file that has not been saved first.

Opening a File

Additional Information

To open a new blank document, click Office Button, choose New, and choose Blank Document from the Blank Document dialog box.

You asked your assistant to enter the remaining information in the flyer for you while you attended the meeting. Upon your return, you find a note from your assistant on your desk. The note explains that he had a

little trouble entering the information and tells you that he saved the revised file as Flyer1. You want to open the file and continue working on the flyer.

1 **Click Office Button and choose Open.**

Another Method
The keyboard shortcut is Ctrl + O.

Having Trouble?
In Windows Vista, the Open dialog box layout will be different; however, the same information will be displayed.

Your screen should be similar to Figure 1.29

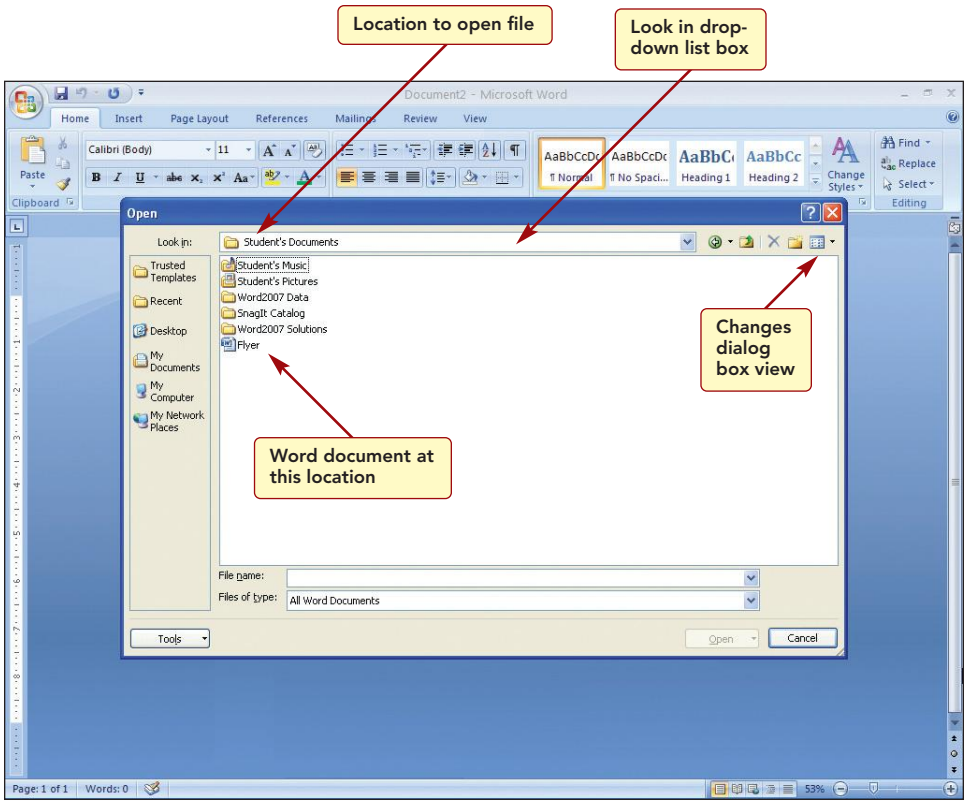


Figure 1.29

Additional Information
You can display a preview of the first page of a selected file by choosing Preview from the Views menu.

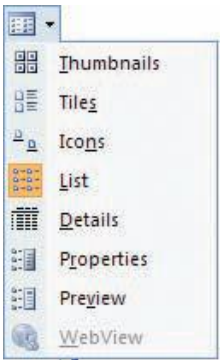
In the Open dialog box, you specify the location and name of the file you want to open. The current location is the location you last used when you saved the flyer document. As in the Save As dialog box, the Look In drop-down list box displays folders and document files at this location. You will need to change the location to the location containing your data files.

2. **Select the location containing your data files from the Look In drop-down list box.**

- **Select** wd01_Flyer1.

Having Trouble?
Click on the file name to select it. Depending on your Window's settings, your files may display file extensions and additional information.

- **Open the Views drop-down list.**



- **Choose Properties.**

Having Trouble?
In Windows Vista, open the Organize drop-down list and choose Properties. The document properties appear in a separate dialog box window. Click OK to close the dialog box.

Your screen should be similar to Figure 1.30

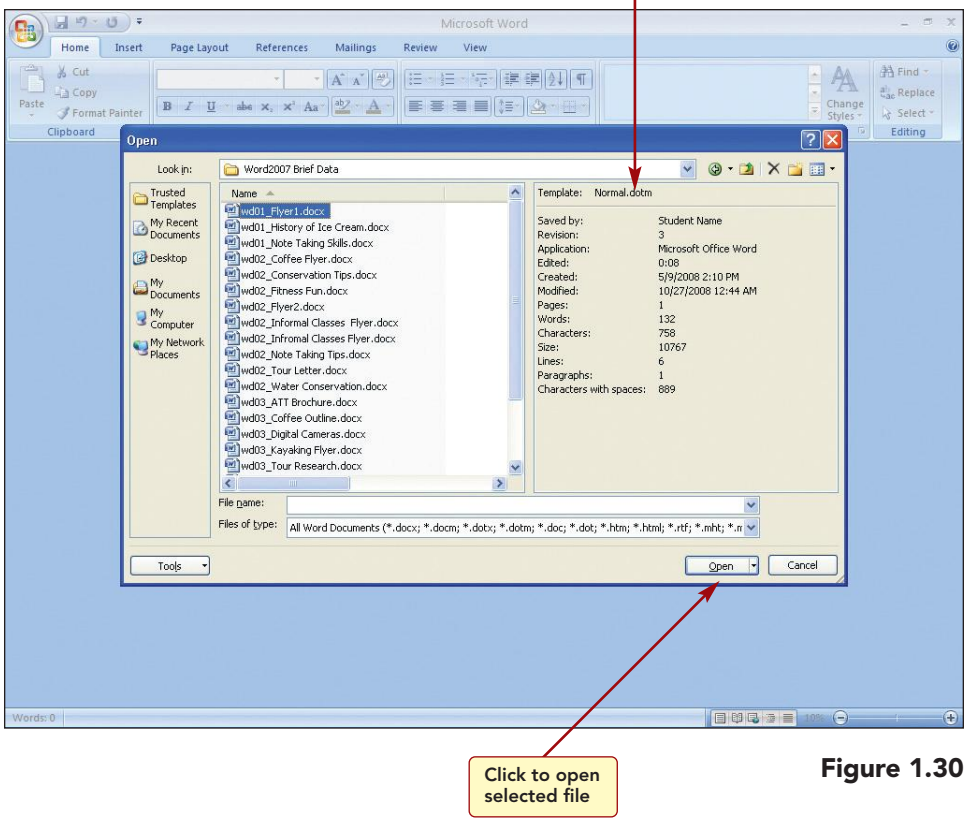


Figure 1.30

Additional Information
Pointing to a file name displays document property information in a ScreenTip about the type of file, author, title, date modified, and size.

The document properties for the selected file are displayed in the right pane of the dialog box. You will return the view to the list of file names and open this file.

3. **Open the Views drop-down list.**

- **Choose List.**
- **If necessary, select wd01_Flyer1.**
- **Click Open.**

Another Method

You also could double-click the file name to both select and open it.

- **If necessary, change to Print Layout view at 100% zoom.**

Your screen should be similar to Figure 1.31

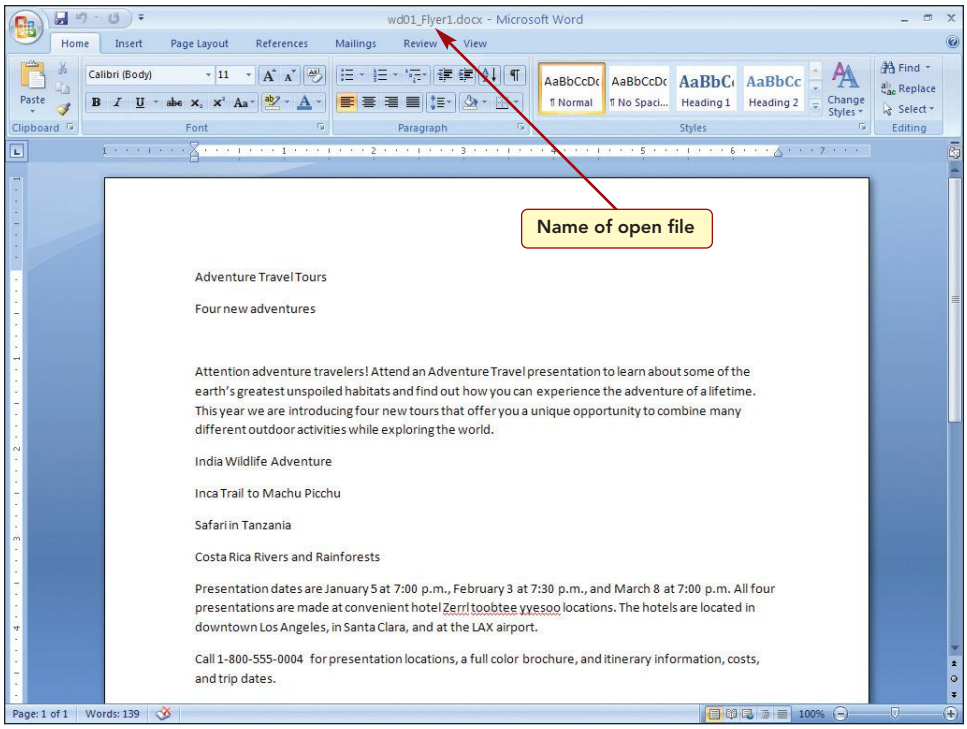


Figure 1.31

The file is opened and displayed in the document window. This file contains the additional content you asked your assistant to add to the flyer.

Navigating a Document

As documents increase in size, they cannot be easily viewed in their entirety in the document window and much time can be spent moving to different locations in the document. Word includes many features that make it easy to move around in a large document. The basic method is to scroll through a document using the scroll bar or keyboard. Another method is to move directly to a page or other identifiable item in the document, such as a table. You also can quickly return to a previous location, or browse through a document to a previous page or item.

Other features that help move through a large document include searching the document to locate specific items and using the Document Map or a table of contents. You will learn about many of these features in later labs.

Scrolling a Document

Now that more information has been added to the document, the document window is no longer large enough to display the entire document. To bring additional text into view in the window, you can scroll

Additional Information
If you have a mouse with a scroll wheel, you can use it to scroll a document vertically.

the document using either the scroll bars or the keyboard. Again, both methods are useful, depending on what you are doing. The tables below explain the mouse and keyboard techniques that can be used to scroll a document.

Mouse	Action
Click ▼	Moves down line by line.
Click ▲	Moves up line by line.
Click above/below scroll box	Moves up/down window by window.
Drag scroll box	Moves up/down quickly through document.
Click ⏫	Moves to top of previous page.
Click ⏬	Moves to top of next page.
Click ○ Select Browse Object	Changes how you want the ⏫ and ⏬ buttons to browse through a document, such as by table or graphic. The default setting is by page.

Key	Action
↓	Down line by line
↑	Up line by line
Page Up	Top of window
Page Down	Bottom of window
Ctrl + Home	Beginning of document
Ctrl + End	End of document

Additional Information
You also can scroll the document window horizontally using the horizontal scroll bar or the ← and → keys.

You will use the vertical scroll bar to view the text at the bottom of the flyer. When you use the scroll bar to scroll, the insertion point does not move. To move the insertion point, you must click in a location in the window.

1. **Click ▼ in the vertical scroll bar 12 times.**
2. **Click anywhere in the last line to move the insertion point.**

Your screen should be similar to Figure 1.32

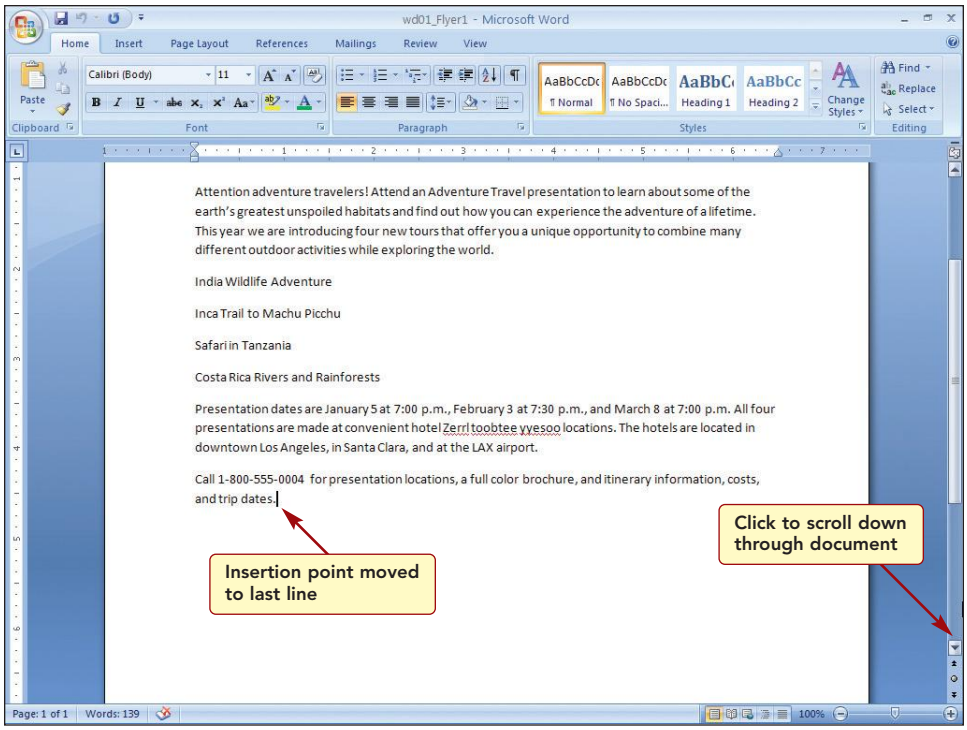


Figure 1.32

Having Trouble?
If your screen scrolls differently, this is a function of the type of monitor you are using.

The text at the beginning of the flyer has scrolled off the top of the document window, and the text at the bottom of the flyer is now displayed.

You also can scroll the document using the keyboard. While scrolling using the keyboard, the insertion point also moves. The insertion point attempts to maintain its position in a line as you scroll up and down through the document. In a large document, scrolling line by line can take a while. You will now try out several of the mouse and keyboard scrolling features that move by larger jumps.

2. **Hold down ↑ for several seconds until the insertion point is on the first line of the flyer.**
3. **Click below the scroll box in the scroll bar.**
4. **Drag the scroll box to the top of the scroll bar.**
5. **Press Ctrl + End.**

Your screen should be similar to Figure 1.33

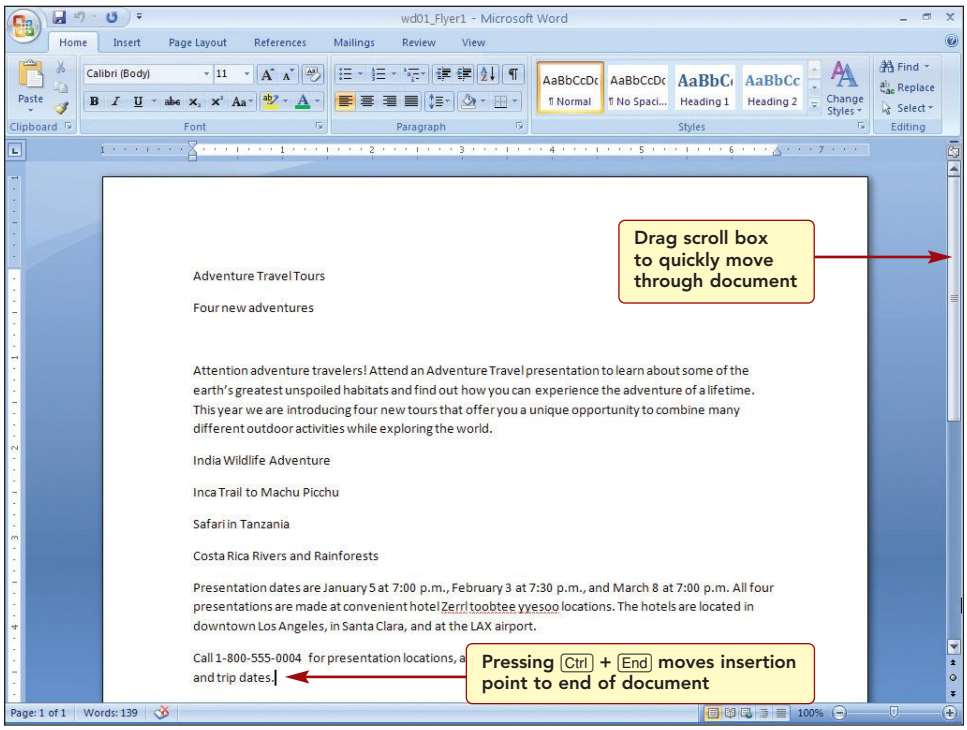


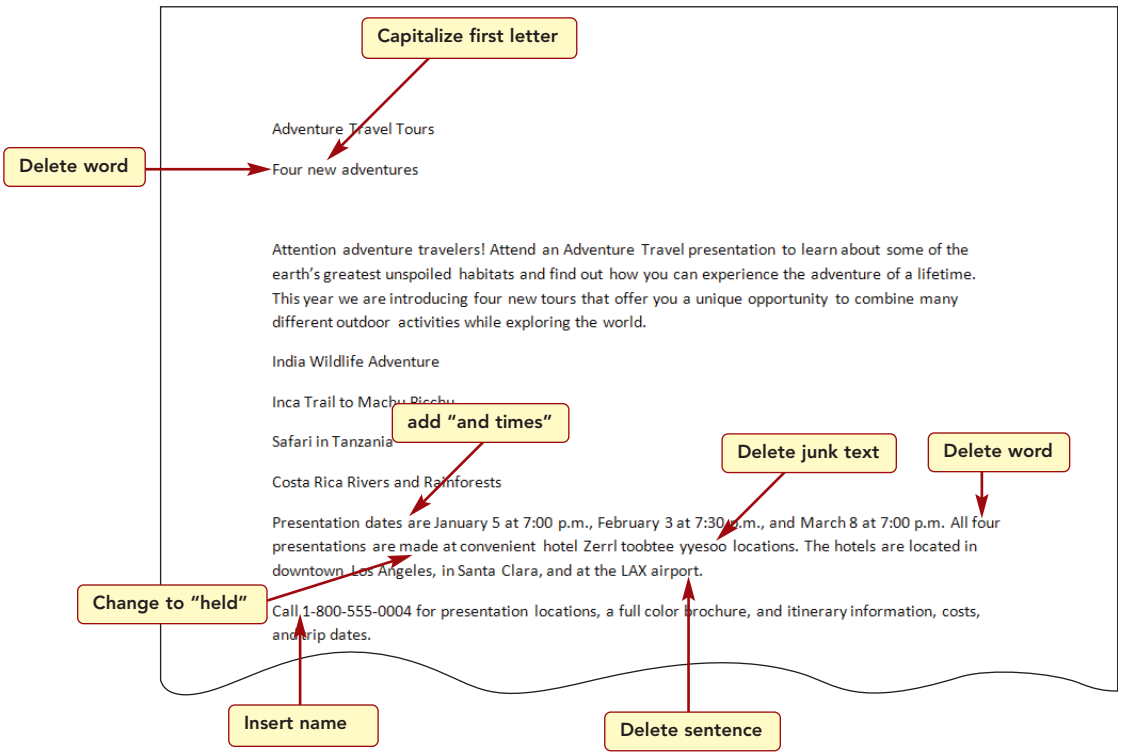
Figure 1.33

The insertion point is now at the end of the document. Using these features makes scrolling a large document much more efficient. Remember that when scrolling using the mouse, if you want to start working at that location, you must click at the new location to move the insertion point.

Editing Documents

While entering text and creating a document, you will find that you will want to edit or make changes and corrections to the document. Although many of the errors are identified and corrections are made automatically for you, others must be made manually. You learned how to use the Backspace and Delete keys earlier to correct errors. But deleting characters one at a time can be time consuming. Now you will learn about several additional editing features that make editing your work more efficient.

After entering the text of a document, you should proofread it for accuracy and completeness and edit the document as needed. After looking over the flyer, you have identified several errors that need to be corrected and changes you want to make to the content. The changes you want to make are shown below.



Inserting Text

As you check the document, you see that the first sentence of the paragraph below the list of trips is incorrect. It should read: "Presentation dates and times are . . . " The sentence is missing the words "and times." In addition, you want to change the word "made" to "held" in the following sentence. These words can easily be entered into the sentence without retyping the entire line. This is because Word uses **Insert mode** to allow new characters to be inserted into the existing text by moving the existing text to the right to make space for the new characters. You will insert the words "and times" after the word "dates" in the first sentence.

1. **Press Ctrl + Home to move to the top of the document.**

- **Move to "a" in "are" in the first sentence of the paragraph below the list of tours.**

Additional Information

Throughout these labs, when instructed to move to a specific letter in the text, this means to move the insertion point to the left side of the character.

- **Type and times.**
- **Press Spacebar.**

Your screen should be similar to Figure 1.34

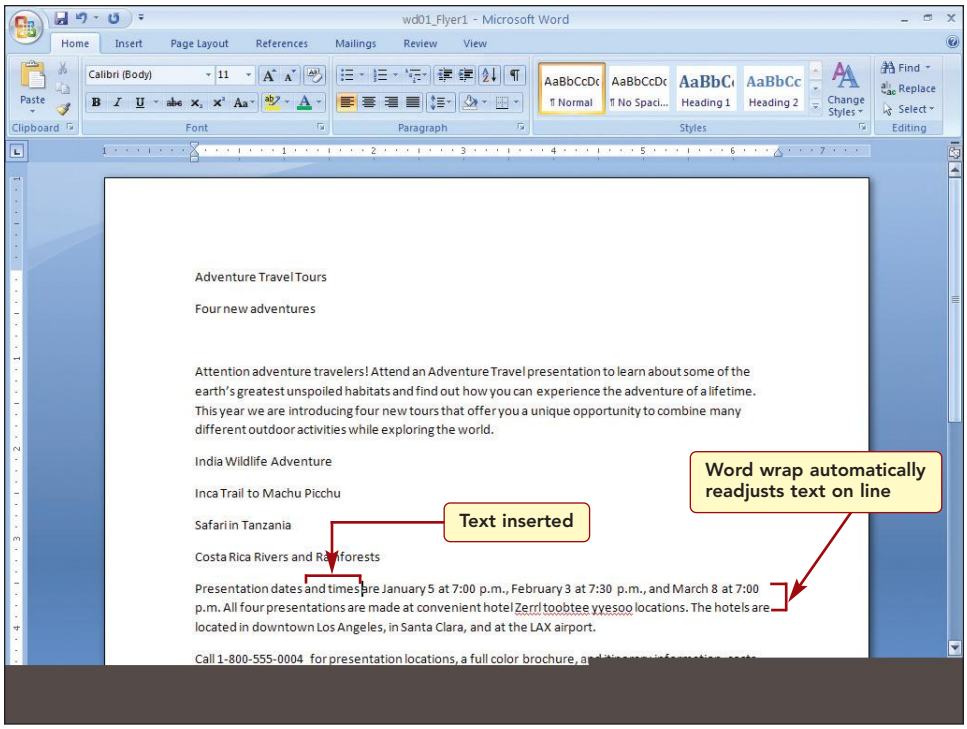


Figure 1.34

The inserted text pushes the existing text on the line to the right, and the word wrap feature automatically readjusts the text on the line to fit within the margin settings.

Selecting and Replacing Text

In the second sentence, you want to change the word "made" to "held." You could delete this word and type in the new word, or you can select the text and type the new text. Text that is selected is highlighted.

To select text using the mouse, first move the insertion point to the beginning or end of the text to be selected, and then drag to highlight the text you want selected. You can select as little as a single letter or as much as the entire document. You can quickly select a standard block of text. Standard blocks include a sentence, paragraph, page, tabular column, rectangular portion of text, or the entire document. The following tables summarize the mouse and keyboard techniques used to select standard blocks.

Additional Information

You can replace existing text using Overtype mode, in which each character you type replaces an existing character. This feature is turned on using Office Button/ Word Options /Advanced/Use overtype mode.

To Select	Mouse
Word	Double-click in the word.
Sentence	Press Ctrl and click within the sentence.
Line	Click to the left of a line when the mouse pointer is  .
Multiple lines	Drag up or down to the left of a line when the mouse pointer is  .
Paragraph	Triple-click on the paragraph or double-click to the left of the paragraph when the mouse pointer is  .
Multiple paragraphs	Drag to the left of the paragraphs when the mouse pointer is  .
Document	Triple-click or press Ctrl and click to the left of the text when the mouse pointer is  .

To Select	Keyboard
Next space or character	Shift + →
Previous space or character	Shift + ←
Next word	Ctrl + Shift + →
Previous word	Ctrl + Shift + ←
Text going backward to beginning of paragraph	Ctrl + Shift + ↑
Text going forward to end of paragraph	Ctrl + Shift + ↓
Entire document	Ctrl + A

To remove highlighting to deselect text, simply click anywhere in the document or press any directional key.

1 **Double click on "made" in the next sentence.**

Your screen should be similar to Figure 1.35

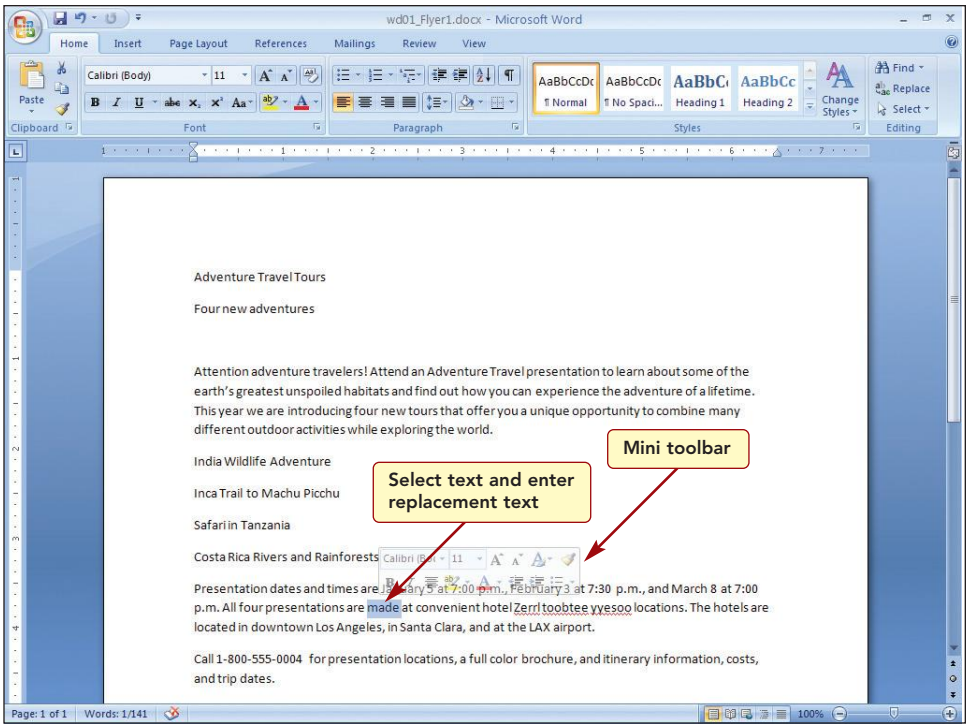


Figure 1.35

Text that is selected can be modified using many different Word features. The Mini toolbar appears automatically when text is selected and the mouse pointer is pointing to the selection. You will learn about using this feature shortly. In this case, you want to replace the selected text with new text.

2 **Type held.**

Your screen should be similar to Figure 1.36

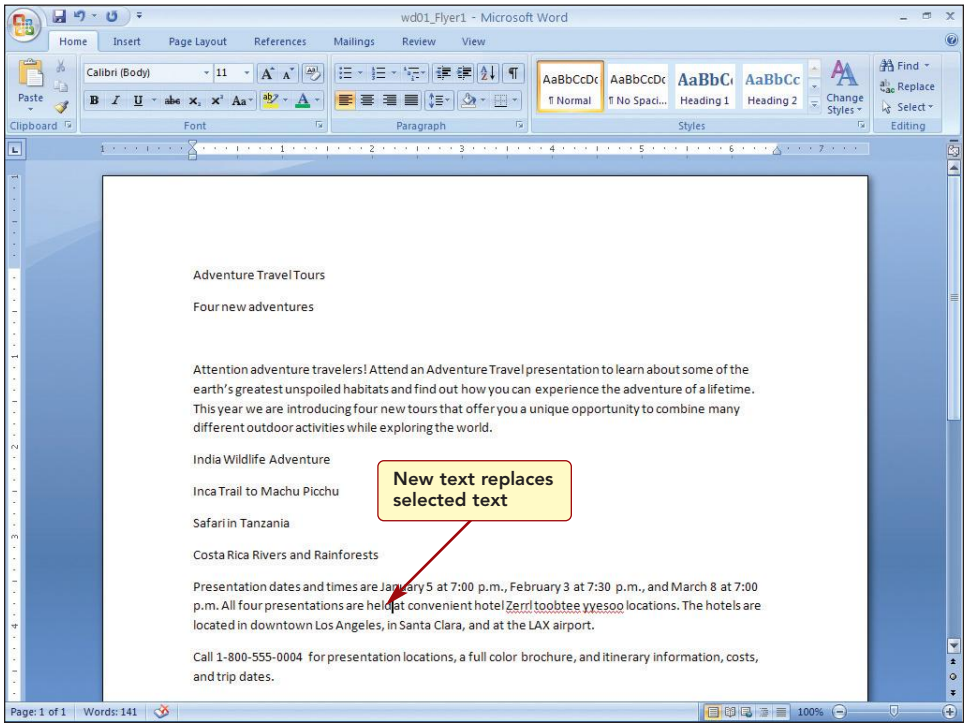


Figure 1.36

As soon as you began typing, the selected text was automatically deleted. The new text was inserted in the line just like any other text.

Deleting a Word

Additional Information
The Ctrl + Backspace key combination deletes text to the left of the insertion point to the beginning of the next group of characters.

You next want to delete the word "four" from the same sentence. The Ctrl + Delete key combination deletes text to the right of the insertion point to the beginning of the next group of characters. In order to delete an entire word, you must position the insertion point at the beginning of the word.

1. **Move to "f" in "four" in the same sentence.**
2. **Press Ctrl + Delete.**

Having Trouble?
Hold down Ctrl while pressing Delete.

Your screen should be similar to Figure 1.37

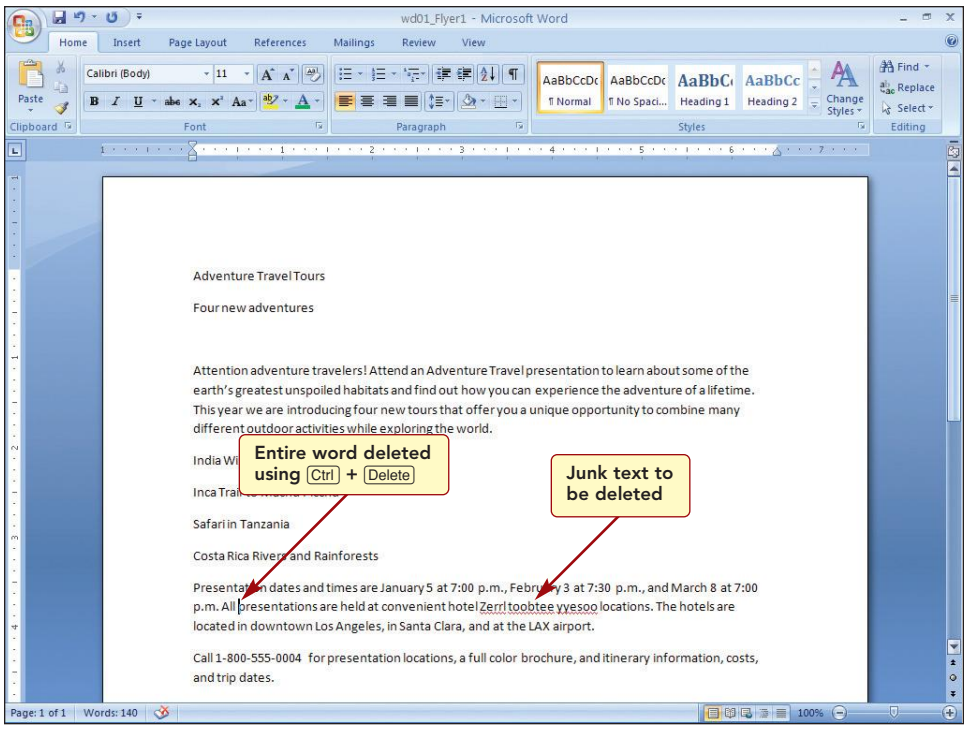


Figure 1.37

The word "four" has been deleted.

Selecting and Deleting Text

As you continue proofreading the flyer, you see that the end of this sentence contains a section of junk characters. To remove these characters, you could use Delete and Backspace to delete each character individually, or Ctrl + Delete or Ctrl + Backspace to delete each word or group of characters. This is very slow, however. Several characters, words, or lines of text can be deleted at once by first selecting the text and then pressing Delete.

The section of characters you want to remove follows the word "hotel" in the second line of the paragraph below the list of trips. You also decide to delete the entire last sentence of the paragraph.

1. **Move to "Z" (following the word "hotel").**

- **Drag to the right until all the text including the space before the word "locations" is highlighted.**

Having Trouble?
Hold down the left mouse button while moving the mouse to drag.

Additional Information
When you start dragging over a word, the entire word including the space after it is automatically selected.

- **Press** Delete.

- **Hold down** Ctrl **and click anywhere in the third sentence of the paragraph below the list of trips.**

- **Press** Delete.

Your screen should be similar to Figure 1.38

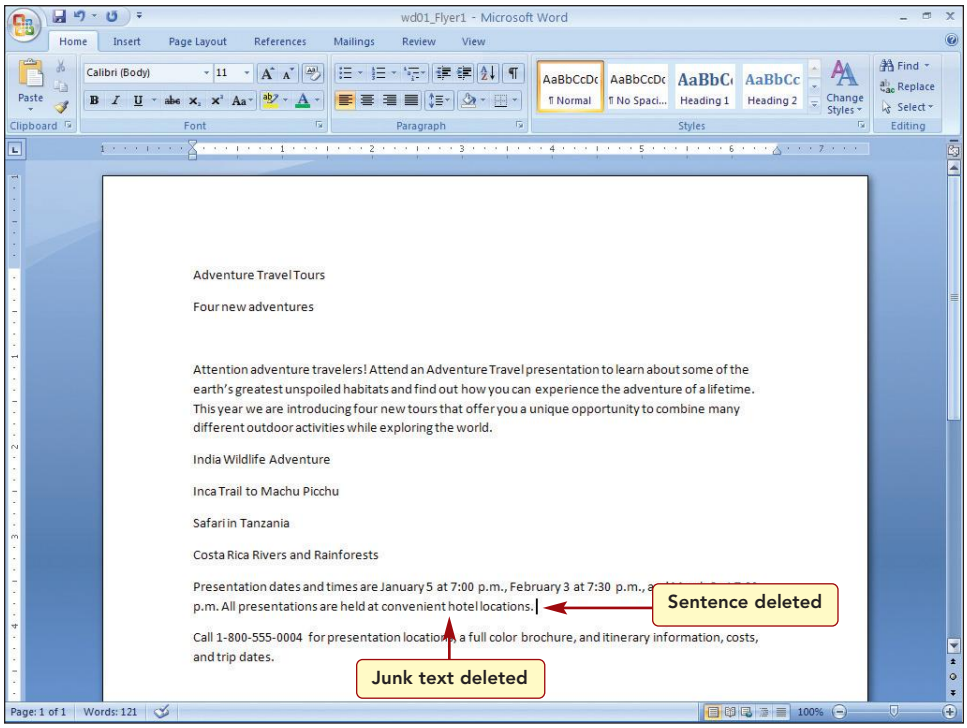


Figure 1.38

The selected junk text and the complete sentence were removed from the flyer.

Undoing Editing Changes

After removing the sentence, you decide it may be necessary after all. To quickly restore this sentence, you can use Undo to reverse your last action or command.

1 Click Undo in the Quick Access Toolbar.

Another Method

The keyboard shortcut is Ctrl + Z.

Your screen should be similar to Figure 1.39

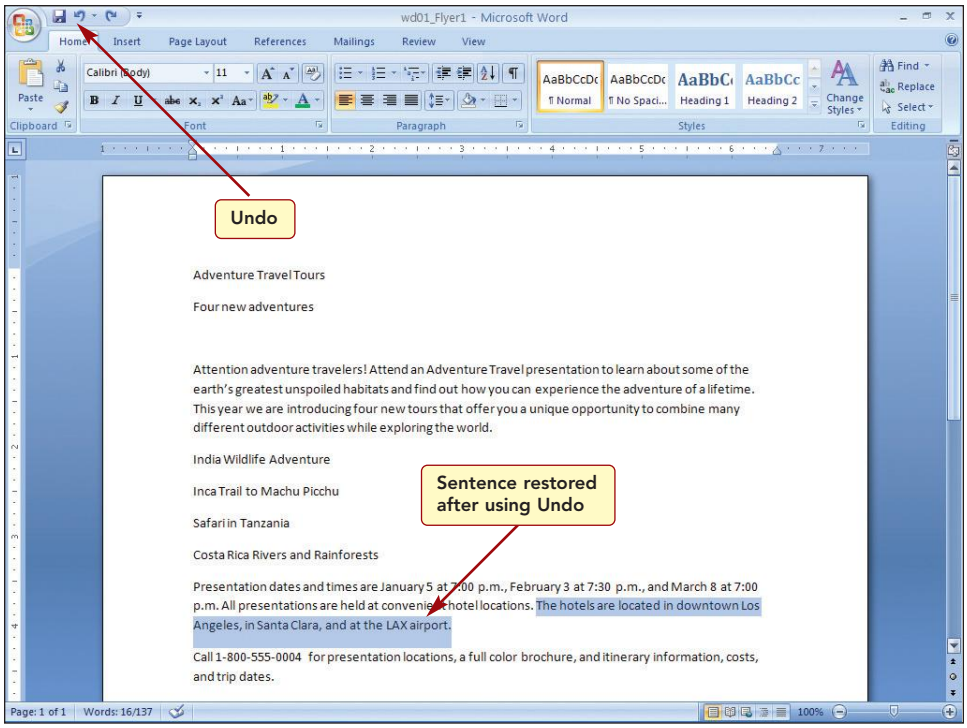


Figure 1.39

Undo returns your last deletion and restores it to its original location in the text, regardless of the current insertion point location. Notice that the Undo button includes a drop-down list button. Clicking this button displays a list of the most recent actions that can be reversed, with the most recent action at the top of the list. When you select an action from the drop-down list, you also undo all actions above it in the list.

2 Open the Undo drop-down list.



Choose Delete Word.

Your screen should be similar to Figure 1.40

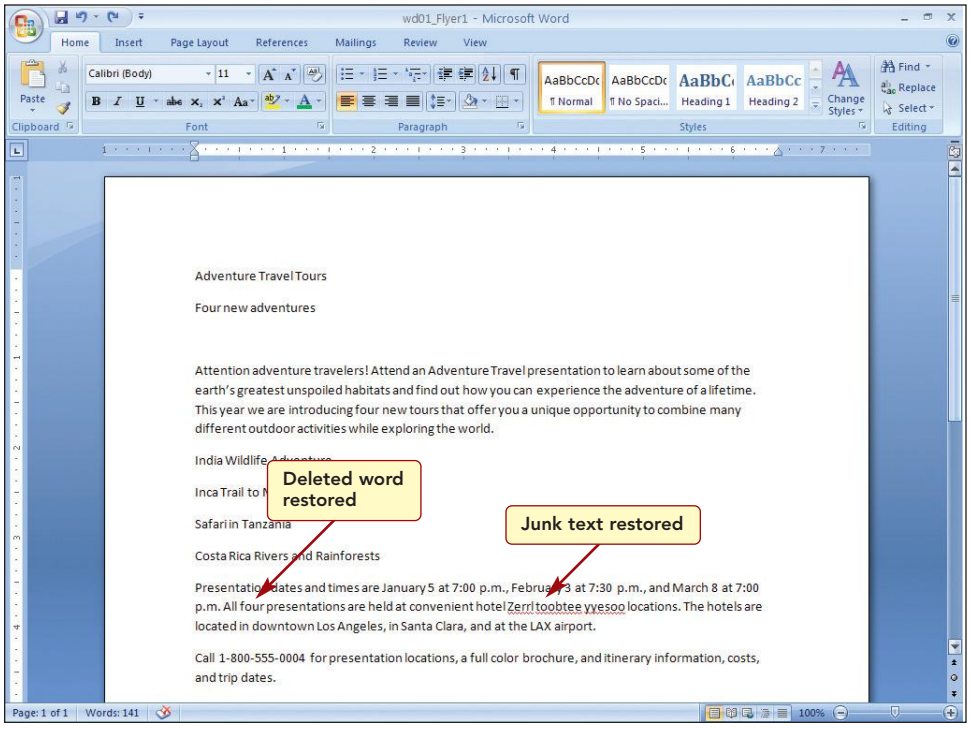


Figure 1.40

The junk characters and the word "four" are restored. Immediately after you undo an action, the Redo button is available so you can restore the action you just undid. You will restore your corrections and then save the changes you have made to the document to a new file.

3 Click Redo 2 times.

Another Method
The keyboard shortcut is Ctrl + Y.

Click Office Button and choose Save As.

Save the document as Flyer1 to your solution file location.

Your screen should be similar to Figure 1.41

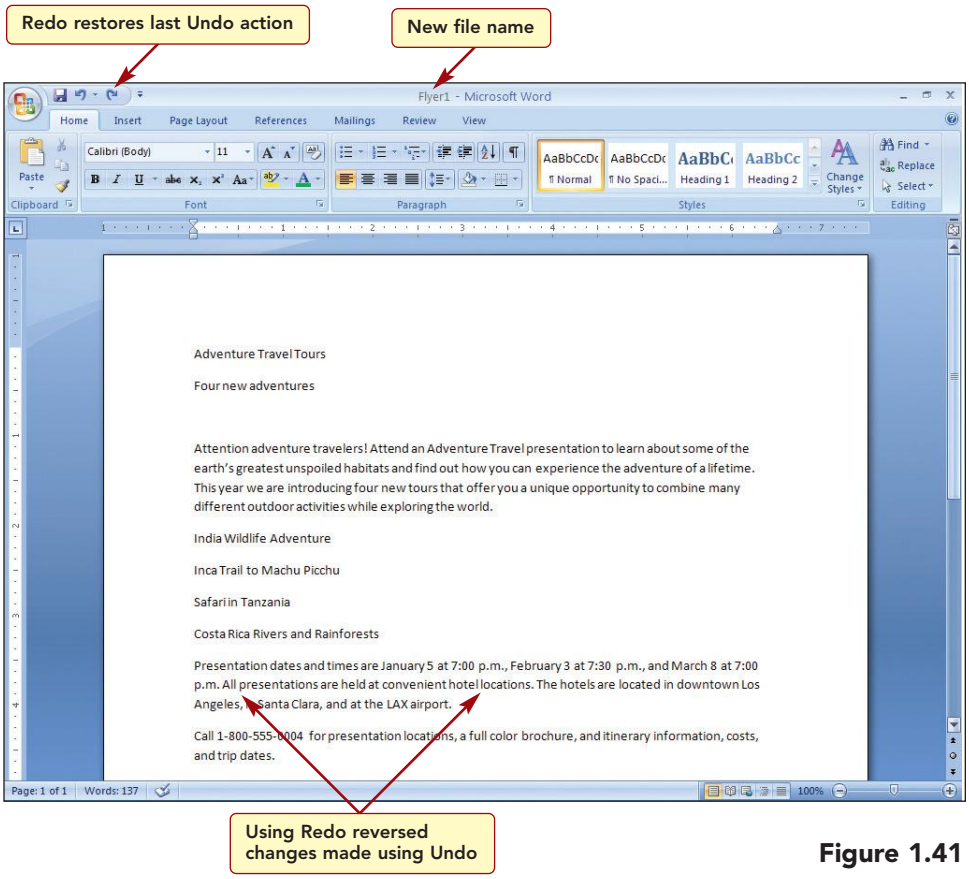


Figure 1.41

Repeatedly using the Undo or Redo buttons performs the actions in the list one by one. So that you can see what action will be performed, these button's ScreenTips identify the action.

The new file name, Flyer1, is displayed in the window title bar. The original document file, wd01_Flyer 1 is unchanged.

Changing Case

You also want to delete the word "Four" from the second line of the flyer title and capitalize the first letter of each word. Although you could change the case individually for the words, you can quickly change both using the Change Case command in the Font group.

1. **Move the insertion point to the beginning of the word "Four".**
2. **Press Ctrl + Delete.**
3. **Click in the left margin to select the entire title line.**
4. **From the Font group, click Aa Change Case.**

Your screen should be similar to Figure 1.42

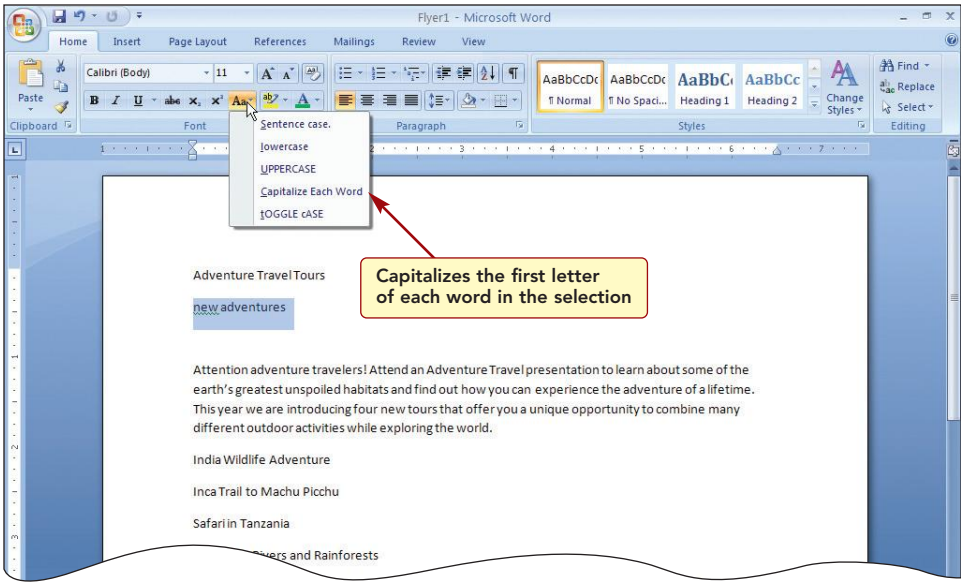


Figure 1.42

The Change Case drop-down menu allows you to change the case of selected words and sentences to the desired case without having to make the change manually. You want both words in the title to be capitalized.

2. **Choose Capitalize Each Word.**
3. **Click anywhere to deselect the title line.**

Your screen should be similar to Figure 1.43

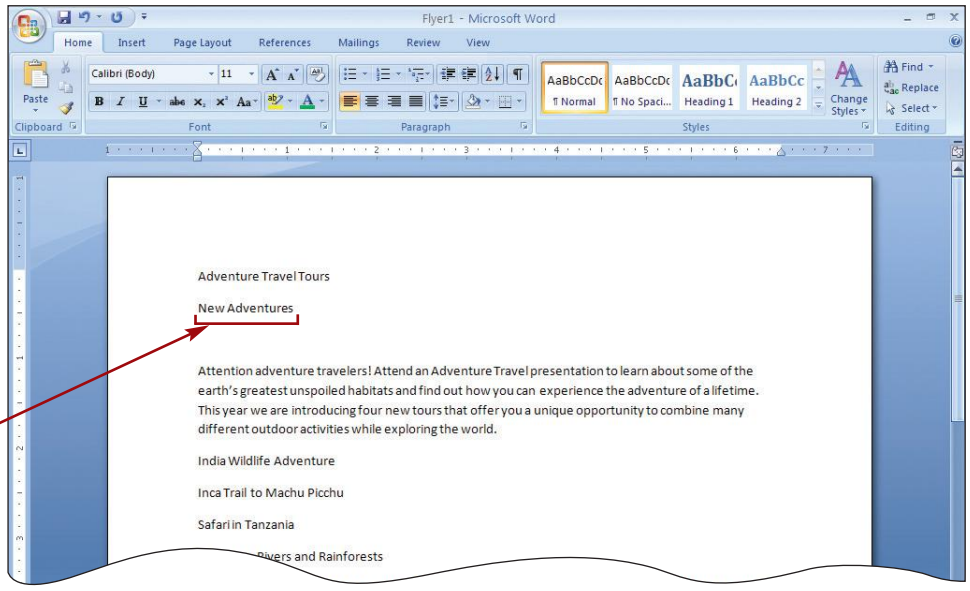


Figure 1.43

Additional Information
You also can use Shift + F3 to cycle through and apply the different change case options.

The first letter of each word in the title is now capitalized and the highlight is removed from the text.

Formatting a Document

Because this document is a flyer, you want it to be easy to read and interesting to look at. Applying different formatting to characters and paragraphs can greatly enhance the appearance of the document. **Character formatting** consists of formatting features that affect the selected characters only. This includes changing the character style and size, applying effects such as bold and italics to characters, changing the character spacing, and adding animated text effects. **Paragraph formatting** features affect an entire paragraph. A paragraph consists of all text up to and including the paragraph mark. Paragraph formatting features include how the paragraph is positioned or aligned between the margins, paragraph indentation, spacing above and below a paragraph, and line spacing within a paragraph.

Changing Fonts and Font Sizes

The first formatting change you want to make is to use different fonts and font sizes in the flyer.

Concept 5

Font and Font Size

5

A **font**, also commonly referred to as a **typeface**, is a set of characters with a specific design. The designs have names such as Times New Roman and Courier. Using fonts as a design element can add interest to your document and give readers visual cues to help them find information quickly.

Two basic types of fonts are serif and sans serif. **Serif fonts** have a flair at the base of each letter that visually leads the reader to the next letter. Two common serif fonts are Roman and Times New Roman. Serif fonts generally are used for text in paragraphs. **Sans serif fonts** do not have a flair at the base of each letter. Arial and Helvetica are two common sans serif fonts. Because sans serif fonts have a clean look, they are often used for headings in documents. A good practice is to use only two types of fonts in a document, one for text and one for headings. Using too many different font styles can make your document look cluttered and unprofessional.

Each font has one or more sizes. **Font size** is the height and width of the character and is commonly measured in points, abbreviated "pt." One point equals about 1/72 inch, and text in most documents is 10 pt or 12 pt.

Several common fonts in different sizes are shown in the table below.

Font Name	Font Type	Font Size
Arial	Sans serif	This is 10 pt. This is 16 pt.
Courier New	Serif	This is 10 pt. This is 16 pt.
Times New Roman	Serif	This is 10 pt. This is 16 pt.

To change the font before typing the text, use the command and then type. All text will appear in the specified setting until another font setting is selected. To change a font setting for existing text, select the text you want to change and then use the command. If you want to apply font formatting to a word, simply move the insertion point to the word and the formatting is automatically applied to the entire word.

First you want to increase the font size of all the text in the flyer to make it easier to read. Currently, you can see from the Font Size button in the Font group that the font size is 11 points.

1 **Triple-click in the left margin when the mouse pointer is ⇗ to select the entire document.**

Having Trouble?
The left margin is the white space to the left of the text.

Another Method
The keyboard shortcut is Ctrl + A.

From the Font group, open the 11 Font Size drop-down list.

Another Method
The keyboard shortcut is Ctrl + ⇧Shift + P.

Your screen should be similar to Figure 1.44

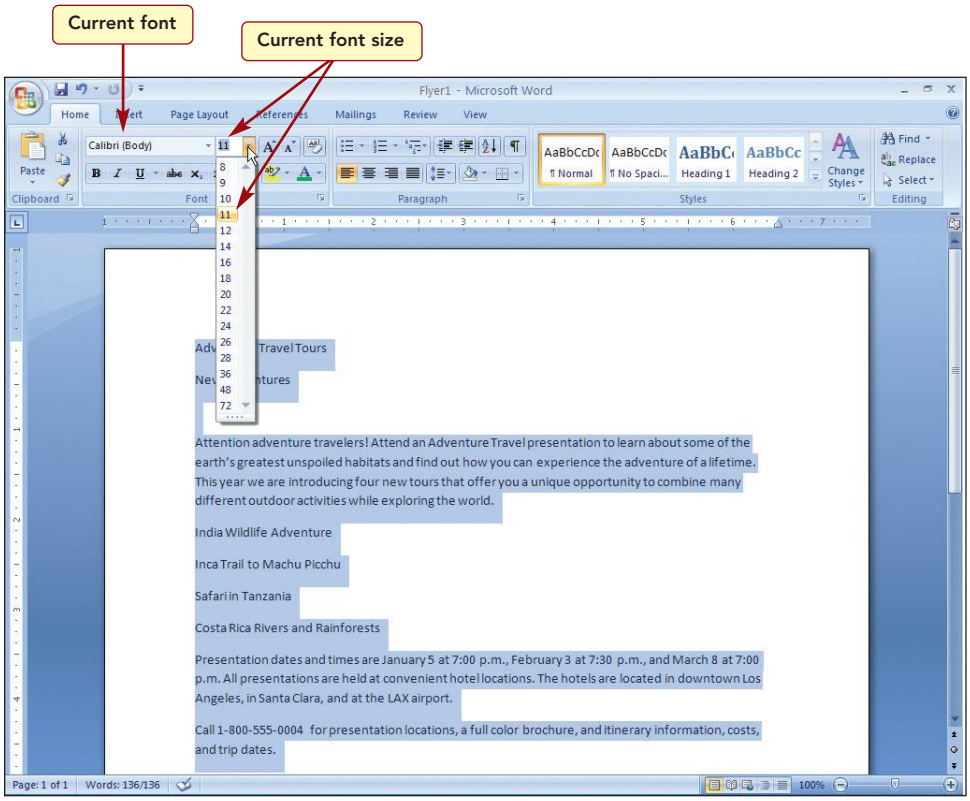


Figure 1.44

The current (default) font size of 11 is selected. You will increase the font size to 14 points. As you point to the size options, the selected text in the document displays how it will appear if chosen. This is the **Live Preview** feature of Word.

2 **Point to several different point sizes in the list to see the Live Preview.**

Click 14 to choose it.

Your screen should be similar to Figure 1.45

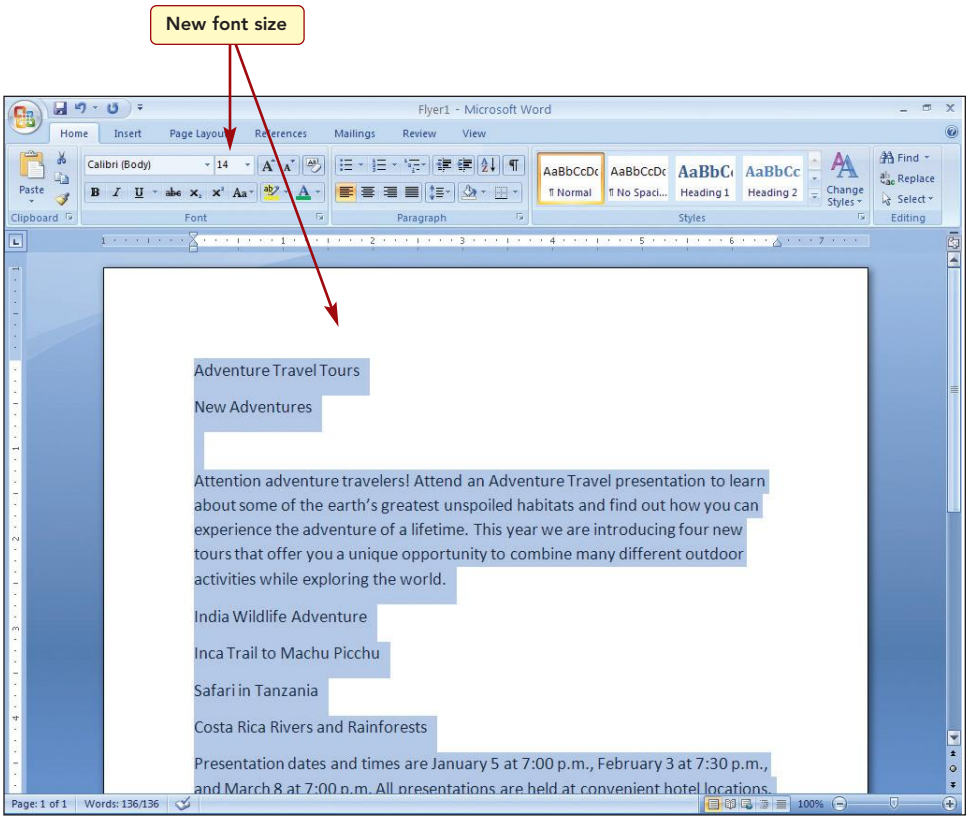


Figure 1.45

Additional Information
If a selection includes text of various sizes, the Font Size button will be blank.

The font size of all text in the document has increased to 14 points, making the text much easier to read. The Font Size button displays the new point size setting for the text at the location of the insertion point.

Next you will change the font and size of the two title lines. First you will change the font to Comic Sans MS and then you will increase the font size.

Many of the formatting commands are on the Mini toolbar that appears whenever you select text. The Mini toolbar appears dimmed until you point to it. This is so it is not distracting as you are using features that are not available on the Mini toolbar. To use the Mini toolbar, just point to it to make it solid and choose command buttons just as you would from the Ribbon.

3. **Select the two title lines and point to the Mini toolbar.**

- **Open the Calibri (Bo Font drop-down menu in the Mini toolbar.**
- **Choose Comic Sans MS.**

Additional Information
Font names are listed in alphabetical order.

Having Trouble?
If this font is not available on your computer, choose a similar font.

Your screen should be similar to Figure 1.46

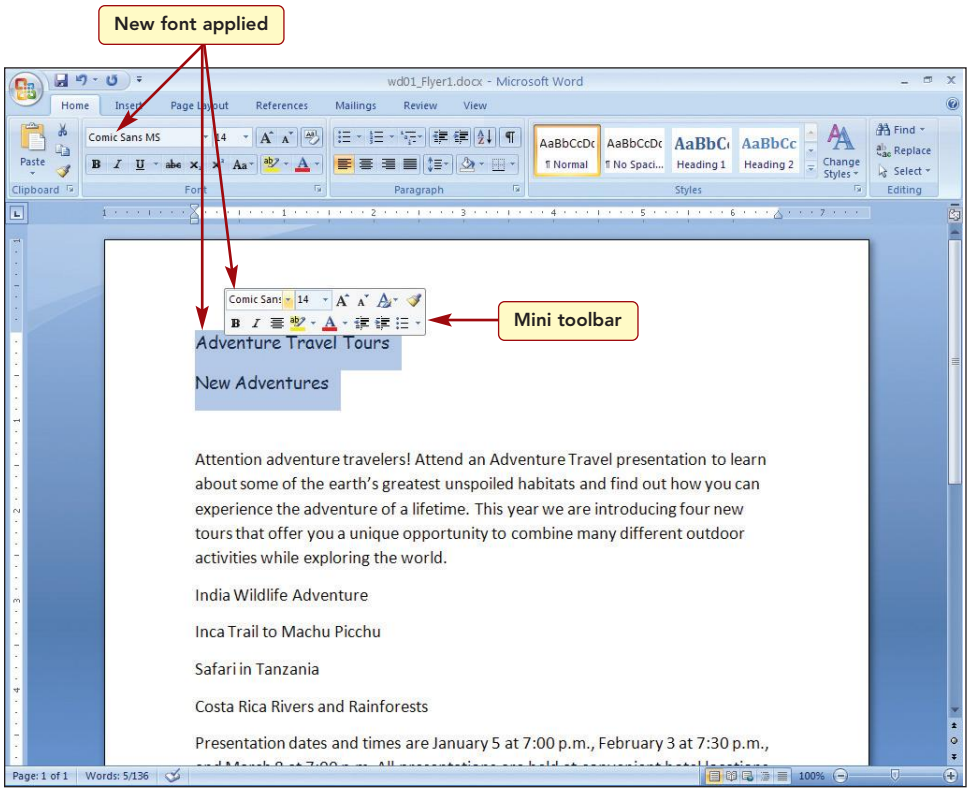


Figure 1.46

Using the Mini toolbar to apply the formats is a quick and convenient alternative to using the Ribbon. Next, you will change the font size.

4. **Open the 14 Size drop-down menu in the Mini toolbar.**

- **Choose 36.**

Your screen should be similar to Figure 1.47

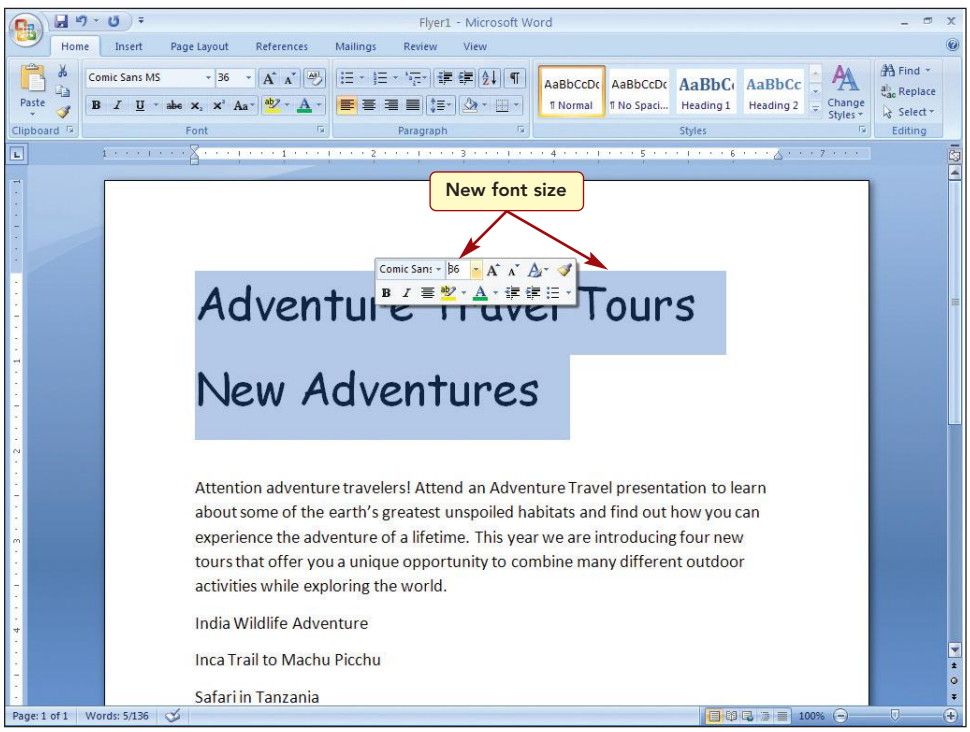


Figure 1.47

The selected font and size have been applied to the selection, making the title lines much more interesting and eye-catching. The Font and Font Size buttons reflect the settings in use in the selection. As you look at the title lines, you decide the font size of the first title line is too large. You will reduce it to 20 points.

5 **Select the first title line.**

- **Choose 20 points from the 36 Font Size drop-down menu.**

Your screen should be similar to Figure 1.48

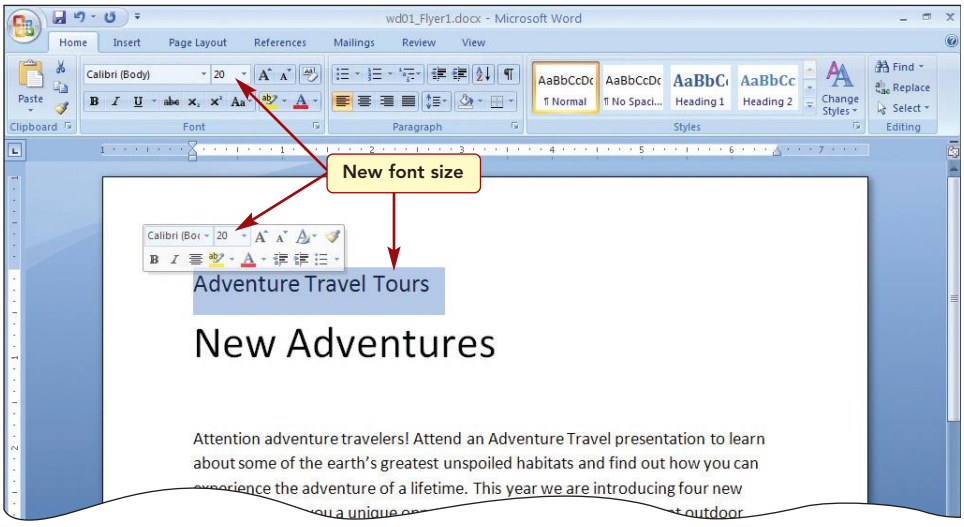


Figure 1.48

Finally, you want to change the font of the list of four tours.

6 **Select the list of four tours.**

- **Click Calibri (Body) Font in the Mini toolbar and change the font to Comic Sans MS.**

Additional Information
Theme fonts and recently used fonts appear at the top of the list. You will learn about themes in Lab 3.

- **Click anywhere on the highlighted text to deselect it.**
- **Reduce the zoom so the entire page is visible.**

Your screen should be similar to Figure 1.49

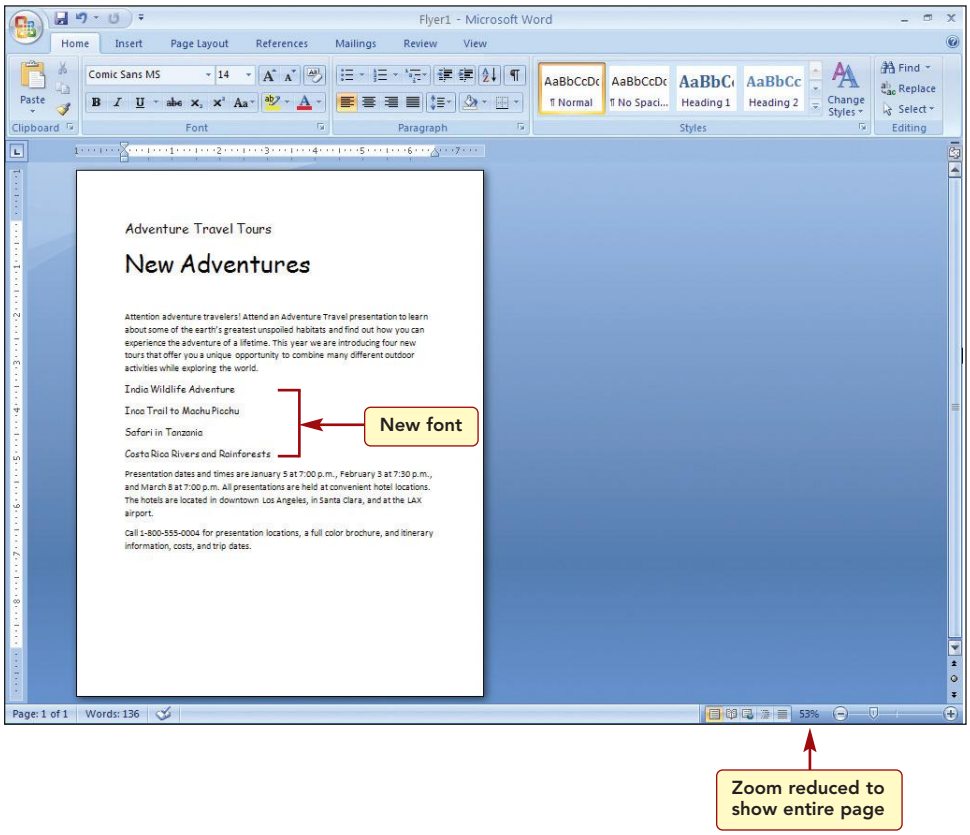


Figure 1.49

The changes you have made to the font and font size have made the flyer somewhat more interesting. However, you want to further enhance the document.

Applying Character Effects

Next you want to liven up the flyer by adding character effects such as color and bold to selected areas. The table below describes some of the effects and their uses.

Format	Example	Use
Bold, italic	**Bold** *Italic*	Adds emphasis.
Underline	Underline	Adds emphasis.
Strikethrough	~~Strikethrough~~	Indicates words to be deleted.
Double strikethrough	~~Double Strikethrough~~	Indicates words to be deleted.
Superscript	"To be or not to be."[1]	Used in footnotes and formulas.
Subscript	H_2O	Used in formulas.
Shadow	Shadow	Adds distinction to titles and headings.
Outline	Outline	Adds distinction to titles and headings.
Emboss	Emboss	Adds distinction to titles and headings.
Engrave	Engrave	Adds distinction to titles and headings.
Small caps	SMALL CAPS	Adds emphasis when case is not important.
All caps	ALL CAPS	Adds emphasis when case is not important.
Hidden		Prevents selected text from displaying or printing. Hidden text can be viewed by displaying formatting marks.
Color	Color Color Color	Adds interest

Additional Information
You will learn about background colors in Lab 2.

First you will add color and bold to the top title line. The default font color setting is Automatic. This setting automatically determines when to use black or white text. Black text is used on a light background and white text on a dark background.

1 **Return the zoom to 100%.**

- **Select the first title line and point to the Mini toolbar.**
- **Open the Font Color drop-down list on the Mini toolbar.**



- **Choose Orange from the Standard Colors bar.**

Additional Information
A ScreenTip displays the name of the color when selected.

- **Click Bold on the Mini Toolbar.**

Another Method
The keyboard shortcut is Ctrl + B.

- **Click on the title line to clear the selection.**

Your screen should be similar to Figure 1.50

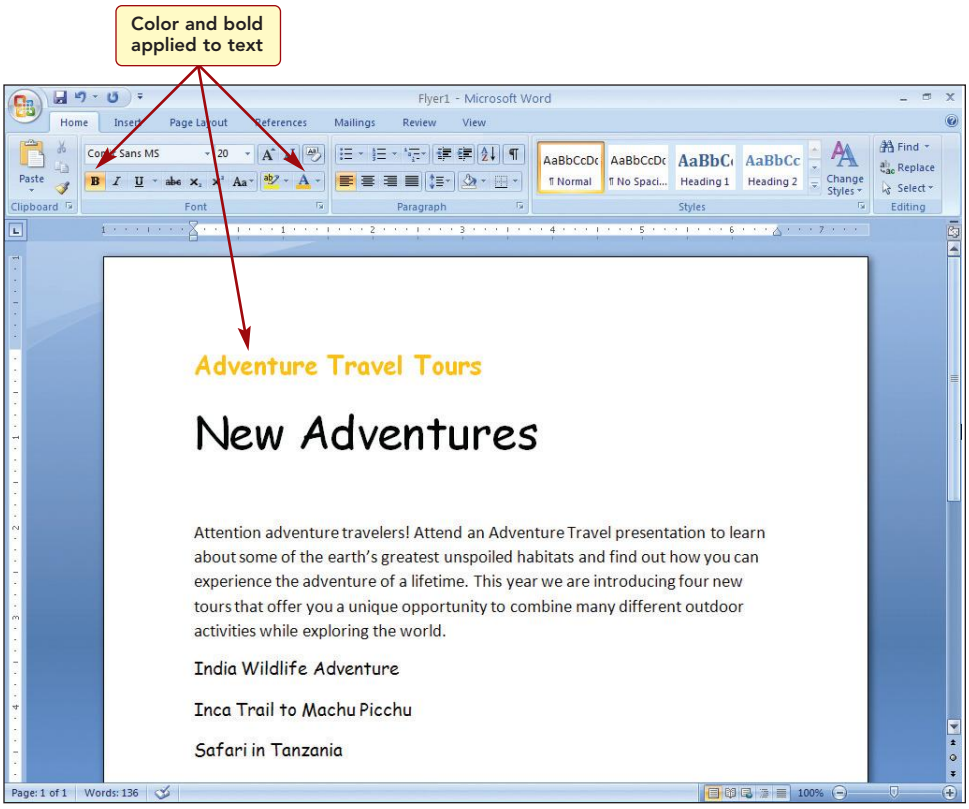


Figure 1.50

The buttons reflect the settings associated with the text at the insertion point. The Font Color button appears in the last selected color. This color can be quickly applied to other selections now simply by clicking the button.

Next you will add color and bold to several other areas of the flyer.

2. **Select the second title line.**

- **Using the Mini toolbar, change the font color to green and add bold.**
- **Select the list of four trips.**
- **Click Font Color to change the color to green.**

Additional Information
The currently selected font color can be applied to the selection simply by clicking the button.

- **Click Bold, Italic.**
- **Click Italic again to remove the italic effect.**

Additional Information
Many formatting commands are toggle commands. This means the feature can be turned on and off simply by clicking on the command button.

- **Apply bold, italic, and orange font color to the last sentence of the flyer.**
- **Click in the document to deselect the text.**

Your screen should be similar to Figure 1.51

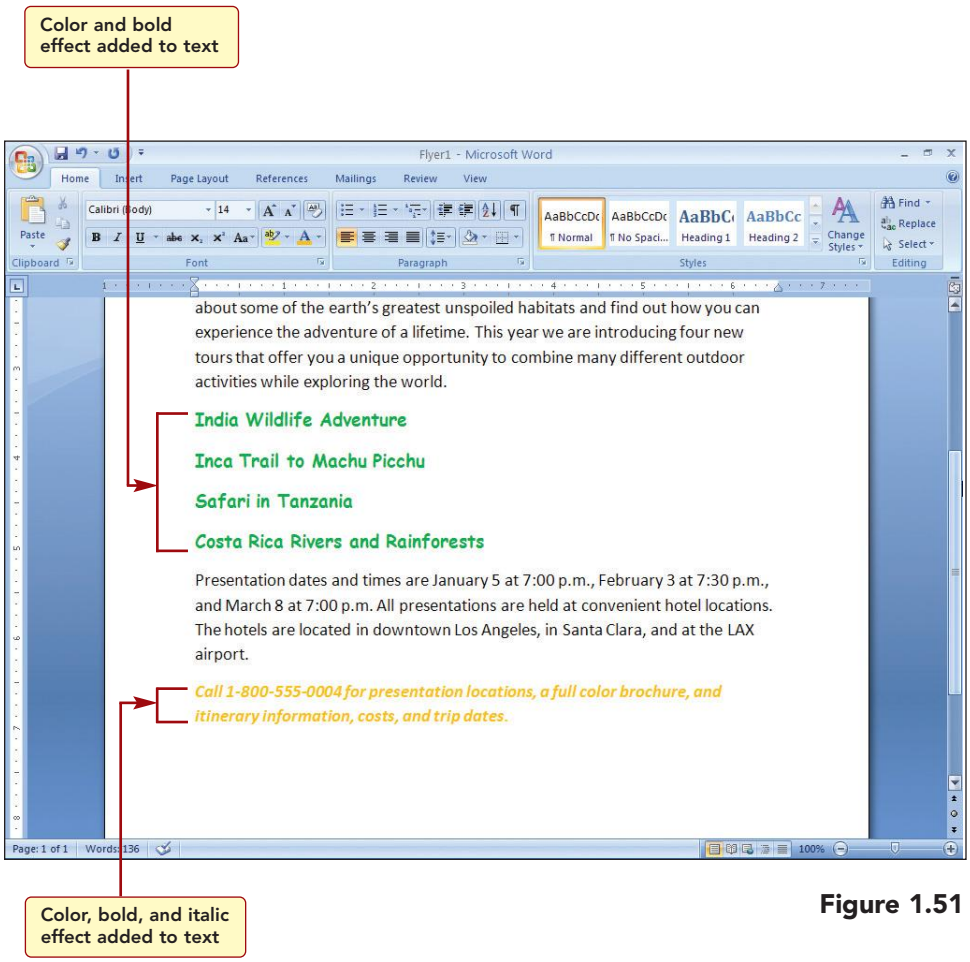


Figure 1.51

The character formatting effects you added to the flyer make it much more interesting.

The next formatting change you want to make is to add a shadow to the title lines. Since the Ribbon does not display a button for this feature, you need to open the Font dialog box to access this feature.

3 **Select both title lines.**

Click in the bottom-right corner of the Font group to open the Font dialog box.

Your screen should be similar to Figure 1.52

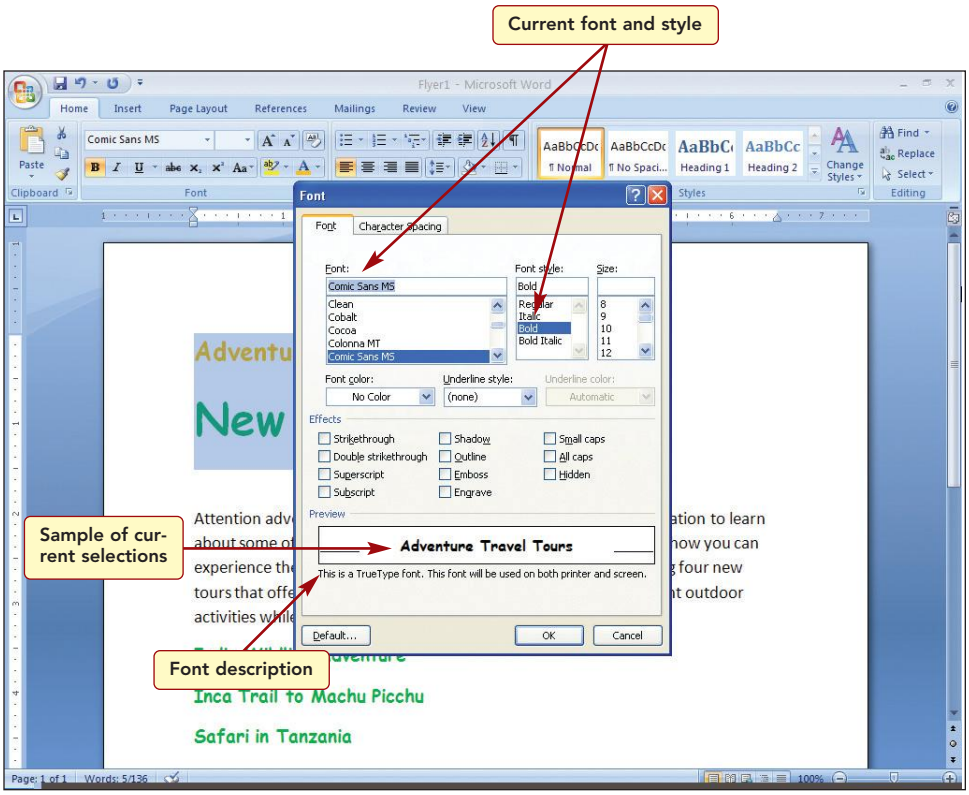


Figure 1.52

The Font dialog box contains all of the Font commands in the Font group and more. Using the Dialog Box Launcher to open a dialog box allows you to access the more-advanced or less-used features of a group. The font and font style used in the selected text are identified in the list boxes. However, because the selection includes two different font sizes and colors, these settings are not identified.

The Preview box displays an example of the currently selected font setting. Notice the description of the font below the Preview box. It states that the selected font is a TrueType font. **TrueType** fonts are fonts that are

Concept 6

Alignment

6 **Alignment** is the positioning of text on a line between the margins or indents. There are four types of paragraph alignment: left, centered, right, and justified. The alignment settings affect entire paragraphs and are described in the table below.

Alignment	Effect on Text Alignment
 Left	Aligns text against the left margin of the page, leaving the right margin ragged or uneven. This is the most commonly used paragraph alignment type and therefore the default setting in all word processing software packages.
 Center	Centers each line of text between the left and right margins. Center alignment is used mostly for headings or centering graphics on a page.
 Right	Aligns text against the right margin, leaving the left margin ragged. Use right alignment when you want text to line up on the outside of a page, such as a chapter title or a header.
 Justify	Aligns text against the right and left margins and evenly spaces out the words by inserting extra spaces, called **soft spaces**, that adjust automatically whenever additions or deletions are made to the text. Newspapers commonly use justified alignment so the columns of text are even.

The commands to change paragraph alignment are available in the Paragraph dialog box. However, it is much faster to use the keyboard shortcuts or command buttons in the Paragraph group shown below.

Alignment	Keyboard Shortcut	Button
Left	Ctrl + L	
Center	Ctrl + E	
Right	Ctrl + R	
Justify	Ctrl + J	

You want to change the alignment of all paragraphs in the flyer from the default of left-aligned to centered.

1. **Triple-click in the left margin to select the entire document.**
2. **Click Center in the Mini toolbar.**

Another Method

You also can use in the Paragraph group of the Home tab or in the Paragraph dialog box.

3. **Reduce the zoom so the entire page is visible.**

Your screen should be similar to Figure 1.54

Additional Information

In addition to using the Zoom feature, you can use One Page in the Zoom group of the View tab.

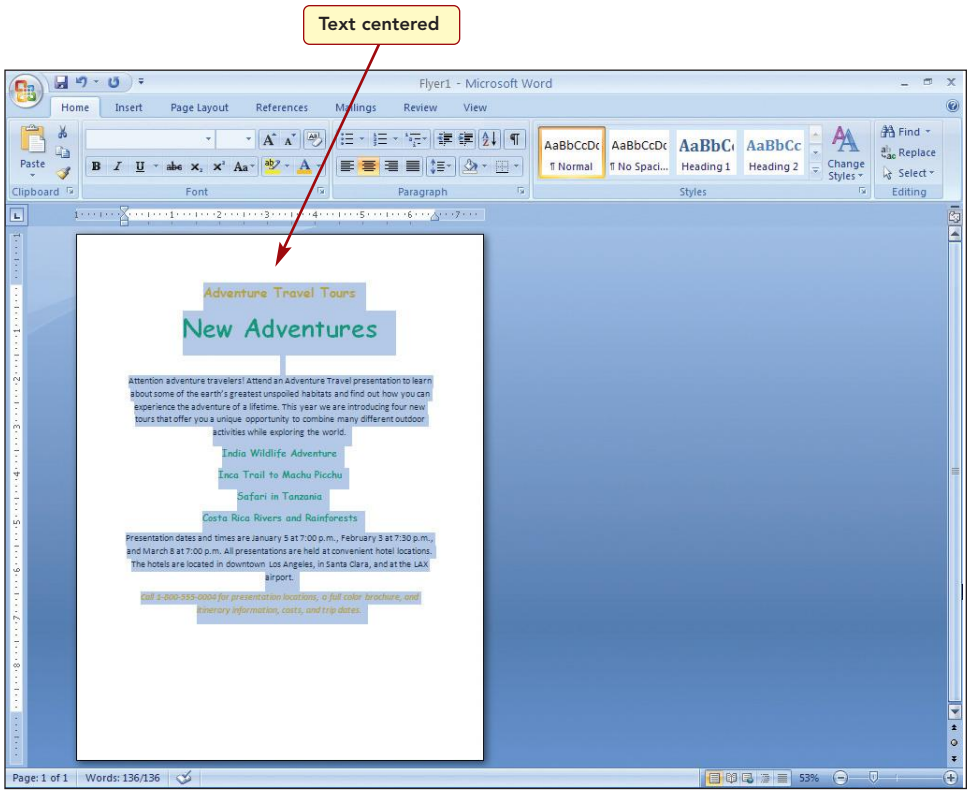


Figure 1.54

Additional Information

The alignment settings also can be specified before typing in new text. As you type, the text is aligned according to your selection until the alignment setting is changed to another setting.

Each line of text is centered evenly between the left and right page margins.

Clearing Formats

As you look at the entire flyer, you decide the last line is overformatted. You think it would look better if it did not include italics and color. Since it has been a while since you applied these formats, using Undo also would remove many other changes that you want to keep. Instead, you will quickly clear all formatting from the selection and then apply only those you want.

1. **Select the last sentence.**
2. **Click Clear Formatting.**

Your screen should be similar to Figure 1.55

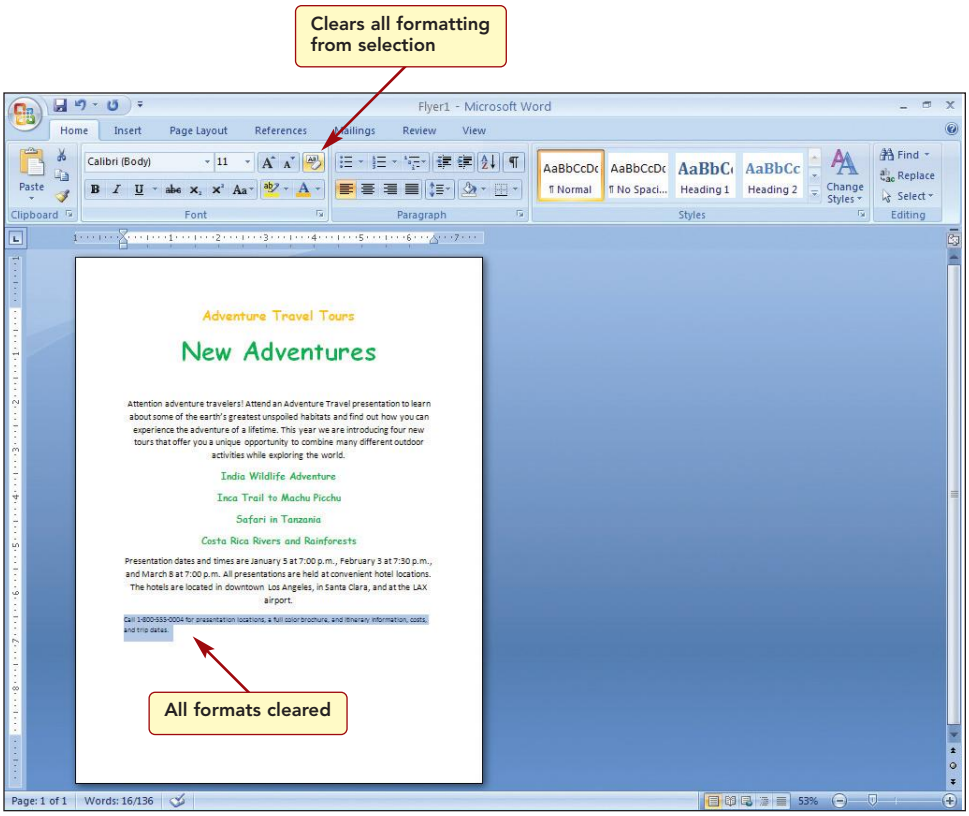


Figure 1.55

Another Method

Instead of clearing all formats, you could simply reselect the command button to remove the formats that you did not want or select another format to replace it.

All formatting associated with the selection, including text alignment and font size, has been removed and the text appears in the default document font and size.

2. **Format the last sentence to bold, centered, and a font size of 14.**
3. **Click Save in the Quick Access Toolbar to save the file using the same file name.**

The formatting of the last sentence looks much better now. As you are working on a document, it is a good idea to save your document frequently to prevent the accidental loss of work from a power outage or other mishap. While AutoRecover is a great feature for recovering lost work, it should not be used in place of regularly saving your work.

Working with Graphics

Finally, you want to add a graphic to the flyer to add interest.

Concept 7

Graphics

7

A **graphic** is a nontext element or object such as a drawing or picture that can be added to a document. An **object** is an item that can be sized, moved, and manipulated.

A graphic can be a simple **drawing object** consisting of shapes such as lines and boxes. A drawing object is part of your Word document. A **picture** is an illustration such as a graphic illustration or a scanned photograph. Pictures are graphics that were created using another program and are inserted in your Word document as **embedded objects**. An embedded object becomes part of the Word document and can be opened and edited from within the Word document using the **source program**, the program in which it was created. Any changes made to the embedded object are not made to the original picture file because they are independent. Several examples of drawing objects and pictures are shown below.



Drawing object



Graphic illustration



Photograph

Add graphics to your documents to help the reader understand concepts, to add interest, and to make your document stand out from others.

Inserting a Picture

Picture files can be obtained from a variety of sources. Many simple drawings called **clip art** are available in the Clip Organizer, a Microsoft Office tool that arranges and catalogs clip art and other media files stored on the computer's hard disk. Additionally, you can access Microsoft's Clip Art and Media Web site for even more graphics.

Digital images created using a digital camera are one of the most common types of graphic files. You also can create picture files using a scanner to convert any printed document, including photographs, to an electronic format. Most images that are scanned and inserted into documents are stored as Windows bitmap files (.bmp). All types of pictures, including clip art, photographs, and other types of images, can

be found on the Internet. These files are commonly stored as .jpg or .pcx files. Keep in mind that any images you locate on the Internet may be copyrighted and should only be used with permission. You also can purchase CDs containing graphics for your use.

You want to add a picture to the flyer below the two title lines. You will move to the location in the document where you want to insert a photograph of a lion you recently received from a client. The photograph has been saved as a picture image.

Additional Information
You also can scan a picture and insert it directly into a Word document without saving it as a file first.

1. **Change the zoom to 100%.**

Additional Information
In addition to using the Zoom feature, you can click 100% in the Zoom group of the View tab.

- **Move to the blank line below the second title line.**
- **Open the Insert tab.**
- **From the Illustrations group, click Picture.**
- **Change the Look In location to the location of your data files.**
- **Select wd01_Lions.**
- **Click Insert.**

Your screen should be similar to Figure 1.56

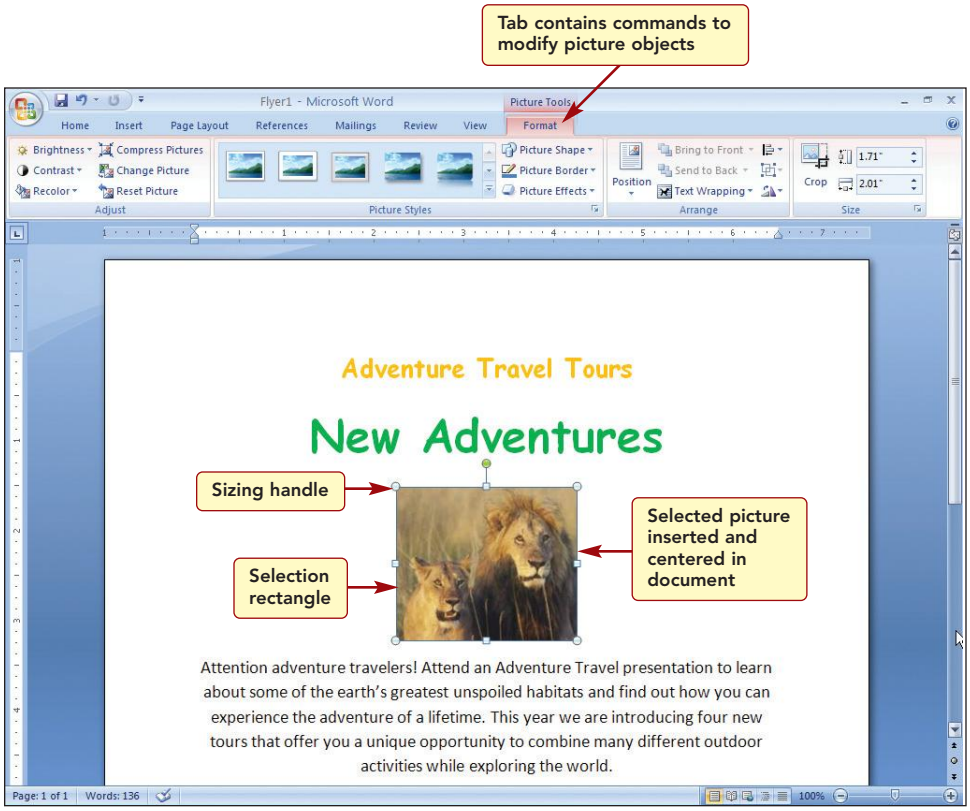


Figure 1.56

The picture is inserted in the document at the location of the insertion point. It is centered because the paragraph in which it was placed is centered. Notice the picture is surrounded by a **selection rectangle** and four circles and four squares, called **sizing handles**, indicating it is a selected object and can now be deleted, sized, moved, or modified. A Picture Tools tab automatically appears and can be used to modify the selected picture object.

Although you like the picture of the lions that you might see on one of the tours, you want to check the Clip Art Gallery to see if a picture of a tiger or parrot would be better.

Additional Information
You will learn more about the Picture Tools tab features in later labs.

2. **Click to the right side of the graphic to deselect it.**

- **Open the Insert tab.**
- **From the Illustrations group, click**  **.**

Your screen should be similar to Figure 1.57

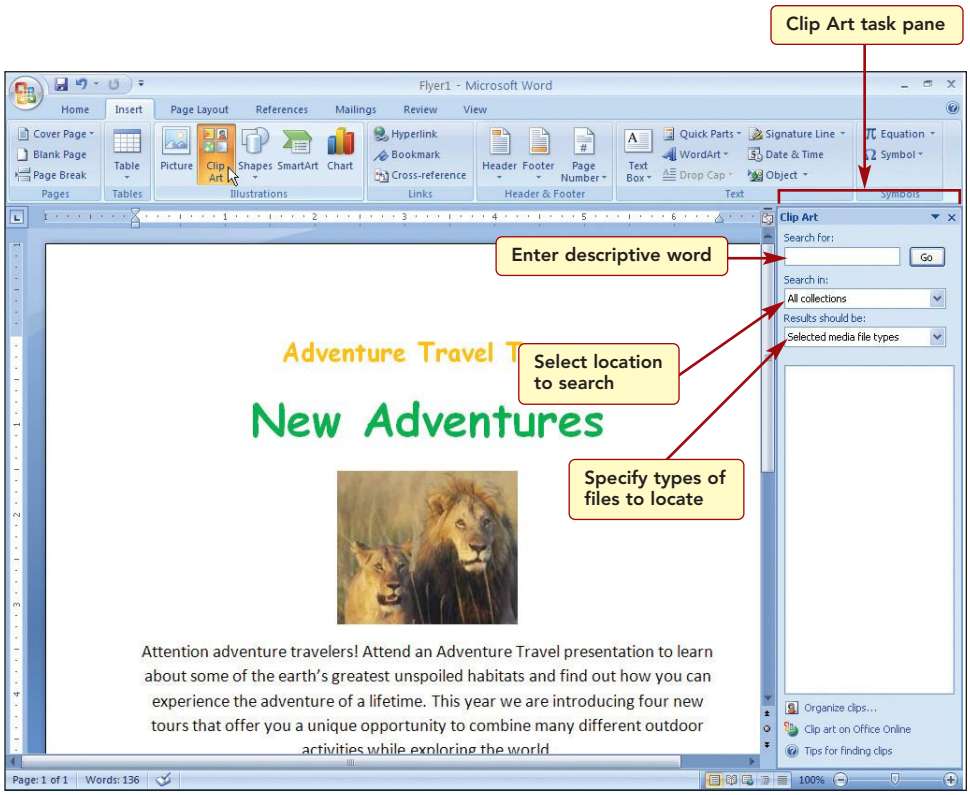


Figure 1.57

The Clip Art task pane appears in which you can enter a word or phrase that is representative of the type of picture you want to locate. You also can specify the locations to search and the type of media files, such as clip art, movies, photographs, or sound, to display in the results. You want to find clip art and photographs of animals.

3. **If necessary, select any existing text in the Search For text box.**

- **Type animals.**
- **If All Collections is not displayed in the Search In text box, select Everywhere from the drop-down list.**
- **Open the Results Should Be drop-down list, select Clip Art and Photographs, and deselect all other options.**

Having Trouble?
Click the box next to an option to select or deselect (clear the checkmark).

- **Click** Go **.**

Your screen should be similar to Figure 1.58

Having Trouble?
Your Clip Art task pane may display different pictures than shown in Figure 1.58.

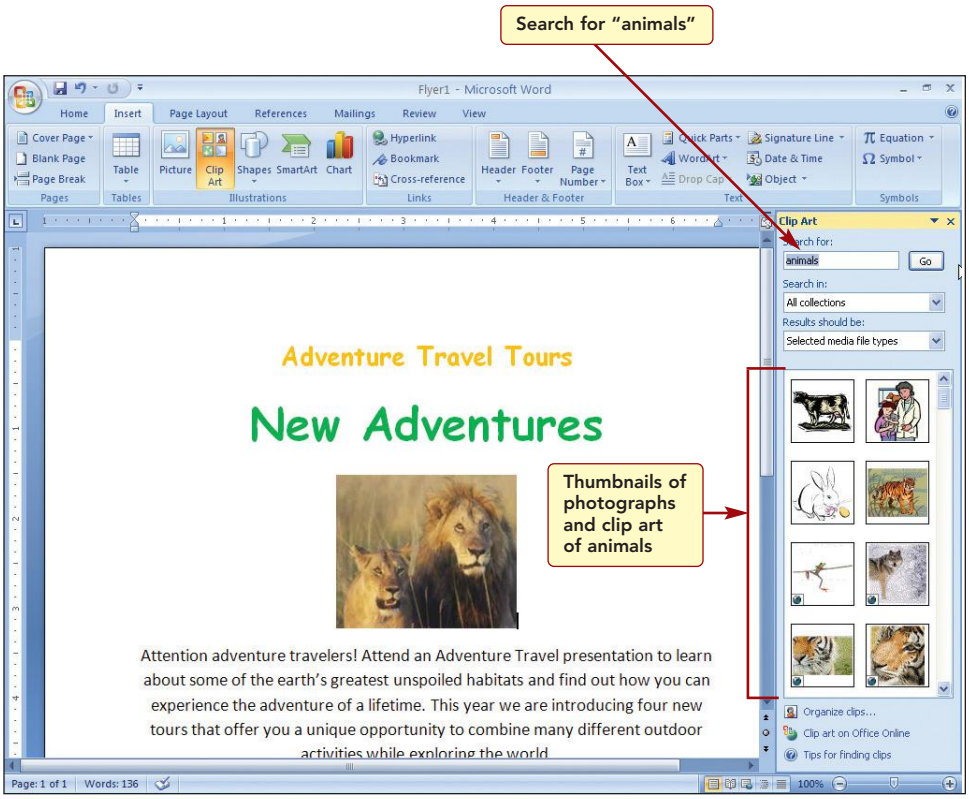


Figure 1.58

The program searches all locations on your computer and, if you have an Internet connection established, Microsoft's Clip Art and Media Web site for clip art and graphics that match your search term. The Results area displays **thumbnails**, miniature representations of pictures, of all located graphics. The pictures stored on your computer in the Microsoft Clip Organizer appear first in the results list, followed by the Office Online clip art.

Pointing to a thumbnail displays a ScreenTip containing the keywords associated with the picture and information about the picture properties. It also displays a drop-down list bar that accesses the item's context menu.

4 **Scroll the list to view additional images.**

Point to any thumbnail to see a ScreenTip.

Your screen should be similar to Figure 1.59

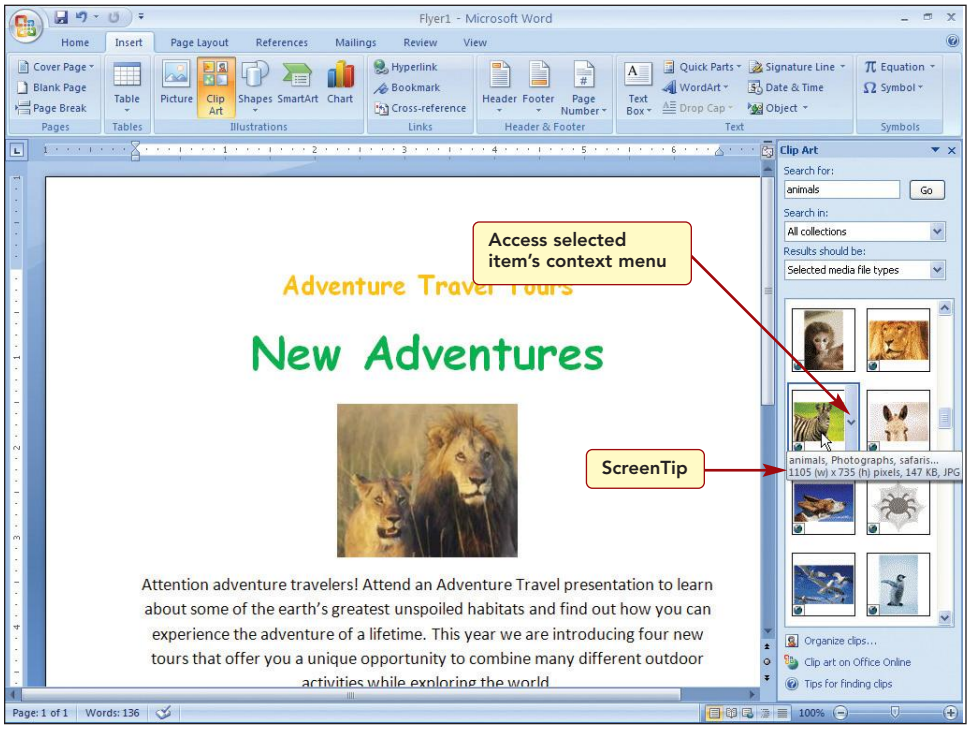


Figure 1.59

Each graphic has several keywords associated with it. All the displayed graphics include the keyword "animals." Because so many pictures were located, you decide to narrow your search to display pictures with keywords of "animals" and "parrots" only. Additionally, because it is sometimes difficult to see the graphic, you can preview it in a larger size.

5 **Add a comma and a space after the word "animals" in the Search For text box and then type parrots.**

- **Click Go.**
- **Scroll the results area and point to the graphic of the parrot shown in Figure 1.60.**
- **Click next to the graphic to open the context menu.**
- **Choose Preview/Properties.**

Additional Information

If you cannot find the picture of the parrot shown in Figure 1.60, it is provided with the files downloaded for the lab. Use Picture to insert it into the flyer.

Your screen should be similar to Figure 1.60

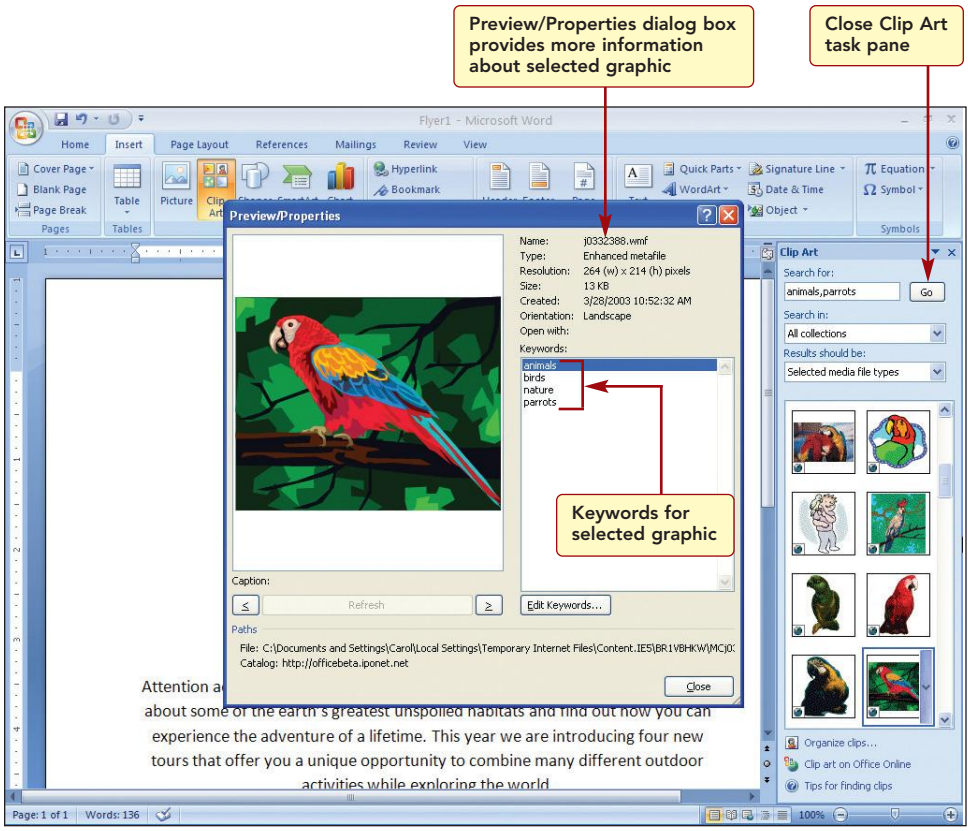


Figure 1.60

Because the search term is more specific, fewer results are displayed. The Preview/Properties dialog box displays the selected graphic larger so it is easier to see. It also displays more information about the properties associated with the graphic, including the keywords used to identify the graphic. You think this looks like a good choice and will insert it into the document.

6. Click Close to close the dialog box.

Click on the graphic to insert it in the document.

Another Method
You also could choose Insert from the thumbnail's context menu.

Click ✕ in the Clip Art task pane title bar to close it.

Your screen should be similar to Figure 1.61

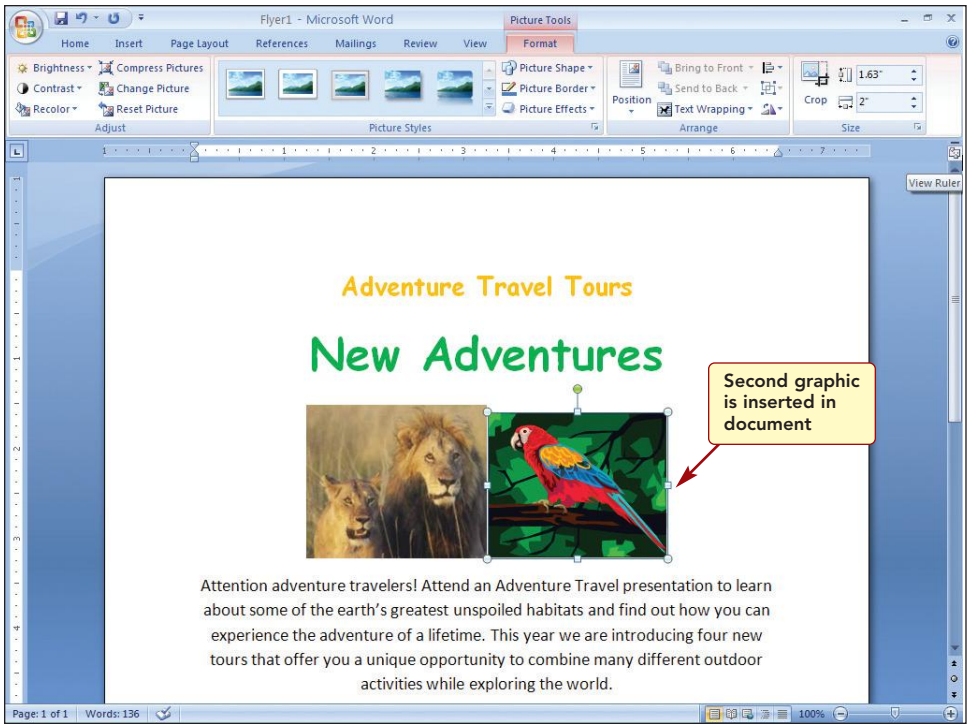


Figure 1.61

The clip art graphic is inserted next to the lion picture.

Deleting a Graphic

There are now two graphics in the flyer. You decide to use the parrot graphic and need to remove the picture of the lion. To do this, you select the graphic and delete it.

1. Click on the lion graphic to select it.

Press Delete.

Your screen should be similar to Figure 1.62

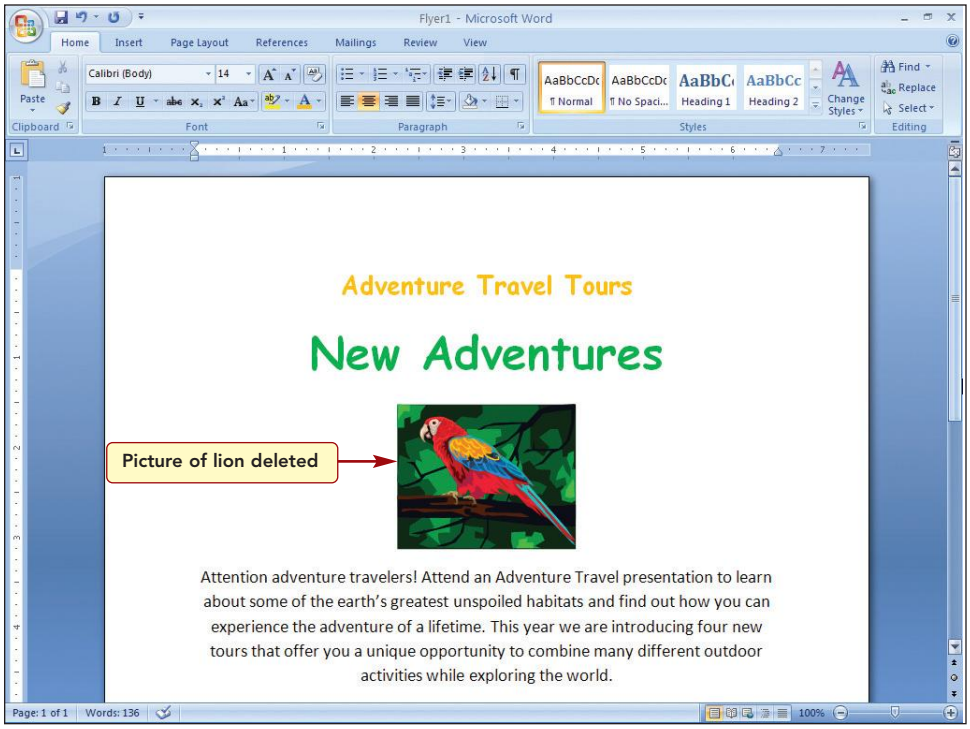


Figure 1.62

The lion graphic is removed.

Sizing a Graphic

Additional Information
A selected graphic object can be moved by dragging it to the new location.

Another Method
You also can size a picture to an exact measurement using commands in the Size group of the Picture Tools tab.

Usually, when a graphic is inserted, its size will need to be adjusted. A graphic object can be manipulated in many ways. You can change its size; add captions, borders, or shading; or move it to another location. A graphic object can be moved anywhere on the page, including in the margins or on top of or below other objects, including text. The only places you cannot place a graphic object are into a footnote, endnote, or caption.

In this case, you want to increase the picture's size. To size a graphic, you select it and drag the sizing handles to increase or decrease the size of the object. The mouse pointer changes to ⤡ when pointing to a handle. The direction of the arrow indicates the direction in which you can drag to size the graphic. You want to increase the image to approximately 3 inches wide by 2.5 inches high.

1. **Click on the graphic to select it.**
2. **Point to the lower-right corner handle.**

Additional Information
Dragging a corner handle maintains the original proportions of the graphic.

3. **With the pointer as a ⤡, drag outward from the picture to increase the size to approximately 2.5 inches wide by 2 inches high (use the ruler as a guide and refer to Figure 1.63).**
4. **Click anywhere in the document to deselect the graphic.**
5. **Click Save.**

Your screen should be similar to Figure 1.63

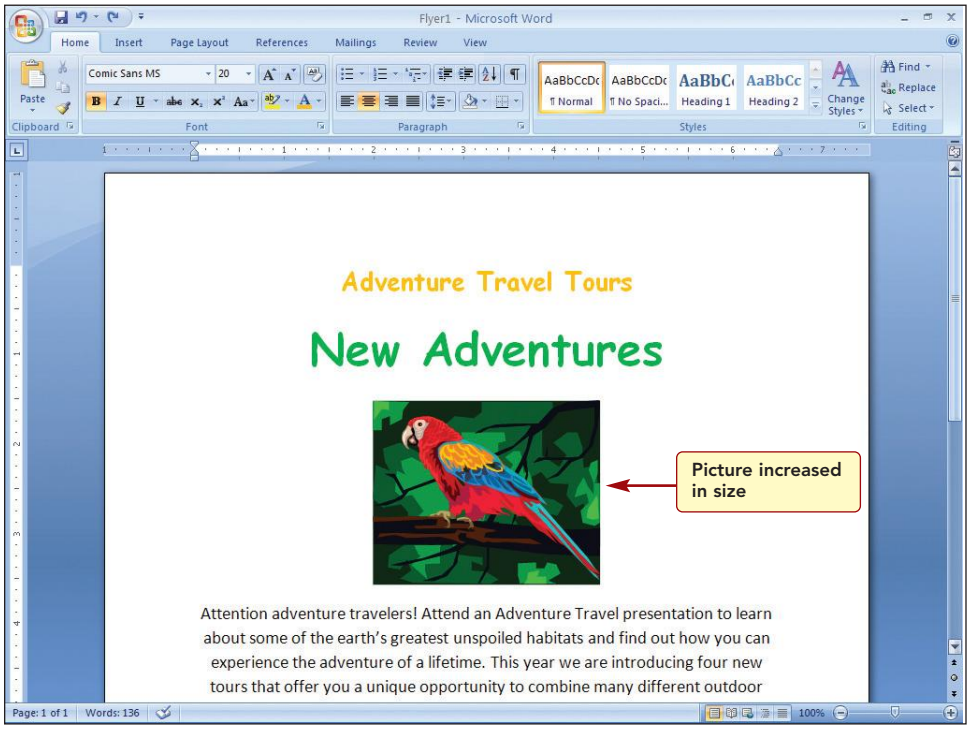


Figure 1.63

Enhancing the Page

The final changes you want to make to the flyer for now are to add a border line around the entire page and to add a watermark in the page background. Borders can add interest and emphasis to various parts of your document, including entire pages, selected text, tables, graphic objects, and pictures. **Watermarks** are text or pictures that appear behind document text. They often add interest or identify the document status, such as marking a document as a Draft. Both page borders and watermarks are features that affect an entire page and are found in the Page Layout tab.

Adding a Page Border

You want to add a decorative border around the entire page to enclose the text and enhance the appearance of the flyer.

1. **Open the Page Layout tab.**
2. **Click Page Borders in the Page Background group.**

Your screen should be similar to Figure 1.64

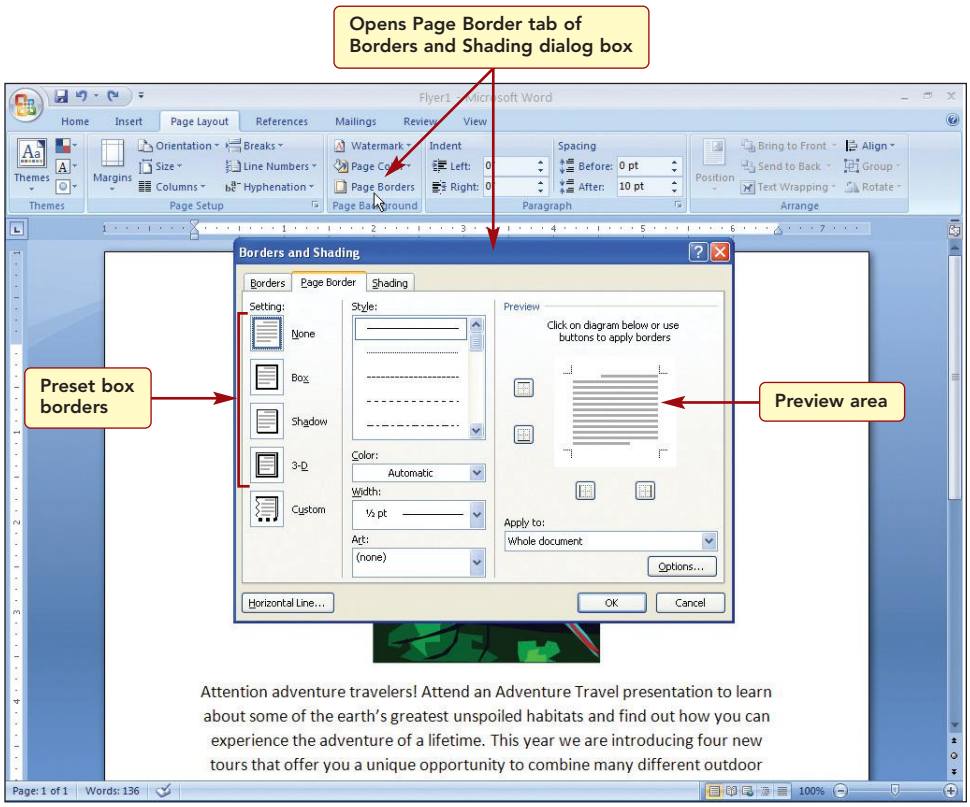


Figure 1.64

Additional Information
There are also a variety of graphical borders available in the Art list box.

Additional Information
You will learn about creating custom borders in later labs.

From the Page Borders tab of the Borders and Shading dialog box, you first select either a preset box border or a custom border. Then you specify the style, color, weight, and location of the border. A page border can be applied to all pages in a document, to pages in selected parts of a document, to the first page only, or to all pages except the first.

You want to create a box border around the entire page of text. As you specify the border settings, the Preview area will reflect your selections.

2 Choose Box from the Setting area.

Scroll the Style list box and select

Open the Color palette and select Orange, Accent 6.

From the Width drop-down list box, select 3 pt.

Having Trouble?
Use the None option to remove all border lines, or remove individual lines by selecting the border location again.

Your screen should be similar to Figure 1.65

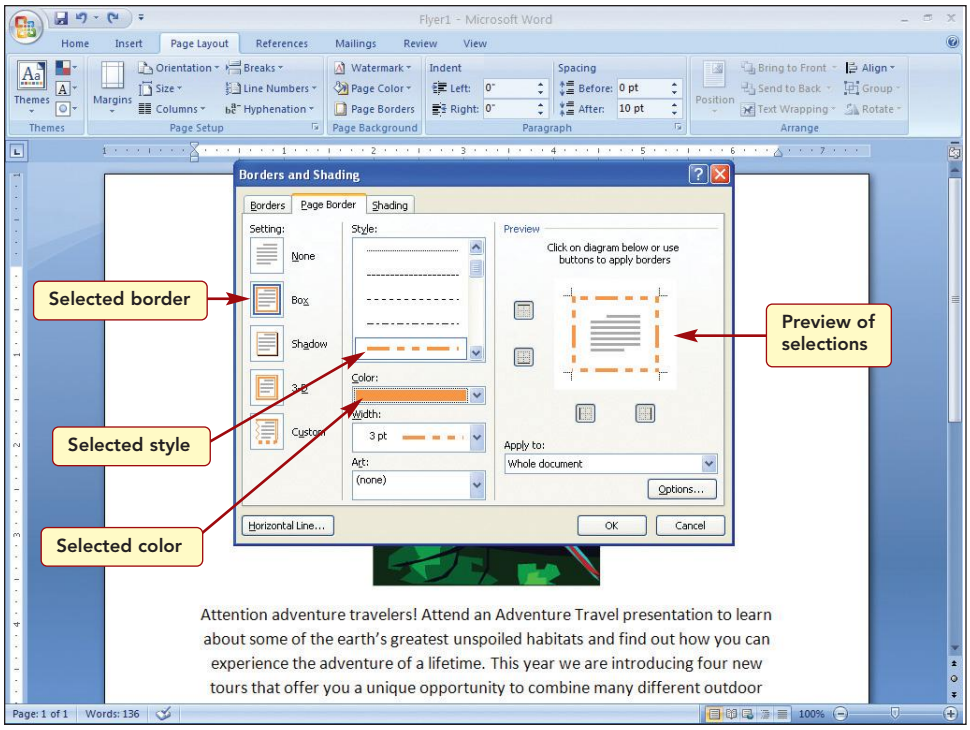


Figure 1.65

The Preview area shows how the box page border will appear in the style, color, and point size you selected. The default selection of Document, as to what part of the document to apply the border, is acceptable because the document is only one page long.

3 Click OK.

Reduce the zoom to display the entire page.

Your screen should be similar to Figure 1.66

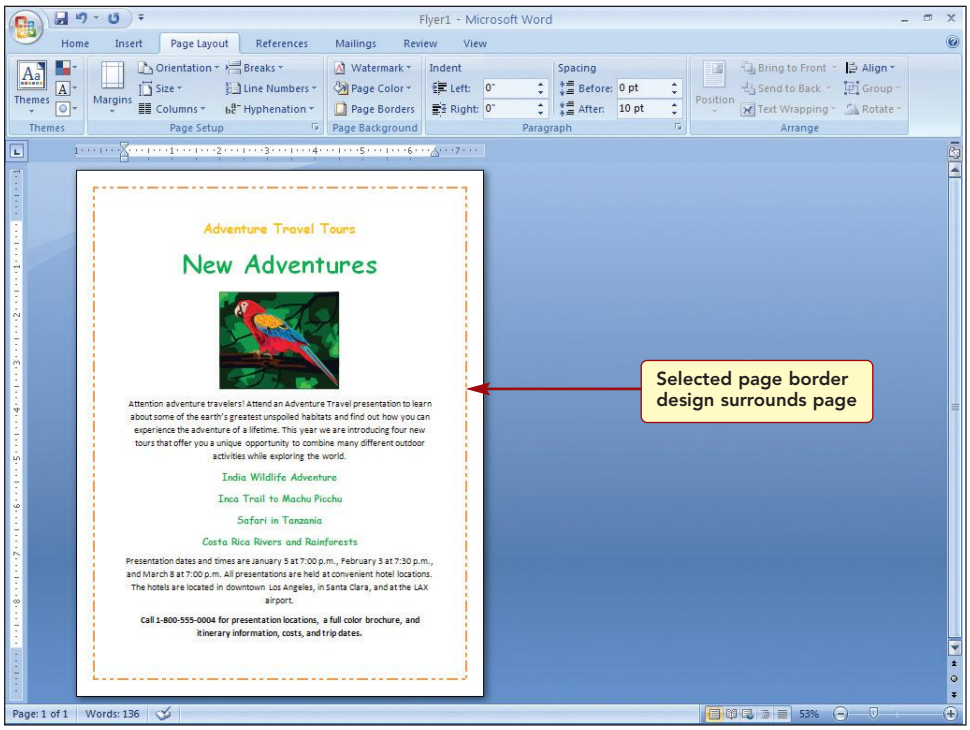


Figure 1.66

The specified page border appears in the middle of the margin space around the entire page.

Adding a Watermark

Finally, you want to add a watermark to the background of the flyer identifying the document as a draft. You can insert a predesigned watermark from a gallery of watermark text, or you can insert a watermark with custom text.

1. **Click Watermark from the Page Background group.**
2. **Scroll the Watermark gallery and choose the Draft1 design from the Disclaimers section.**

Additional Information
Choose Remove Watermark from the Watermark menu to remove a watermark.

Your screen should be similar to Figure 1.67

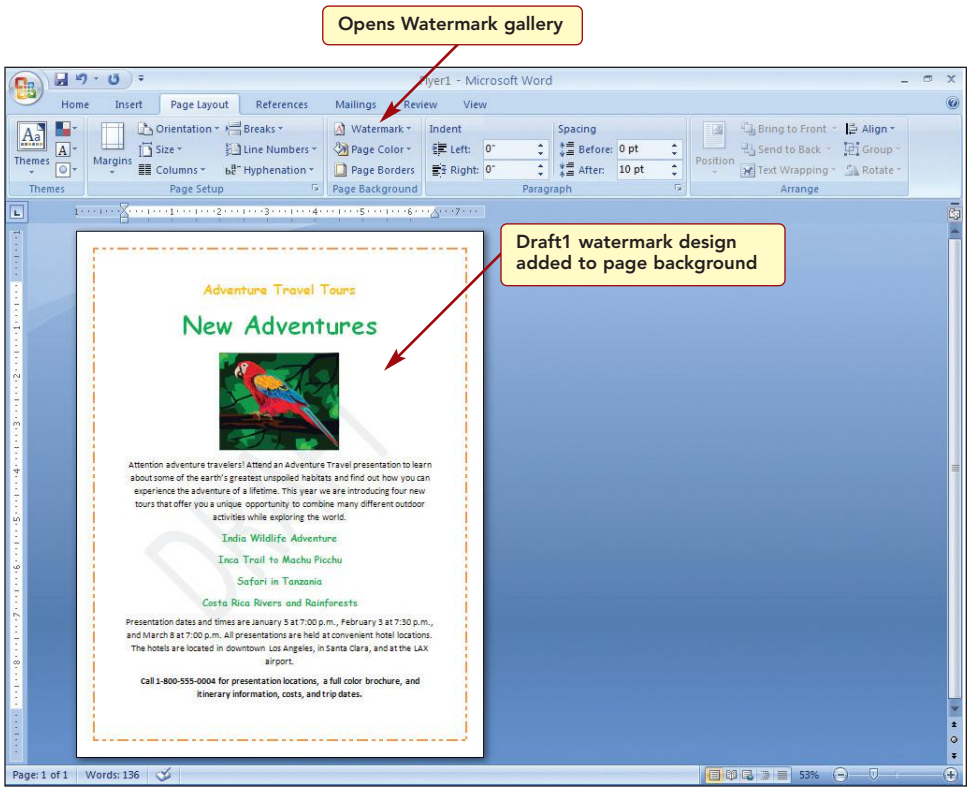


Figure 1.67

Additional Information
You can only see watermarks in Print Layout view and Full Screen Reading view or in a printed document.

The DRAFT watermark appears diagonally across the background of the page. The entire page is displayed as it will appear when printed. The flyer looks good and does not appear to need any further modifications immediately.

Printing a Document

Although you still plan to make several formatting changes to the document, you want to give a copy of the flyer to the manager to get feedback regarding the content and layout.

First you need to add your name to the flyer and to the document properties and check the print settings.

1. **Increase the zoom to 100%.**
2. **Scroll to the bottom of the flyer.**
3. **Add your name at before the phone number in the last sentence of the flyer.**
4. **Replace Student Name with your name in the document properties.**
5. **If necessary, make sure your printer is on and ready to print.**
6. **Click Office Button and choose Print.**

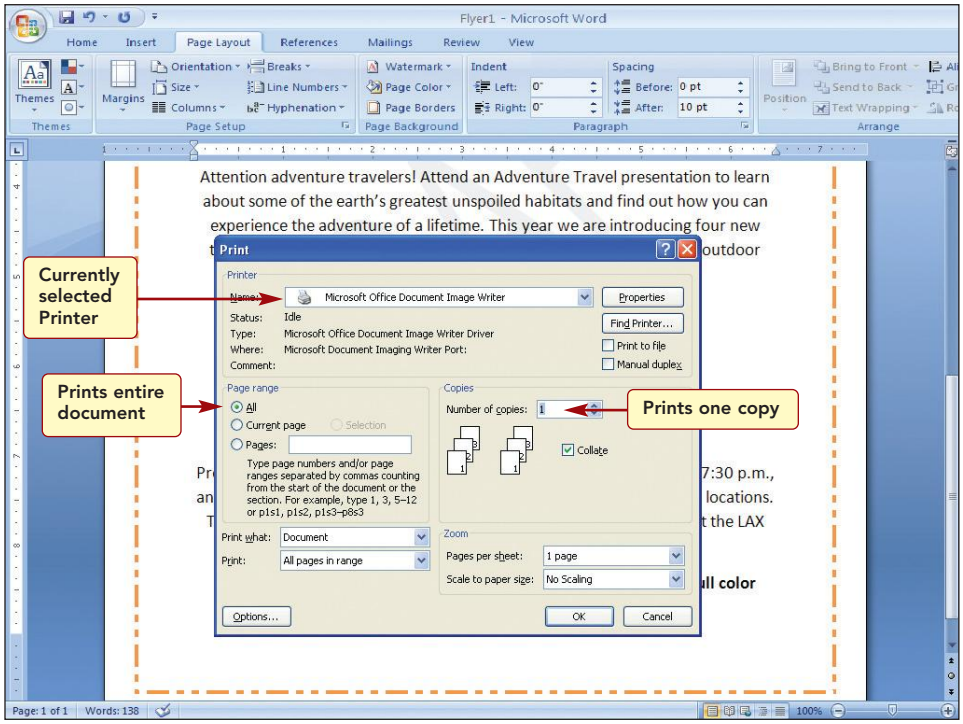


Figure 1.68

Another Method
The keyboard shortcut for the Print command is Ctrl + P.

Additional Information
You also can use Quick Print on the Print submenu to print the active document immediately using the current print settings.

Your screen should be similar to Figure 1.68

From the Print dialog box, you need to specify the printer you will be using and the document settings. The printer that is currently selected is displayed in the Name drop-down list box in the Printer section of the dialog box.

The Page Range area of the Print dialog box lets you specify how much of the document you want printed. The range options are described in the following table:

Option	Action
All	Prints entire document.
Current page	Prints selected page or page the insertion point is on.
Pages	Prints pages you specify by typing page numbers in the dialog box.
Selection	Prints selected text only.

Note: Please consult your instructor for printing procedures that may differ from the following directions.

The default range setting, All, is the correct setting. In the Copies section, the default setting of one copy of the document is acceptable. You will print using the default print settings.

2. **If you need to change the selected printer to another printer, open the Name drop-down list box and select the appropriate printer (your instructor will tell you which printer to select).**

- **Click OK.**

Your printer should be printing the document. The printed copy of the flyer should be similar to the document shown in the Case Study at the beginning of the lab.

Exiting Word

You are finished working on the flyer for now and want to save the last few changes you have made to the document and close the Word application. The Exit Word command in the File menu is used to quit the Word program. Alternatively, you can click the Close button in the application window title bar. If you attempt to close the application without first saving your document, Word displays a warning asking if you want to save your work. If you do not save your work and you exit the application, any changes you made since last saving it are lost.

Another Method
The keyboard shortcut for the Exit command is Alt + F4.

1. **Click Close.**

- **Click Yes to save the changes you made to the file.**

The Windows desktop is visible again.

If multiple Word documents are open, clicking closes the application window containing the document you are viewing only.



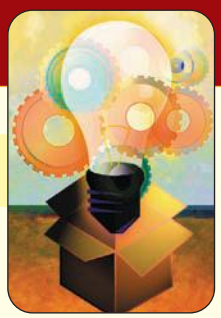
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Food Service Manager

Have you noticed flyers around your campus advertising job positions? Many of these jobs are in the food service industry. Food service managers are traditionally responsible for overseeing the kitchen and dining room. However, these positions increasingly involve administrative tasks, including recruiting new employees. As a food service manager, your position would likely include creating newspaper notices and flyers to attract new staff. These flyers should be eye-catching and error-free. The typical salary range of a food service manager is $34,000 to $41,700. Demand for skilled food service managers is expected to increase through 2010.

Concept Summary

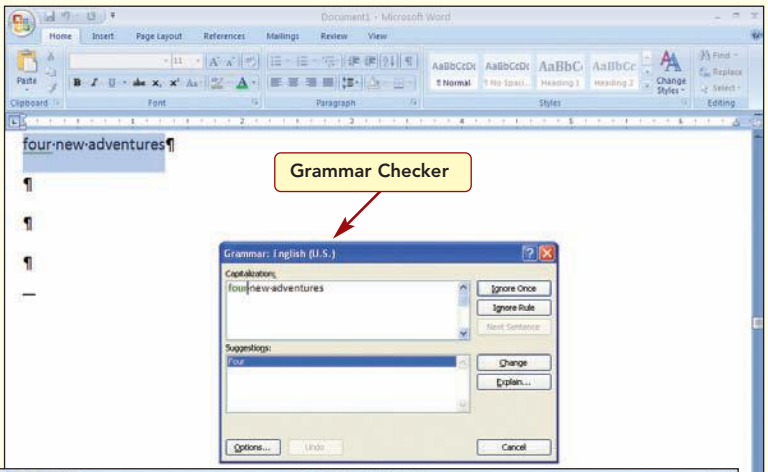


LAB 1

Creating and Editing a Document

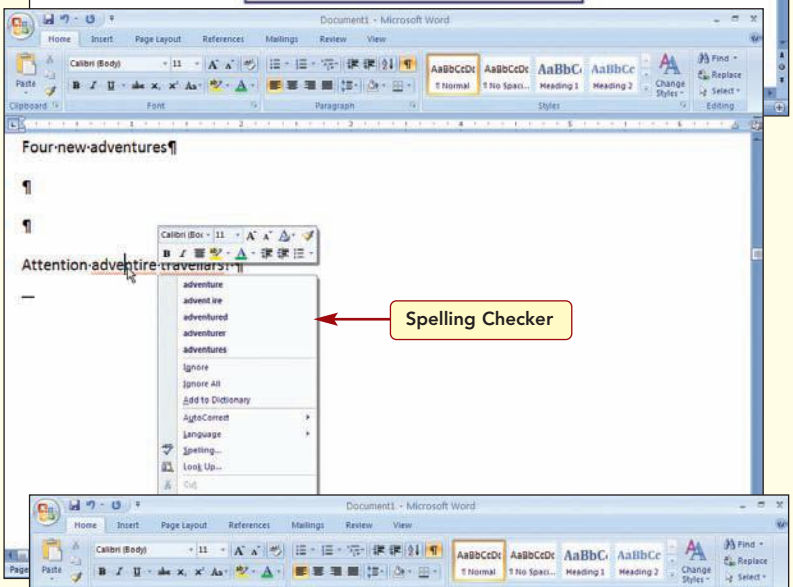
Grammar Checker (WD1.16)

The grammar checker advises you of incorrect grammar as you create and edit a document, and proposes possible corrections.



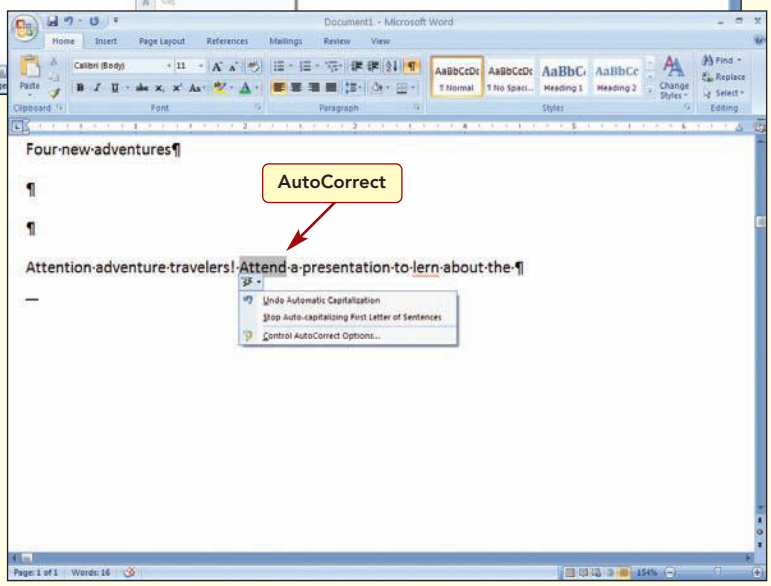
Spelling Checker (WD1.19)

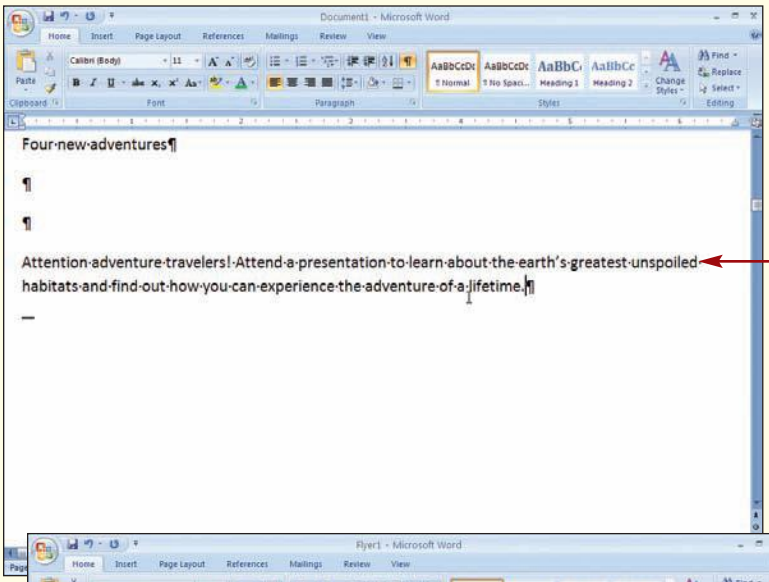
The spelling checker advises you of misspelled words as you create and edit a document, and proposes possible corrections.



AutoCorrect (WD1.21)

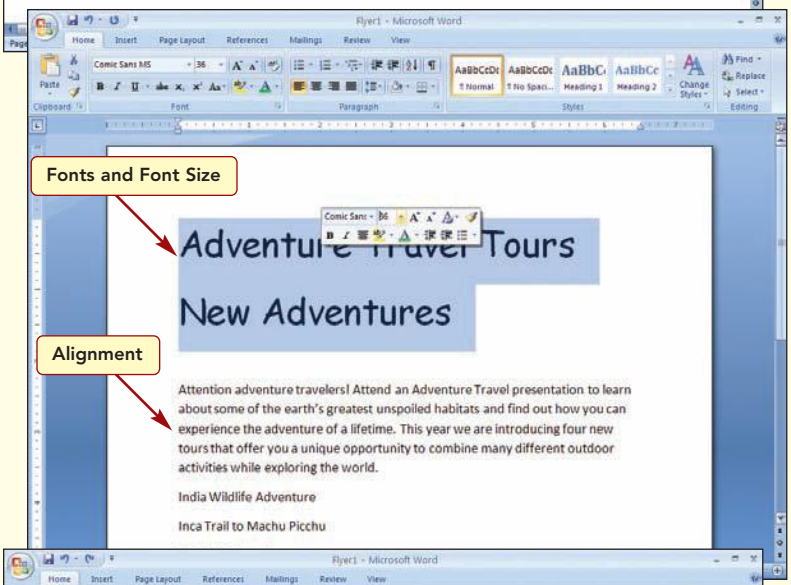
The AutoCorrect feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.





Word Wrap (WD1.23)

The word wrap feature automatically decides where to end a line and wraps text to the next line based on the margin settings.



Font and Font Size (WD1.46)

A font, also commonly referred to as a typeface, is a set of characters with a specific design that has one or more font sizes.

Alignment (WD1.56)

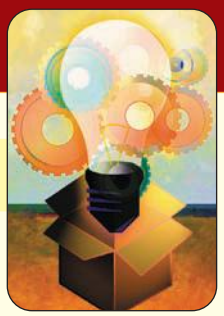
Alignment is the positioning of text on a line between the margins or indents. There are four types of paragraph alignment: left, centered, right, and justified.



Graphics (WD1.59)

A graphic is a nontext element or object such as a drawing or picture that can be added to a document.

Lab Review



LAB 1

Creating and Editing a Document

key terms

alignment WD1.56
AutoCorrect WD1.21
character formatting WD1.46
clip art WD1.59
cursor WD1.5
custom dictionary WD1.19
default WD1.8
document properties WD1.25
document window WD1.5
drawing object WD1.59
edit WD1.10
embedded object WD1.59
end-of-file marker WD1.10
font WD1.46
font size WD1.46
format WD1.10
grammar checker WD1.16
graphic WD1.59
Insert mode WD1.37
insertion point WD1.5
Live Preview WD1.47
main dictionary WD1.19
object WD1.59
paragraph formatting WD1.46
picture WD1.59
ruler WD1.5
sans serif font WD1.46
selection rectangle WD1.60
serif font WD1.46
sizing handles WD1.60
soft space WD1.56
source program WD1.59
spelling checker WD1.19
template WD1.8
thumbnail WD1.62
TrueType WD1.54
typeface WD1.46
watermark WD1.67
word wrap WD1.23

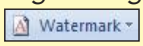
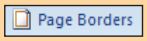
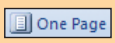
MCAS skills

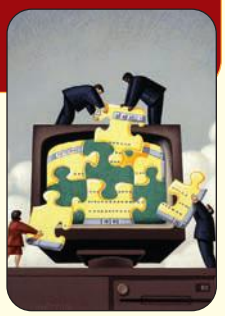
The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2 MCAS Certification Guide for a complete list of the skills that were covered in Lab 1.

command summary

Command	Shortcut	Action
Office Button		**Opens File menu**
New	Ctrl + N	Opens new blank document
Open	Ctrl + O	Opens existing document file
Save	Ctrl + S	Saves document using same file name
Save As	F12	Saves document using a new file name, type, and/or location
Print	Ctrl + P	Prints document
Prepare/Properties		Opens Document Information Panel
Close	Ctrl + F4	Closes document
Exit Word	Alt + F4	Exit Word application
Quick Access Toolbar		
Save	Ctrl + S	Saves document using same file name
Undo	Ctrl + Z	Restores last editing change
Redo	Ctrl + Y	Restores last Undo or repeats last command or action
Home tab		
Font Group		
Calibri (Body) Font		Changes typeface
11 Size		Changes font size
Clear Formatting		Removes all formatting from selection
Bold	Ctrl + B	Adds/removes bold effect
Italic	Ctrl + I	Adds/removes italic effect
Change Case		Changes case of selected text
Color		Changes text to selected color
Paragraph group		
Show/Hide	Ctrl + → +*	Displays or hides formatting marks
Align Text Left	Ctrl+ L	Aligns text to left margin
Center	Ctrl + E	Centers text between left and right margins
Align Text Right	Ctrl + R	Aligns text to right margin
Justify	Ctrl + J	Aligns text equally between left and right margins
Insert Tab		
Illustrations group		
Picture		Inserts selected picture

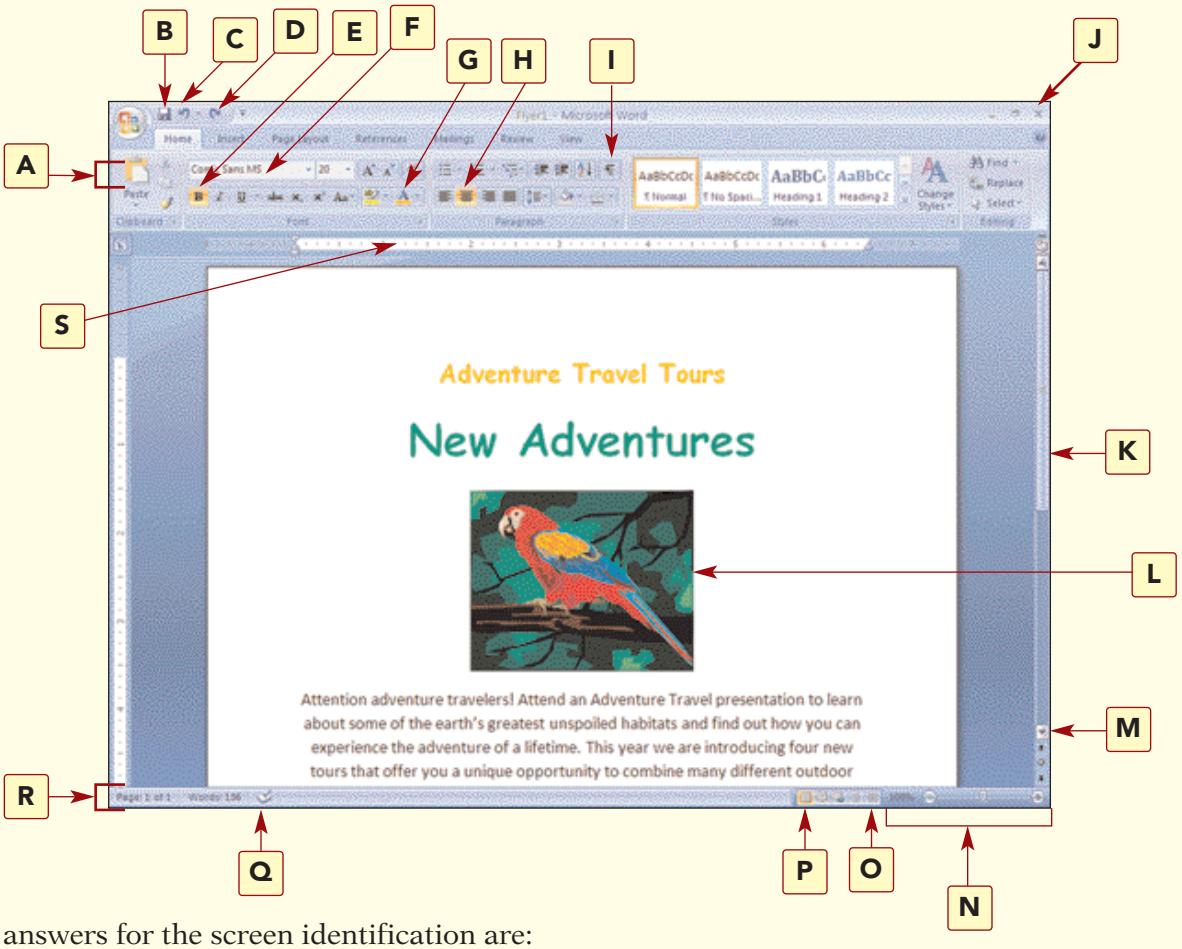
command summary (continued)

Command	Shortcut	Action
		Accesses Clip Organizer and inserts selected clip
Page Layout Tab		
Page Background group		
		Inserts ghosted text behind page content
		Adds a border around page
Review Tab		
Proofing group		
		Opens Spelling and Grammar dialog box
View Tab		
Document Views group		
		Shows how text and objects will appear on printed page
		Displays document only, without application features
		Shows document as it will appear when viewed in a Web browser
		Shows structure of document
		Shows text formatting and simple layout of page
Show/Hide group		
		Displays/hides ruler
Zoom group		
		Opens Zoom dialog box
		Zooms document to 100% of normal size
		Zooms document so an entire page fits in window
		Zooms document so width of page matches width of window



screen identification

1. In the following Word screen, letters identify important elements. Enter the correct term for each screen element in the space provided.



Possible answers for the screen identification are:

Scrolls down
Draft view
Tab mark
Ribbon
Save
Print Layout view
Font color
Font
Undo
Show/Hide
Close
Zoom
Center
Spelling and grammar status icon
Redo
Bold
Status bar
Scroll bar
Graphic
Paragraph mark
Ruler

A. _____
B. _____
C. _____
D. _____
E. _____
F. _____
G. _____
H. _____
I. _____
J. _____
K. _____
L. _____
M. _____
N. _____
O. _____
P. _____
Q. _____
R. _____
S. _____

matching

Match the item on the left with the correct description on the right.

1. 	_____	**a.** undoes last command
2. font	_____	**b.** moves to the top of the document
3. sans serif	_____	**c.** feature that automatically begins a new line when text reaches the right margin
4. alignment	_____	**d.** pictures and clip art
5. Ctrl + h	_____	**e.** shows dialog box
6. graphics	_____	**f.** type style that can be applied to text
7. 	_____	**g.** font size measurement
8. word wrap	_____	**h.** controls paragraph positioning between the margins
9. point	_____	**i.** saves a document using the same file name
10. 	_____	**j.** font without a flair at the base of each letter

multiple choice

Circle the correct response to the questions below.

1. Document development follows these steps.
   - **a.** plan, edit, enter, format, preview, and print
   - **b.** enter, edit, format, preview, and print
   - **c.** plan, enter, edit, format, preview, and print
   - **d.** design, enter, edit, format, preview, and print
2. This feature makes some basic assumptions about the text entered and automatically makes changes based on those assumptions.
   - **a.** AutoChange
   - **b.** AutoFormat
   - **c.** AutoText
   - **d.** AutoCorrect

3. Words that are not contained in the main dictionary can be added to the _____ dictionary.
   a. custom
   b. additional
   c. supplemental
   d. user defined
4. A(n) _____ is a nontext element or object that can be added to a document.
   a. illustration
   b. picture
   c. drawing
   d. all of the above
5. When text is evenly aligned on both margins, it is _____.
   a. center aligned
   b. justified
   c. left aligned
   d. right aligned
6. Words that may be spelled incorrectly in a document are indicated by a _____.
   a. green wavy line
   b. red wavy line
   c. blue wavy line
   d. purple dotted underline
7. Font sizes are measured in _____.
   a. inches
   b. points
   c. bits
   d. pieces
8. The _____ feature shows how various formatting choices would look on selected text.
   a. Actual Preview
   b. Real Preview
   c. Active Preview
   d. Live Preview

9. A set of characters with a specific design is called a(n) _____.
   a. style
   b. font
   c. AutoFormat
   d. Design
10. A(n) _____ is text or pictures that appear behind document text.
   a. graphic
   b. watermark
   c. embedded object
   d. thumbnail

true/false

Circle the correct answer to the following questions.

1.	A wavy red line indicates a potential spelling error.	True	False
2.	Hard spaces are used to justify text on a line.	True	False
3.	The default document settings are stored in the Normal.docx file.	True	False
4.	The Delete key erases the character to the right of the insertion point.	True	False
5.	The automatic word wrap feature checks for typing errors.	True	False
6.	The Word document file name extension is .wrd.	True	False
7.	Font sizes are measured in inches.	True	False
8.	Word inserts hidden marks into a document to control the display of text.	True	False
9.	The AutoCorrect feature automatically identifies and corrects certain types of errors.	True	False
10.	A selected picture is surrounded by a selection rectangle and eight moving handles.	True	False

fill-in

Complete the following statements by filling in the blanks with the correct terms.

1. The default document settings are stored in the _____ template file.
2. A small blue box appearing under a word or character indicates that the _____ feature was applied.
3. The _____ feature displays each page of your document in a reduced size so you can see the page layout.
4. To size a graphic evenly, click and drag the _____ in one corner of the graphic.
5. It is good practice to use only _____ types of fonts in a document.
6. Word 2007 documents are identified by the _____file extension.
7. The _____ at the top of the window contains commands that are organized into related groups.
8. Use _____ when you want to keep your existing document with the original name and make a copy with a new name.
9. A _____ is a miniature representation of all located graphics in the Clip Art task pane.
10. The _____ feature shows how your formatting choices will appear on selected text.

Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

Step-by-Step

Asking for Input Memo ★

1. Adventure Travel Tours is planning to update its Web site in the near future. You have been asked to solicit suggestions from the travel agents about changes they would like to see made to the current Web site. You decide to send all the travel agents a memo asking them for their input. Your completed memo will be similar to the one shown here.


To: Travel Agents
From: Student Name
Date: September, 15, 2008

The Adventure Travel Tours Web site was designed with travel agents in mind. But as you know, the role of the travel agent is changing. In order to keep up with these changes we plan to begin work on updating the Adventure Travel Tours Web site.

In preparation for this project, I would like your input about the content that will only be available to travel agents. In the next few days as you work with clients please note what can be changed to make it easier for you to book travel, and then send your comments back to me. All suggestions for changes are welcome and will be considered for our improved Web site.

Thank you in advance for your input.

   a. Open a blank Word 2007 document and create the following memo in Draft view. Press Tab after you type the colon (:) in the memo header. This will make the information following the colons line up evenly. Enter a blank line between paragraphs.

To: Travel Agents
From: Student Name
Date: [Current date]

The Adventure Travel Tours current Web site was designed with travel agents in mind but as you know, the role of the travel agent is changing. In order to keep up with these changes we plan to begin work on updating the current Adventure Travel Tours Web site. In preparation for this project, I would like your input about the content that will only be available to travel agents. As you work with clients please note what can be changed to make it easier for you to book travel, then send your comments back to me. All suggestions for changes are welcome and will be considered for our improved Web site.

Thank you in advance for your input.

   b. Correct any spelling and grammar errors that are identified.

   c. Turn on the display of formatting marks. Check the document and remove any extra blank spaces between words or at the end of lines.

   d. Save the document as Web Site Memo in your solution file location.

   e. Switch to Print Layout view.

f. End the first sentence after the word "mind". Capitalize the following word, but. Insert the text "In the next few days" before the word "As," in the fifth sentence. Change the "A" in As to lower case. Delete the word "current" from the first and third sentences.

g. Start a new paragraph beginning with the fourth sentence.

h. Change the font size for the entire memo to 14 pt and the alignment of the body of the memo to justified.

i. Turn off the display of formatting marks.

j. Add an ASAP watermark.

k. Include your name in the document properties as author and the file name as the title.

l. Save the document again and print the document.

Promoting Celebrate Bikes Sunday ★★

2. You are the program coordinator for the city of Westbrook's Parks and Recreation Department. In next week's newspaper, you plan to run an article to promote bike riding in the community through the Celebrate Bikes Sunday event. Your completed article will be similar to the one shown here.

a. Enter the following information in a new Word 2007 document. Leave a blank line between paragraphs.

Celebrate Bicycling!

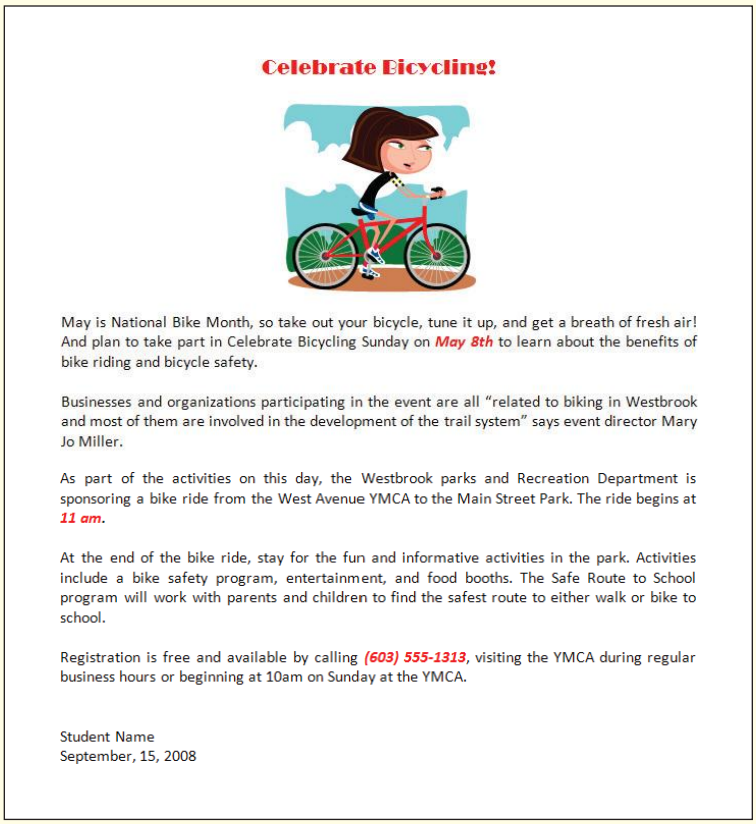
May is traditionally National Bike Month, so take out your bicycle, tune it up and get a breath of fresh air! And plan to take part in Celebrate Bikes Sunday on 5/8 to learn about the benefits of bike riding.

Businesses and organizations participating in the event are all "related to biking in Westbrook and most of them are involved in the development of the trail system" says event director Mary Jo Miller.

As part of the activities on this day, the Westbrook Parks and Recreation Department is sponsoring a bike ride from the West Avenue YMCA to the Main Street Park beginning at 11 am.

At the end of the bike ride, the riders are encouraged to stay for the fun and informative activates in the park. Activities include a bike safety program, entertainment, and food booths. The Safe Route to School program will work with parents and children to find the safest route to either walk or bike to school.

Registration is free and available by calling (603) 555-1313, visiting the YMCA during regular business hours or beginning at 10 am on Sunday at the YMCA.



Celebrate Bicycling!

May is National Bike Month, so take out your bicycle, tune it up, and get a breath of fresh air! And plan to take part in Celebrate Bicycling Sunday on *May 8th* to learn about the benefits of bike riding and bicycle safety.

Businesses and organizations participating in the event are all "related to biking in Westbrook and most of them are involved in the development of the trail system" says event director Mary Jo Miller.

As part of the activities on this day, the Westbrook parks and Recreation Department is sponsoring a bike ride from the West Avenue YMCA to the Main Street Park. The ride begins at *11 am*.

At the end of the bike ride, stay for the fun and informative activities in the park. Activities include a bike safety program, entertainment, and food booths. The Safe Route to School program will work with parents and children to find the safest route to either walk or bike to school.

Registration is free and available by calling *(603) 555-1313*, visiting the YMCA during regular business hours or beginning at 10am on Sunday at the YMCA.

Student Name
September, 15, 2008

b. Correct any spelling or grammar errors. Save the document as Bike Event.

c. Turn on the display of formatting marks. Check the document and remove any extra blank spaces between words or at the end of lines.

d. In Print Layout view, center the title. Change the title font to Broadway (or a font of your choice), 16 pt, and red font color.

e. In the first paragraph, delete the word "traditionally" and change the number 5/8 to "May 8th." Add the text "and bicycle safety" to the end of the second sentence in this paragraph.

f. End the first sentence in paragraph 3 after the word "Park". Change the following sentence to "The ride begins at 11 am."

g. Delete the phrase "the riders are encouraged to" from the first sentence of the fourth paragraph.

h. Add italics, bold, and red font color to the date in the first paragraph, the time in the third paragraph, and the phone number in the last paragraph.

i. Justify the paragraphs.

j. Increase the font size of the paragraphs to 12 pt.

k. Below the title, insert a clip art graphic of your choice of a child riding a bike by searching on the keyword "bike" or use the graphic file wd01_Child on Bike. Center it and adjust the size of the graphic appropriately.

l. Add your name and the current date on separate lines several lines below the last line. Left-align both lines. Turn off the display of formatting marks.

m. Review the document and, if necessary, adjust the size of the graphic to fit the document on a single page.

n. Include your name in the file properties as author and the file name as the title.

o. Save the document again. Print the document.

Creating a Grand Opening Flyer ★★

3. The Downtown Internet Cafe is planning a grand re-opening celebration. The cafe combines the relaxed atmosphere of a coffee house with the fun of using the Internet. You want to create a flyer about the celebration that you can give to customers and also post in the window of other local businesses about the celebration. Your completed flyer will be similar to the one shown here.

a. Open a new Word document and enter the following text, pressing ↵Enter where indicated.

Grand Re-Opening Celebration ↵Enter

Downtown Internet Cafe ↵Enter

Your newly remodeled neighborhood coffee shop ↵Enter (2 times)

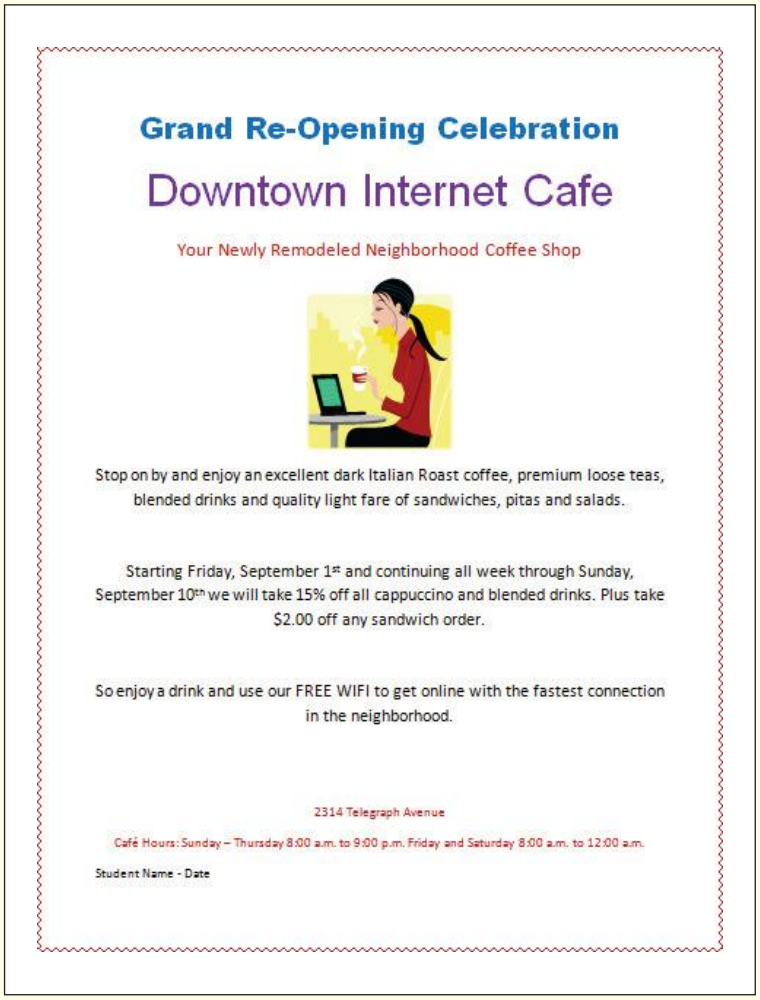
Stop on by and enjoy an excellent dark Italian Roast coffee, premium loose teas, blended drinks and quality light fare of sandwiches, pitas and salads. ↵Enter (2 times)

Starting Friday, September 1st and continuing all week through Sunday, September 10th we will take 15 percent off all cappuccino and blended drinks. Plus take $2.00 off any sandwich order. ↵Enter (2 times)

So enjoy a drink and use our free wifi service to get online with the fastest connection in the neighborhood! ↵Enter (3 times)

2314 Telegraph Avenue ↵Enter

Cafe Hours: Sunday - Thursday 8:00 a.m. to 9:00 p.m. Friday and Saturday 8:00 a.m. to 12:00 a.m. ↵Enter



b. Correct any spelling and grammar errors that are identified.

c. Save the document as Grand Re-Opening.

d. Type **Join Us for Live Entertainment!** after the location and hours. Use the Undo feature to remove this sentence.

e. Turn on the display of formatting marks. Center the entire document.

f. Capitalize each word of the third line. Replace the word percent with the % symbol. Change the case of the text "free wifi" to uppercase. Delete the following word, "service."

g. Change the first line to a font color of blue, font type of Arial Black or a font of your choice, and size of 24 pt.

h. Change the second line to a font color of purple, font type of Arial or a font of your choice, and size of 36 pt.

i. Change the third line to a font color of dark red and a font size of 16 pt. Change the last two lines (address and hours) to a font color of dark red.

j. Increase the font size of the three paragraphs to 14 points.

k. Insert the graphic file wd01_coffee (from your data files) on the blank line below the third title line. Size the graphic to be approximately 2 by $2^{1}/_{4}$ inches using the ruler as a guide.

l. Add a page border of your choice to the flyer.

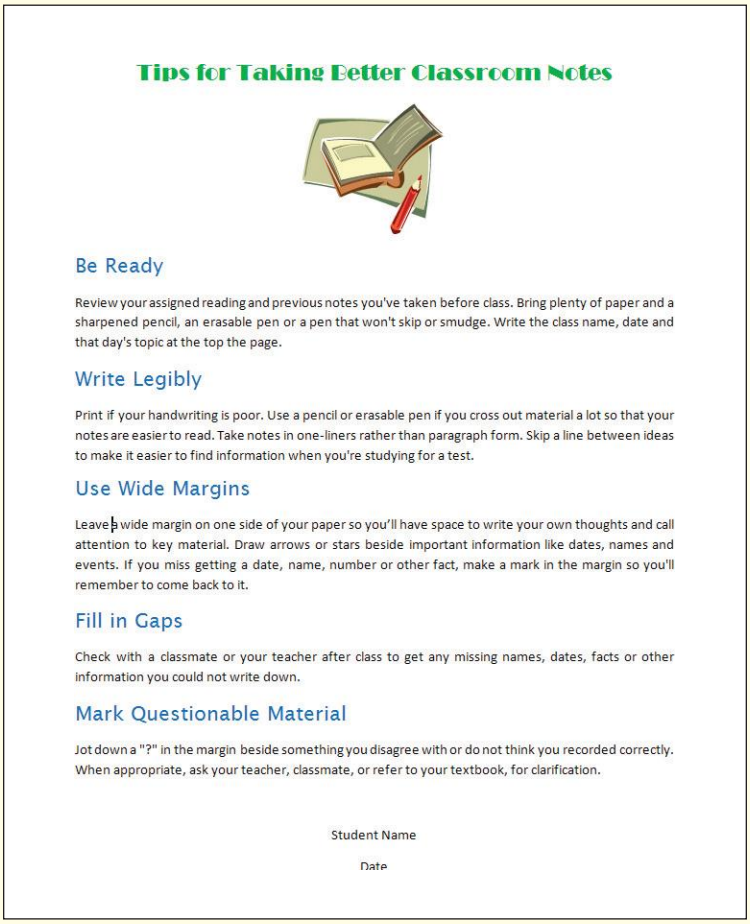
m. Add your name and the current date, left-aligned, on one line, below the last line. Turn off the display of formatting marks.

n. If necessary, reduce the size of the graphic so the entire flyer fits on one page.

o. Include your name in the file properties as author and the file name as the title. Save and print the flyer.

Preparing a Lecture on Note-Taking Skills ★★★

4. You teach a college survival skills class and have recently read about the results of a survey conducted by the Pilot Pen Company of America about note-taking skills. The survey of 500 teenagers found that students typically begin taking classroom notes by sixth grade and that only half had been taught how to take classroom notes. It also found that those students trained in note-taking earned better grades. Note-taking becomes increasingly important in high school and is essential in college. Lecture notes are a key component for mastering material. In response to the survey, the pen manufacturer came up with 10 tips for better note-taking. You started a document of these tips that you plan to use to supplement your lecture on this topic. You will continue to revise and format the document. The revised document will be similar to the one shown here.


Tips for Taking Better Classroom Notes

Be Ready

Review your assigned reading and previous notes you've taken before class. Bring plenty of paper and a sharpened pencil, an erasable pen or a pen that won't skip or smudge. Write the class name, date and that day's topic at the top the page.

Write Legibly

Print if your handwriting is poor. Use a pencil or erasable pen if you cross out material a lot so that your notes are easier to read. Take notes in one-liners rather than paragraph form. Skip a line between ideas to make it easier to find information when you're studying for a test.

Use Wide Margins

Leave a wide margin on one side of your paper so you'll have space to write your own thoughts and call attention to key material. Draw arrows or stars beside important information like dates, names and events. If you miss getting a date, name, number or other fact, make a mark in the margin so you'll remember to come back to it.

Fill in Gaps

Check with a classmate or your teacher after class to get any missing names, dates, facts or other information you could not write down.

Mark Questionable Material

Jot down a "?" in the margin beside something you disagree with or do not think you recorded correctly. When appropriate, ask your teacher, classmate, or refer to your textbook, for clarification.

Student Name

Date

a. Open the Word document wd01_Note Taking Skills.

b. Correct any spelling and grammar errors that are identified. Save the document as Note Taking Skills.

c. Switch to Draft view. Change the font of the title line to a font of your choice, 18 pt. Center and add color of your choice to the title line.

d. In the Be Ready tip, delete the word "lots". In the Write Legibly tip, delete the word "cursive" and add the words "an erasable" before the word "pen." Change the tip heading "Margins" to "Use Wide Margins."

e. Above the Mark Questionable Material tip, insert the following tip:

Fill in Gaps

Check with a classmate or your teacher after class to get any missing names, dates, facts or other information you could not write down.

f. Change the font of the tip heading lines to Lucida Sans with a font size of 16 pt and a color of your choice.

g. Change the alignment of the paragraphs to justified. Use Undo Changes to return the alignment to left. Use Redo Changes to return the paragraphs to justified again.

h. Switch to Print Layout view. Insert a clip art graphic of your choice (search on "pencil") below the title. Size it appropriately and center it.

i. Add your name and the current date, centered, on separate lines two lines below the last line. If needed, reduce the size of the graphic to fit the entire document on one page.

j. Include your name in the file properties as author and the document title as the title. Save the document. Print the document.

Writing an Article on the History of Ice Cream ★★★

5. Each month the town's free paper prints a fun article on the history of something people are familiar with but might not know anything about. You researched the topic online and found the information you needed about the history of ice cream from the International Dairy Foods Association's Web site at www.idfa.org/facts/icmonth/page7.cfm. You started writing the article a few days ago and just need to continue the article by adding a few more details. Then you need to edit and format the text and include a graphic to enhance the appearance of the article. Your completed article will be similar to the one shown here.

a. Open the file named wd01_History of Ice Cream.

b. Correct any spelling and grammar errors. (Hint: Click in the status bar to move to each error.) Save the document as Ice Cream History.

c. Enter the following headings at the location shown in parentheses.

History of Ice Cream (above first paragraph)

The Evolution of Ice Cream (above second paragraph)

Ice Cream in America (above third paragraph)

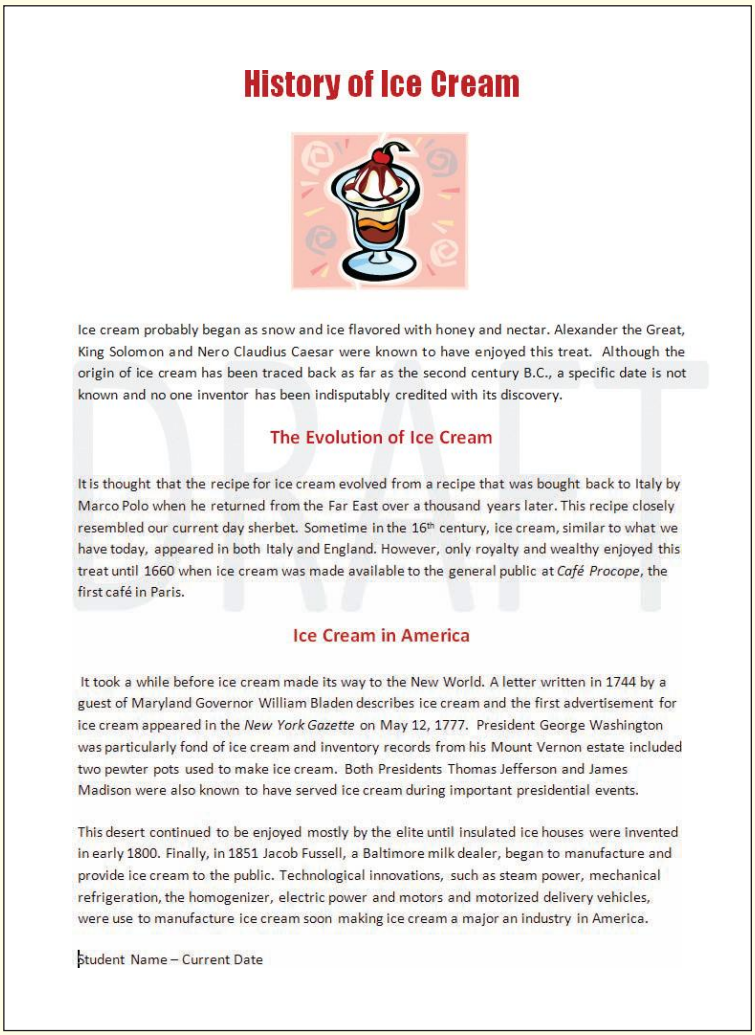
d. Center the article title. Change the font to Impact with a point size of 24. Add a color of your choice to the title.

e. Change the other two headings to bold with a type size of 14 pt. Center the heads. Use the same color as in the title for the heads.

f. Change the alignment of the first paragraph to justified.

g. Add a blank line below the main title of the article and insert the picture wd01_Ice Cream (from your data files) at this location.

h. Size the picture to be 2 inches wide (use the ruler as a guide). Center it below the title.



History of Ice Cream

Ice cream probably began as snow and ice flavored with honey and nectar. Alexander the Great, King Solomon and Nero Claudius Caesar were known to have enjoyed this treat. Although the origin of ice cream has been traced back as far as the second century B.C., a specific date is not known and no one inventor has been indisputably credited with its discovery.

The Evolution of Ice Cream

It is thought that the recipe for ice cream evolved from a recipe that was bought back to Italy by Marco Polo when he returned from the Far East over a thousand years later. This recipe closely resembled our current day sherbet. Sometime in the 16th century, ice cream, similar to what we have today, appeared in both Italy and England. However, only royalty and wealthy enjoyed this treat until 1660 when ice cream was made available to the general public at *Café Procope*, the first café in Paris.

Ice Cream in America

It took a while before ice cream made its way to the New World. A letter written in 1744 by a guest of Maryland Governor William Bladen describes ice cream and the first advertisement for ice cream appeared in the *New York Gazette* on May 12, 1777. President George Washington was particularly fond of ice cream and inventory records from his Mount Vernon estate included two pewter pots used to make ice cream. Both Presidents Thomas Jefferson and James Madison were also known to have served ice cream during important presidential events.

This desert continued to be enjoyed mostly by the elite until insulated ice houses were invented in early 1800. Finally, in 1851 Jacob Fussell, a Baltimore milk dealer, began to manufacture and provide ice cream to the public. Technological innovations, such as steam power, mechanical refrigeration, the homogenizer, electric power and motors and motorized delivery vehicles, were use to manufacture ice cream soon making ice cream a major an industry in America.

Student Name – Current Date

DRAFT

i. Add a Draft watermark.

j. Add your name and the current date below the last line of the article. View the whole page and, if necessary, reduce the size of the graphic so the entire article fits on one page.

k. Include your name in the file properties as author and the document title as the title. Save the document again. Print the document.

on your own

Creating a Flyer ★

1. Adventure Travel Tours is offering a great deal on a Day of the Dead Bicycle Tour in Mexico. Research the Day of the Dead celebration using the Web as a resource. Then, using the features of Word you have learned so far, create a flyer that will advertise this tour. Be sure to use at least two colors of text, two sizes of text, and two kinds of paragraph alignment. Include a graphic from the Clip Organizer. Include your name at the bottom of the flyer. Include your name in the file properties as author and the file name as the title. Save the document as Mexico Adventure.

Creating a Swimming Pool Rules Flyer ★★

2. You work in the community pool and have been asked to create a flyer to post that identifies the rules swimmers should follow when using the pool. Create a flyer that explains the five most important rules to follow while swimming at the pool. Use a piece of clip art to liven up your flyer. Include different font sizes, paragraph alignments, and other formatting features to make the flyer attractive. Apply different font colors for each rule. Include a page border. Include your name at the bottom of the flyer. Include your name in the file properties as author and the file name as the title. Save the document as Pool Rules.

Astronomy Class Memo ★★

3. The city of Gilbert, Arizona, has recently built a $100,000 observatory that includes a $20,000 telescope in a local park. The observatory is open evenings for small groups of five to six people to take turns looking through the 16-inch telescope's eyepiece. The use of the observatory is free.

   The city has decided to offer classes for the community to learn how to use the telescope and to teach about astronomy. As a trial run, the class will first be offered to city employees and their families. You want to notify all employees about the observatory and the class by including a memo with their paycheck. Using Step-by-Step Exercise 1 as a model, provide information about when and where the class will be held. Include information about how people sign up for the class. Include your name in the file properties as author and the file name as the title. Save the memo as Astronomy Basics.

Volunteer Opportunities ★★★

4. Many community groups, hospitals, libraries, and churches are looking for volunteers to assist in their programs. Volunteering has rewards for both the volunteer and the community. Using the Web as a resource, research volunteer opportunities in your community. Then write a one-page report that includes information about two volunteer groups for which you would like to volunteer. Include information about what the organization does for the community. Also include the skills you have to offer and the amount of time you can commit as volunteer. Include a title at the top of the document and your name and the current date below the title. Center the title lines. Use at least two colors of text, two sizes of text, and two kinds of paragraph alignment. Include a graphic from the Clip Organizer. Include your name in the file properties as author and the file name as the title. Save the document as Volunteer Opportunities.

Writing a Career Report ★★★

5. Using the library or the Web, research information about your chosen career. Write a one-page report about your findings that includes information on three areas: Career Description; Educational Requirements; Salary and Employment projections. Include a title at the top of the document and your name and the current date below the title. Center the title lines. Justify the paragraphs. Include your name in the file properties as author and the file name as the title. Save the document as Career Report.

Revising and Refining a Document

LAB 2

Objectives

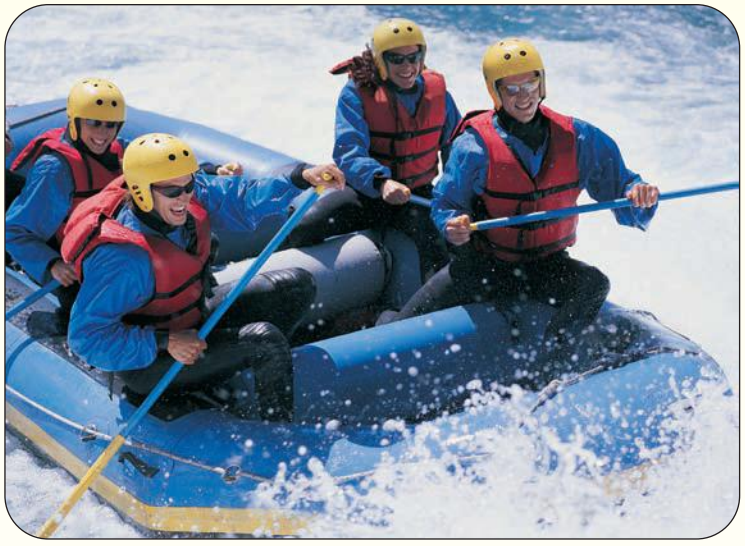
After completing this lab, you will know how to:

1. Use the Spelling and Grammar tool and the Thesaurus.
2. Move, cut, and copy text and formats.
3. Control document paging.
4. Find and replace text.
5. Insert the current date.
6. Change indents, line spacing, and margins.
7. Create a tabbed table.
8. Add color highlighting and underlines.
9. Create numbered and bulleted lists.
10. Create and use Building Blocks.
11. Insert and modify a shape.
12. Edit in Print Preview.
13. Print a document.

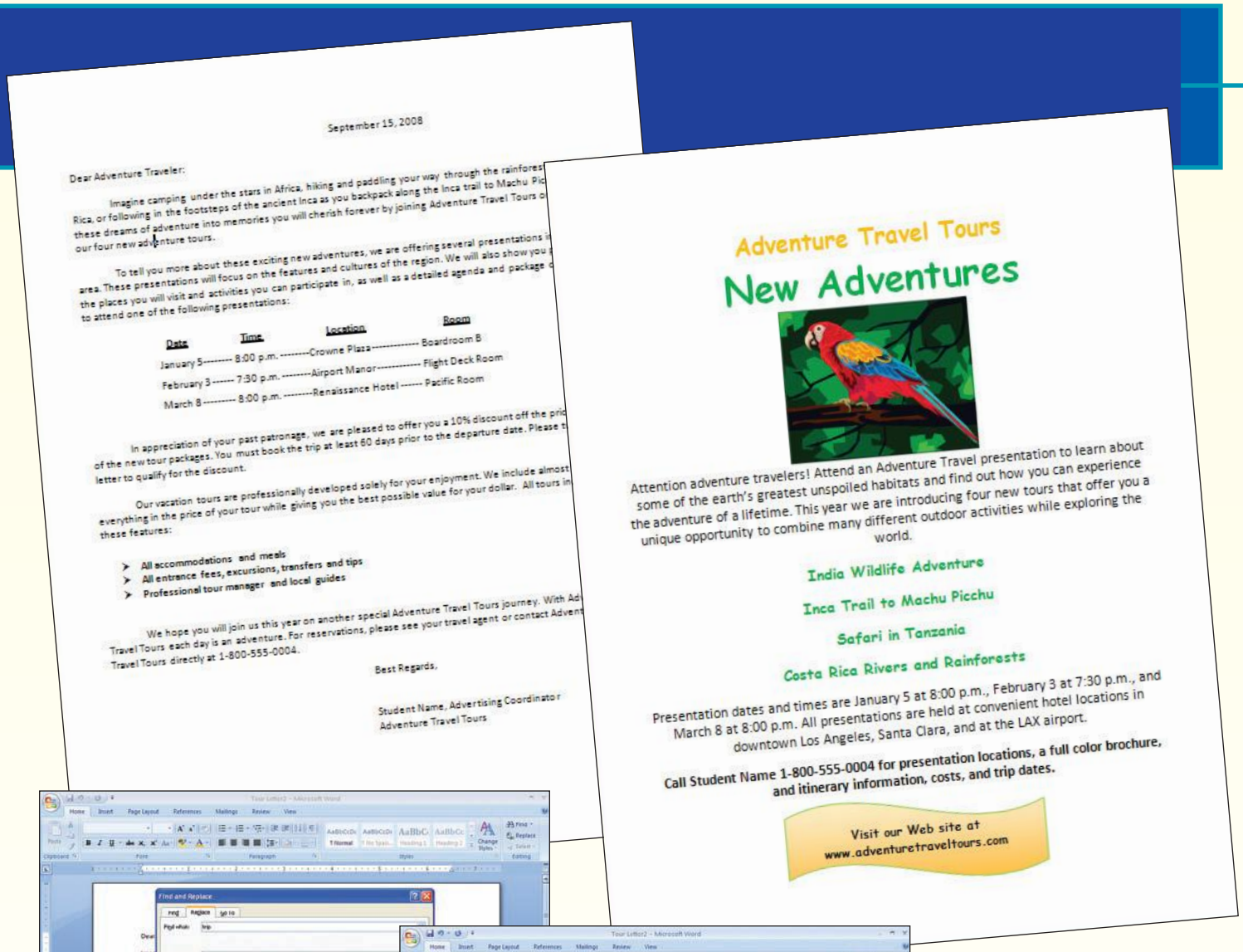
Case Study

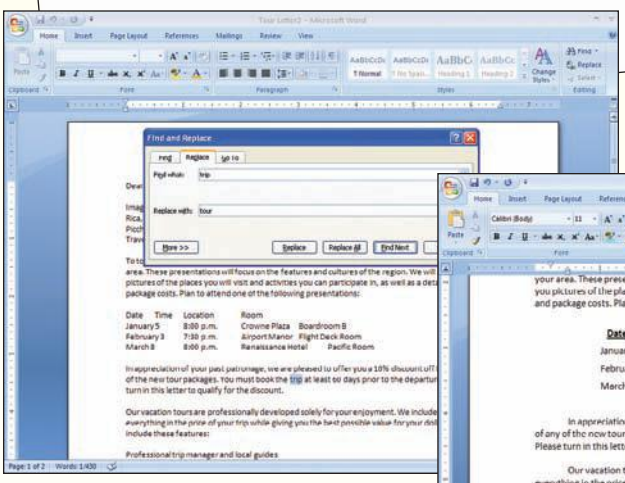
Adventure Travel Tours

After creating the rough draft of the new tours flyer, you showed the printed copy to your manager at Adventure Travel Tours. Your manager then made several suggestions for improving the flyer's style and appearance. In addition, you created a letter to be sent to clients along with your flyer. The letter briefly describes Adventure Travel's four new tours and invites clients to attend an informational presentation. Your manager likes the idea, but also wants the letter to include information about the new Adventure Travel Tours Web site and a 10 percent discount for early booking.

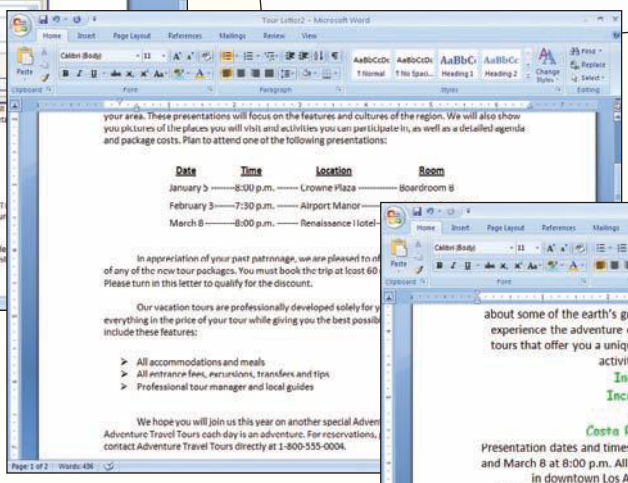


In this lab, you will learn more about editing documents so you can reorganize and refine both your flyer and a rough draft of the letter to clients. You also will learn to use many more of the formatting features included in Office Word 2007 so you can add style and interest to your documents. Formatting features can greatly improve the appearance and design of any document you produce so that it communicates its message more clearly. The completed letter and revised flyer are shown here.

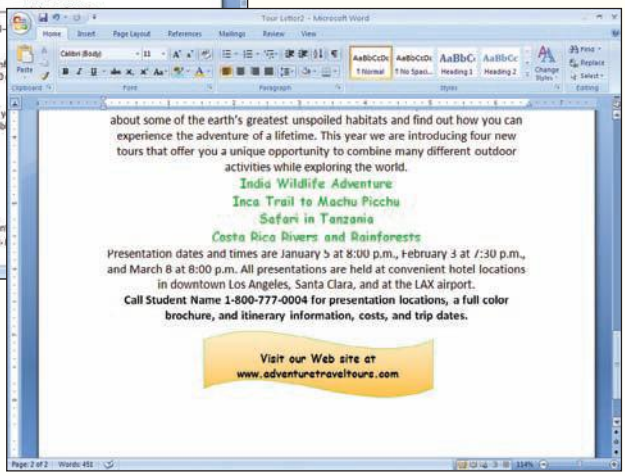




Features such as the Spelling Checker, Thesaurus, Move and Copy, and Find and Replace make it easy to revise and refine your document.



Formatting and page layout changes such as margin adjustments, indented paragraphs, and tabbed tables help improve the readability and style of the document.



Graphic enhancements such as shapes add interest to a document.

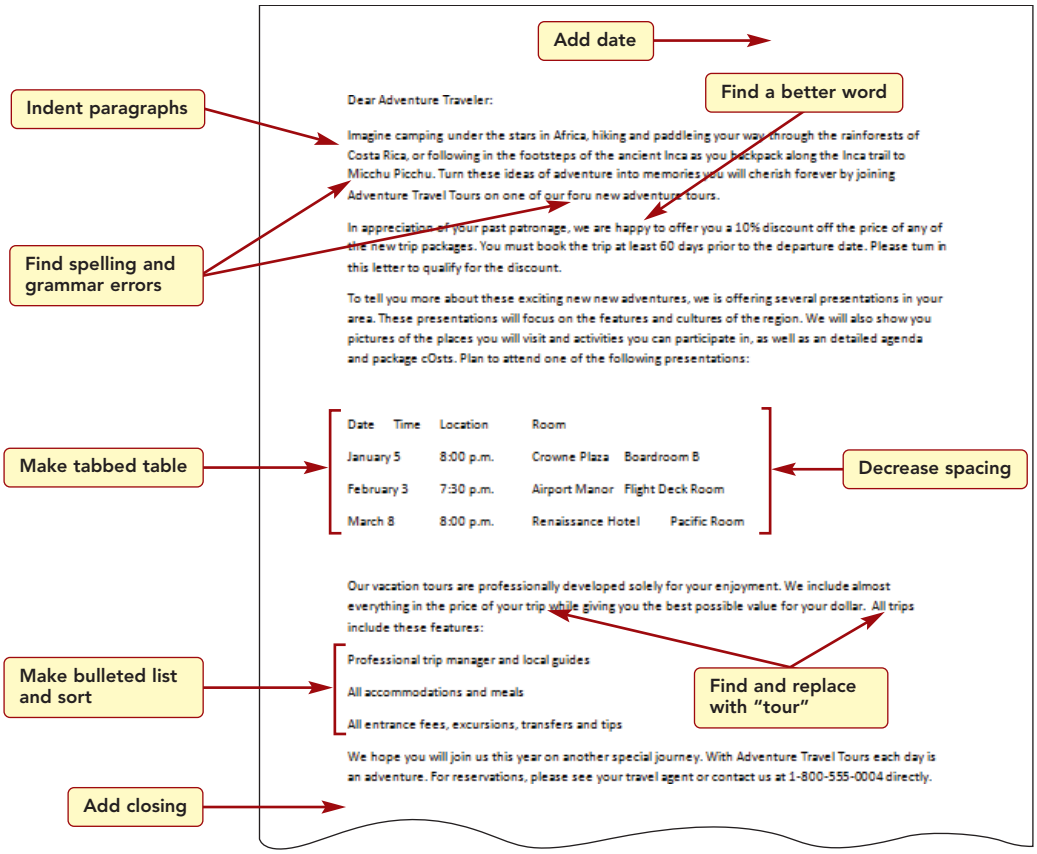
Concept Preview

The following concepts will be introduced in this lab:

1	**Thesaurus** Word's Thesaurus is a reference tool that provides synonyms, antonyms, and related words for a selected word or phrase.
2	**Move and Copy** Text and graphic selections can be moved or copied to new locations in a document or between documents, saving you time by not having to retype the same information.
3	**Page Break** A page break marks the point at which one page ends and another begins. Two types of page breaks can be used in a document: soft page breaks and hard page breaks.
4	**Find and Replace** To make editing easier, you can use the Find and Replace feature to find text in a document and replace it with other text as directed.
5	**Field** A field is a placeholder that instructs Word to insert information into a document.
6	**Indents** To help your reader find information quickly, you can indent paragraphs from the margins. Indenting paragraphs sets them off from the rest of the document.
7	**Line Spacing** Adjusting the line spacing, or the vertical space between lines of text and paragraphs, helps set off areas of text from others and when increased or decreased makes it easier to read and edit text.
8	**Bulleted and Numbered Lists** Whenever possible, add bullets or numbers before items in a list to organize information and make your writing clear and easy to read.
9	**Sort** Word can quickly arrange or sort text, numbers, or data in lists or tables in alphabetical, numeric, or date order based on the first character in each paragraph.
10	**Page Margin** The page margin is the blank space around the edge of the page. Standard single-sided documents have four margins: top, bottom, left, and right.

Revising a Document

After speaking with the manager about the letter's content, you planned the basic topics that need to be included in the letter: to advertise the new tours, invite clients to the presentations, describe the early-booking discount, and promote the new Web site. You quickly entered the text for the letter, saved it as Tour Letter, and printed out a hard copy. As you are reading the document again, you mark up the printout with the changes and corrections you want to make. The marked-up copy is shown here.



Spell-Checking the Entire Document

The first correction you want to make is to clean up the spelling and grammar errors that Word has identified.

1. **Start Office Word 2007 and open the file** wd02_Tour Letter**.**

2. **If necessary, change to Print Layout view at 100% zoom.**

Your screen should be similar to Figure 2.1

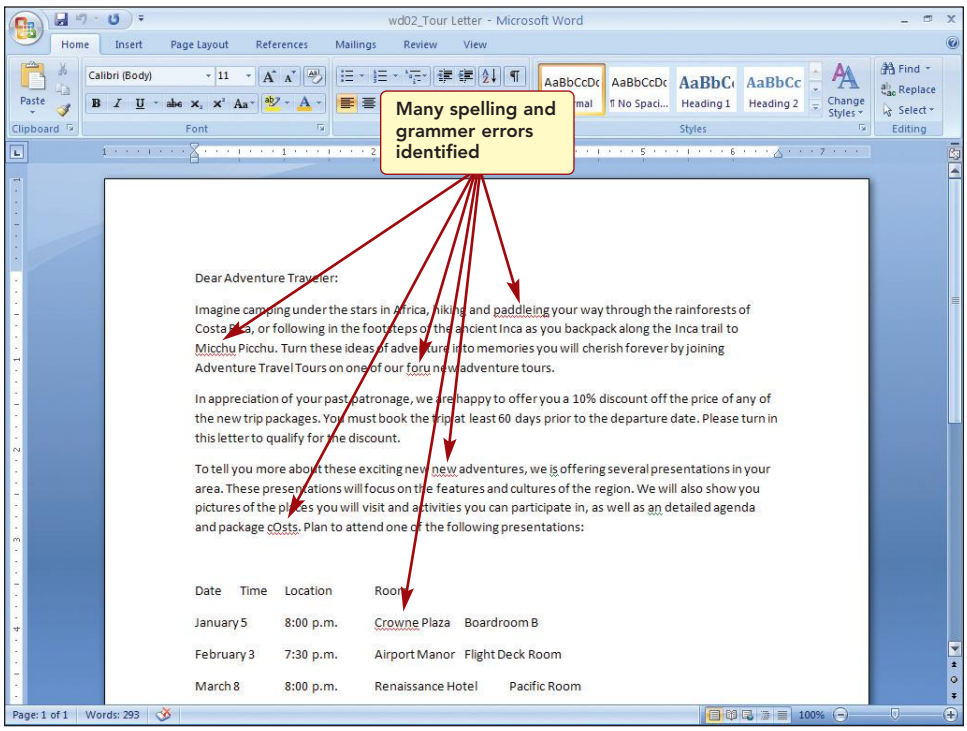


Figure 2.1

To correct the misspelled words and grammatical errors, you can use the context menu to correct each individual word or error, as you learned in Lab 1. However, in many cases, you may find it more efficient to wait until you are finished writing before you correct errors. Rather than continually breaking your train of thought to correct errors as you type, you can manually turn on the spelling and grammar checker to locate and correct all the errors in the document at once.

2 **Open the Review tab.**

Click Spelling & Grammar.

Another Method

The keyboard shortcut is F7.

If necessary, select the Check grammar option to turn on grammar checking.

Additional Information

You also can click the Spelling and Grammar status icon to move to the next spelling or grammar error and open the spelling context menu.

Your screen should be similar to Figure 2.2

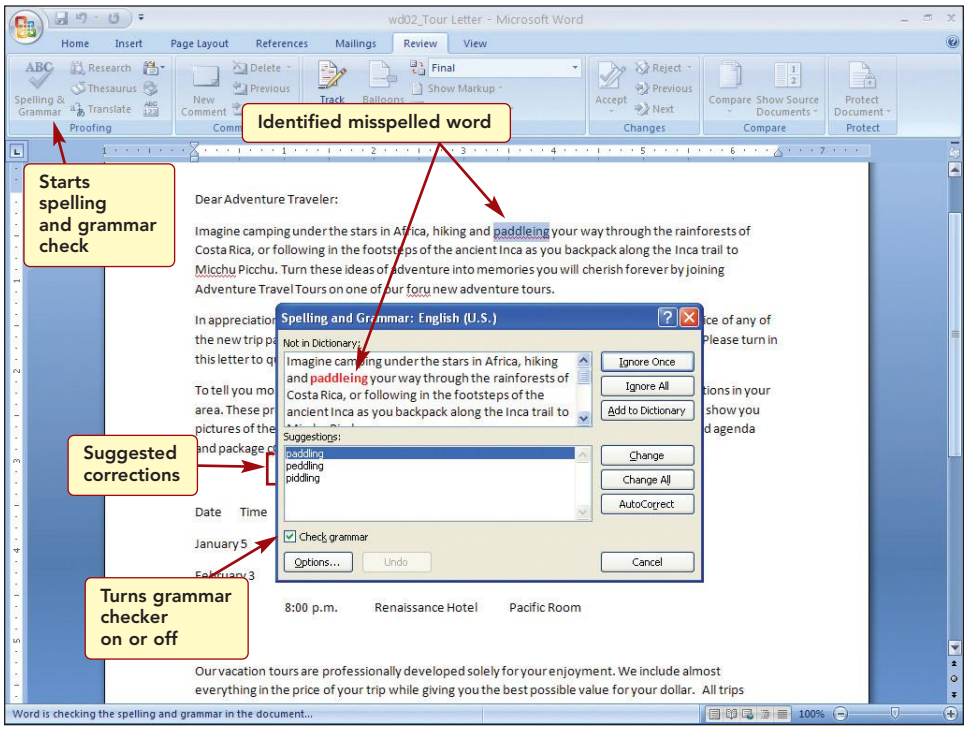


Figure 2.2

Additional Information

Because the contents of the list are determined only by spelling, any instances of terms that seem inappropriate in context are completely coincidental.

The Spelling and Grammar dialog box is displayed, and the spelling and grammar checker has immediately located the first word that may be misspelled, "paddleing." The sentence with the misspelled word in red is displayed in the Not in Dictionary text box, and the word is highlighted in the document.

The Suggestions list box displays the words the spelling checker has located in the dictionary that most closely match the misspelled word. The most likely match is highlighted. Sometimes the spelling checker does not display any suggested replacements. This occurs when it cannot locate any words in the dictionaries that are similar in spelling. If no suggestions are provided, the Not in Dictionary text box simply displays the word that is highlighted in the text.

Additional Information

The Change All option replaces the same word throughout the document with the word you select in the Suggestions box.

To change the spelling of the word to one of the suggested spellings, highlight the correct word in the list and then click Change. If there were no suggested replacements, and you did not want to use any of the option buttons, you could edit the word yourself by typing the correction in the Not in Dictionary box. In this case, the correct replacement, "paddling," is already highlighted.

3 Click Change.

Additional Information

On your own computer system, you would want to add words to the custom dictionary that you use frequently and that are not included in the standard dictionary so they will be accepted when typed correctly and offered as a suggested replacement when not typed correctly.

Your screen should be similar to Figure 2.3

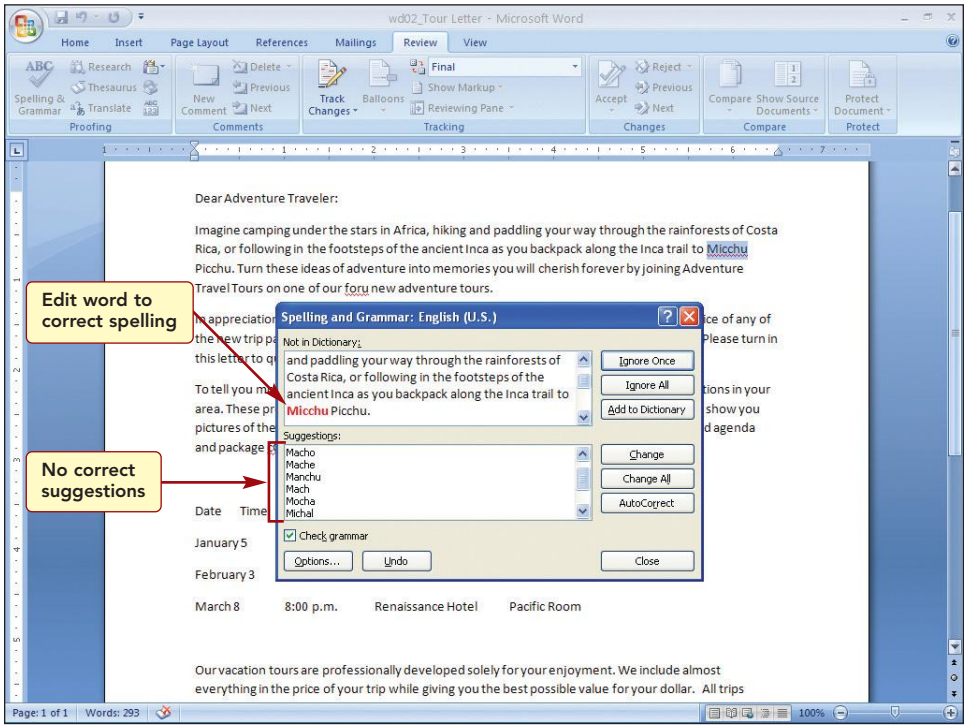


Figure 2.3

The spelling checker replaces the misspelled word with the selected suggested replacement and moves on to locate the next error. This time the error is the name of the Inca ruins at Machu Picchu. "Micchu" is the incorrect spelling for this word; there is no correct suggestion, however, because the word is not found in the dictionary. You will correct the spelling of the word by editing it in the Not in Dictionary text box.

4 Edit the spelling of the word to **Machu** in the Not in Dictionary box.

Having Trouble?

You may need to scroll the Not in Dictionary box to see the highlighted word.

Click Change.

Your screen should be similar to Figure 2.4

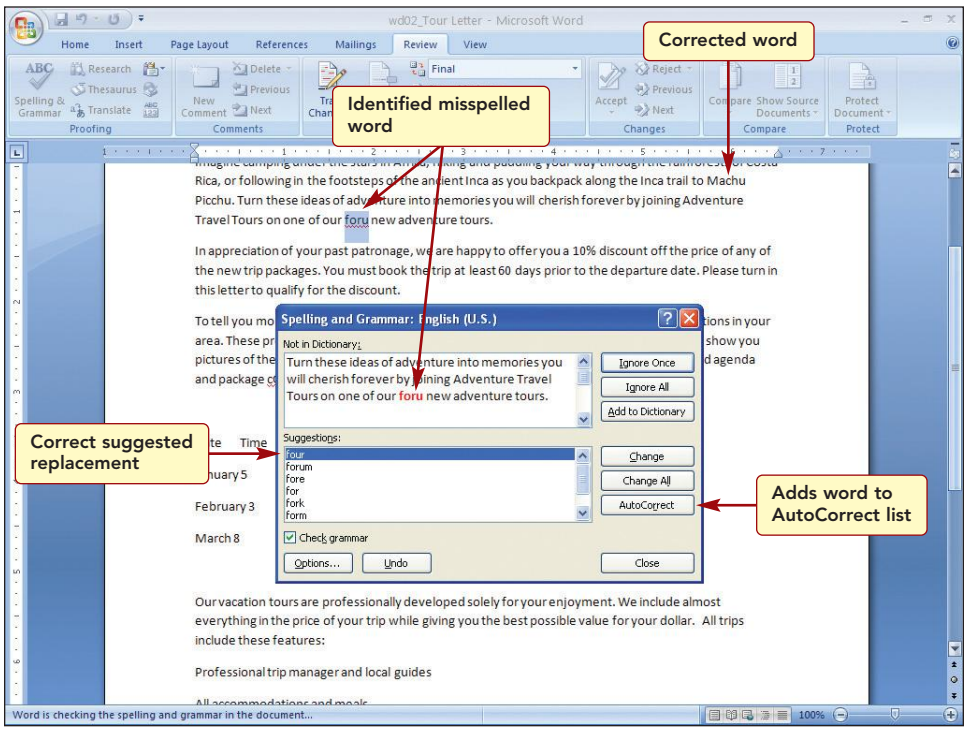


Figure 2.4

Additional Information

You also can edit words directly in the document and then click Resume to continue using the Spelling and Grammar Checker.

The next located error, "foru," is a typing error that you make frequently when typing the word four. The correct spelling is selected in the Suggestions list box. You want to change it to the suggested word and add it to the list of words that are automatically corrected.

5 Click AutoCorrect.

Having Trouble?

If a dialog box appears telling you an AutoCorrect entry already exists for this word, simply click Yes to continue.

Your screen should be similar to Figure 2.5

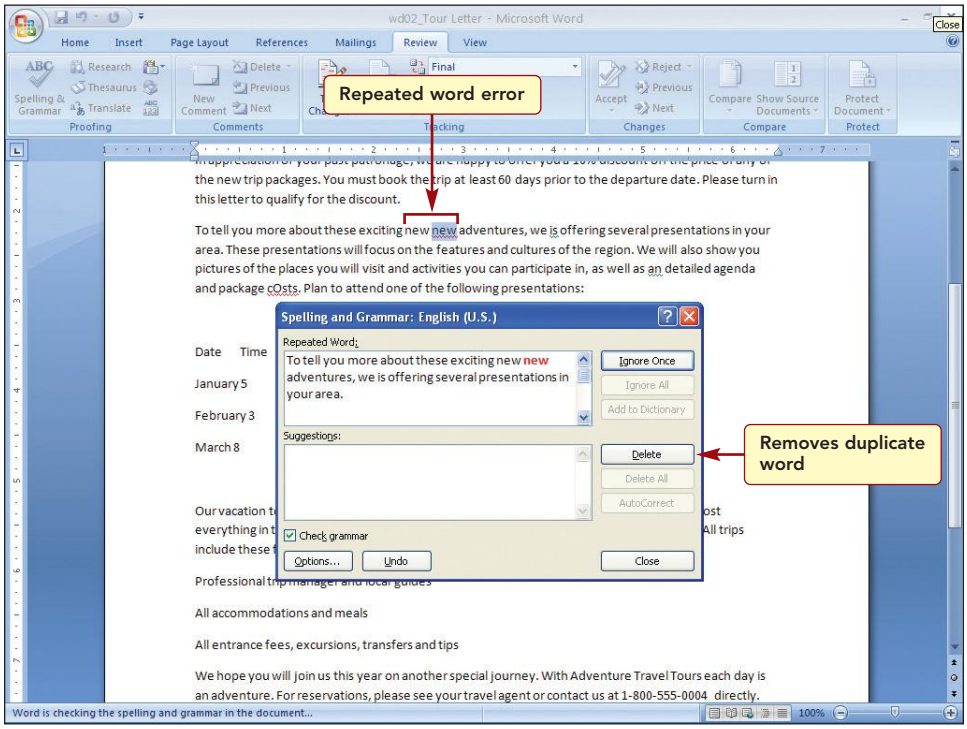


Figure 2.5

The word is corrected in the document. Because you also added it to the AutoCorrect list, in the future whenever you type this word incorrectly as "foru," it will automatically be changed to "four." The next five errors that will be identified and their causes are shown in the following table

Identified Error	Cause	Action	Result
new	Repeated word	Delete	duplicate word "new" is deleted
we is	Subject-verb disagreement	Change	we are
cOsts	Inconsistent capitalization	Change	costs
an detailed	Grammatical error	Change	a
Crowne	Spelling error	Ignore Once	accepts the word as correct for this occurrence only

6. **Respond to the spelling and grammar checker by taking the actions in the table above for the five identified errors.**

- **Click OK in response to the message telling you that the spelling and grammar check is complete.**
- **Move to the top of the document.**

Your screen should be similar to Figure 2.6

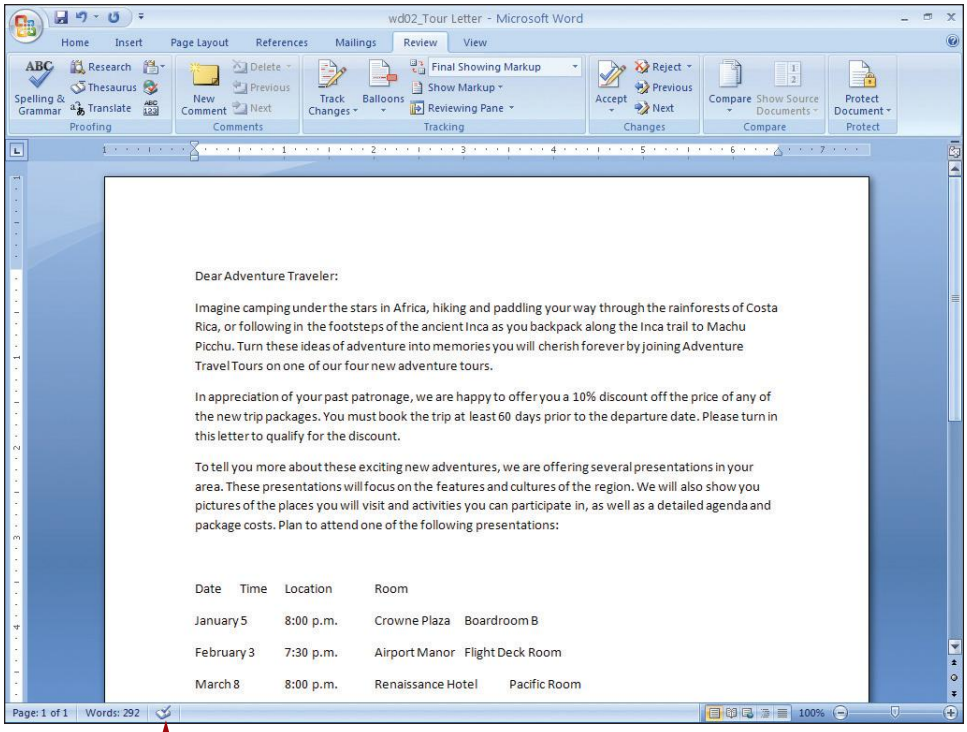


Figure 2.6

Using the Thesaurus

The next text change you want to make is to find a more descriptive word for "ideas" in the first paragraph and "happy" in the second paragraph. To help find a similar word, you will use the thesaurus tool.

Concept 1

Thesaurus

1 Word's **thesaurus** is a reference tool that provides synonyms, antonyms, and related words for a selected word or phrase. **Synonyms** are words with a similar meaning, such as "cheerful" and "happy." **Antonyms** are words with an opposite meaning, such as "cheerful" and "sad." Related words are words that are variations of the same word, such as "cheerful" and "cheer." The thesaurus can help to liven up your documents by adding interest and variety to your text.

First you need to identify the word you want looked up by moving the insertion point onto the word. Then you use the thesaurus to suggest alternative words. The quickest way to get synonyms is to use the context menu for the word you want to replace.

1. **Right-click on the word "ideas" (first paragraph, second sentence) to display the context menu.**

2. **Select Synonyms on the Context menu.**

Having Trouble?
Simply point to the menu option to select it.

Additional Information
Whenever you right-click an item, both the context menu and Mini toolbar are displayed.

Your screen should be similar to Figure 2.7

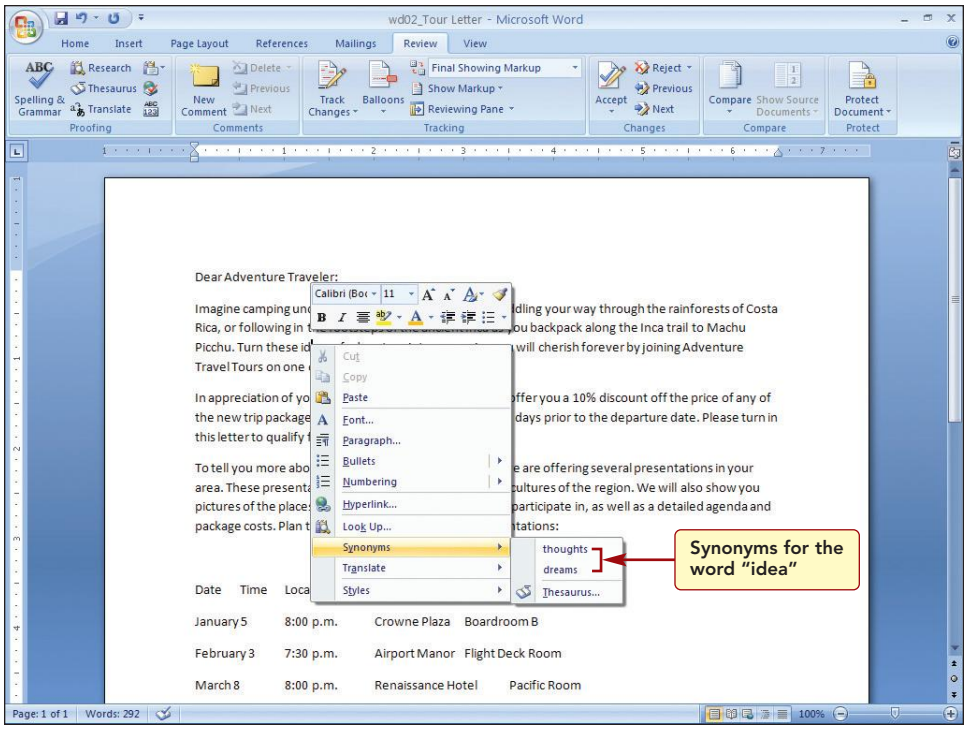


Figure 2.7

The Synonyms submenu lists two words with similar meanings. You decide to replace "ideas" with "dreams." Then you will look for a synonym for "happy." You will use the Research pane to locate synonyms this time.

2. **Choose "dreams".**

3. **Click the word "happy" (first sentence, second paragraph).**

4. **Click Thesaurus in the Proofing group.**

Another Method
The keyboard equivalent is Shift + F7.

Your screen should be similar to Figure 2.8

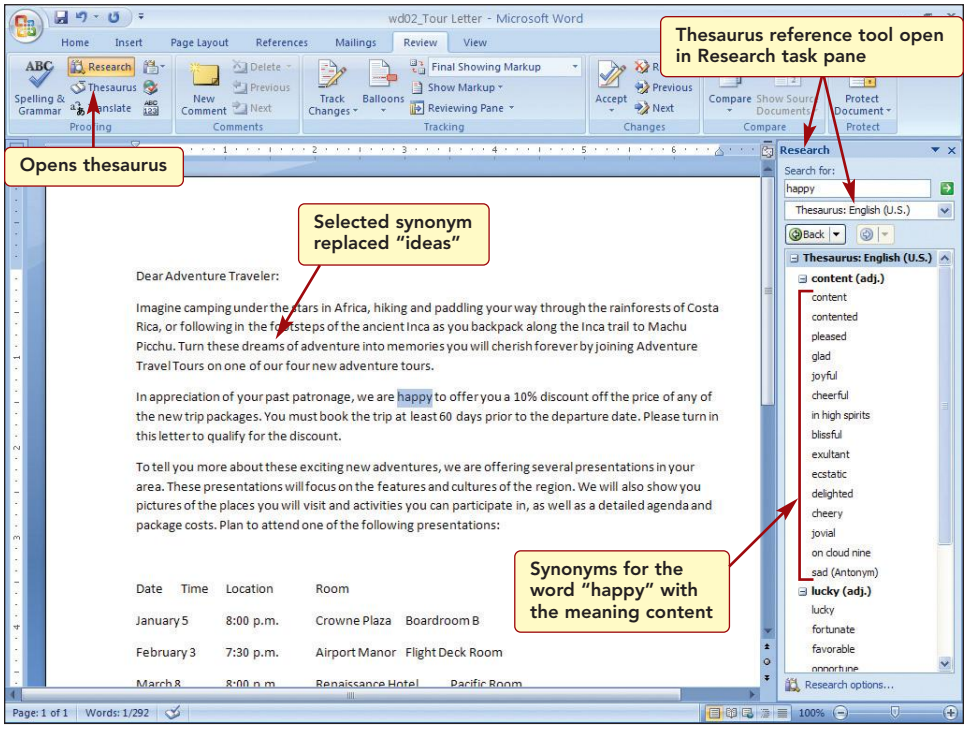


Figure 2.8

The thesaurus opens in the Research task pane and the word the insertion point is on is displayed in the Search For text box. The list box displays words that have similar meanings for the word "happy" with a meaning of

"content (adj)." The best choice from this list is "pleased." To see whether any other words are closer in meaning, you will look up synonyms for the word "pleased."

3 **Choose "pleased".**

Additional Information
You also can choose Look Up from the word's drop-down menu to look up synonyms for the word.

Your screen should be similar to Figure 2.9

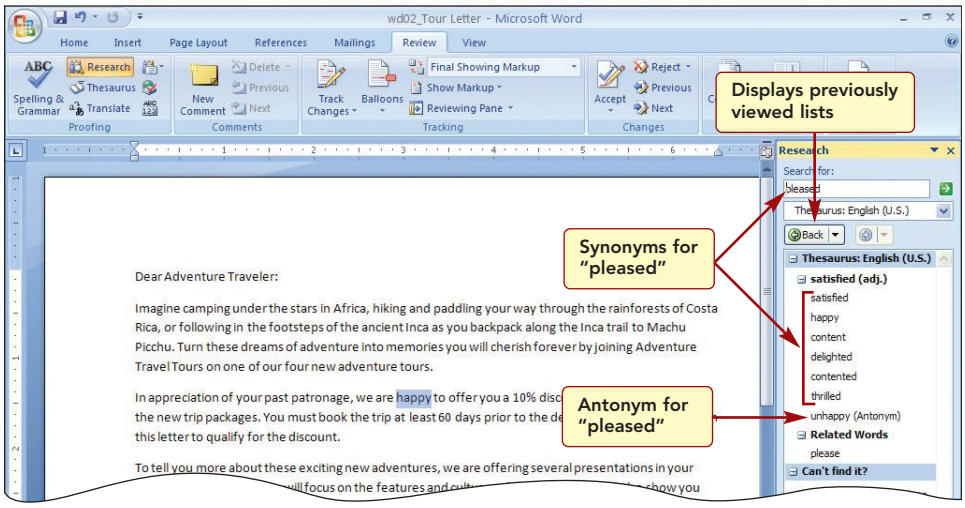


Figure 2.9

The word "pleased" is the new search term, and the list displays synonyms, as well as an antonym, for this word. You decide to use "pleased" and will return to the previous list and insert the word into the document.

4 **Click Back to display the list for the word "happy."**

Open the "pleased" synonym drop-down menu.

Choose Insert.

Close the Research task pane.

Move to the top of the document and save the revised document as Tour Letter2 to your solution file location.

Your screen should be similar to Figure 2.10

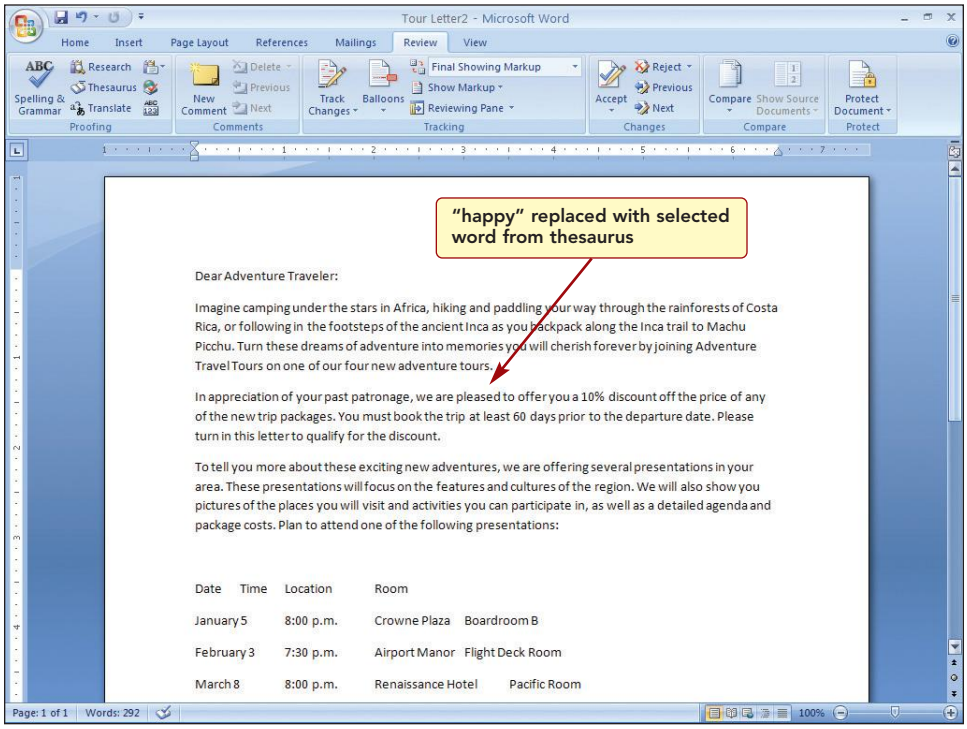


Figure 2.10

The word "happy" is replaced with the selected word from the thesaurus.

Moving and Copying Selections

After looking over the letter, you decide to add the company name in several other locations and to change the order of paragraphs. To make these changes quickly, you can move and copy selections.

Concept 2

Move and Copy

2 Text and graphic selections can be moved or copied to new locations in a document or between documents, saving you time by not having to recreate the same information. A selection that is moved is cut from its original location, called the **source**, and inserted at a new location, called the **destination**. A selection that is copied leaves the original in the source and inserts a duplicate at the destination.

When a selection is cut or copied, the selection is stored in the **system Clipboard**, a temporary Windows storage area in memory. It is also stored in the **Office Clipboard**. The system Clipboard holds only the last cut or copied item, whereas the Office Clipboard can store up to 24 items that have been cut or copied. This feature allows you to insert multiple items from various Office documents and paste all or part of the collection of items into another document.

Using Copy and Paste

You want to include the company name in the last paragraph of the letter in two places. Because the name has already been entered in the first paragraph, you will copy it instead of typing the name again.

1. **Select "Adventure Travel Tours" (first paragraph, last sentence).**
2. **Click Copy in the Clipboard group of the Home tab.**
3. **Move to the beginning of the word "journey" (last paragraph, first sentence).**
4. **Click Paste in the Clipboard group.**

Another Method

The Copy keyboard shortcut is Ctrl + C. The Paste keyboard shortcut is Ctrl + V.

Your screen should be similar to Figure 2.11

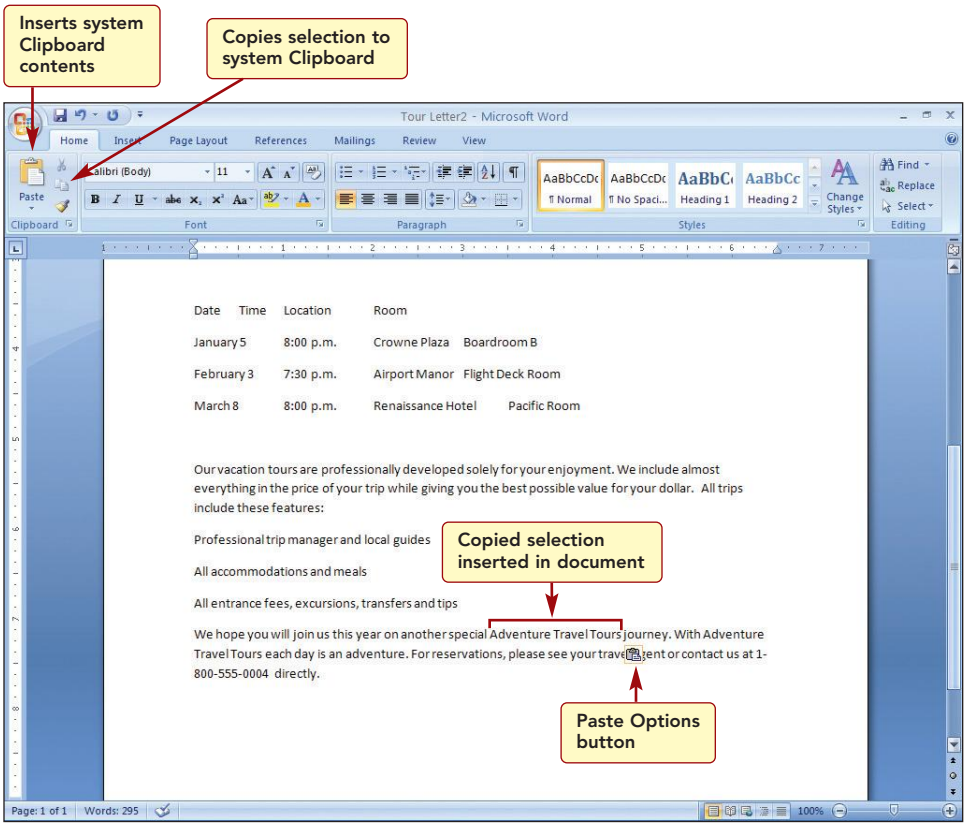


Figure 2.11

Additional Information

Using the Paste button or keyboard shortcut inserts the system Clipboard contents, not the Office Clipboard contents. You will learn about using the Office Clipboard in Lab 3.

The copied selection is inserted at the location you specified. The Paste Options button appears automatically whenever a selection is pasted. It is used to control the format of the pasted item.

2 **Click the Paste Options button.**

Your screen should be similar to Figure 2.12

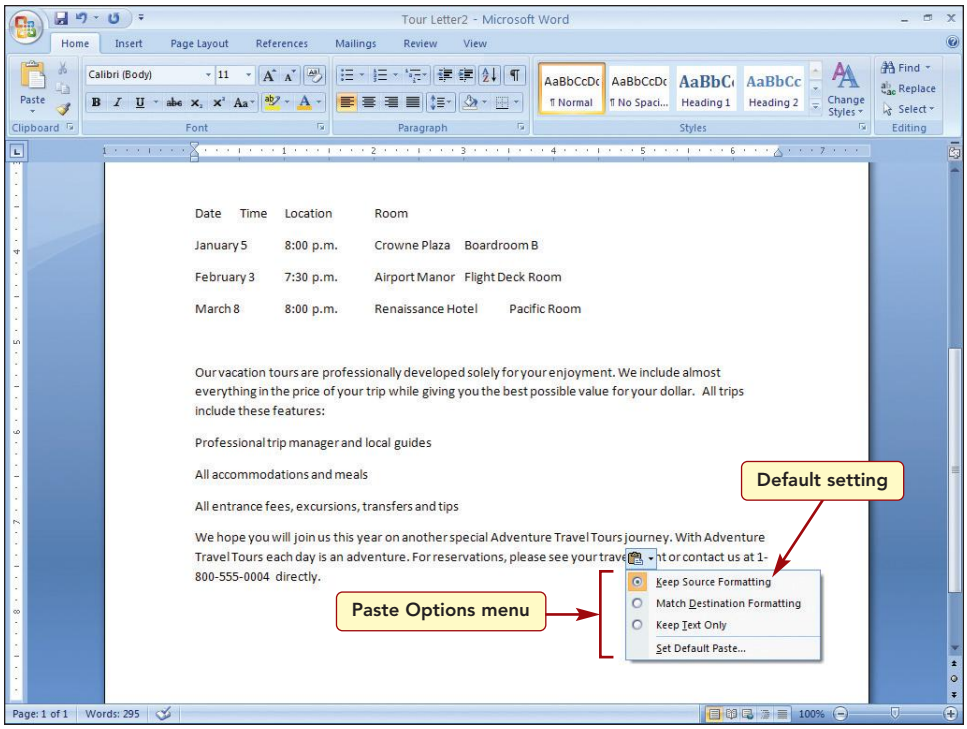


Figure 2.12

The Paste options are used to specify whether to insert the item with the same formatting that it had in the source, to change it to the formatting of the surrounding destination text, or to insert text only (from a selection that is a combination of text and graphics). The default, to keep the formatting from the source, is appropriate. The last option is used to change the default paste formatting setting to another.

Next, you want to insert the company name in place of the word "us" in the last sentence of the letter.

3 **Click outside the menu to close it.**

Select "us" (last sentence).

Right-click on the selection and choose Paste from the context menu.

Your screen should be similar to Figure 2.13

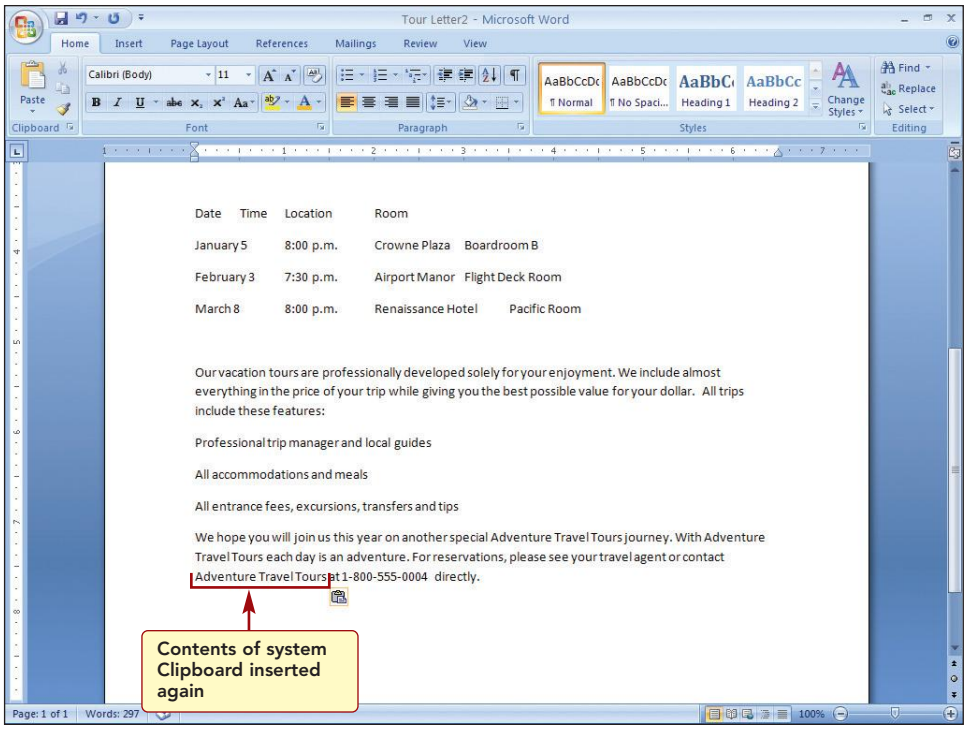


Figure 2.13

The selected text was deleted and replaced with the contents of the system Clipboard. The system Clipboard contents remain in the Clipboard until another item is copied or cut, allowing you to paste the same item multiple times.

Using Cut and Paste

You want the paragraph about the 10 percent discount (second paragraph) to follow the list of presentation dates. To do this, you will move the paragraph from its current location to the new location. The Cut and Paste commands in the Clipboard group of the Home tab are used to move selections. You will use the context menu to select the Cut command.

1 **Select the second paragraph.**

Having Trouble?
Double-click in the margin space to the left of the paragraph to select it.

Click Cut in the Clipboard group.

Another Method
The Cut keyboard shortcut is Ctrl + X. You also can choose Cut from the context menu.

Your screen should be similar to Figure 2.14

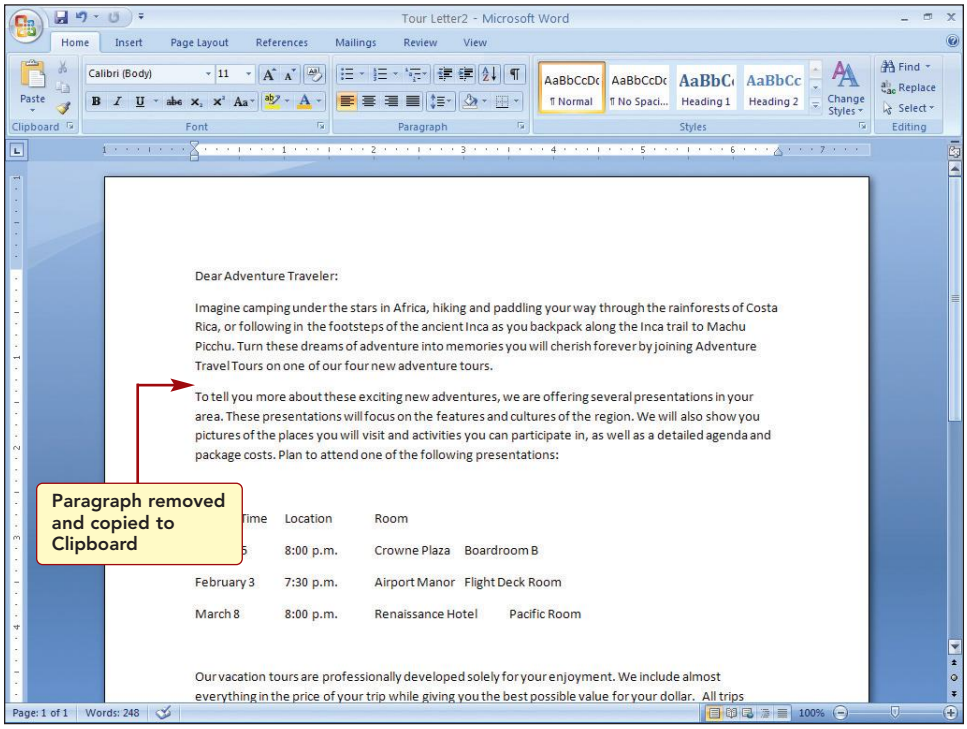


Figure 2.14

The selected paragraph is removed from the source and copied to the Clipboard. Next, you need to move the insertion point to the location where the text will be inserted and paste the text into the document from the Clipboard.

2. **Move to the beginning of the paragraph below the list of presentation dates.**

- **Press Ctrl + V.**
- **If necessary, scroll down to view the pasted paragraph.**

Your screen should be similar to Figure 2.15

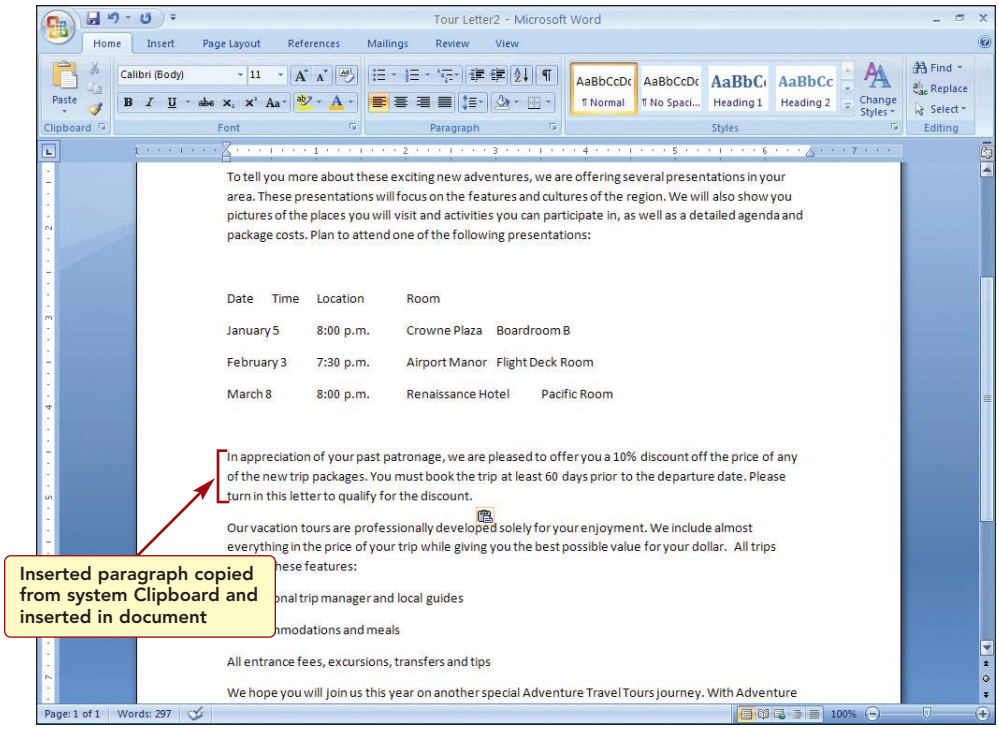


Figure 2.15

The cut paragraph is reentered into the document at the insertion point location. That was much quicker than retyping the whole paragraph!

Using Drag and Drop

Finally, you also decide to move the word "directly" in the last paragraph so that the sentence reads " . . . contact Adventure Travel Tours directly at 1-800-555-0004." Rather than use Cut and Paste to move this text, you will use the **drag-and-drop** editing feature. This feature is most useful for copying or moving short distances in a document.

To use drag and drop to move a selection, point to the selection and drag it to the location where you want the selection inserted. The mouse pointer appears as as you drag, and a temporary insertion point shows you where the text will be placed when you release the mouse button.

Additional Information

You also can use drag and drop to copy a selection by holding down Ctrl while dragging. The mouse pointer shape is .

1. **Select "directly" (last word in last paragraph).**
2. **Drag the selection to before "at" in the same sentence.**

Additional Information

You also can move or copy a selection by holding down the right mouse button while dragging.

When you release the mouse button, a context menu appears with the available move and copy options.

Your screen should be similar to Figure 2.16

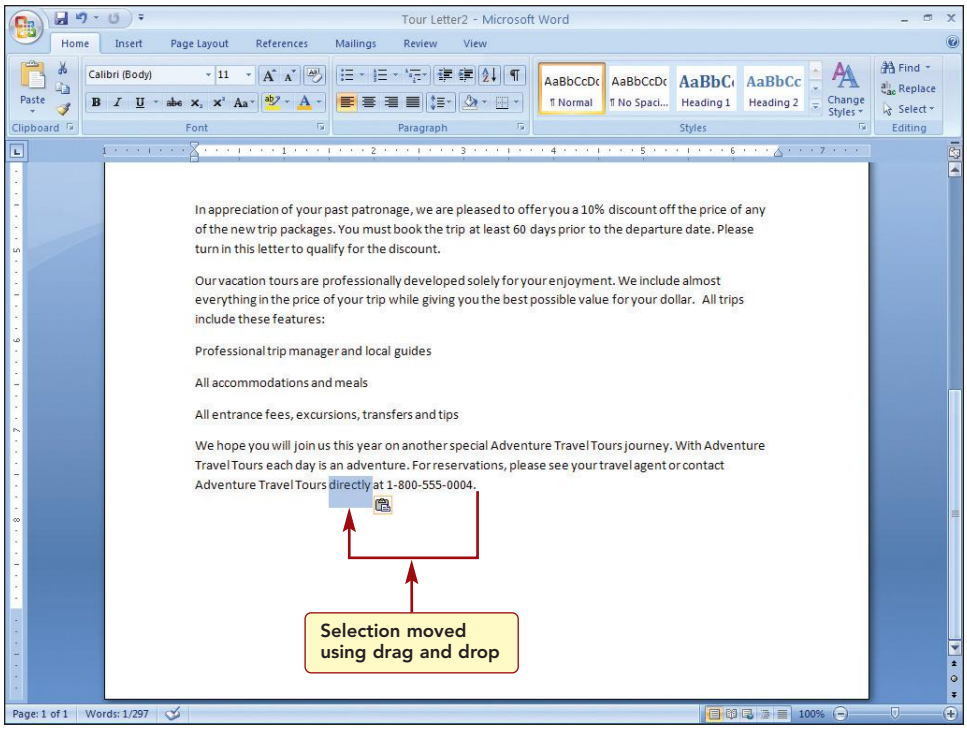


Figure 2.16

The selection is moved to the new location.

Copying between Documents

You plan to include the flyer with the letter to be mailed to clients. To do this, you will open the flyer document and copy it into the letter document file. Because all Office 2007 applications allow you to open and use multiple files at the same time, this is a very simple procedure.

1. **Move to the top of the document.**
2. **Click Save.**
3. **Open the wd02_Flyer2 document.**

Additional Information

Sometimes you may want to open several files at once. To do this, you can select multiple files from the Open dialog box by holding down Ctrl while clicking on each file name. If the files are adjacent, you can click the first file name, hold down Shift, and click on the name of the last file.

Your screen should be similar to Figure 2.17

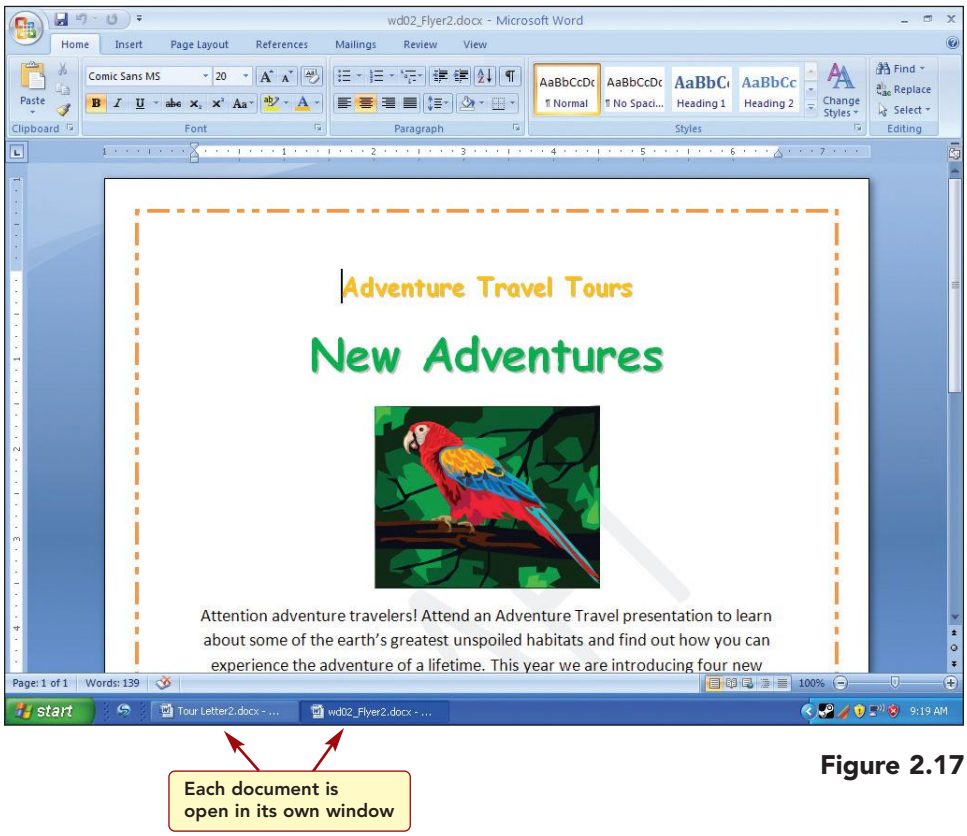


Figure 2.17

Additional Information

You also can switch quickly from one window to the other using in the Window group or by clicking the button for each open document window in the taskbar.

The flyer document is opened and displayed in a separate Word 2007 application window. You made a few changes to the flyer that your supervisor suggested. You would like to see both documents in the window at the same time. This makes it easy to compare documents or to move or copy information between documents.

2 **Open the View tab.**

- **Click View Side by Side in the Window group.**

Having Trouble?

Do not be concerned if your windows are reversed.

- **Reduce the Zoom to 75%.**
- **Scroll to the bottom of the wd02_Flyer2 window and replace Student Name with your name.**

Your screen should be similar to Figure 2.18

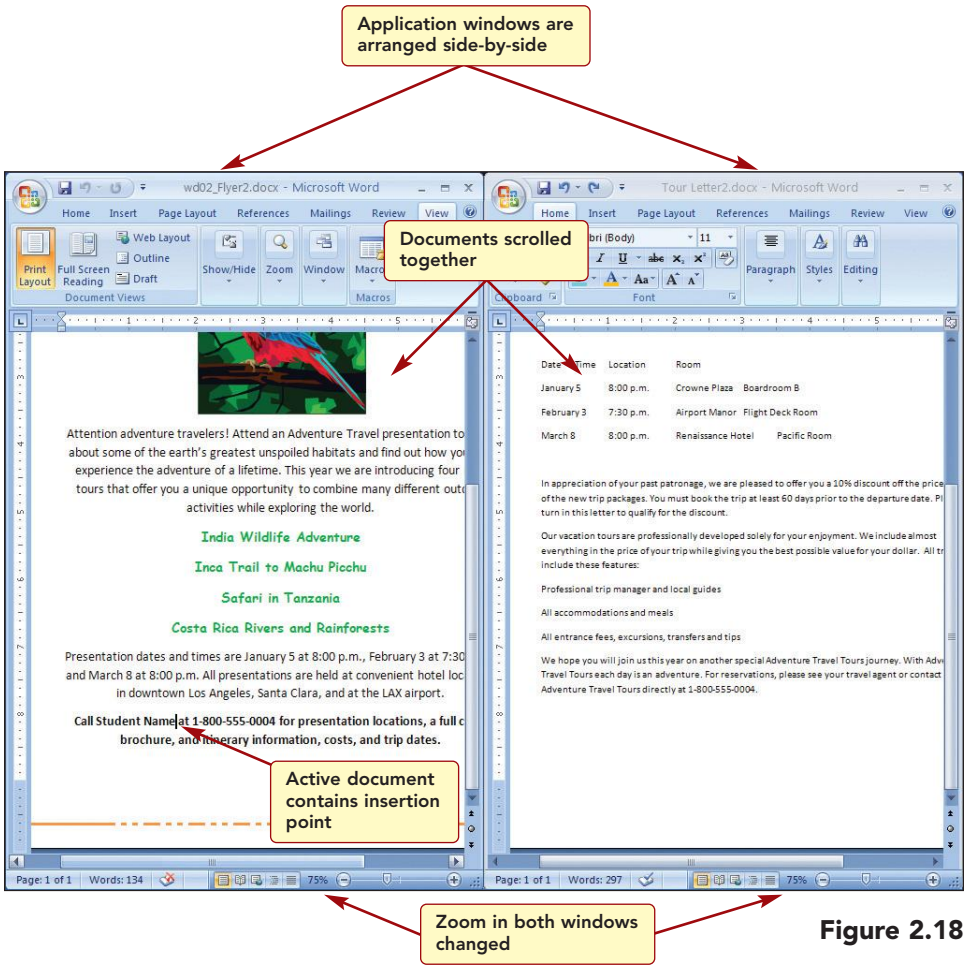


Figure 2.18

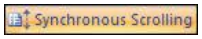
Additional Information

Using Arrange All arranges all open windows horizontally on the screen.

Now, the two Word application windows are arranged side by side on the screen. The flyer contains the insertion point, which indicates that it is the **active window**, or the window in which you can work. Simply clicking on the other document makes it active. Because the windows are side by side and there is less horizontal space in each window, the Ribbon groups are compressed. To access commands in these groups, simply click on the group button and the group commands appear.

Did you notice when you scrolled the document that both documents scrolled together? This is because the windows are **synchronized**, meaning both windows will act the same. When synchronized, the documents in both windows will scroll together so you can compare text easily. If you are not comparing text, this feature can be turned off so that they scroll independently.

3 Click  to display the Window group commands.

Click  to turn off this feature.

Scroll to the top of the wd02_Flyer2 document.

Your screen should be similar to Figure 2.19

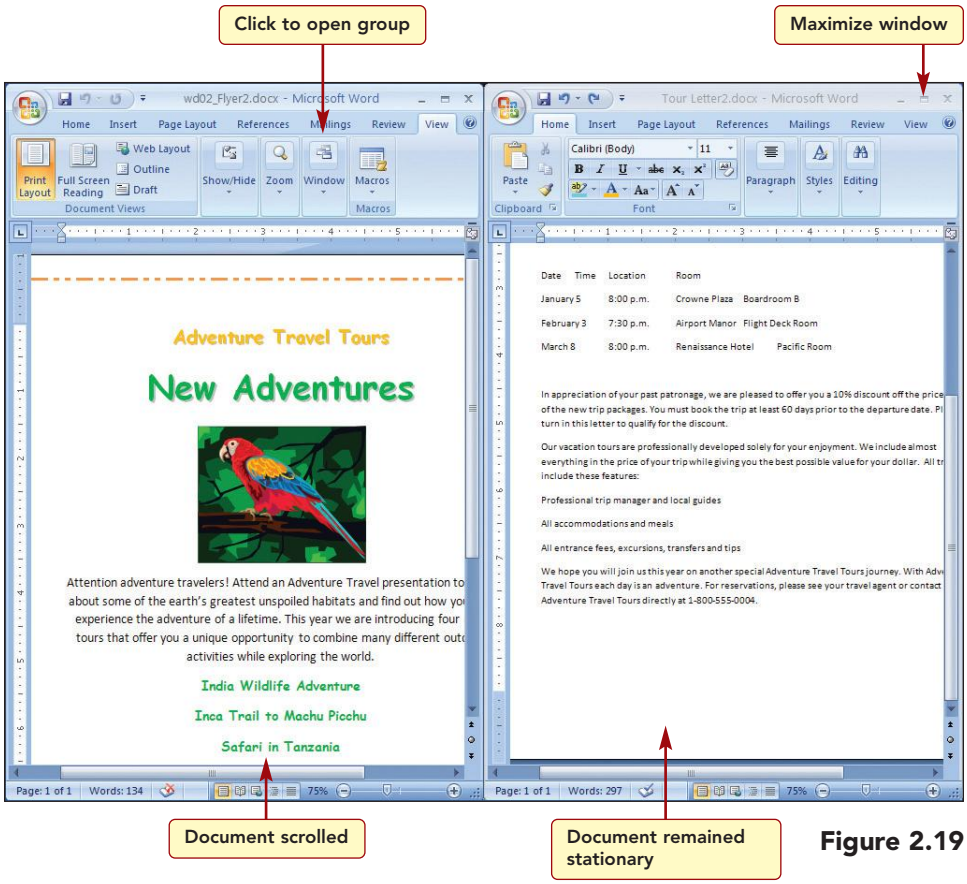


Figure 2.19

The flyer document scrolled while the letter document remained stationary.

Next you will copy the entire flyer to the bottom of the letter document using drag and drop. To copy between documents using drag and drop, hold down the right mouse button while dragging. When you release the button, a context menu appears where you specify the action you want to perform. If you drag using the left mouse button, the selection is moved by default.

4. **Click in the Tour Letter2 window to make it active and press Ctrl + End to move to the last (blank) line of the document.**

- **Click in the Flyer2 window to make it active and drag in the left margin to select the entire flyer.**
- **Right-drag the selection to the blank line at the end of the letter.**
- **Release the mouse button and choose Copy Here from the context menu.**
- **Click Maximize in the Tour Letter2 title bar to maximize the application window.**
- **Scroll the window to see the bottom of page one and the top of page two.**

Your screen should be similar to Figure 2.20

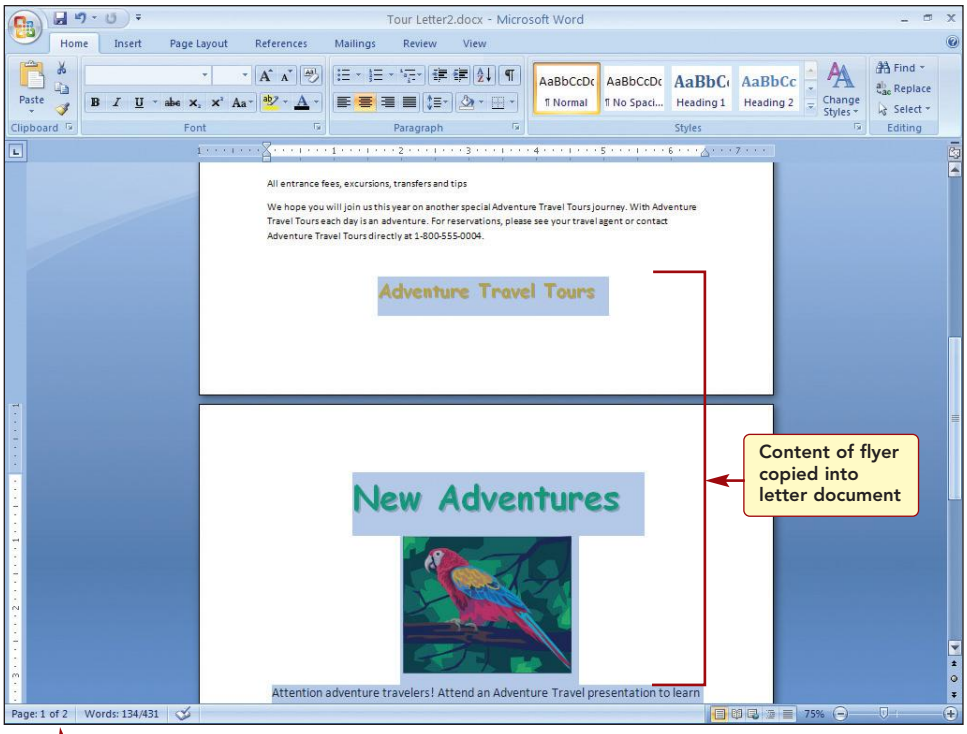


Figure 2.20

Another Method

If you did not want to arrange windows, you could just copy the selection in the active window, click on the taskbar button of the other open window to make it active, and then paste the selection in the document.

The letter now consists of two pages. Notice the status bar shows the insertion point location is on page 1 of 2 pages.

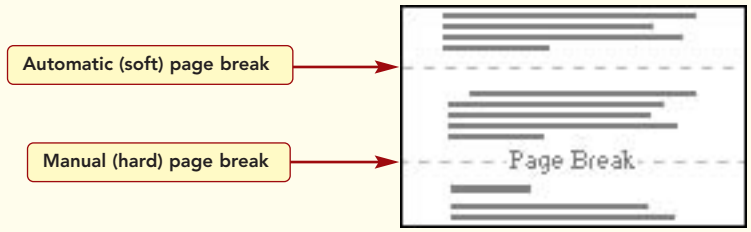
Controlling Document Paging

As text and graphics are added to a document, Word automatically starts a new page when text extends beyond the bottom margin setting. The beginning of a new page is identified by a page break.

Concept 3

Page Break

3 A **page break** marks the point at which one page ends and another begins. Two types of page breaks can be used in a document: soft page breaks and hard page breaks. As you fill a page with text or graphics, Word inserts a **soft page break** automatically when the bottom margin is reached and starts a new page. As you add or remove text from a page, Word automatically readjusts the placement of the soft page break.



Many times, however, you may want to force a page break to occur at a specific location. To do this you can manually insert a **hard page break**. This action instructs Word to begin a new page regardless of the amount of text on the previous page. When a hard page break is used, its location is never moved regardless of the changes that are made to the amount of text on the preceding page. All soft page breaks that precede or follow a hard page break continue to adjust automatically. Sometimes you may find that you have to remove the hard page break and reenter it at another location as you edit the document.

In Print Layout view, the page break is identified by a space between pages. However you cannot tell if it is a hard or soft page break. You will switch back to Draft view to see the soft page break that was entered in the document. Also notice that images are not shown in Draft view.

1 **Click in the document to deselect the flyer text.**

Switch to Draft view at 100% zoom.

If necessary, scroll the document to see the soft page break line.

Your screen should be similar to Figure 2.21

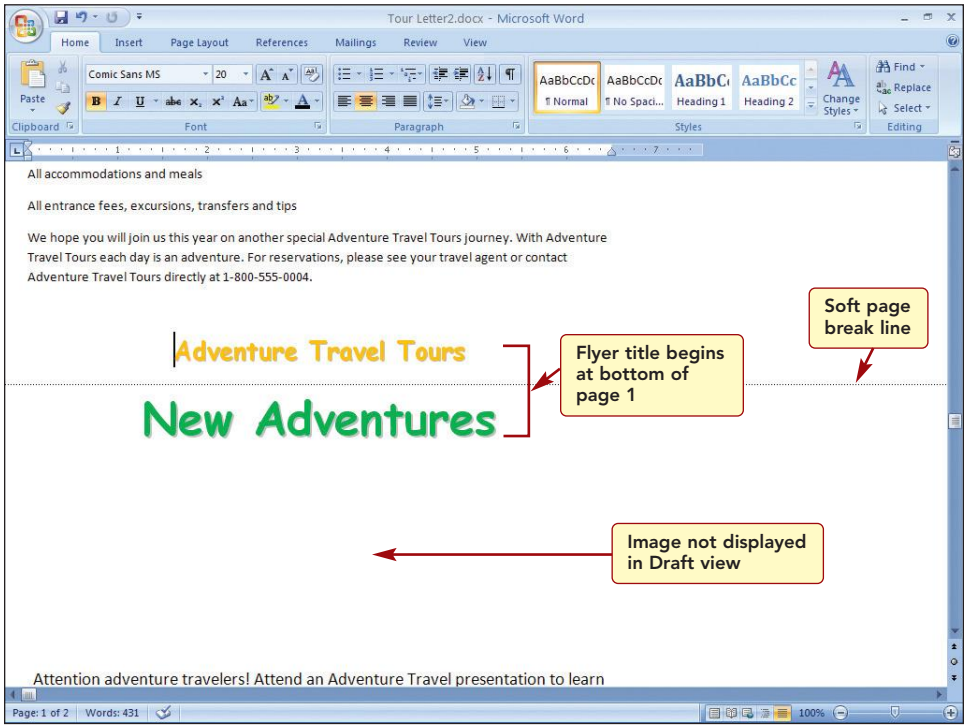


Figure 2.21

To show where one page ends and another begins, Word displays a dotted line across the page to mark the soft page break.

Inserting a Hard Page Break

Many times, the location of the soft page break is not appropriate. In this case, the location of the soft page break displays the flyer title on the bottom of page 1 and the remaining portion of the flyer on page 2. Because you want the entire flyer to print on a page by itself, you will manually insert a hard page break above the flyer title.

1. **Move to the beginning of the first line of the flyer.**
2. **Press Ctrl + ↵Enter.**

Another Method
The Ribbon equivalent is Insert/Page Break or Page Layout/Breaks/Page.

3. **Save the document again.**

Your screen should be similar to Figure 2.22

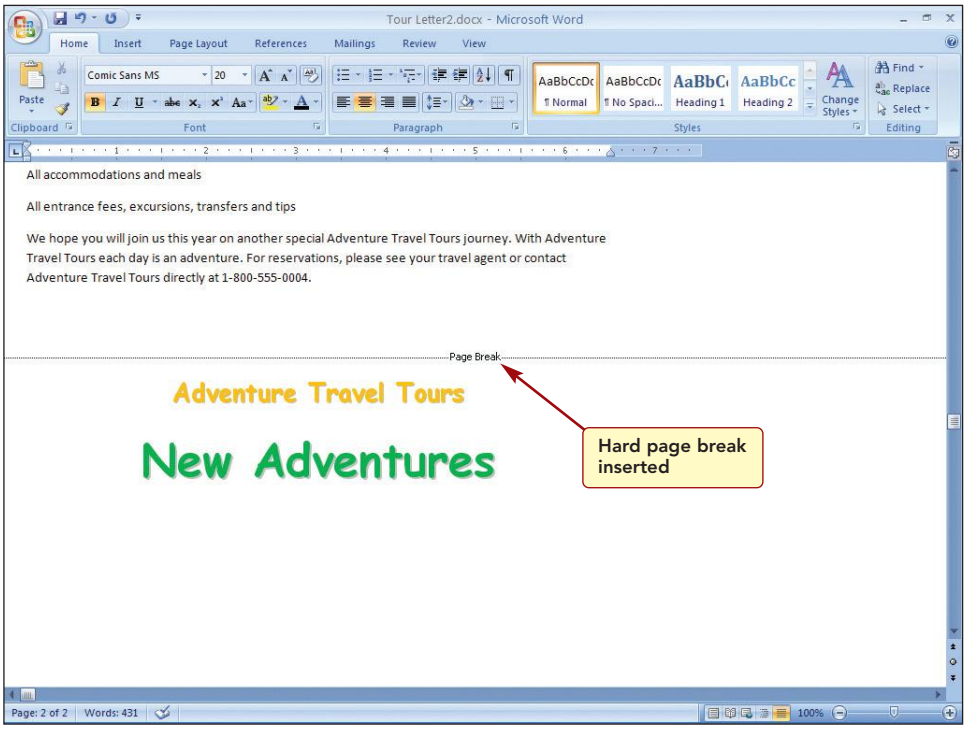


Figure 2.22

Additional Information
To remove a hard page break, simply select the hard page break line and press Delete

A dotted line and the words "Page Break" appear across the page above the flyer title, indicating that a hard page break was entered at that position.

Finding and Replacing Text

As you continue proofing the letter, you notice that the word "trip" is used frequently. You think that the letter would read better if the word "tour" was used in place of "trip" in some instances. To do this, you will use the Find and Replace feature.

Concept 4

Find and Replace

4 To make editing easier, you can use the Find and Replace feature to find text in a document and replace it with other text as directed. For example, suppose you created a lengthy document describing the type of clothing and equipment needed to set up a world-class home gym, and then you decided to change "sneakers" to "athletic shoes." Instead of deleting every occurrence of "sneakers" and typing "athletic shoes," you can use the Find and Replace feature to perform the task automatically.

You also can find and replace occurrences of special formatting, such as replacing bold text with italicized text, as well as find and replace formatting marks. Additionally, special characters and symbols, such as an arrow or copyright symbol, can be easily located or replaced. This feature is fast and accurate; however, use care when replacing so that you do not replace unintended matches.

Finding Text

First, you will use the Find command to locate all occurrences of the word "trip" in the document.

1 **Switch to Print Layout view at 100% zoom.**

Move the insertion point to the top of the document.

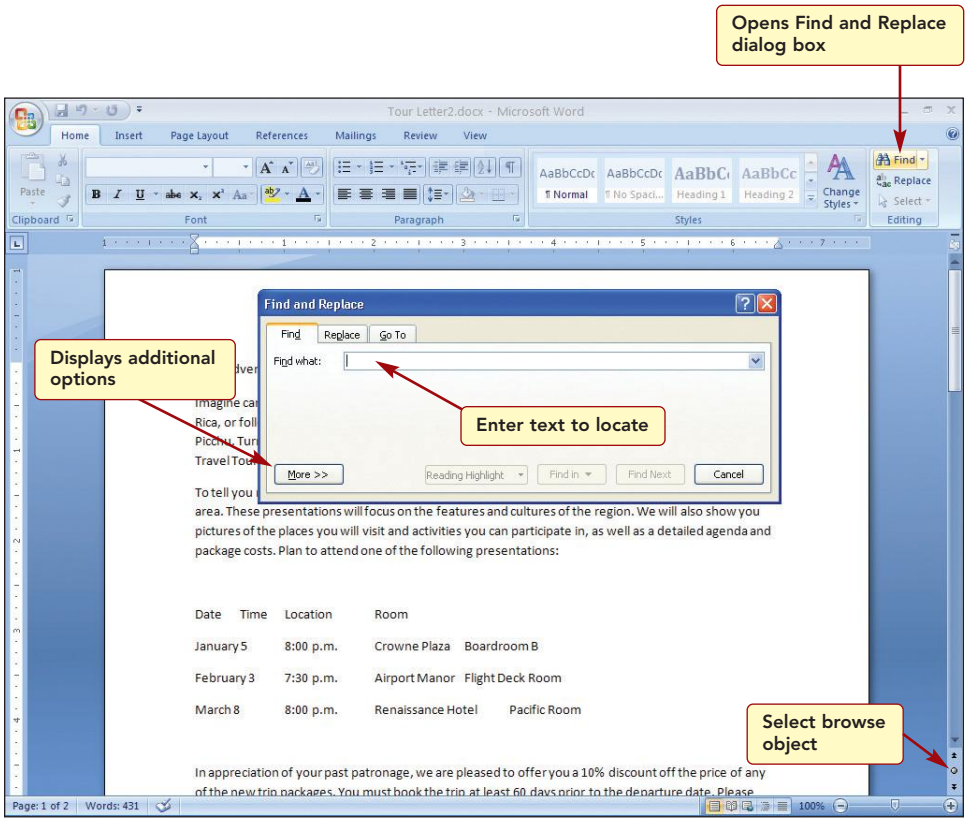
Another Method

Reminder: Use Ctrl + Home to quickly move to the top of the document.

Click Find in the Editing group.

Another Method

The keyboard shortcut is Ctrl + F. You also can open the Find and Replace dialog box by clicking the Select Browse Object button in the vertical scroll bar and selecting Find from the menu.



Your screen should be similar to Figure 2.23

Figure 2.23

The Find tab of the Find and Replace dialog box is used to define the information you want to locate. In the Find What text box, you enter the text you want to locate. In addition, you can use the search options to refine the search.

2 Click More >>.

Your screen should be similar to Figure 2.24

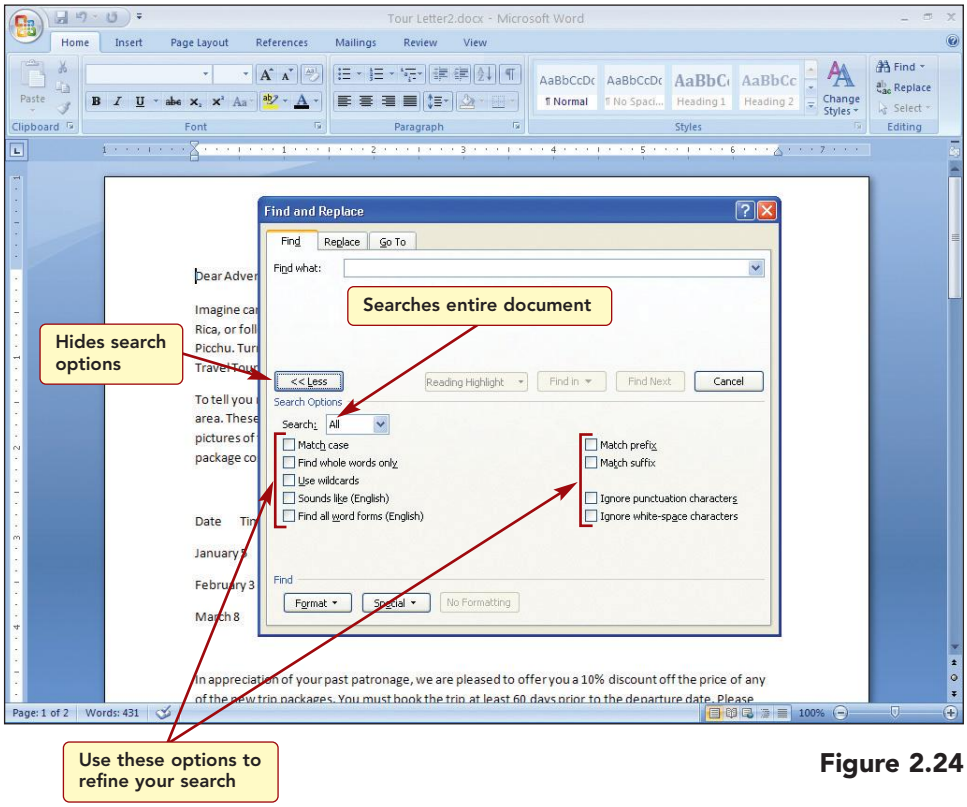


Figure 2.24

Additional Information

Clicking Format is used to search for specific formatting such as bold. Clicking Special is used to search for special characters and document elements.

The search options can be combined in many ways to help you find and replace text in documents. They are described in the table below.

Option	Effect on Text
Match case	Finds only those words in which the capitalization matches the text you typed.
Find whole words only	Finds matches that are whole words and not part of a larger word. For example, finds "cat" only and not "catastrophe" too.
Use wildcards	Fine-tunes a search; for example, c?t finds "cat" and "cot" (one-character matches), while c*t finds "cat" and "court" (searches for one or more characters).
Sounds like (English)	Finds words that sound like the word you type; very helpful if you do not know the correct spelling of the word you want to find.
Find all word forms (English)	Finds and replaces all forms of a word; for example, "buy" will replace "purchase," and "bought" will replace "purchased."

When you enter the text to find, you can type everything lowercase, because the Match Case option is not selected and the search will not be **case sensitive**. This means that lowercase letters will match both upper- and lowercase letters in the text. To further control the search, you can specify to match prefixes or suffixes. Because these are not selected, a letter or group of letters added at the beginning or end of a word to form another word will not affect the search. For example, the search will find "quick" or "quickly". Finally punctuation and white spaces will be ignored when searching the document unless these options are selected.

Also notice that the Search option default setting is All, which means Word will search the entire document, including headers and footers. You also can choose to search Up to the top of the document or Down to the end of the document from your current location in the document. These options search in the direction specified but exclude the headers, footers, footnotes, and comments from the area to search. Because you want to search the entire document, All is the appropriate setting. You will hide the search options again and begin the search.

Additional Information
You will learn about headers, footers, footnotes, and comments in later labs.

3 **Click** << Less **to close the advanced search options.**

Type trip in the Find What text box.

Click Find Next **.**

Your screen should be similar to Figure 2.25

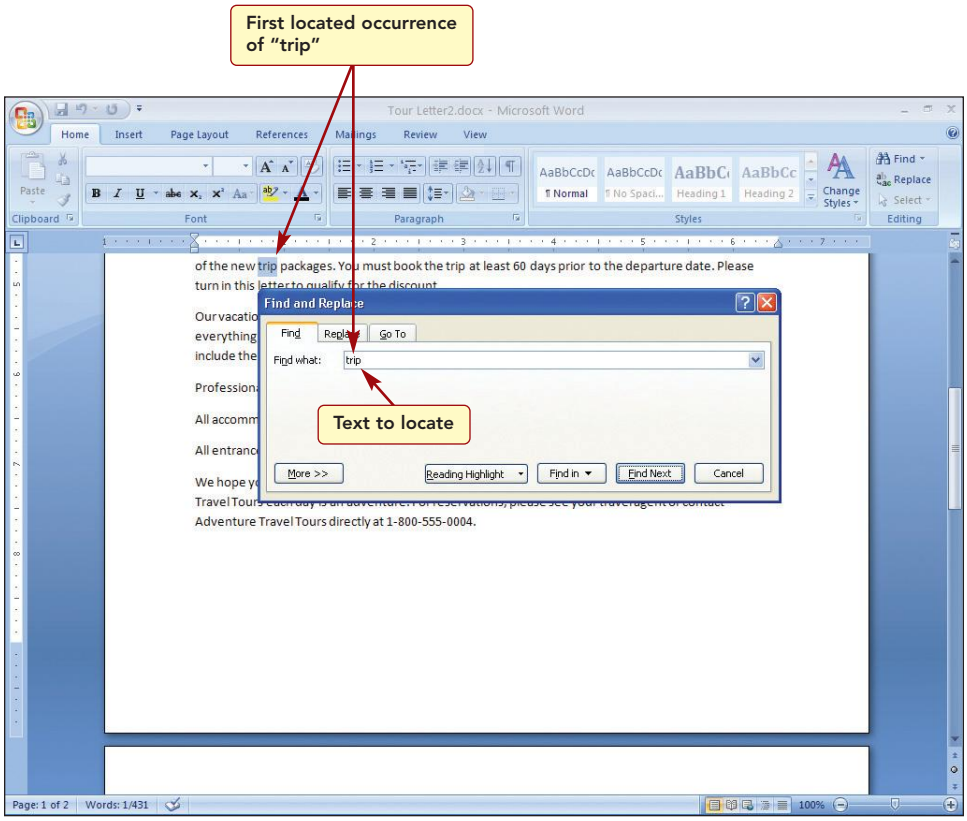


Figure 2.25

Additional Information
If you use the Up or Down options and the search does not begin at the top of the document, when Word reaches the beginning or end of the document, it asks if you want to continue searching from the end or beginning of the document. You also can highlight text to restrict the search to a selection.

Word searches for all occurrences of the text to find beginning at the insertion point, locates the first occurrence of the word "trip," and highlights it in the document.

4. **Continue to click Find Next to locate all occurrences of the word.**

Additional Information
The Find and Replace dialog box automatically moves out of the way to show the located text.

- **Click OK when Word indicates the entire document has been searched.**

Your screen should be similar to Figure 2.26

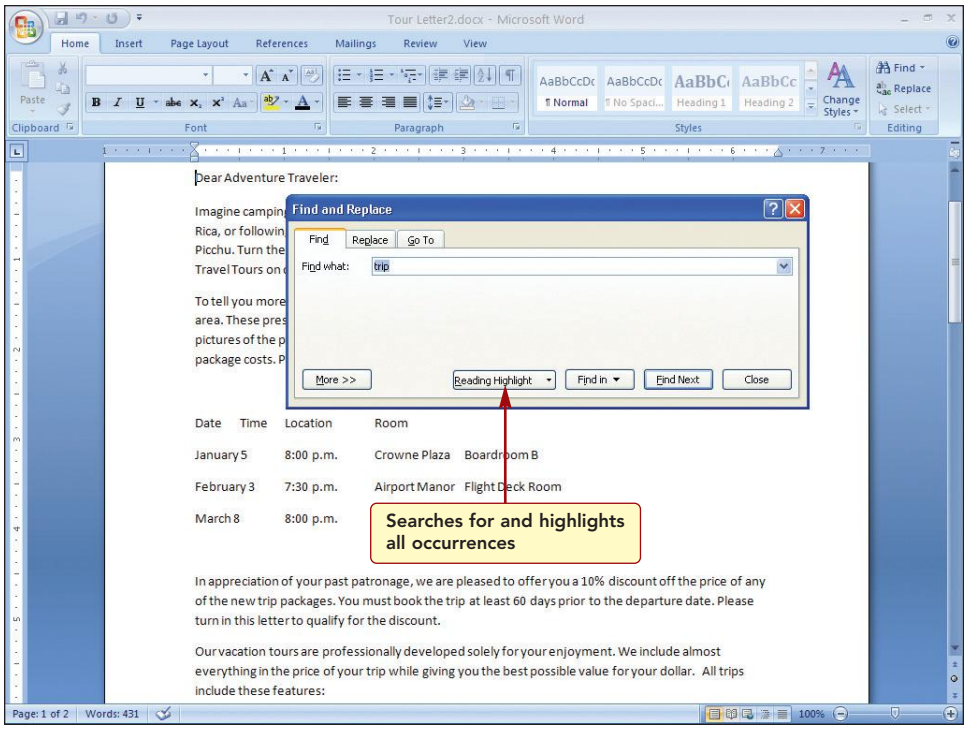


Figure 2.26

The word "trip" is used six times in the document. Using the Find command is a convenient way to quickly navigate through a document to locate and move to specified information.

To better see all located words, you will highlight them using the Reading Highlight feature.

5. **Click Reading Highlight.**

- **Choose Highlight All.**
- **If necessary, scroll the document to view the first five highlighted words.**

Your screen should be similar to Figure 2.27

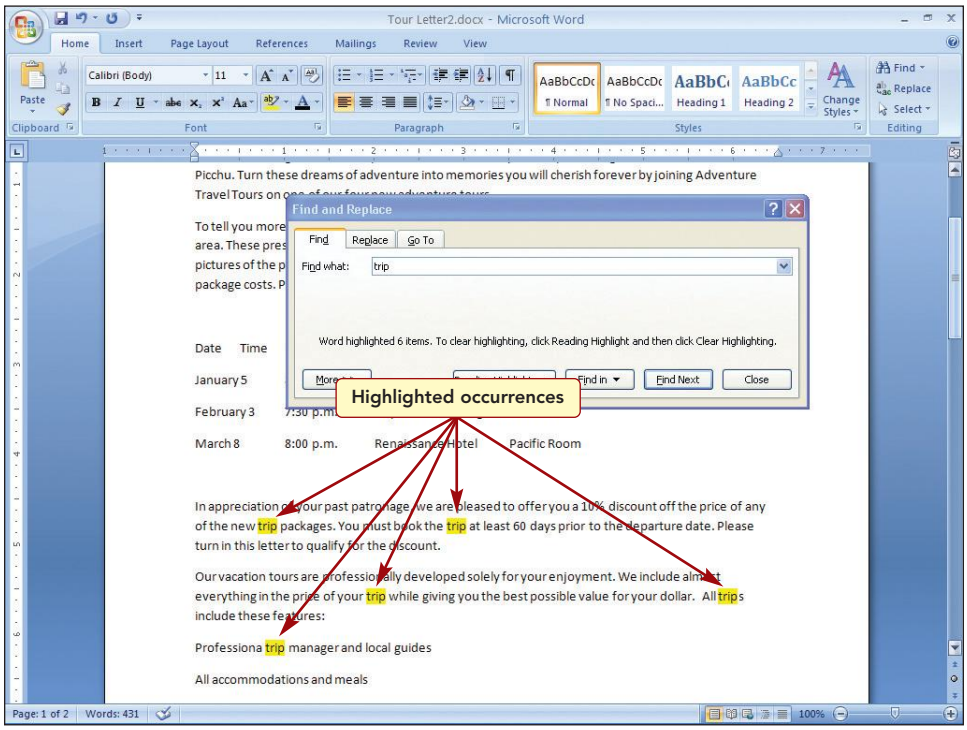


Figure 2.27

Additional Information
The highlight color is determined by the currently selected color in Text Highlight.

The first five located words are highlighted in yellow. The last use of the word trip is in the last line of the flyer. You will move to that location, and then you will turn off highlights.

6 **Scroll to the end of the document to see the highlighted word.**

Click Reading Highlight **and choose Clear Highlighting.**

Replacing Text

You decide to replace several occurrences of the word "trip" in the letter with "tour" where appropriate. You will use the Replace feature to specify the text to enter as the replacement text.

1 **Move to the top of the document.**

Open the Replace tab.

Your screen should be similar to Figure 2.28

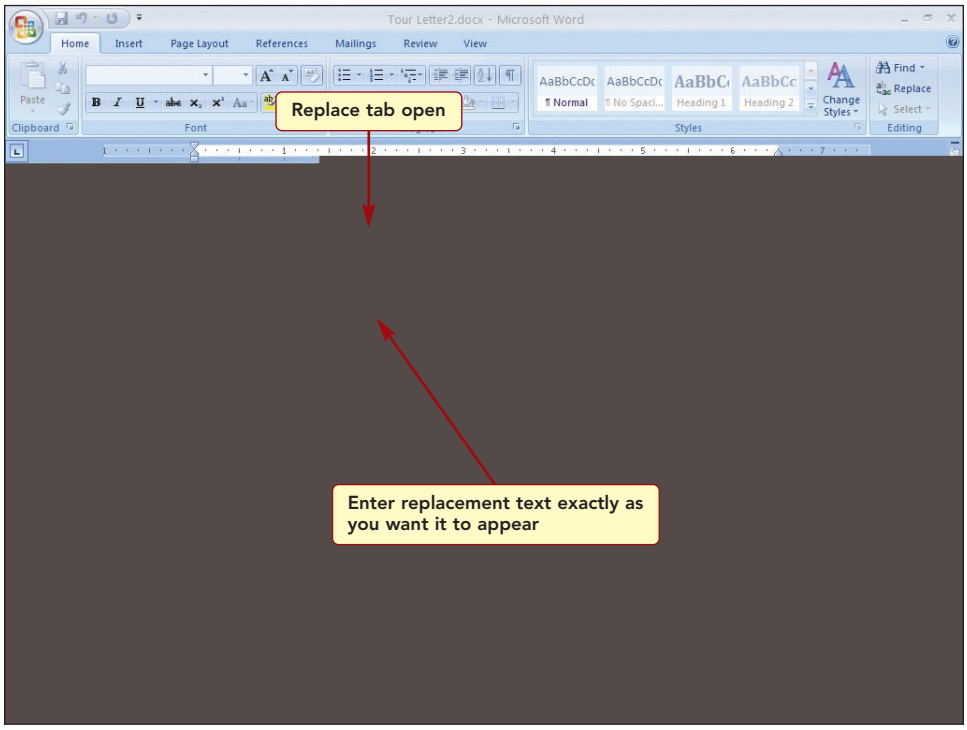


Figure 2.28

The Replace tab includes a Replace with text box in which you enter the replacement text. This text must be entered exactly as you want it to appear in your document. You want to find and replace the first occurrence of the word "trip" with "tour."

2. **Type tour in the Replace with text box.**

- **Click** Find Next.
- **Click** Replace.

Your screen should be similar to Figure 2.29

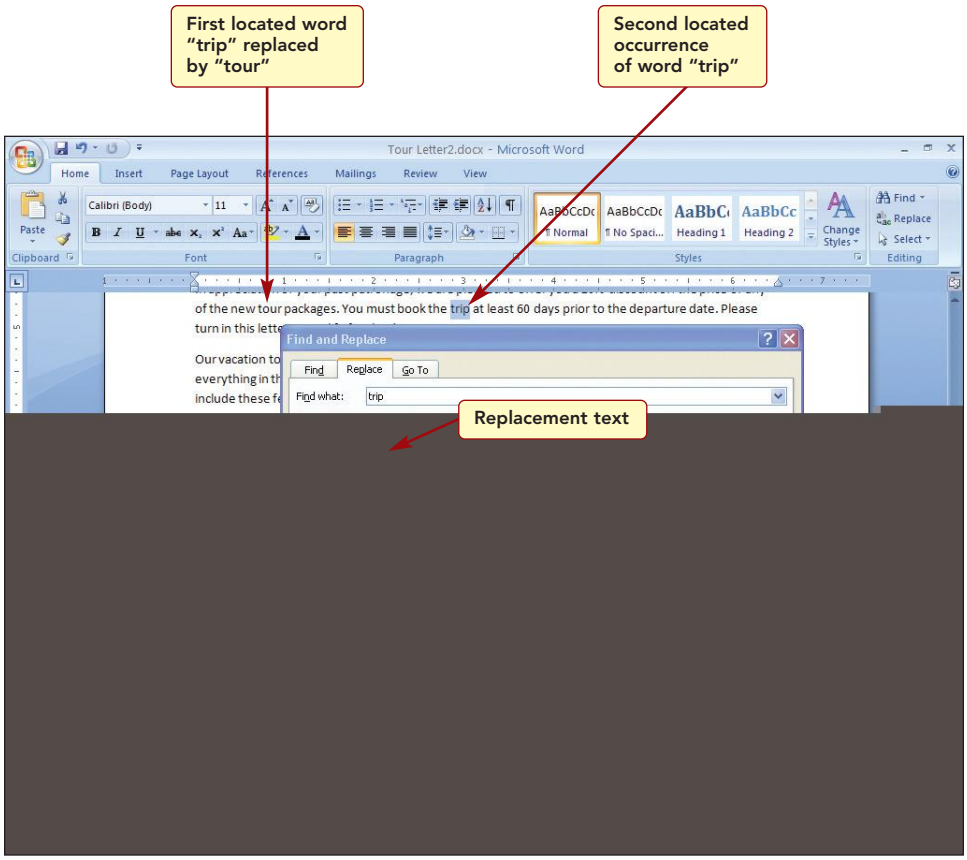


Figure 2.29

Word replaced the first located word with "tour" and has highlighted the second occurrence of the word "trip." You do not want to replace this occurrence of the word. You will continue the search without replacing the highlighted text.

3. **Click** Find Next **to skip this occurrence and locate the next occurrence.**

- **Replace the next located occurrence.**
- **Continue to review the document, replacing all other occurrences of the word "trip" with "tour," except on the final line of the flyer.**
- **Click** Find Next **.**
- **Click** OK **to close the information dialog box.**
- **Click** Close **to close the Find and Replace dialog box.**

Your screen should be similar to Figure 2.30

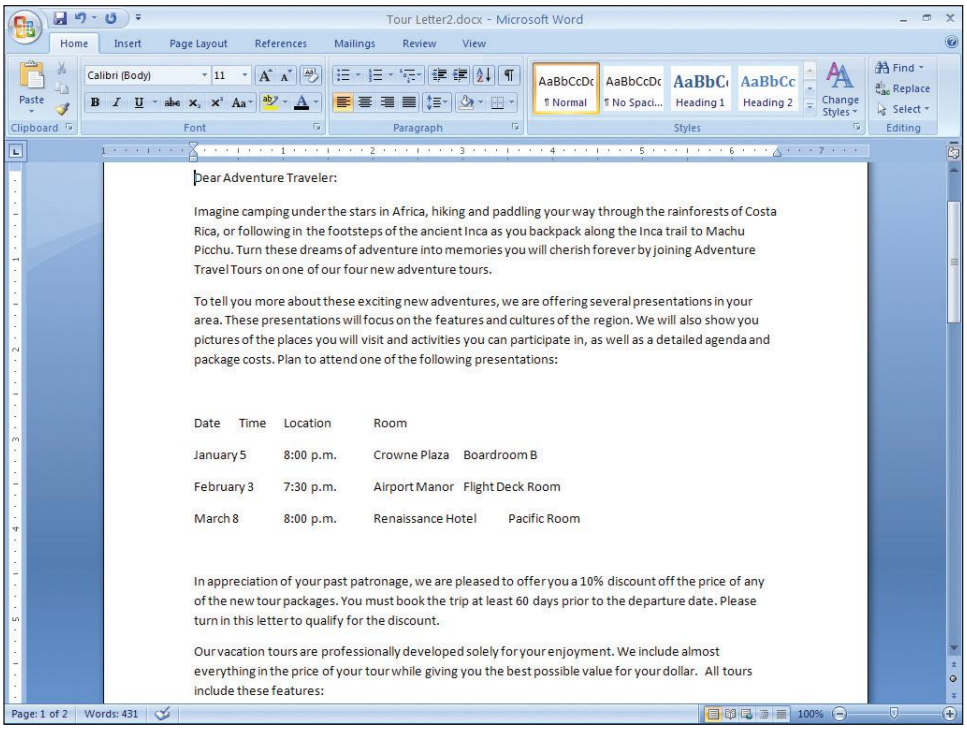


Figure 2.30

When using the Find and Replace feature, if you wanted to change all the occurrences of the located text, it is much faster to use Replace All. Exercise care when using this option, however, because the search text you specify might be part of another word and you may accidentally replace text you want to keep. If this happens, you could use Undo to reverse the action.

Inserting the Current Date

The last text change you need to make is to add the date to the letter. The Date and Time command on the Insert tab inserts the current date as maintained by your computer system into your document at the location of the insertion point. You want to enter the date on the first line of the letter, five lines above the salutation.

1. **If necessary, move to the "D" in "Dear" at the top of the letter.**
2. **Press ↵Enter 2 times to insert two blank lines.**
3. **Move to the first blank line.**
4. **Click Date & Time in the Text group of the Insert tab.**

Your screen should be similar to Figure 2.31

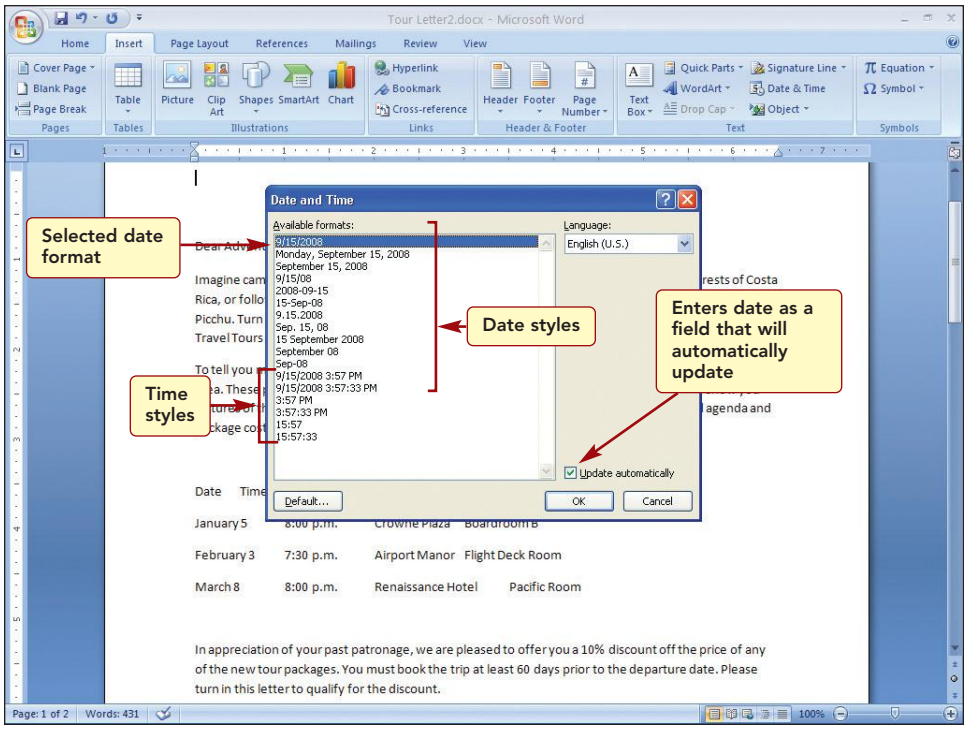


Figure 2.31

Additional Information
The current time also can be inserted into a document using the same procedure.

From the Date and Time dialog box, you select the style in which you want the date displayed in your document. The Available Formats list box displays the format styles for the current date and time. You want to display the date in the format Month XX, 2XXX, the third format setting in the list.

You also want the date to be updated automatically whenever the letter is opened or printed. You use the Update Automatically option to do this, which enters the date as a field.

Concept 5

Field

5 A **field** is a placeholder that instructs Word to insert information into a document. The **field code** contains the directions as to the type of information to insert or action to perform. Field codes appear between curly brackets {}, also called braces. The information that is displayed as a result of the field code is called the **field result**. Many field codes are automatically inserted when you use certain commands; others you can create and insert yourself. Many fields update automatically when the document changes. Using fields makes it easier and faster to perform many common or repetitive tasks.

2. **Select the third format setting.**
   - **If necessary, select Update Automatically to display the checkmark.**
   - **Click** OK **.**
   - **Point to the date.**
   - **Click on the date.**

Additional Information
You can use Alt + Shift + D to insert the current date as a field in the format MM/DD/YY.

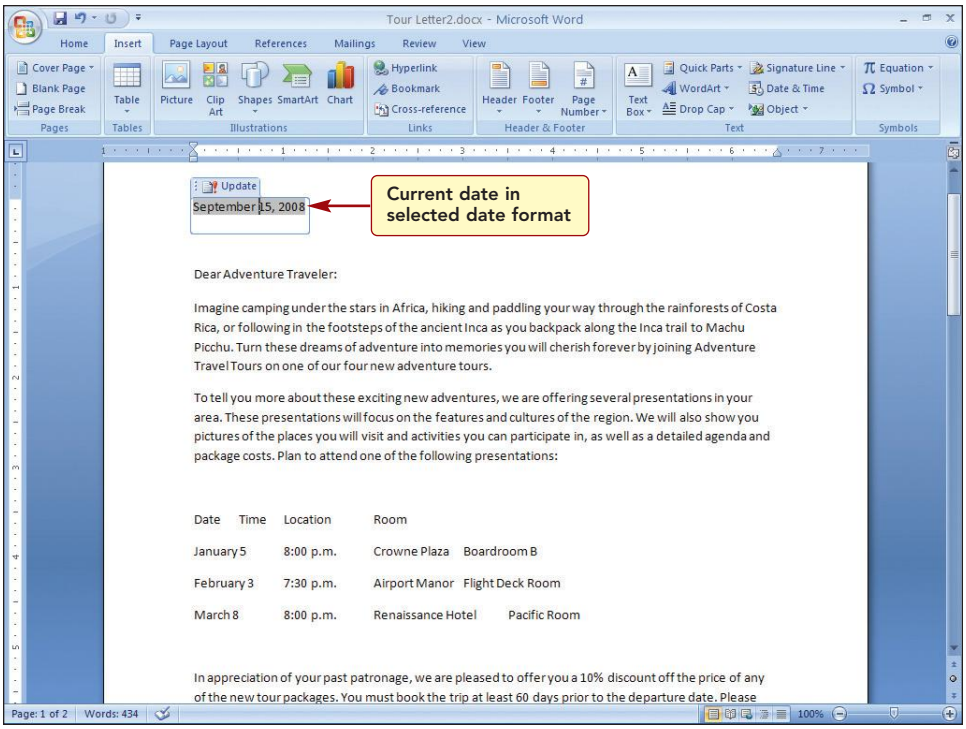


Figure 2.32

Your screen should be similar to Figure 2.32

Having Trouble?
The date on your screen will reflect the current date on your system. If your date is not shaded, this is because the setting for this feature is off in your program.

The current date is entered in the document in the format you selected. When you point to a field, the entire entry is shaded to identify the entry as a field. When the insertion point is positioned in a field entry, the entire entry is highlighted, indicating it is selected and can be modified.

The date is the field result. You will display the field code to see the underlying instructions.

Additional Information
To show or remove field shading, choose Office Button/Word Options/Advanced and then select Never, Always, or When Selected from the Field Shading box.

3. **Right-click on the date and choose Toggle Field Codes from the context menu.**

Another Method
The keyboard shortcut is Shift + F9.

Your screen should be similar to Figure 2.33

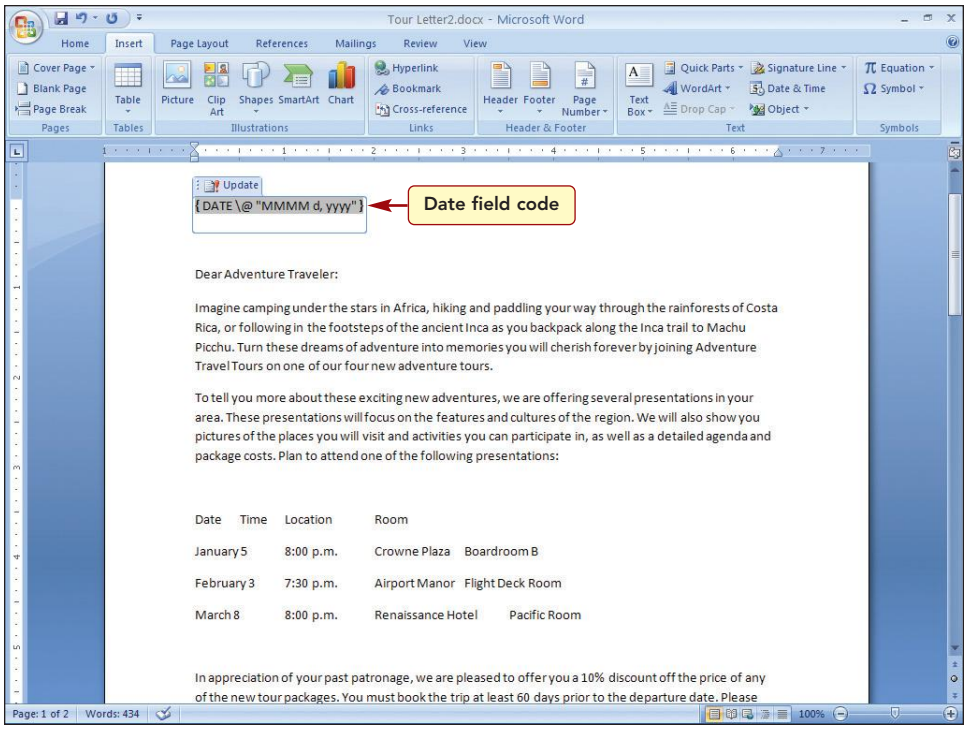


Figure 2.33

Additional Information
You can press Alt + F9 to show or hide field codes for all fields in a document.

The field code includes the field name, DATE, followed by the field properties, in this case the date format instructions. Whenever this document is printed, Word will print the current system date using this format.

4. **Press Shift + F9 to display the field result again.**

Save the document.

Modifying Page Layout

Additional Information
You will be learning about these other page layout features in future labs.

Next the manager has suggested that you make several changes to improve the overall appearance of the letter and flyer. Two common page layout features are paragraph settings, such as indents and line spacing, and page margin settings. Other page layout features include page background colors, themes, and vertical alignment and orientation of text on a page.

To give the document more interest, you can indent paragraphs, use tabs to create tabular columns of data, and change the line spacing. These formatting features are all paragraph formats that affect the entire selected paragraph.

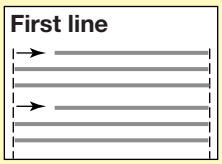
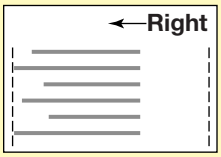
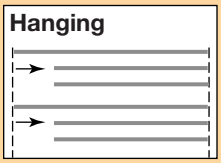
Indenting Paragraphs

Business letters typically use a block layout style or a modified block style with indented paragraphs. In a block style, all parts of the letter, including the date, inside address, all paragraphs in the body, and closing lines, are evenly aligned with the left margin. The block layout style has a very formal appearance. The modified block style, on the other hand, has a more casual appearance. In this style, certain elements such as the date, all paragraphs in the body, and the closing lines are indented from the left margin.

Concept 6

Indents

6 To help your reader find information quickly, you can **indent** paragraphs from the margins. Indenting paragraphs sets them off from the rest of the document. There are four types of indents, and their effects are described below.

Indent	Effect on Text	Indent	Effect on Text
Left 	Indents the entire paragraph from the left margin. To "outdent" or extend the paragraph into the left margin, use a negative value for the left indent.	**First Line** 	Indents the first line of the paragraph. All following lines are aligned with the left margin.
Right 	Indents the entire paragraph from the right margin. To outdent or extend the paragraph into the right margin, use a negative value for the right indent.	**Hanging** 	Indents all lines after the first line of the paragraph. The first line is aligned with the left margin. A hanging indent is typically used for bulleted and numbered lists.

You want to change the letter style from the block paragraph style to the modified block style. You will begin by indenting the first line of the first paragraph. The quickest way to indent the first line of a paragraph is to press Tab when the insertion point is positioned at the beginning of the first line. Pressing Tab indents the first line of the paragraph to the first tab stop from the left margin. A tab stop is a marked location on the horizontal ruler that indicates how far to indent text each time the Tab key is pressed. The default tab stops are every 0.5 inch.

1. **Change the zoom to Page Width.**

Another Method
Click on the Zoom percentage in the status bar to open the Zoom dialog box.

- **Move to the beginning of the first paragraph.**
- **Press Tab.**

Another Method
You can also open the Indents and Spacing tab of the Paragraph dialog box and choose Special/First Line/By 0.5.

Your screen should be similar to Figure 2.34

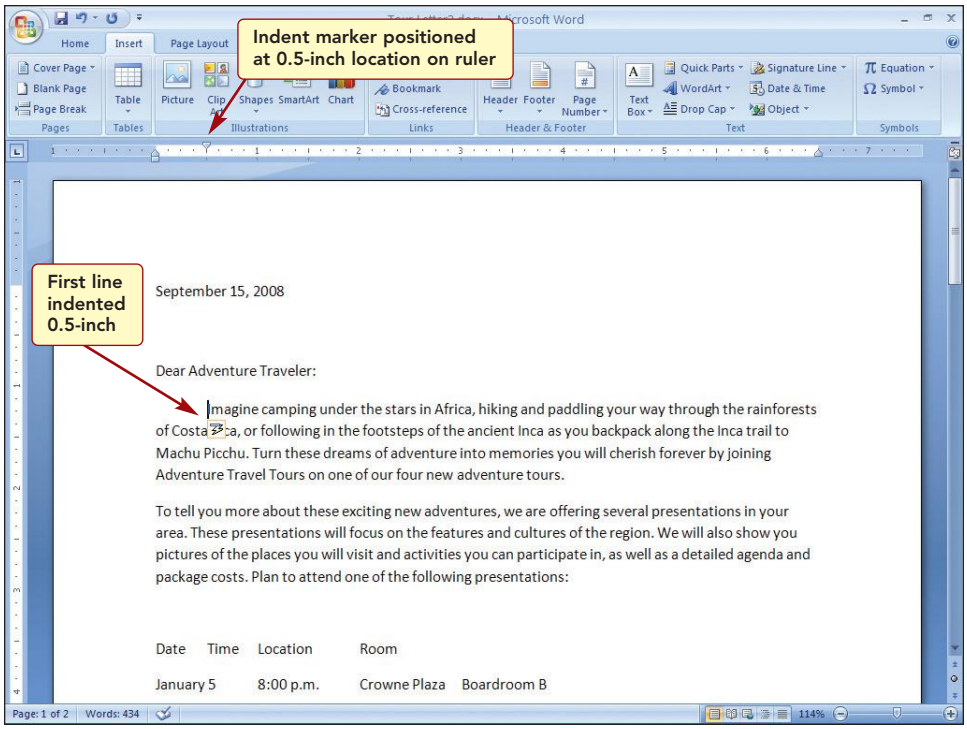


Figure 2.34

The first line of the paragraph indents a half inch from the left margin. The text in the paragraph wraps as needed, and the text on the following line begins at the left margin. Notice that the First Line Indent marker on the ruler moved to the 0.5-inch position. This marker controls the location of the first line of text in the paragraph.

If the insertion point was positioned anywhere else within the line of text, pressing Tab would move the text to the right of the insertion point to the next tab stop and the indent marker would not move.

You can indent the remaining paragraphs individually, or you can select the paragraphs and indent them simultaneously by dragging the upper indent marker on the ruler.

Additional Information
To indent an entire paragraph, click in front of any line except the first line and press Tab.

2 **Beginning with the second paragraph, select the remaining text on page 1.**

- **Drag the First Line Indent marker on the ruler to the 0.5-inch position.**

Additional Information

A ScreenTip identifies the First Line Indent marker when you point to it.

Your screen should be similar to Figure 2.35

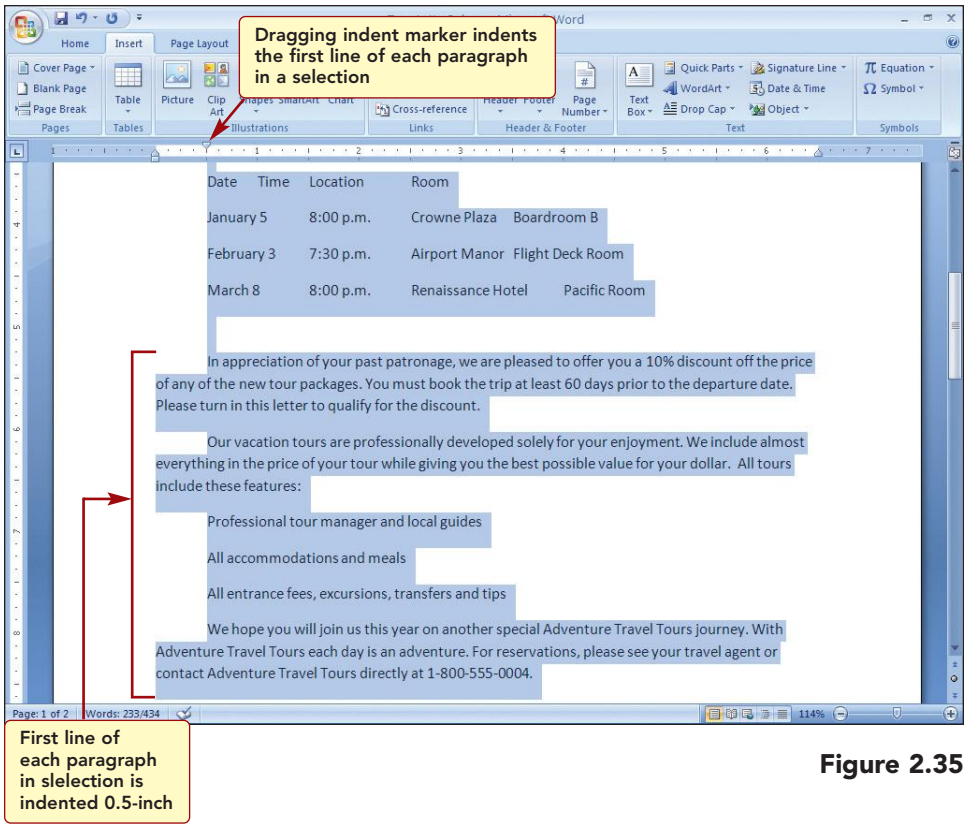


Figure 2.35

The first line of each paragraph in the selection is indented. Notice that each line of the presentation date and time information and the list of tour features also are indented. This is because Word considers each line a separate paragraph (each line ends with a paragraph mark.) You decide to further indent the date and time information to the 1-inch position.

3 **Select the line of table headings and the three lines of data.**

- **Drag the First Line Indent marker on the ruler to the 1-inch position.**

Having Trouble?

If the selection does not move to the 1-inch position, repeat dragging the First Line Indent marker to the 1-inch position.

Your screen should be similar to Figure 2.36

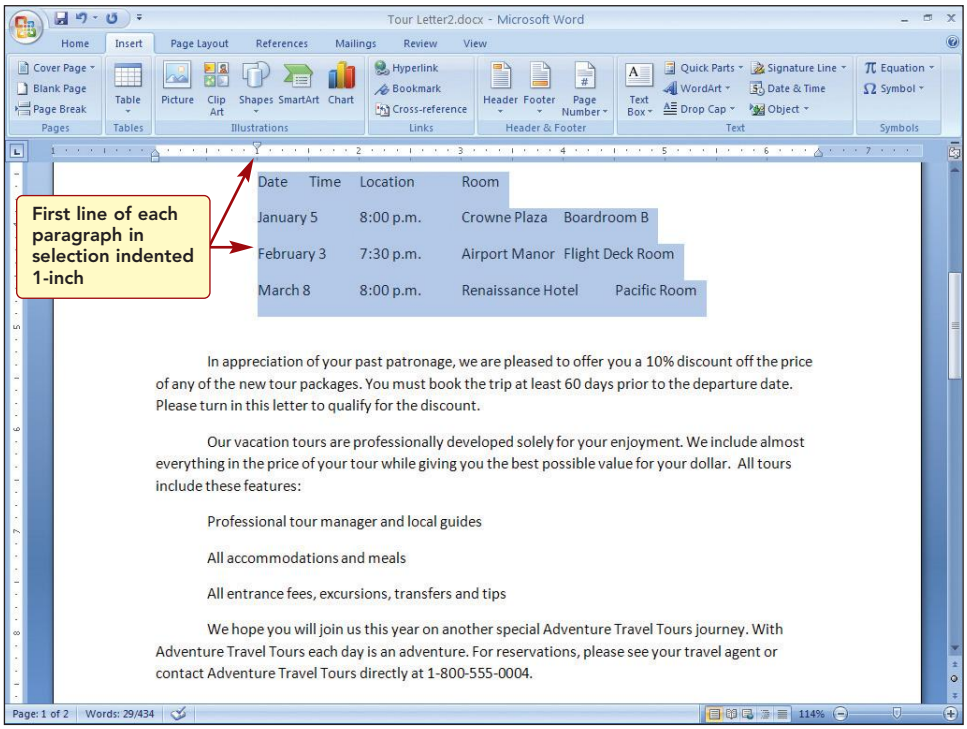


Figure 2.36

Setting Tab Stops

Additional Information
The default tab stops are visible on the ruler as light vertical lines below the numbers.

Next you want to improve the appearance of the list of presentation times and dates. The date and time information was entered using the Tab key to separate the different columns of information. However, because the default tab stops are set at every 0.5 inch, the columns are not properly aligned. You want to reformat this information to appear as a tabbed table of information so that it is easier to read, as shown below.

Date	Time	Location	Room
January 5	7:00 pm	Town Center Hotel	Room 284B
February 3	7:30 pm	Airport Manor	Conference Room A
March 8	7:00 pm	Country Inn	Mountainside Room

To improve the appearance of the information, you will set manual **tab stops** that will align the information in evenly spaced columns. You also can select from five different types of tab stops that control how characters are positioned or aligned with the tab stop. The following table explains the five tab types, the tab marks that appear in the tab selector box (on the left end of the horizontal ruler), and the effects on the text.

To align the information, you will set three left tab stops at the 2-inch, 3-inch, and 4.5-inch positions. You can quickly specify manual tab stop locations and types using the ruler. To select a type of tab stop, click the tab selector box to cycle through the types. Then, to specify where to place the selected tab stop type, click on the location in the ruler. As you specify the new tab stop settings, the table information will align to the new settings.

Tab Type	Tab Mark	Effects on Text	Example
Left		Extends text to right from tab stop	left
Center		Aligns text centered on tab stop	center
Right		Extends text to left from tab stop	right
Decimal		Aligns text with decimal point	35.78
Bar		Draws a vertical line through text at tab stop	|

1. **If necessary, select the line of table headings and the three lines of information.**
2. **If necessary, click the tab alignment selector box until the left tab icon appears.**
3. **Click on the 2-inch position on the ruler.**
4. **Click on the 3-inch and the 4.5-inch positions on the ruler.**
5. **Click anywhere in the table to deselect it.**

Your screen should be similar to Figure 2.37

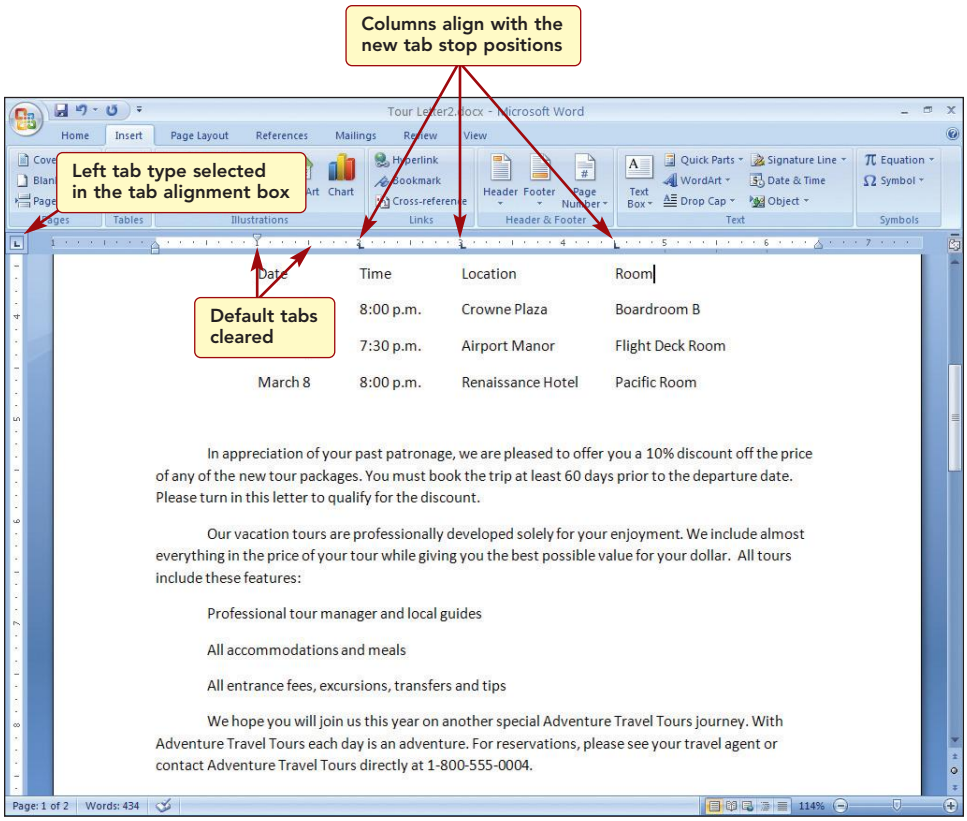


Figure 2.37

Additional Information

The tab selector box also can be used to insert first line or hanging indents by selecting First Line Indent or Hanging Indent.

The three tabbed columns appropriately align with the new tab stops. All default tabs to the left of the manual tab stops are cleared. After looking at the columns, you decide the column headings would look better centered over the columns of information. To make this change, you will remove the three left tab stops for the heading line and then add three center tab stops.

Manual tab stops can be removed by dragging the tab stop up or down off the ruler. They also can be moved by dragging them left or right along the ruler. In addition the Tabs dialog box can be used to make these same changes. You will first drag a tab stop off the ruler to remove it and then you will use the Tabs dialog box to clear the remaining tab stops.

2. **Move to anywhere in the table heading line.**

- **Drag the 2-inch tab stop mark off the ruler.**
- **Double-click any tab stop to open the Tabs dialog box.**
- **Click** Clear All **to remove the remaining two tab stops.**
- **Click** OK **.**
- **Click the tab alignment selector box until the center tab icon appears.**
- **Set center tab stops at the 1.25-inch, 2.25-inch, 3.5-inch, and 5-inch positions.**

Your screen should be similar to Figure 2.38

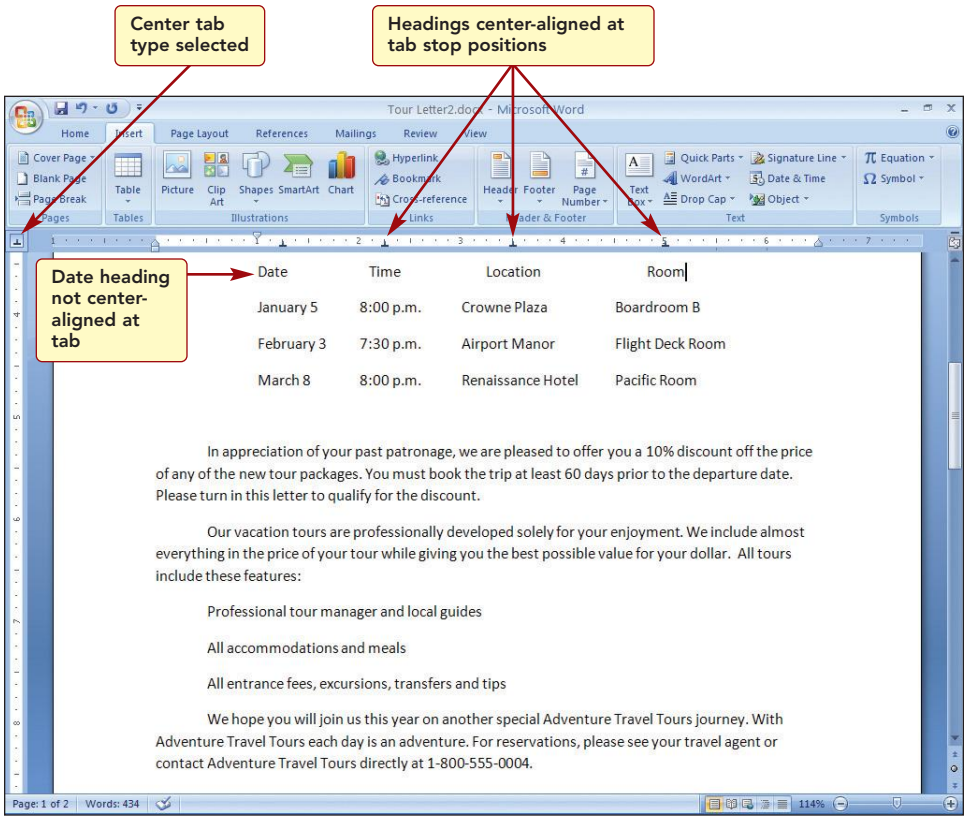


Figure 2.38

The Time, Location, and Room headings are appropriately centered on the tab stops. However, the Date heading still needs to be indented to the 1.25-inch tab stop position by pressing Tab.

3 **If necessary, move to the "D" in "Date."**

Press Tab.

Your screen should be similar to Figure 2.39

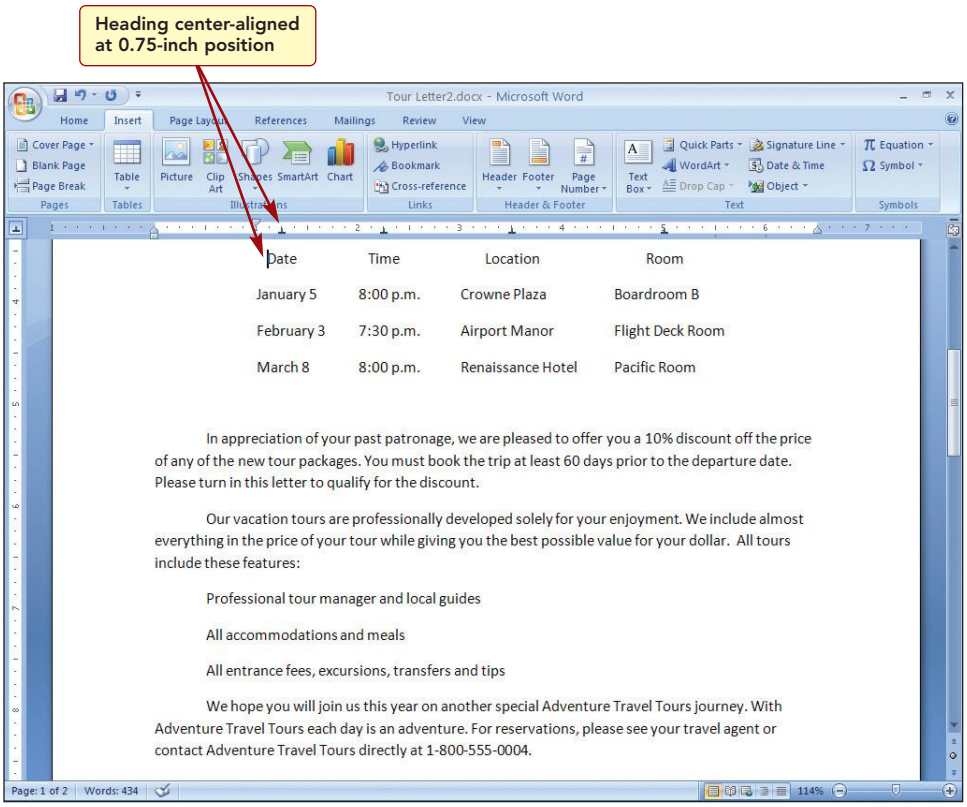


Figure 2.39

As you can see, setting different types of tab stops is helpful for aligning text or numeric information vertically in columns. Using tab stops ensures that the text will indent to the same set location. Setting manual tab stops instead of pressing Tab or Spacebar repeatedly is a more professional way to format a document, as well as faster and more accurate. It also makes editing easier because you can change the tab stop settings for several paragraphs at once.

Adding Leader Characters

To make the presentation times and location information even easier to read, you will add leader characters before each of the tab stops. **Leader characters** are solid, dotted, or dashed lines that fill the blank space between tab stops. They help the reader's eye move across the blank space between the information aligned at the tab stops. To do this, you use the Tabs dialog box.

1. **Select the three lines of presentation information, excluding the heading line.**

2. **Double-click any tab stop on the ruler.**

Another Method

You could also open the Paragraph dialog box and choose Tabs....

Your screen should be similar to Figure 2.40

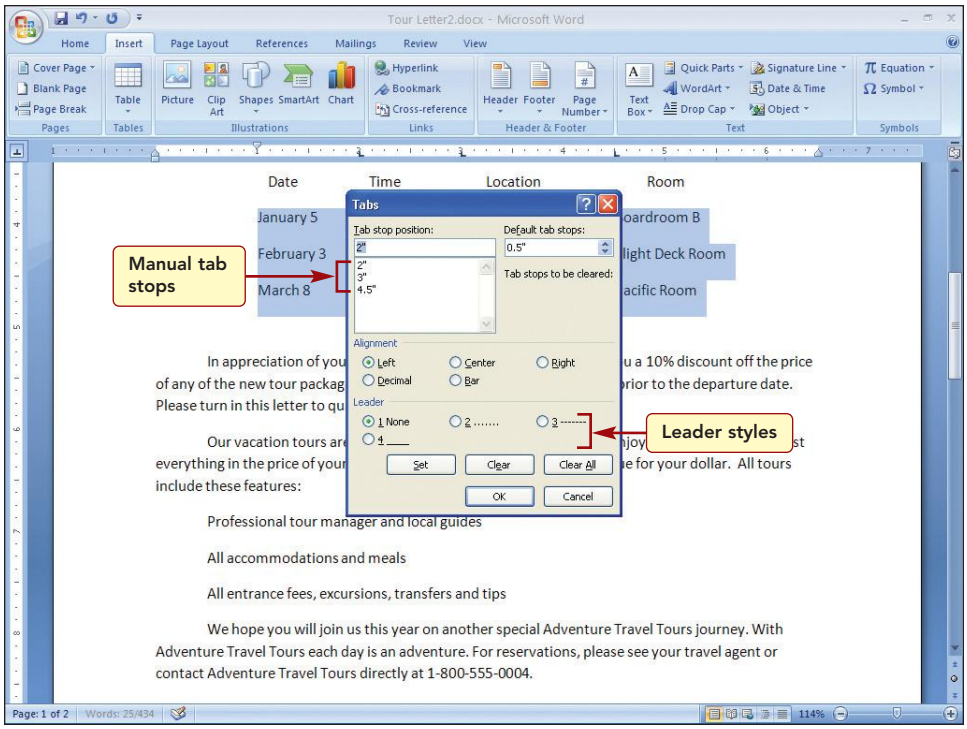


Figure 2.40

Additional Information

The Tabs dialog box can be used to set more precise tab stops than can be set using the ruler.

Notice that the Tabs dialog box displays the manual tabs you set on the ruler. You also can set tab stops using the Tabs dialog box by entering the tab positions in the text box and selecting the tab alignment. You also can clear an individual tab stop by selecting the tab stop position from the list and clicking Clear.

The 2-inch tab stop appears in the Tab stop position text box, indicating it is the tab stop that will be affected by your actions. The Leader setting is None for the 2-inch tab stop. You can select from three styles of leader characters. You will use the third leader style, a series of dashed lines. The leader characters fill the empty space to the left of the tab stop. Each tab stop must have the leader style individually set.

2. **Select the** 3 ------- **leader style.**

- **Click** Set **.**
- **Select the 3-inch tab stop setting from the Tab Stop Position list box.**
- **Select** 3 ------- **.**
- **Click** Set **.**
- **In a similar manner, set the tab leader for the 4.5-inch tab.**
- **Click** OK **.**
- **Click in the table to deselect the text.**

Your screen should be similar to Figure 2.41

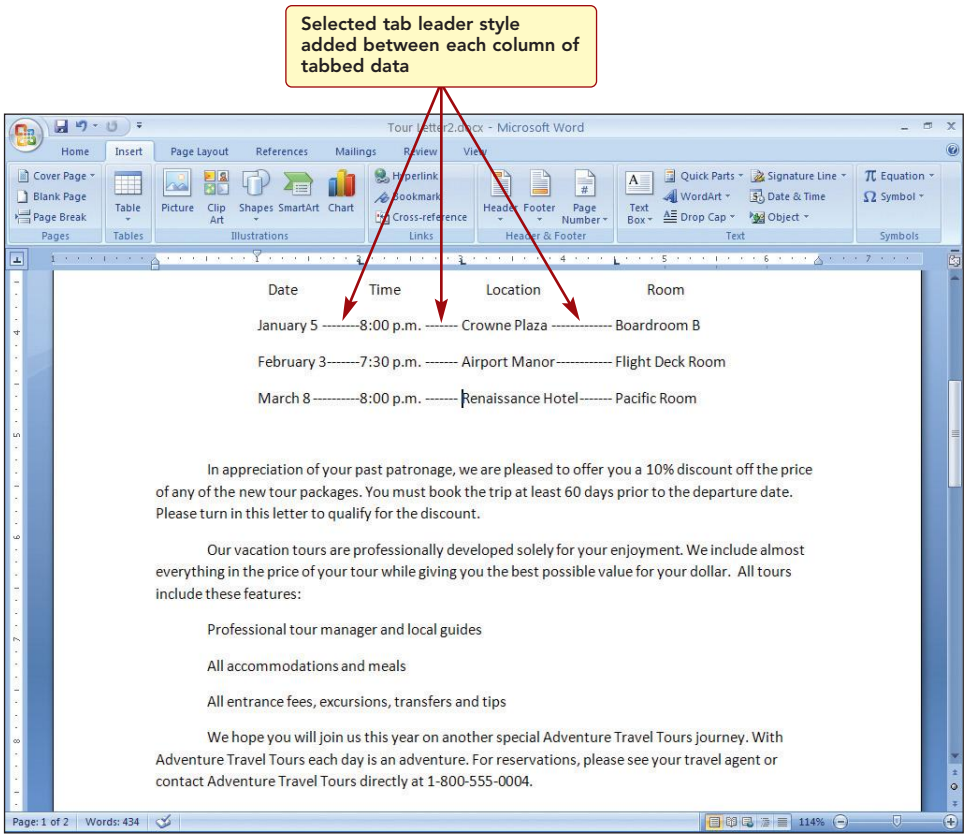


Figure 2.41

The selected leader style has been added to the blank space between each column of tabbed text.

Changing Line Spacing

You decide you want to adjust the spacing above and below the table as well as between the lines in the table to help make the table stand out from the other text in the letter.

Concept 7

Line Spacing

7 Adjusting the **line spacing**, or the vertical space between lines of text, helps set off areas of text from others and when increased makes it easier to read and edit text. If a line contains a character or object, such as a graphic, that is larger than the surrounding text, the spacing for that line is automatically adjusted. Additional line spacing settings are described in the table below.

Spacing	Effect
Single	Accommodates the largest font in that line, plus a small amount of extra space; the amount of extra space varies with the font that is used.
1.5 lines	Spacing is one and a half times that of single line spacing.
Double (2.0)	Spacing is twice that of single line spacing.
At least	Uses a value specified in points as the minimum line spacing that is needed to fit the largest font or graphic on the line.
Exactly	Uses a value specified in points as a fixed line spacing amount that is not adjusted, making all lines evenly spaced. Graphics or text that is too large will appear clipped.
Multiple	Uses a percentage value to increase or decrease the spacing from single spacing. For example, 1.3 will increase the spacing by 33 percent.

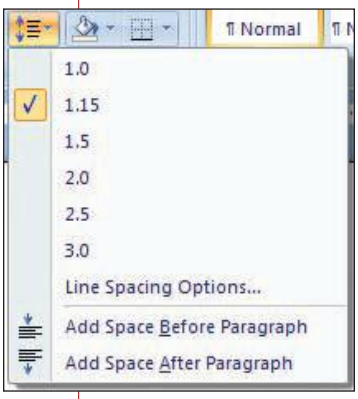
The default line spacing for a Word 2007 document is set to multiple with a 15 percent increase (1.15) over single spacing.

In addition to changing line spacing within paragraphs, you also can change the spacing before or after paragraphs. The default paragraph spacing adds a small amount of space (10 pt) after a paragraph and no extra space before a paragraph.

The  command in the Paragraph group of the Home tab can be used to specify standard spacing settings, such as double and triple spacing. It also lets you turn on or off the extra spacing between paragraphs. You want to look at the line spacing settings and make the adjustments from the Paragraph dialog box.

1. **Select the table including the blank lines above and below it.**

2. **Open the Line Spacing drop-down menu in the Paragraph group of the Home tab.**



3. **Choose Line Spacing Options.**

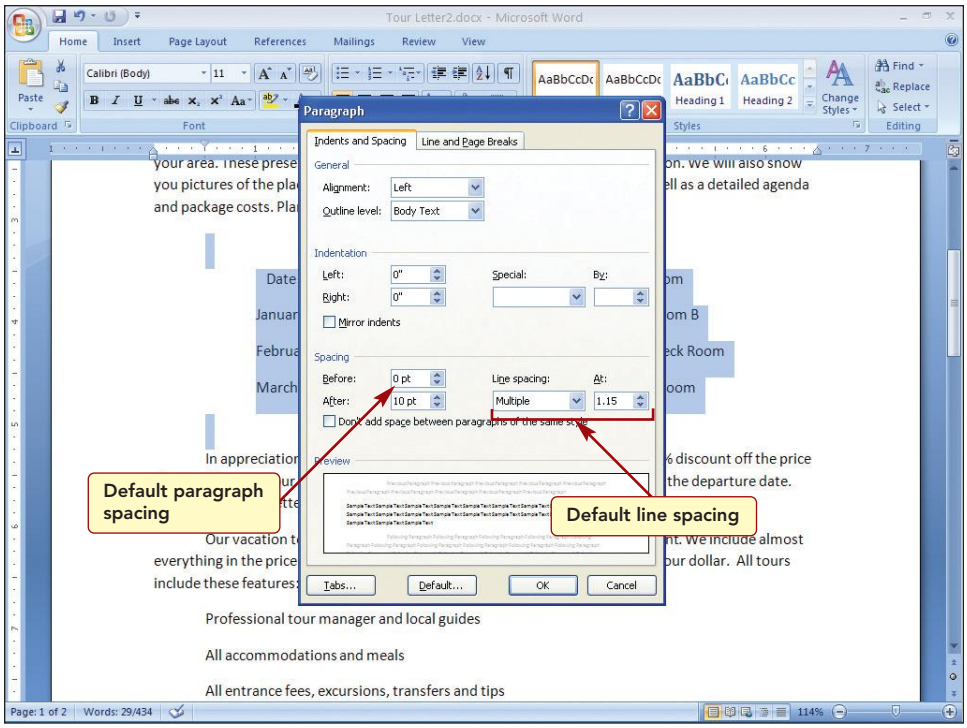


Figure 2.42

Another Method

You also could click in the Paragraph group to open the Paragraph dialog box to access this feature.

Another Method

You also can use Ctrl + # to change the line spacing to the number specified.

Your screen should be similar to Figure 2.42

The default document line spacing setting, multiple at 1.15, before paragraph spacing of 0 pt, and after paragraph spacing of 10 pt are displayed in the Spacing section of the dialog box. You want to decrease the spacing between each line of the table. Because Word considers each line of the table and the blank lines above and below it as separate paragraphs, you can decrease the space after paragraph setting to achieve this effect. You will also change the line spacing to single to remove the 15 percent spacing increase. As you make these changes, the Preview box will show you a sample of the effect they will have on the text.

2. **Select Single from the Line Spacing drop-down menu.**

- **Click the down scroll button of the After box to decrease the spacing to 6 pt.**
- **Click** OK **.**

Your screen should be similar to Figure 2.43

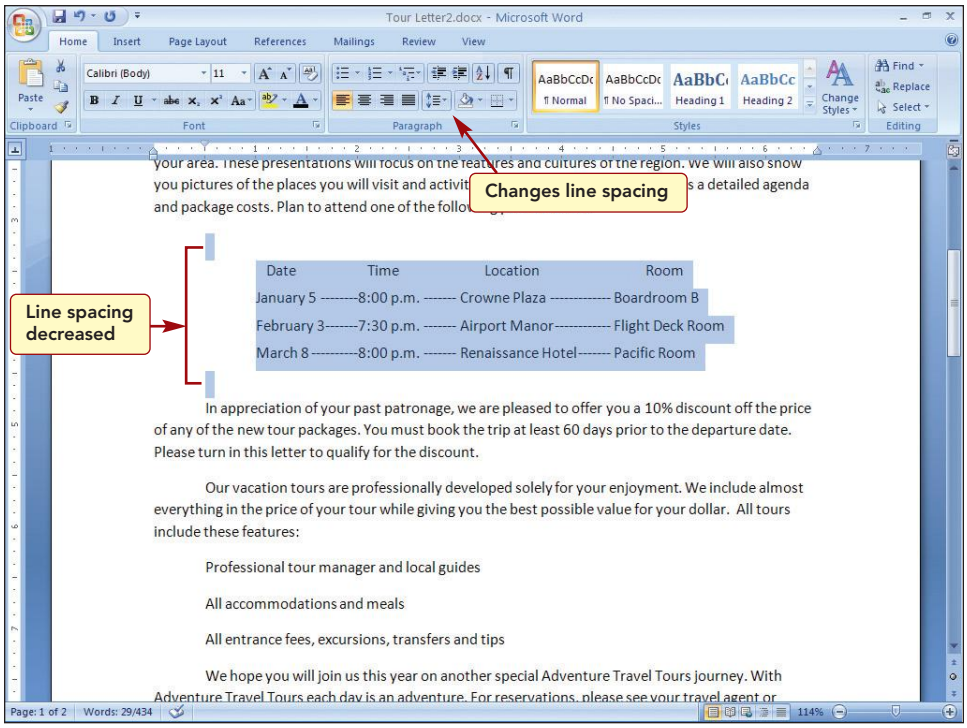


Figure 2.43

The change in line and paragraph spacing improves the appearance of the table and makes the information stand out more from the other text in the letter. You think this same change also would be effective in the list of tour features.

3. **Select the list of three tour features.**

- **Change the line spacing to Single.**
- **Select the first two items in the feature list and change the space after paragraph to 6 pt.**

Another Method

You can also use After: 0 pt in the Paragraph group of the Page Layout tab to adjust paragraph spacing.

Your screen should be similar to Figure 2.44

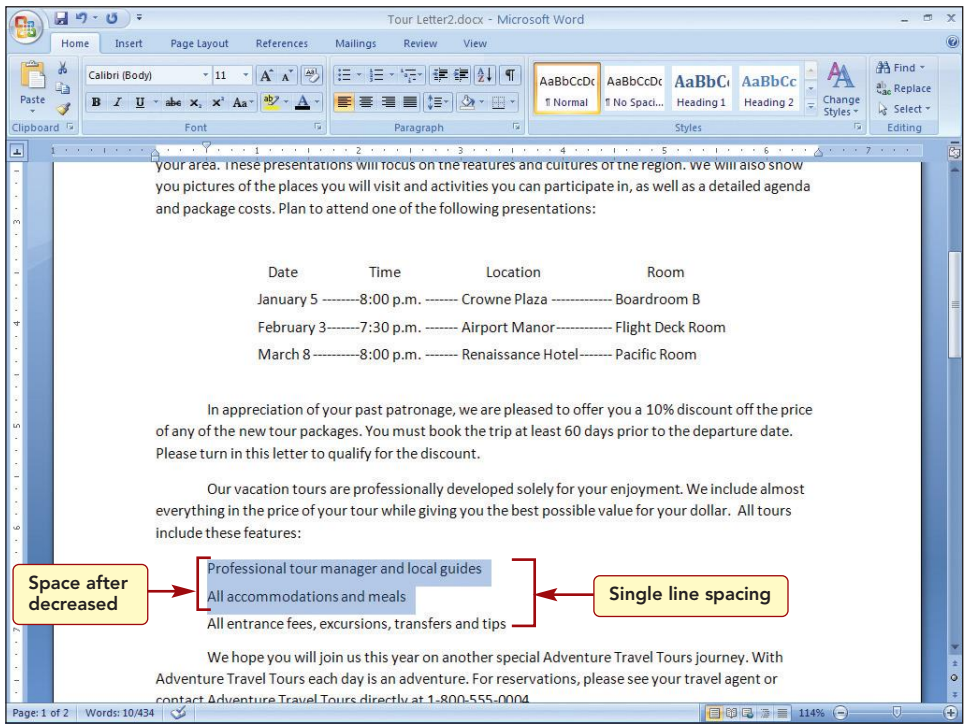


Figure 2.44

More Character Formatting

As you look at the letter, you still feel that the table of presentation dates and times does not stand out enough. You can add emphasis to information in your documents by formatting specific characters or words. Applying color shading or highlighting behind text is commonly used to identify areas of text that you want to stand out. It is frequently used to mark text that you want to locate easily as you are revising a document. Italics, underlines, and bold are other character formats that add emphasis and draw the reader's attention to important items. Word applies character formatting to the entire selection or to the entire word at the insertion point. You can apply formatting to a portion of a word by selecting the area to be formatted first.

Additional Information
When you use highlights in a document you plan to print in black and white, select a light color so the text is visible.

Adding Color Highlighting

First, you want to see how a color highlight behind the tabbed table of presentation times and locations would look.

1. **Click anywhere in the table.**
- **Open the Text Highlight Color drop-down list in the Font group of the Home tab.**
- **Select the turquoise color from the color palette.**

Additional Information
The mouse pointer appears as when positioned on text, indicating the highlighting feature is on.

- **Select the entire presentation locations table.**

Another Method
You also can select the area you want to highlight first and then click to select and apply a color.

- **Click or press Esc to turn off the highlighting feature.**

Your screen should be similar to Figure 2.45

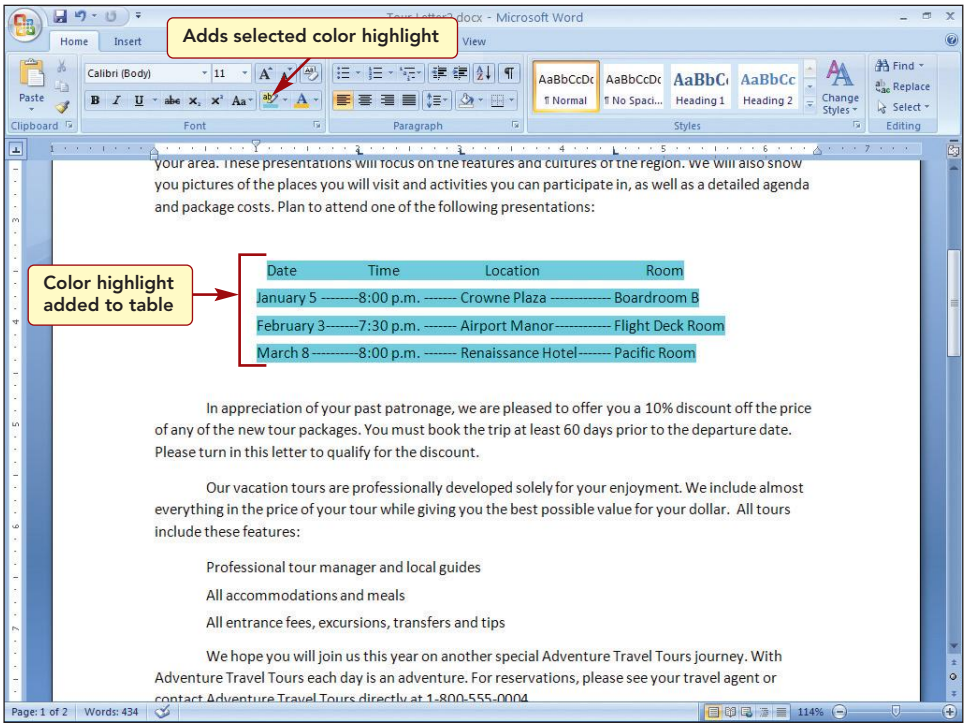


Figure 2.45

Although the highlight makes the table stand out, it does not look good.

Underlining Text

Instead, you decide to bold and underline the headings. The default underline style is a single black line. In addition, Word includes 15 other types of underlines.

1. Click Undo.
2. Select the table heading line.
3. Click Bold from the Mini toolbar.
4. Click Underline from the Font group.

Your screen should be similar to Figure 2.46

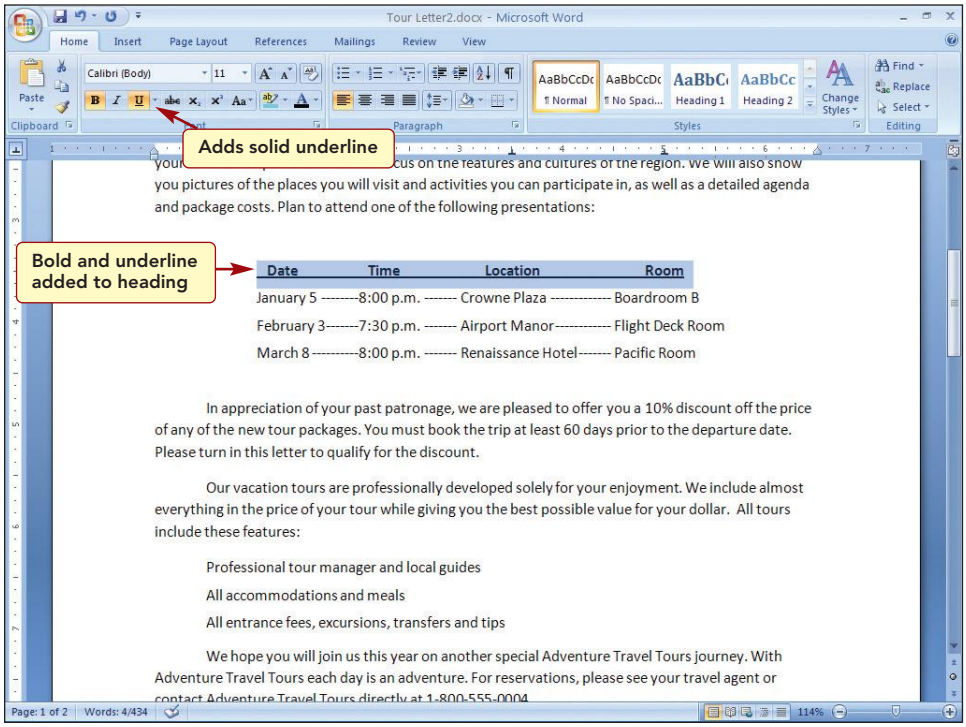


Figure 2.46

All the words are bold, and a single black underline has been added below the entire selection. You decide you want the underline to appear under each word only and to stand out more. To do this, you will select another underline style and apply the underline to the word individually. When the insertion point is positioned on a word, the selected underline style is applied to the entire word.

2. **Click Undo to remove the underline.**
   - **Click on the "Room" heading in the table.**
   - **Open the Underline drop-down menu.**
   - **Point to the dotted underline style to see the Live Preview.**

Your screen should be similar to Figure 2.47

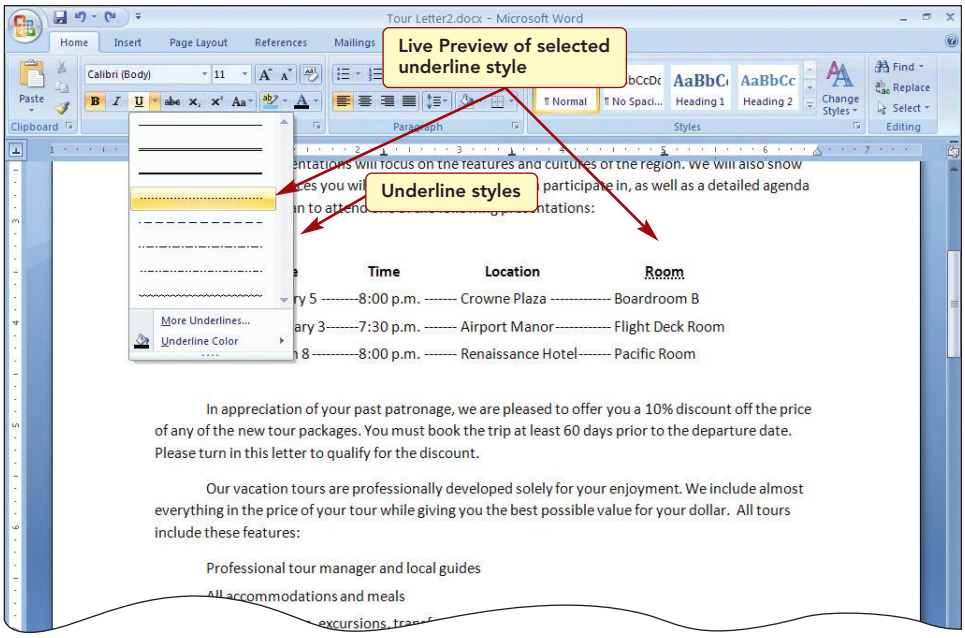


Figure 2.47

The eight most popular underline styles are listed in the menu. Using More Underlines will open the Font dialog box, where you can select other styles, clear underlining from a selection using the None option, or select the Words Only option to display a single underline below words in the selection only, not under the spaces between words. Live Preview shows you how the selection will appear in the document.

3. **Select several other underline styles and see how they appear in the Live Preview.**
   - **Click the double underline style.**

Additional Information
Using the keyboard shortcut Ctrl + U adds the default single underline style.

Your screen should be similar to Figure 2.48

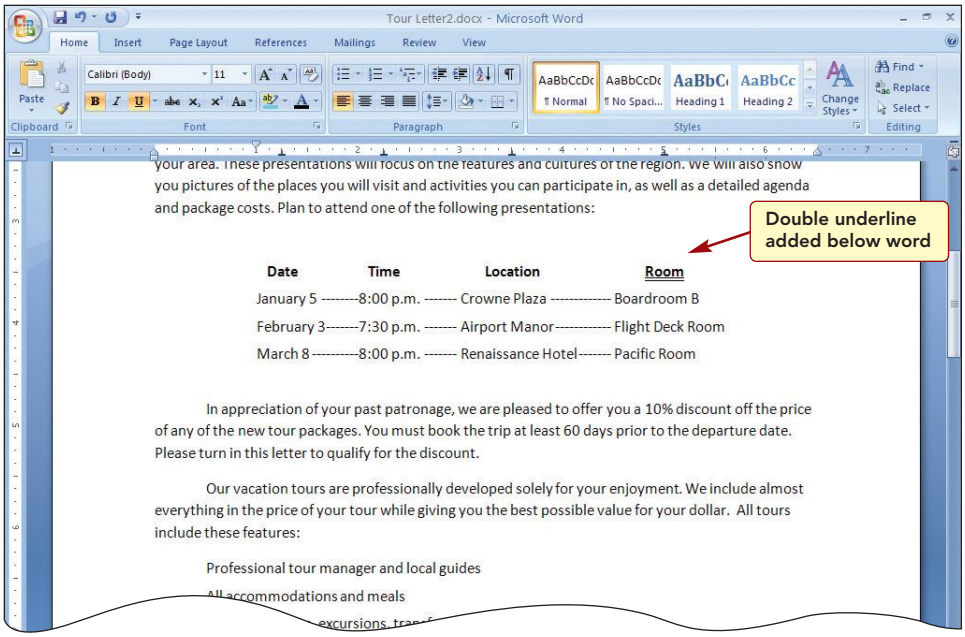


Figure 2.48

The selected word is underlined using the double underline style.

Copying Formats with Format Painter

You want to quickly apply the same formats to the other headings. To do this, you can use the **Format Painter**. This feature applies the formats associated with the current selection to new selections. If the selection is a paragraph (including the paragraph mark), the formatting is applied to the entire paragraph. If the selection is a character, the format is applied to a character, word, or selection you specify.

To use this feature, move the insertion point to the text whose formats you want to copy and click the Format Painter button. Then select the text to which you want the formats applied. The format is automatically applied to an entire word simply by clicking on the word. To apply the format to more or less text, you must select the area.

Additional Information
When Format Painter is on, the mouse pointer appears as .

1. **If necessary, click on the "Room" heading.**
2. **Double-click Format Painter in the Clipboard group.**
3. **Click on the Date, Time, and Location headings.**
4. **Click to turn off Format Painter.**

Another Method
You can press Esc to turn off Format Painter.

5. **Save the document again.**

Your screen should be similar to Figure 2.49

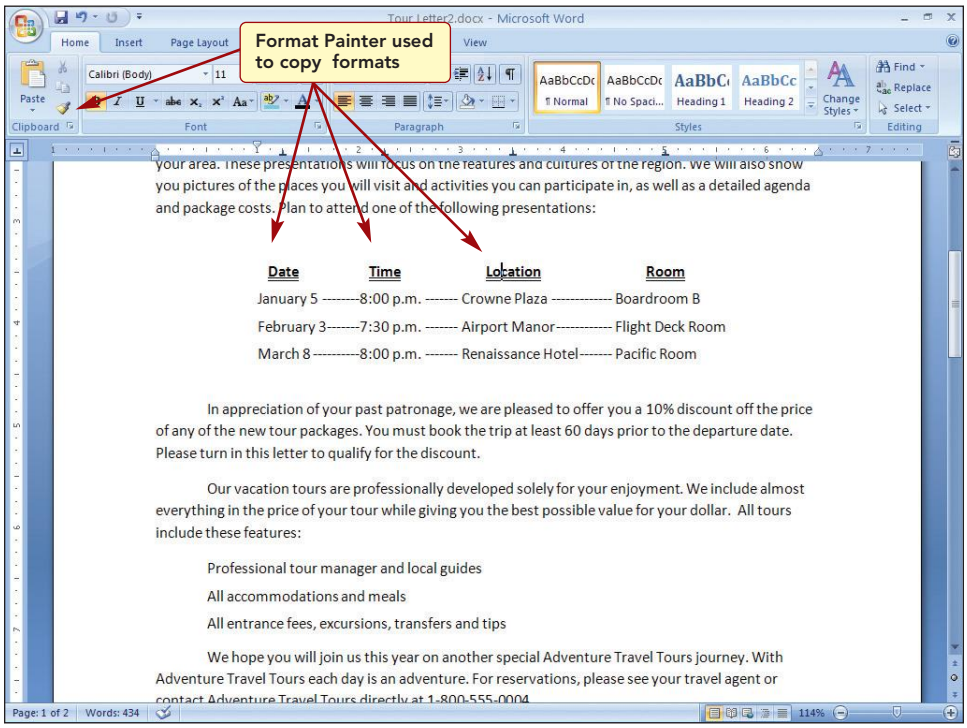


Figure 2.49

Creating Lists

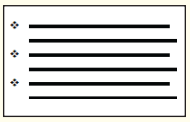
Additional Information
A list can be used whenever you present three or more related pieces of information.

The next change you want to make is to display the three lines of information about tour features as an itemized list so that they stand out better from the surrounding text.

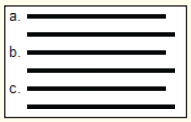
Concept 8

Bulleted and Numbered Lists

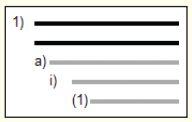
8 Whenever possible, add bullets or numbers before items in a list to organize information and to make your writing clear and easy to read. Word includes many basic bullet, a dot or other symbol, and number formats from which you can select. Additionally, there are many picture bullets available. If none of the predesigned bullet or number formats suits your needs, you also can create your own customized designs.



Use a **bulleted list** when you have several items in a paragraph that logically make a list. A bulleted list displays one of several styles of bullets before each item in the list. You can select from several types of symbols to use as bullets and you can change the color, size, and position of the bullet.



Use a **numbered list** when you want to convey a sequence of events, such as a procedure that has to follow in a certain order. A numbered list displays numbers or letters before the text. Word automatically increments the number or letter as you start a new paragraph. You can select from several different numbering schemes to create your numbered lists.



Use an **outline numbered list** to display multiple outline levels that show a hierarchical structure of the items in the list. There can be up to nine levels.

Numbering a List

Because both bullet and number formats will indent the items automatically when applied, you first need to remove the indent from the three tour features. Then you will try a numbered list format to see how it looks.

1. **Select the three tour features.**
2. **Drag the First Line Indent marker on the ruler back to the margin boundary.**
3. **Right-click on the selection and select Numbering from the menu.**

Another Method

The Ribbon equivalent is Numbering in the Paragraph group.

Your screen should be similar to Figure 2.50

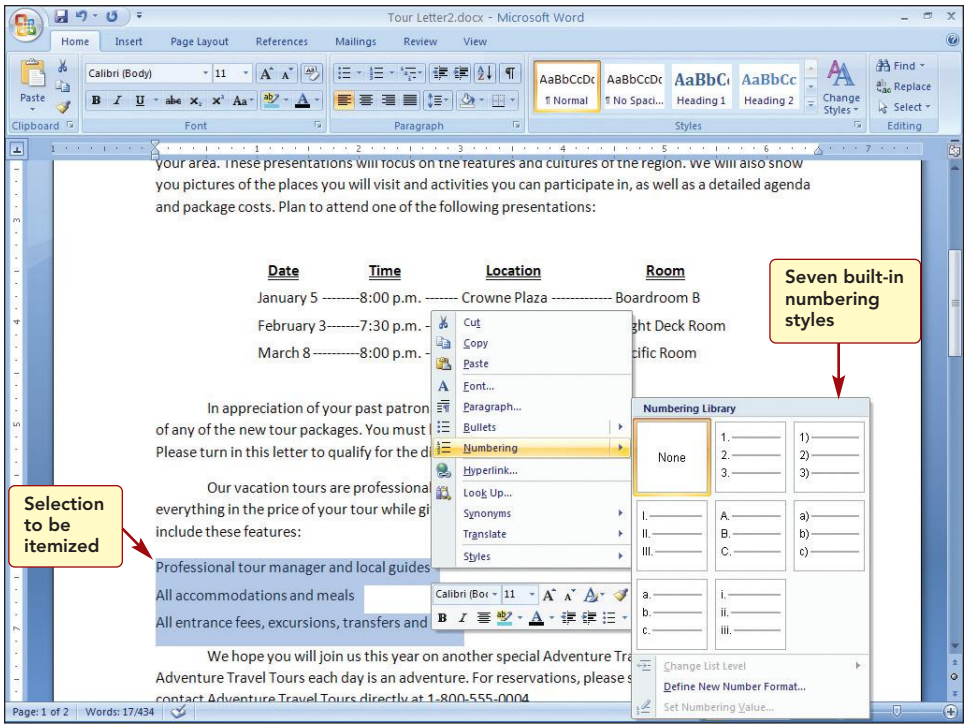


Figure 2.50

The Numbering gallery displays examples of seven built-in numbered list formats in the Numbering Library category. The None option is used to remove an existing numbering format. Numbers followed by periods is the default style that is applied when clicking Numbering in the Paragraph group. However, if another style has been used since starting Word, the last-used numbering format is inserted.

The numbering gallery also may include a Recently Used category if this feature has already been used since Word 2007 was started. If the document contains another numbered list, the gallery will display the used number style in a Document Number Formats category.

The three options at the bottom of the menu are used to change the indent level of the items, to customize the appearance of the built-in formats, and to set a start number for the list (1 is the default). For example, you could indent the list more, change the color of the numbers, and start numbering with 3 instead of 1.

You will use the second number format that has a number followed by a parenthesis.

2 **Select the second (parenthesis style) numbered list format option.**

Your screen should be similar to Figure 2.51

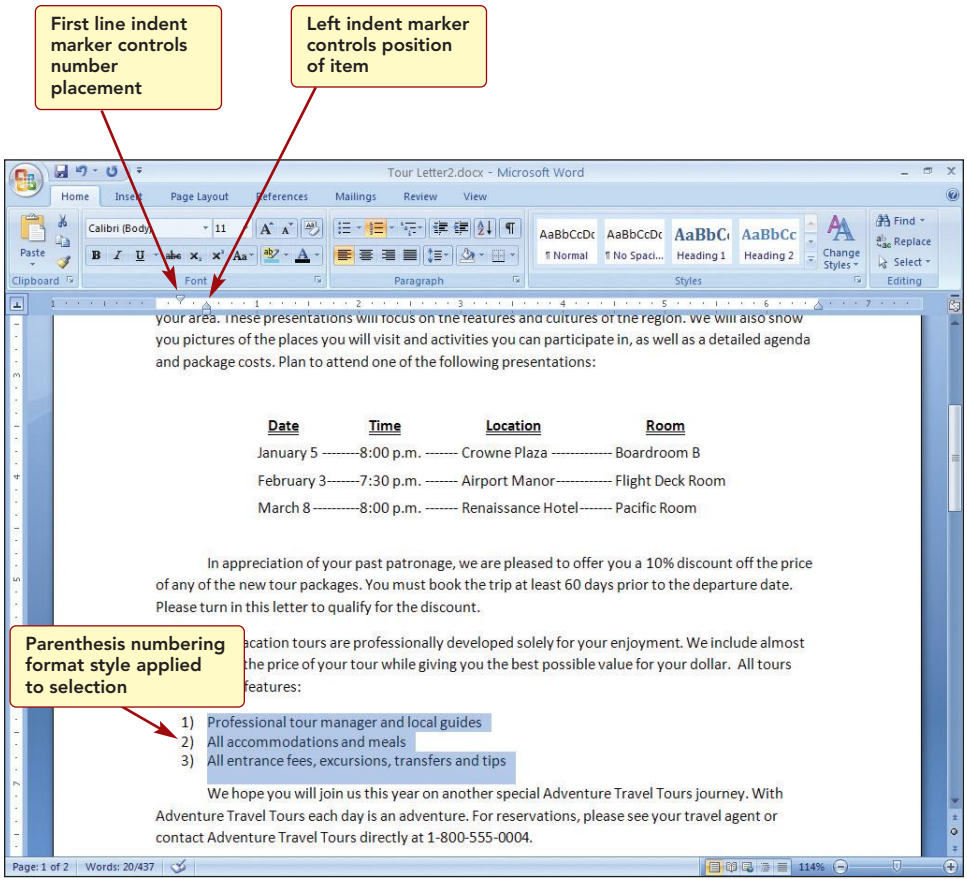


Figure 2.51

Additional Information

You also can create bulleted and numbered lists as you type. To create a bulleted list, type an asterisk (*) followed by a space, and then type the text. To create a numbered list, type a number, type a period followed by a space, and then type the text. When you press ↵Enter, Word automatically creates a list and adds numbers or bullets to the next line. To turn off the list, press ↵Enter twice.

A number is inserted at the 0.25-inch position before each line, and the text following the number is indented to the 0.5-inch position. In an itemized list, the First Line Indent marker on the ruler controls the position of the number or bullet, and the Left Indent marker controls the position of the item following the number or bullet. The Left Indent marker creates a hanging indent. If the text following each bullet were longer than a line, the text on the following lines would also be indented to the 0.5-inch position. Additionally, the extra space between the lines was removed because the feature that adds space between paragraphs of the same style was automatically turned off.

Bulleting a List

After looking at the list, you decide it really would be more appropriate if it were a bulleted list instead of a numbered list. The solid round bullet format is the default when clicking Bullets. However, if another style was previously used since starting Word 2007, that style is inserted. The bullet submenu is divided into the same three groups as the Numbering submenu and has similar options.

1. **If necessary, select the list of three features.**

- **Open the Bullets drop-down menu on the Mini toolbar or from the context menu.**

Another Method

You also can use Bullets in the Paragraph group of the Home tab.

- **Choose the bullet format.**

Your screen should be similar to Figure 2.52

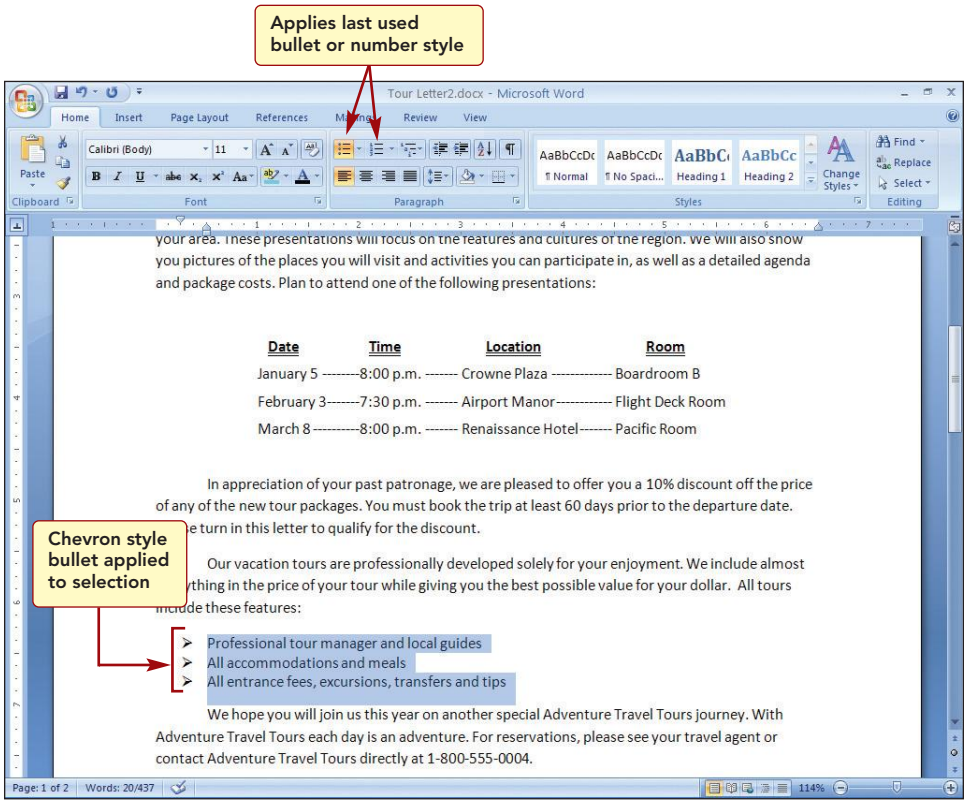


Figure 2.52

Additional Information

To remove bullets or numbers, select the text, open the drop-down menu, and select None, or click again.

The selected bullet format is applied to the selection.

Sorting a List

As you look at the bulleted list, you decide you want the three items to appear in alphabetical order. To make this change quickly, you can sort the list.

Concept 9

Sort

9 Word can quickly arrange or **sort** text, numbers, or data in lists or tables in alphabetical, numeric, or date order based on the first character in each paragraph. The sort order can be ascending (A to Z, 0 to 9, or earliest to latest date) or descending (Z to A, 9 to 0, or latest to earliest date). The following table describes the rules that are used when sorting.

Sort by	Rules
Text	First, items beginning with punctuation marks or symbols (such as !, #, $, %, or &) are sorted.
	Second, items beginning with numbers are sorted. Dates are treated as three-digit numbers.
	Third, items beginning with letters are sorted.
Numbers	All characters except numbers are ignored. The numbers can be in any location in a paragraph.
Date	Valid date separators include hyphens, forward slashes (/), commas, and periods. Colons (:) are valid time separators. If unable to recognize a date or time, Word places the item at the beginning or end of the list (depending on whether you are sorting in ascending or descending order).
Field results	If an entire field (such as a last name) is the same for two items, Word next evaluates subsequent fields (such as a first name) according to the specified sort options.

When a tie occurs, Word uses the first nonidentical character in each item to determine which item should come first.

You will use the default Sort settings that will sort by text and paragraphs in ascending order.

1. **If necessary, select the entire list.**
2. **Click in the Paragraph group.**
3. **Click OK to accept the default settings.**
4. **Click on the document to clear the highlight.**
5. **Increase the space after for the third list item to 12 pt.**

Your screen should be similar to Figure 2.53

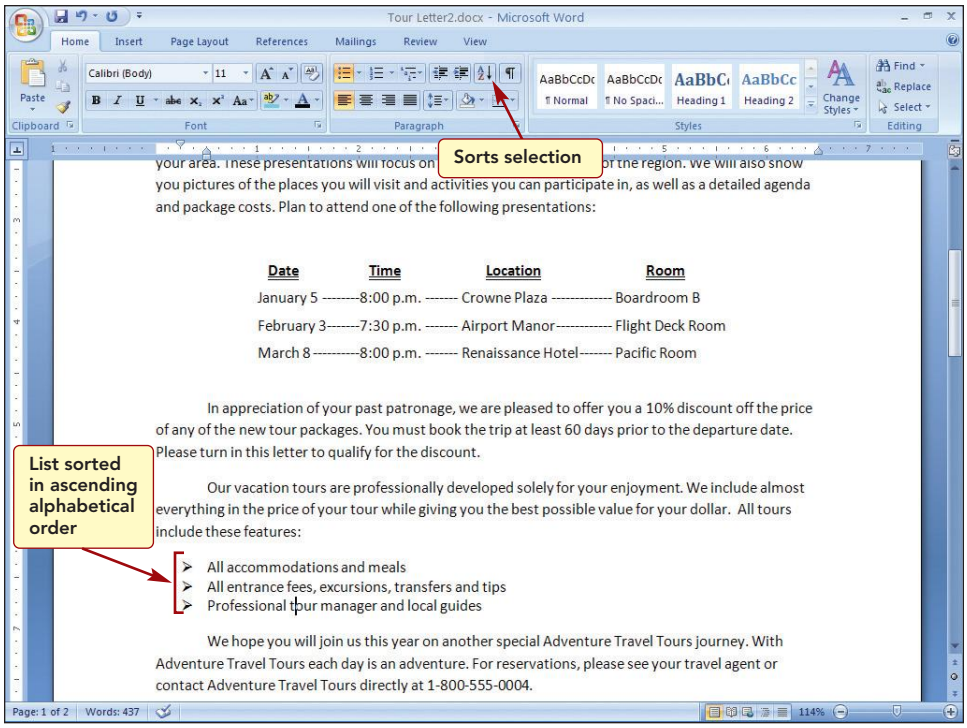


Figure 2.53

The three items in the list now appear in ascending sorted order.

Using Quick Parts

While looking at the letter, you realize that the closing lines have not been added to the document. You can quickly insert text and graphics that you use frequently using the Quick Parts feature. The Quick Parts feature includes reusable pieces of content or document parts, called **building blocks,** that give you a head start in creating content such as page numbers, cover pages, headers and footers, and sidebars. In addition to the supplied building blocks, you also can create your own custom building blocks.

Using Supplied Building Blocks

You will create the closing for the letter using the Author and Company supplied building blocks that get their information from the file's document properties.

1. **Move to the first blank line below the last paragraph of the letter.**
2. **Type Best Regards,.**
3. **Press ↵Enter .**
4. **Open the Insert tab and click Quick Parts in the Text group.**
5. **Select Document Property and choose Author from the submenu.**

Your screen should be similar to Figure 2.54

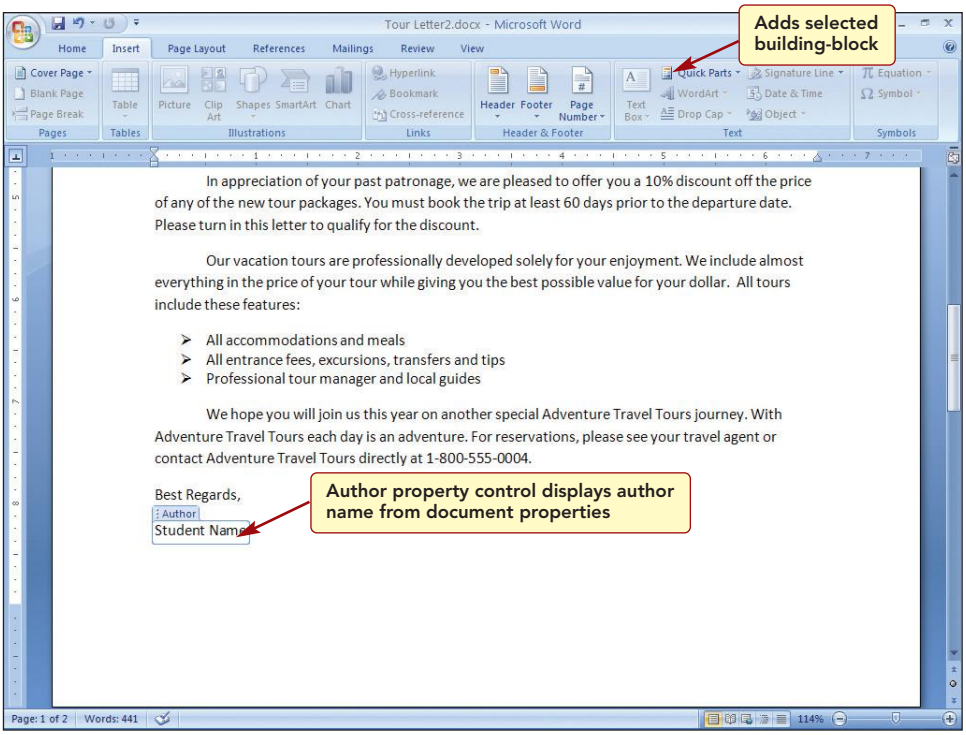


Figure 2.54

Additional Information

If you change the information stored in the Document Information Panel, any property controls in the document using that information also will be updated.

An Author property control containing the name that is currently stored in the file's Author document property is inserted in the document. A **control** is a graphic element that is a container for information or objects. Controls, like fields, appear shaded when you point to them.

You can update or modify the information displayed in a property control by editing the entry. Any changes you make in the property control are automatically updated in the Document Information Panel. You will change the information in the Author property to your name and then continue to create the closing.

2. **Select the text in the Author control and type your name.**
- **Press → to deselect it.**
- **Type , Advertising Coordinator following your name.**
- **Press ↵Enter .**
- **Insert the Company document property control.**
- **Select the last two lines and remove the space after the paragraphs.**

Your screen should be similar to Figure 2.55

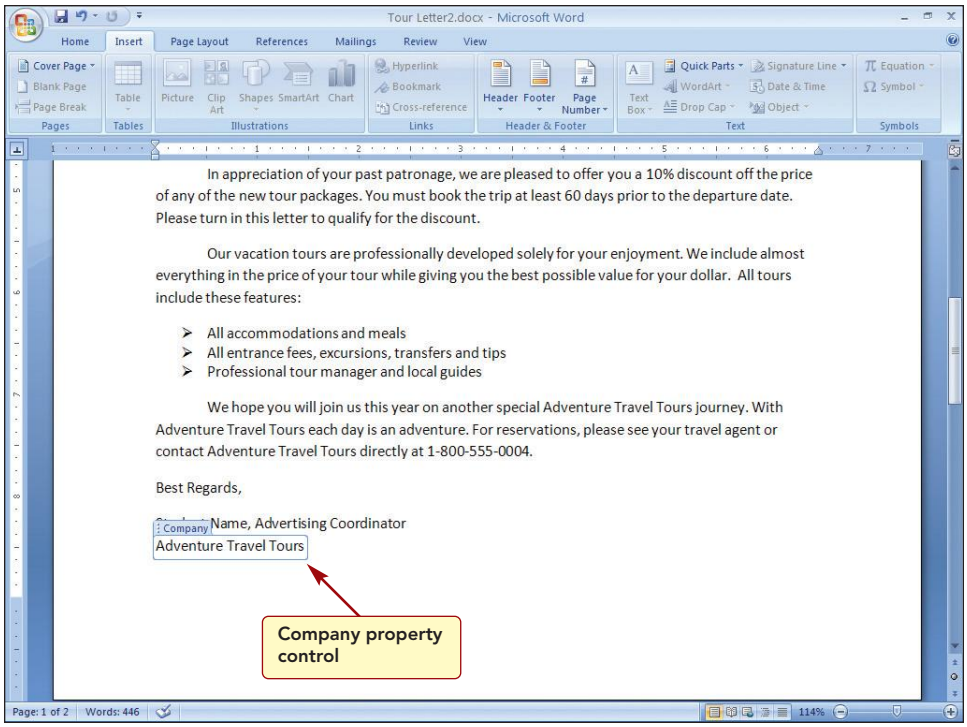


Figure 2.55

The closing is now complete and the document properties now include your name as the author. Using document property controls in a document is particularly helpful when the same controls are used multiple times, as in a contract. Then, when one control is updated or edited, all controls of the same type throughout the document are automatically updated.

Creating a Custom Building Block

In addition to the supplied building blocks, you can create your own. In this case, because you frequently use the same closing when creating correspondence, you will create a building block that you can use to quickly insert this information.

1. **Increase the spacing after of the Best Regards line to 18 pt.**
2. **Select the entire closing.**
3. **Click** Quick Parts.
4. **Choose Save Selection to Quick Part Gallery.**

Another Method

The keyboard shortcut is Alt + F3.

Your screen should be similar to Figure 2.56

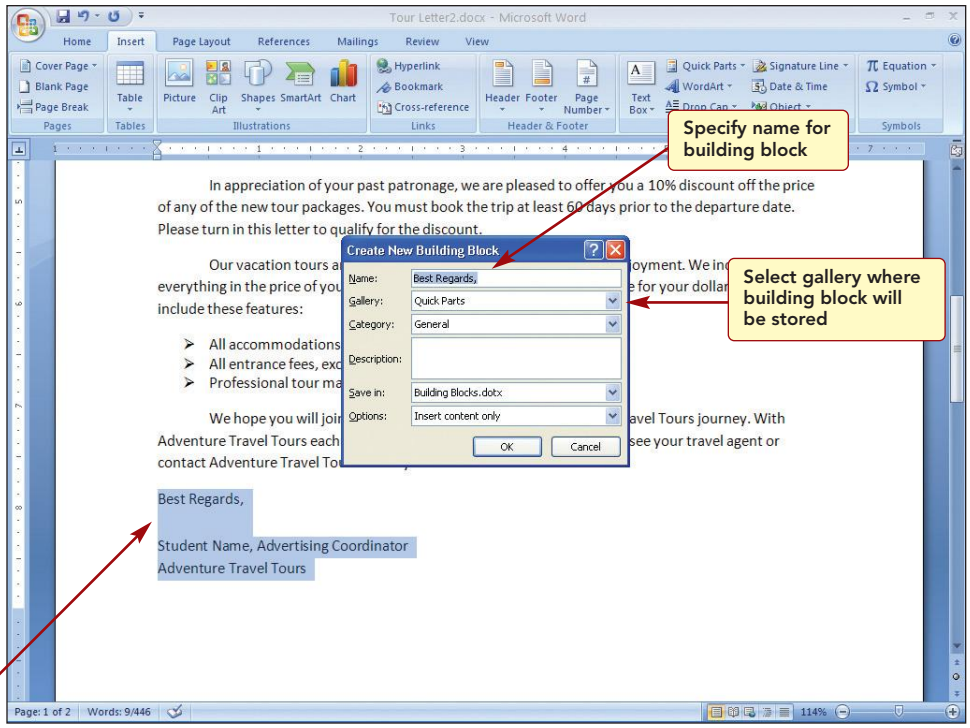


Figure 2.56

In the Create New Building Block dialog box, you define the properties for the building block. This includes entering a unique name for the building block, specifying the gallery where you want the building block stored, and other information that is needed to identify and use the building block.

You will use the proposed name, Best Regards, and store it in the Quick Parts Gallery. All the other default settings for this building block are appropriate. After saving the building block, you will erase the closing you typed in the letter and then reinsert it using the stored Quick Part.

MORE ABOUT



See 4.1 Structure Content by Using Quick Parts in the More About appendix to learn more about saving frequently used data as building blocks.

2. Click OK.
- Delete the closing in the letter.
- Click Quick Parts.
- Click on the Best Regards building block.
- Save the document again.

Your screen should be similar to Figure 2.57

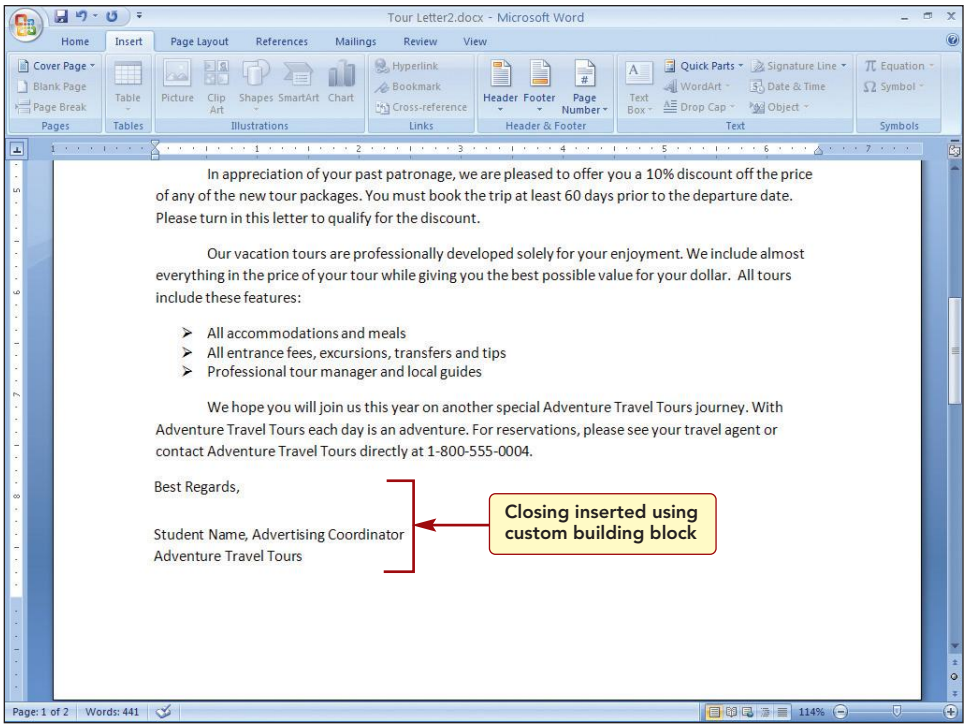


Figure 2.57

MORE ABOUT

See 4.1 Structure Content by Using Quick Parts in the More About appendix to learn how to use the Building Block Organizer to sort and edit properties of building blocks.

Additional Information

You will learn more about Quick Parts and use several of the other supplied building blocks in later labs.

The custom building block you created appeared as a gallery item at the top of the Quick Parts menu, making it easy for you to access and use. The selected block was inserted into the document at the location of the insertion point. As you can see, using Quick Parts was much quicker than typing the closing.

Adding and Modifying Shapes

You also want to add a special graphic to the flyer containing information about the company Web site to catch the reader's attention. To quickly add a shape, you will use one of the ready-made shapes that are supplied with Word. These include basic shapes such as rectangles and circles, a variety of lines, block arrows, flowchart symbols, stars and banners, and callouts. Additional shapes are available in the Clip Organizer. You also can combine shapes to create more complex designs. To see and create shapes, the view needs to be Print Layout view. In Draft view, shapes are not displayed. If you are using Draft view when you begin to create a shape, the view will change automatically to Print Layout view.

Inserting a Shape

You want to add a graphic of a banner to the bottom of the flyer.

1. **Move to the end of the document.**
2. **Click**  **in the Illustrations group.**
3. **From the Stars and Banners group, point to the Wave shape.**

Your screen should be similar to Figure 2.58

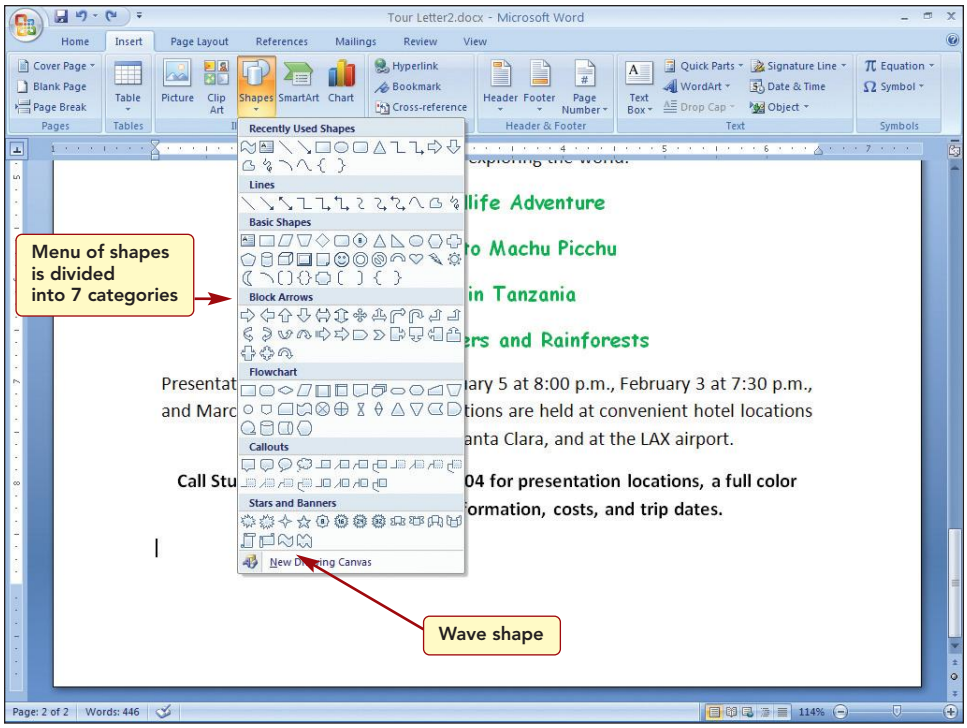


Figure 2.58

The Shapes menu displays seven categories of shapes. Pointing to a shape displays the shape name in a ScreenTip. The recently selected shapes appear at the top of the menu. You will insert the Wave shape at the end of the flyer.

2. **Click the Wave shape.**
3. **Click below the last line of the flyer to insert the shape.**
4. **Drag the sizing handles to obtain a shape similar to that shown in Figure 2.59.**

Additional Information
To maintain the height and width proportions of a shape, hold down Shift while you drag.

Your screen should be similar to Figure 2.59

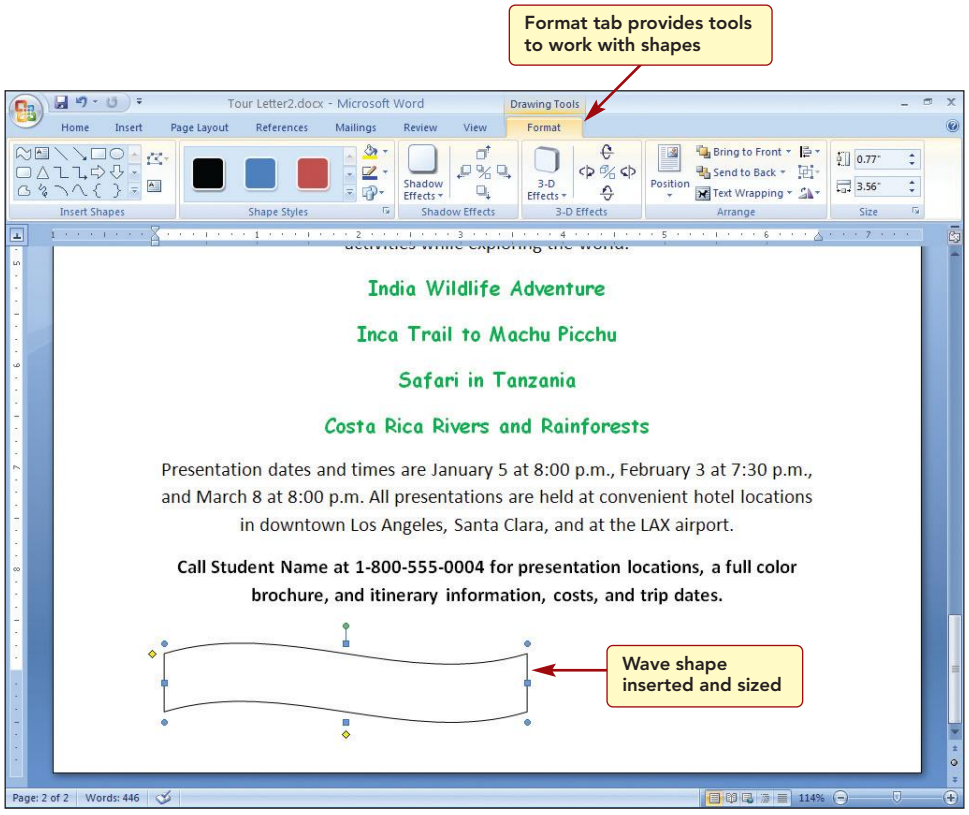


Figure 2.59

Notice the Drawing Tools Format tab is displayed and open so you can continue working with the shape.

Filling the Shape with Color

The shape can be enhanced using many of the features on the Format tab, such as adding a background fill color, gradient, and line color. A **gradient** is a gradual progression of colors and shades, usually from one color to another, or from one shade to another of the same color.

As you make your selections, the Live Preview feature will show how they will look.

1. **Open the Shape Fill drop-down menu in the Shape Styles group.**
2. **Choose the orange fill color from the standard colors palette.**
3. **Open the Shape Fill drop-down menu, select Gradient and choose the Linear Up gradient from the Light Variations section (3rd row).**
4. **In the same manner, open the Shape Outline menu and choose green.**

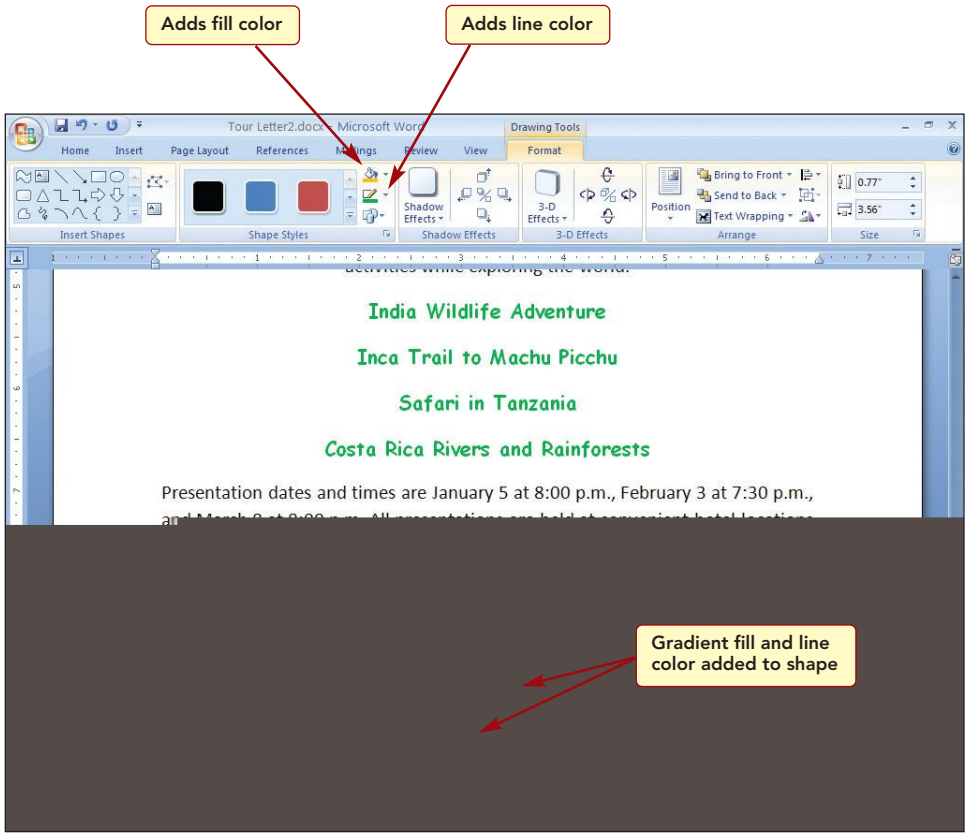


Figure 2.60

Additional Information

The color and gradient names appear in a ScreenTip as you point to them.

Your screen should be similar to Figure 2.60

Adding Text to a Shape

Next you will add text to the shape. The manager also has asked you to add information about the company's Web site to the flyer. You will include the Web site's address, called a **URL** (Uniform Resource Locator), in the shape. Word automatically recognizes URLs you enter and creates a hyperlink of the entry. A **hyperlink** is a connection to a location in the current document, another document, or a Web site. It allows the reader to jump to the referenced location by clicking on the hyperlink text when reading the document on the screen.

1. **Right-click on the shape to open the context menu.**
2. **Choose Add Text.**
3. **Type Visit our Web site at www.adventuretraveltours.com and press** Spacebar**.**
4. **If necessary, adjust the shape size to fully display the text.**

Your screen should be similar to Figure 2.61

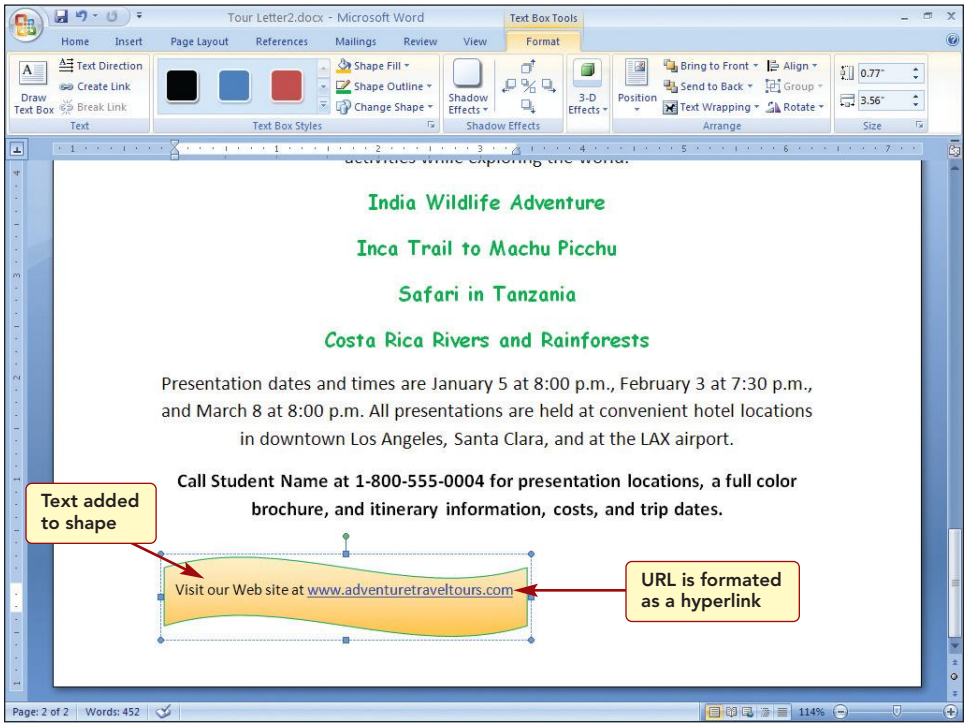


Figure 2.61

The text appears in the selected font settings. The text color is black because the default font color setting is Automatic. This setting will make the text color black if the background fill color is light and white if the fill color is dark.

Additional Information

You can turn off the AutoFormat feature so the hyperlinks are not created automatically using Office Button/ Word Options /Proofing/AutoCorrectOptions/ AutoFormat and clear the Internet and network paths with hyperlinks option.

Removing Hyperlinks

The Web address is automatically formatted in blue and underlined, indicating the entry is a hyperlink. The AutoFormat feature makes certain formatting changes automatically to your document. These formats include formatting a Web address, replacing ordinals (1st) with a superscript (1st) and fractions (1/2) with fraction characters (½), and applying a bulleted list format to a list if you type an asterisk (*) followed by a space at the beginning of a paragraph. These AutoFormat features can be turned off if the corrections are not needed in your document.

Because this is a document you plan to print, you do not want the text displayed as a link. Since the hyperlink was created using the AutoFormat feature, you can undo the correction or turn it off using the AutoCorrect Options button. You also can choose Remove Hyperlink from the hyperlink's context menu.

1. **Right-click on the hyperlink and choose Remove Hyperlink from the context menu.**

Additional Information

A ScreenTip appears when you point to a hyperlink with instructions on how to follow a link.

Another Method

You also could click Undo to remove the hyperlink AutoFormatting.

- **Select the text and using the Mini toolbar, change the font to Comic Sans MS, 12 pt, bold, and centered.**
- **Adjust the shape size as in Figure 2.62.**

Your screen should be similar to Figure 2.62

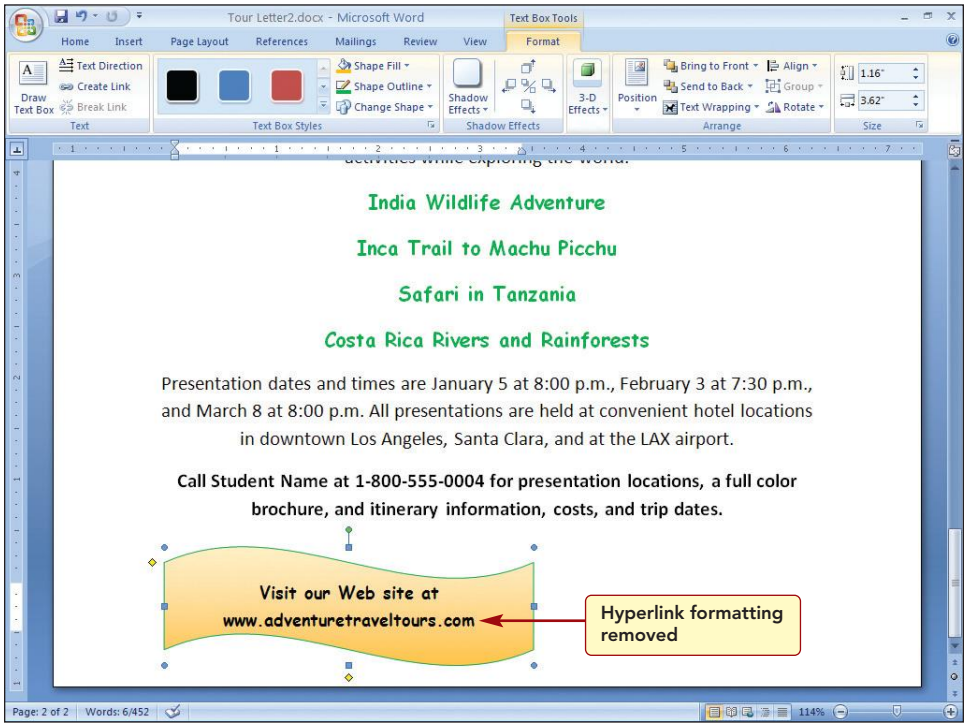


Figure 2.62

The Web address now appears as normal text.

Moving an Object

Finally, you need to center the shape at the bottom of the flyer. You will do this by dragging the object to the desired location.

1. **Point to the shape and when the mouse pointer appears as ✥, drag the shape to the position shown in Figure 2.63.**
2. **Click outside the shape to deselect it.**
3. **Save the document again.**

Your screen should be similar to Figure 2.63

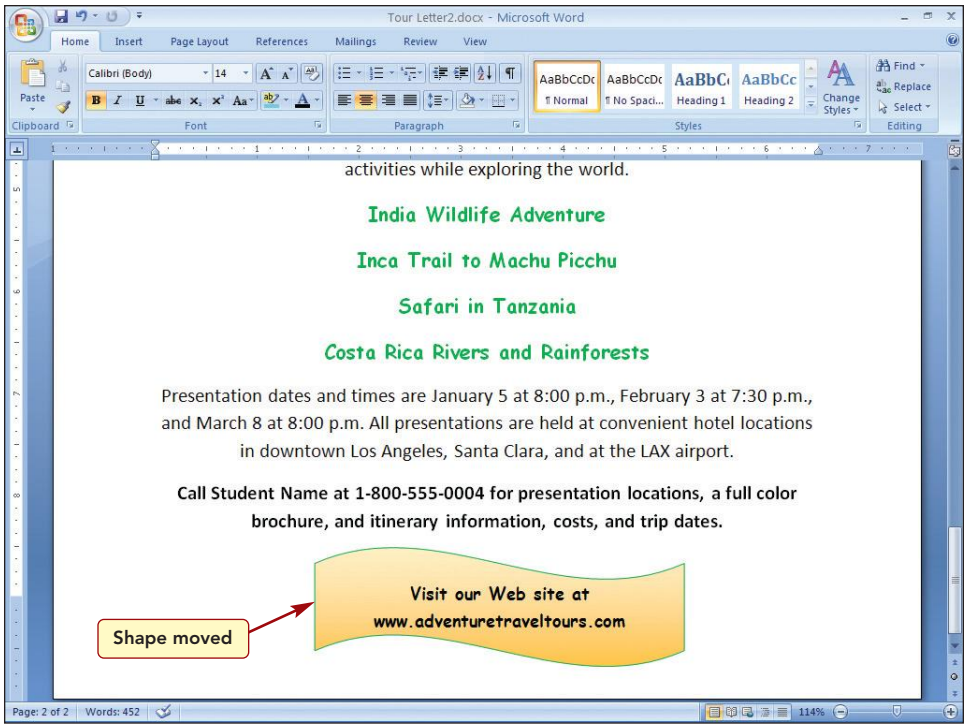


Figure 2.63

The banner complements the colors used in the flyer and adds the needed information about the Web site.

Previewing and Editing Multiple Pages

Next you will preview and make any final changes to the letter and flyer before printing it. When previewing a document, it is often useful to see multiple pages at the same time to check formatting and other items. First, you want to display both pages of your document at the same time in the window.

1. **Move to the top of the document.**
2. **Use the Zoom slider to reduce the zoom to 50%.**

Your screen should be similar to Figure 2.64

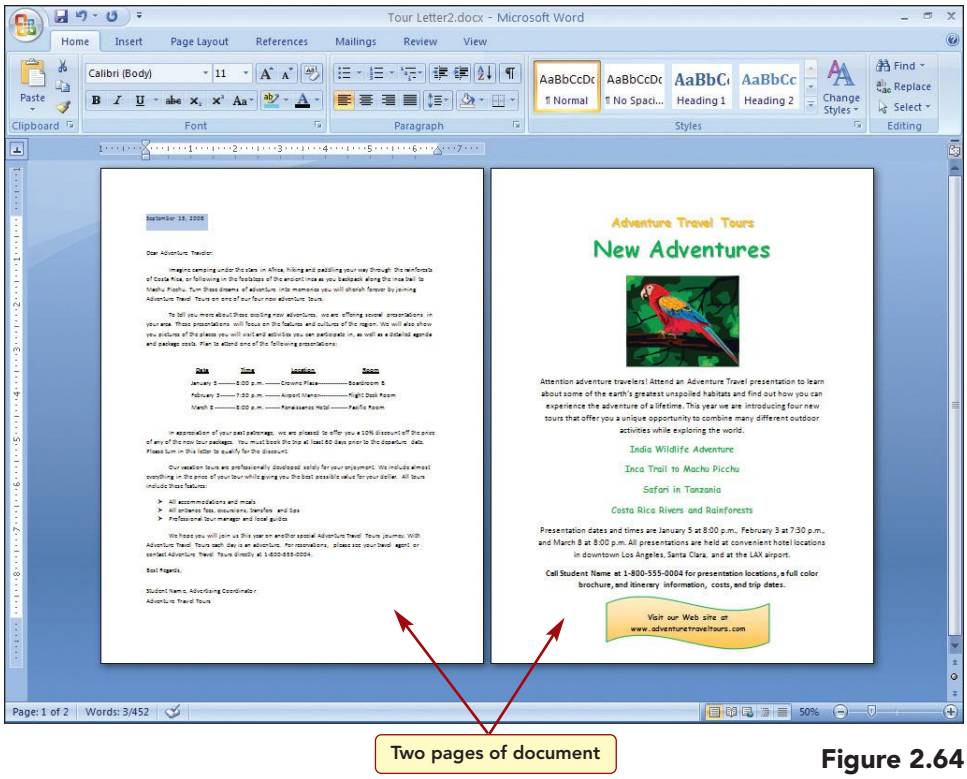


Figure 2.64

Now that you can see the entire letter, you decide to indent the date and closing to the 3.5-inch tab position. You will select both these items at the same time and then change the indent. To select nonadjacent areas in a document, hold down Ctrl while selecting each additional area.

2. **Select the date.**
3. **Hold down Ctrl and select the closing.**
4. **Drag the upper indent marker to the 3.5-inch position.**

Your screen should be similar to Figure 2.65

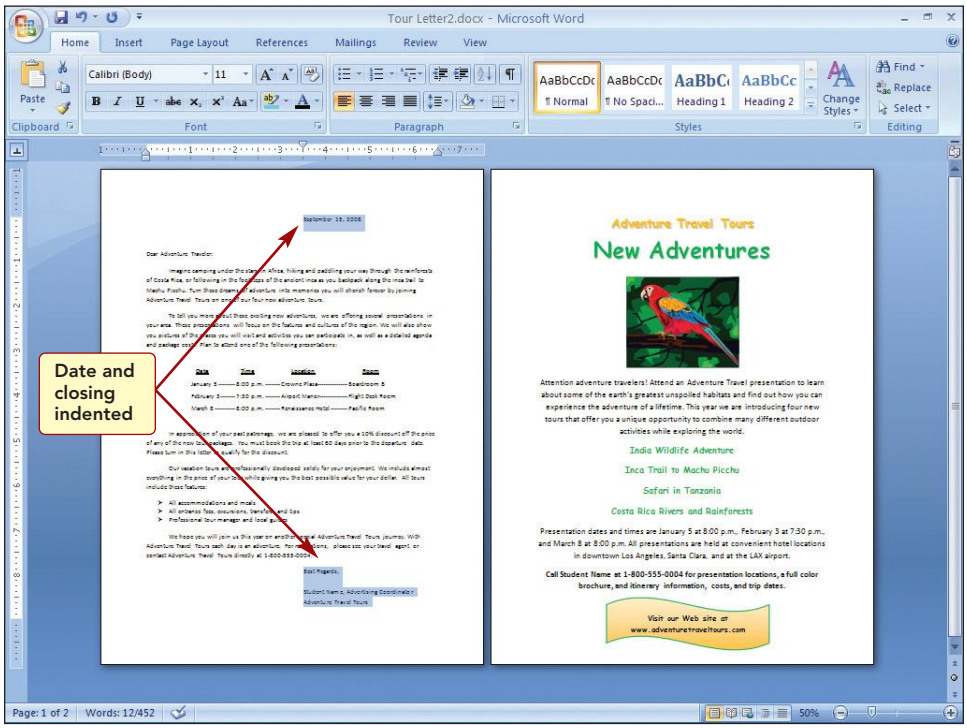


Figure 2.65

While looking at the document, you decide to emphasize the list of tour features by adding bold. You also want to decrease the space between the tour names in the flyer.

3. **Select the three bulleted items.**
- **Click B Bold on the Mini toolbar.**
- **Select the list of four tours in the flyer.**
- **Decrease the spacing after to 6 pt.**
- **Click in the list to clear the selection.**

Your screen should be similar to Figure 2.66

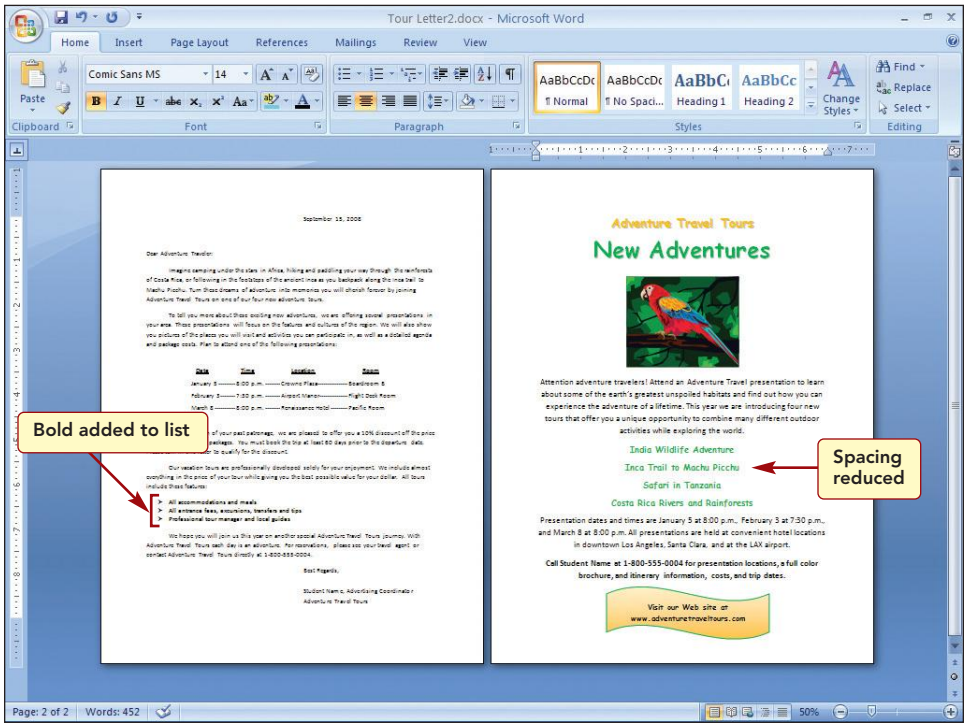


Figure 2.66

Setting Page Margins

Finally, you decide the document may look better if the left and right page margins were narrower.

Concept 10

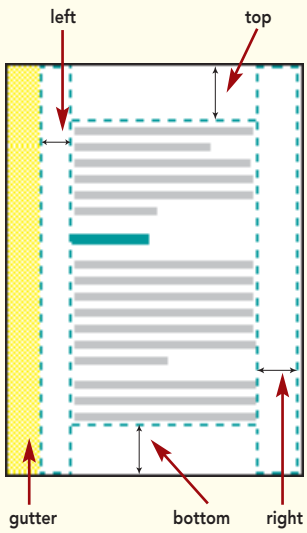
Page Margins

10 The **page margin** is the blank space around the edge of a page. Generally, the text you enter appears in the printable area inside the margins. However, some items can be positioned in the margin space. You can set different page margin widths to alter the appearance of the document.

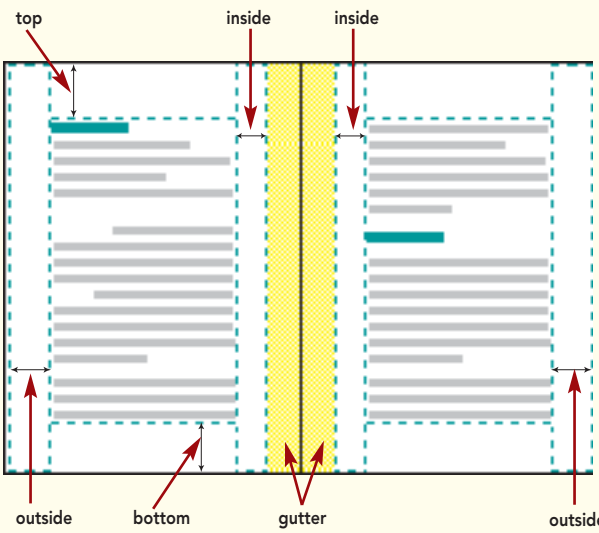
Standard single-sided documents have four margins: top, bottom, left, and right. Double-sided documents with facing pages, such as books and magazines, also have four margins: top, bottom, inside, and outside. These documents typically use mirror margins in which the left page is a mirror image of the right page. This means that the inside margins are the same width and the outside margins are the same width. (See the illustrations below.)

You also can set a "gutter" margin that reserves space on the left side of single-sided documents, or on the inside margin of double-sided documents, to accommodate binding. There are also special margin settings for headers and footers. (You will learn about these features in Lab 3.)

Single-sided with gutter



Double-sided with facing pages



The default document setting for the left and right margins is 1 inch. You would like to see how the document would look if you decreased the size of the right and left margin widths. The Page Setup group is used to change settings associated with the layout of the entire page.

1 **Open the Page Layout tab.**

Click  **in the Page Setup group.**

Your screen should be similar to Figure 2.67

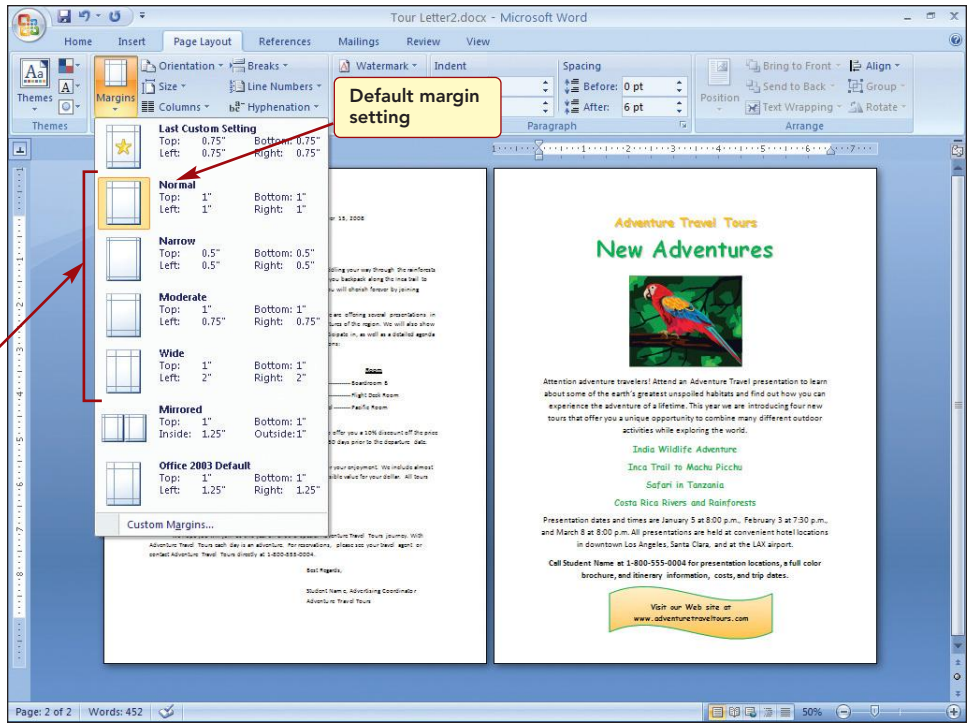


Figure 2.67

The Margins drop-down menu displays several common margin setting options for a single-sided document, including the default setting of Normal. The Mirrored option is used for documents that will be printed double-sided with facing pages, such as a book. Additionally, if you have used a custom margin setting, it also appears in the menu.

You decide to try the Narrow option first.

2 **Choose Narrow.**

Your screen should be similar to Figure 2.68

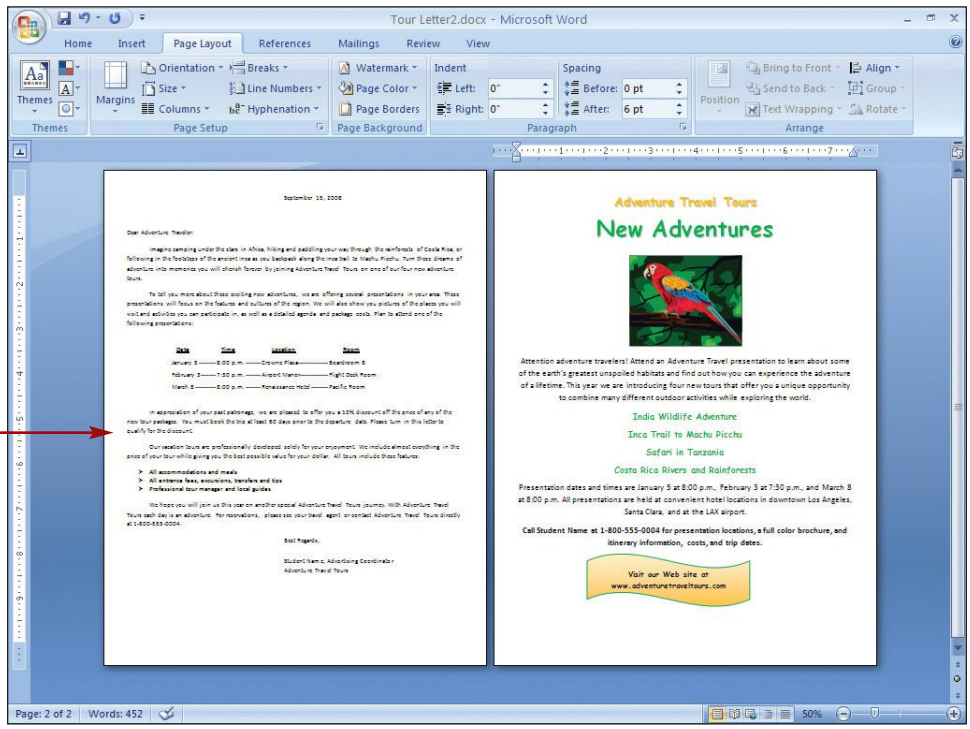


Figure 2.68

Additional Information

Use the custom margins option if you want the new margin settings to be saved for future use.

You do not like how this setting looks at all and will undo the change. Then you will create a custom setting to change this document to 0.8-inch side margins. Custom margin settings are specified using the Custom Margins option on the Margins drop-down menu. You also can double-click on the margin section of the ruler to access this feature.

3. **Click Undo to cancel this change.**
   - **Double-click the margin section of the ruler.**
   - **If necessary, open the Margins tab.**

Your screen should be similar to Figure 2.69

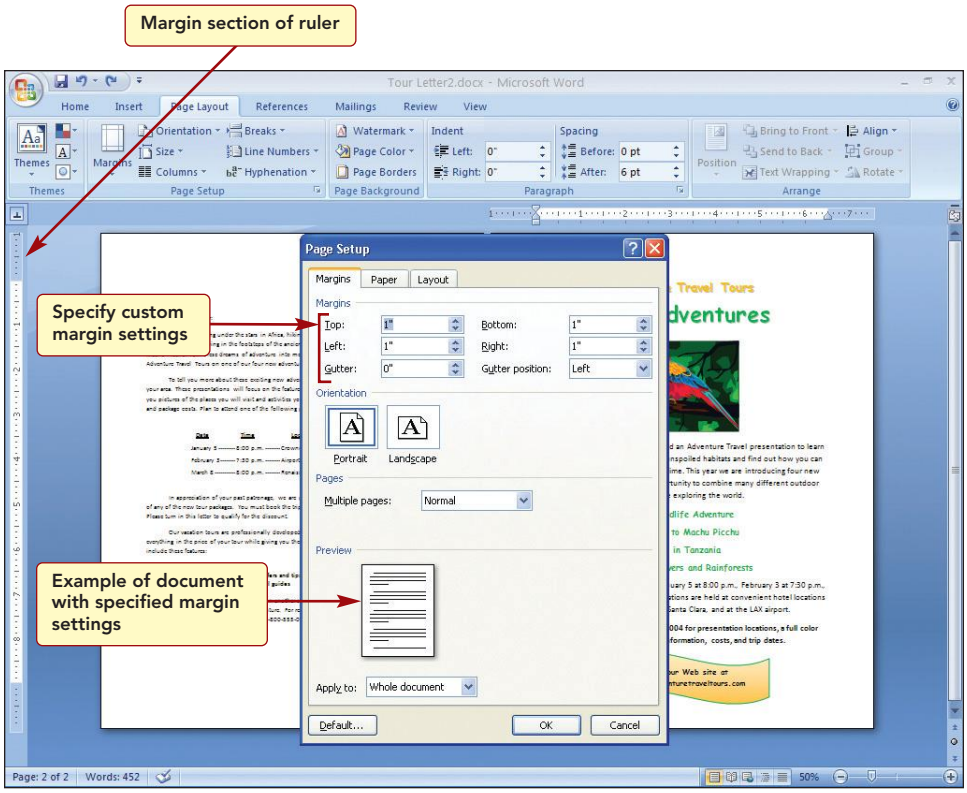


Figure 2.69

The Margins tab of the Page Setup dialog box displays the default margin settings for a single-sided document. The Preview box shows how the current margin settings will appear on a page. New margin settings can be entered by typing the value in the text box, or by clicking the ▲ and ▼ scroll buttons or pressing the ↑ or ↓ keys to increase or decrease the settings by tenths of an inch.

4. **Using any of these methods, set the left and right margins to 0.8 inch.**

- **Click** OK **.**
- **If necessary, readjust the placement of the shape at the bottom of the flyer.**
- **Save the document again.**

Additional Information

You also can change the margins by dragging the left and right margin boundaries on the ruler.

Your screen should be similar to Figure 2.70

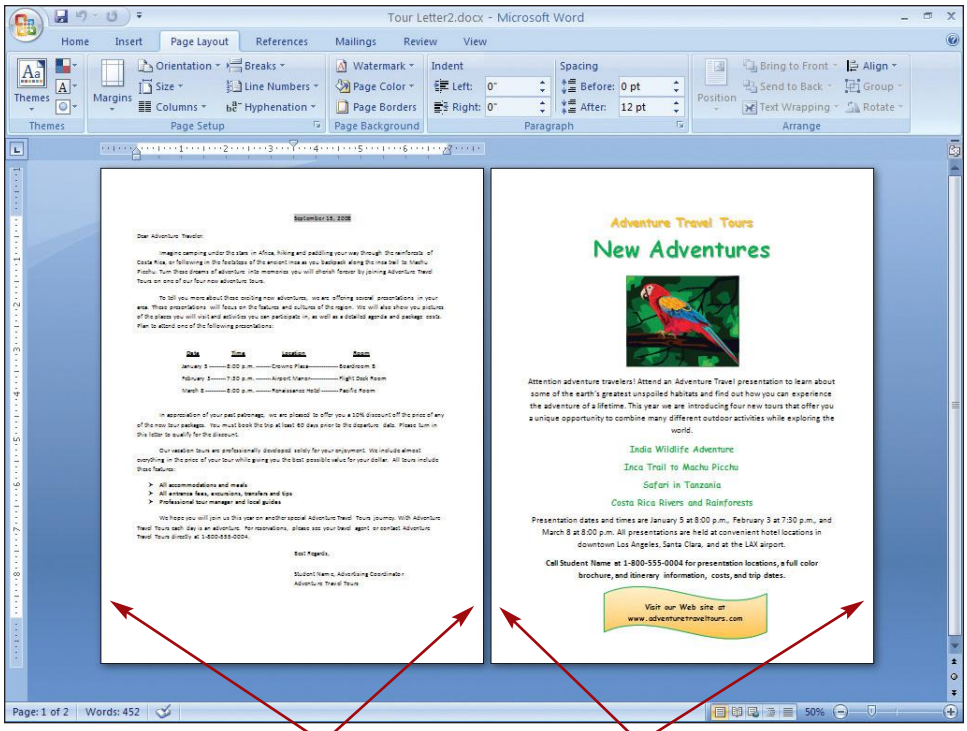


Figure 2.70

Although the text is difficult to read, you can easily see the layout of the pages and that the margin settings have been changed for both pages. You are happy with the new settings.

Printing the Document

Now that the document has been edited and formatted the way you want, you will print a copy of the document using the default print settings.

Note: If you need to specify a different printer, you will need to use the Print command on the Office Button menu.

1. **Click Office Button and choose Print/Quick Print.**

The printed output should be similar to text shown in the Case Study at the beginning of the lab.

2. **Click Close to close the Tour Letter2 document.**

Click Close to close the wd02_Flyer2 document.

Additional Information

Using Close both closes the file and exits the application. If you want to keep the application open, use the Close command in the Office Button menu.

If a question dialog box appears about modified styles, click No.

If a question dialog box appears about a large amount of text in the Clipboard, click No.

If you were using your own computer, you would want to save the modified block style so that it would be available the next time you used the application.



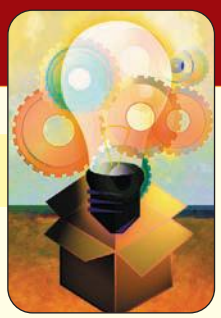
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Assistant Broadcast Producer

Have you wondered who does the background research for a film or television broadcast? Or who is responsible for making sure a film production runs on schedule? Assistant producers are responsible for background research and the daily operations of a shooting schedule. They also may produce written materials for broadcast. These written materials are often compiled from multiple documents and sources. The typical salary range for an assistant broadcast producer is $27,000 to $38,000. Demand for those with relevant training and experience is expected to continue in this competitive job market.

Concept Summary

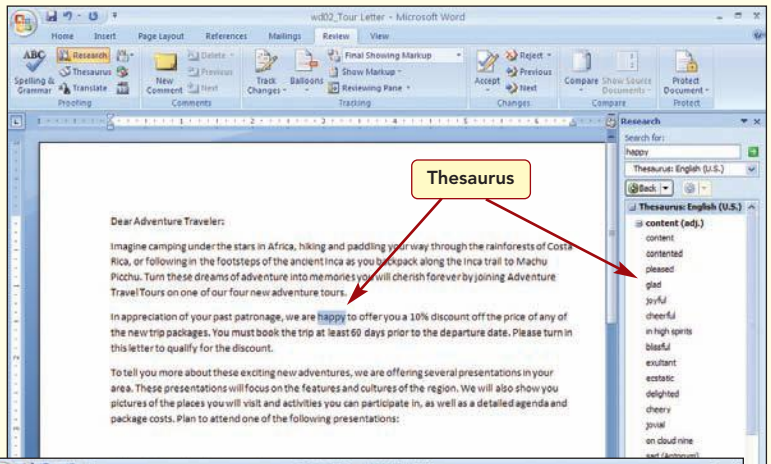


LAB 2

Revising and Refining a Document

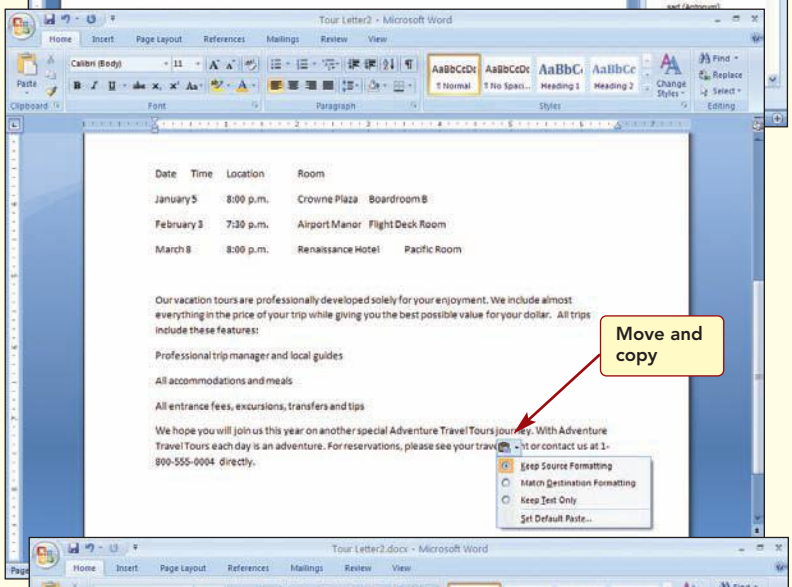
Thesaurus (WD2.9)

Word's Thesaurus is a reference tool that provides synonyms, antonyms, and related words for a selected word or phrase.



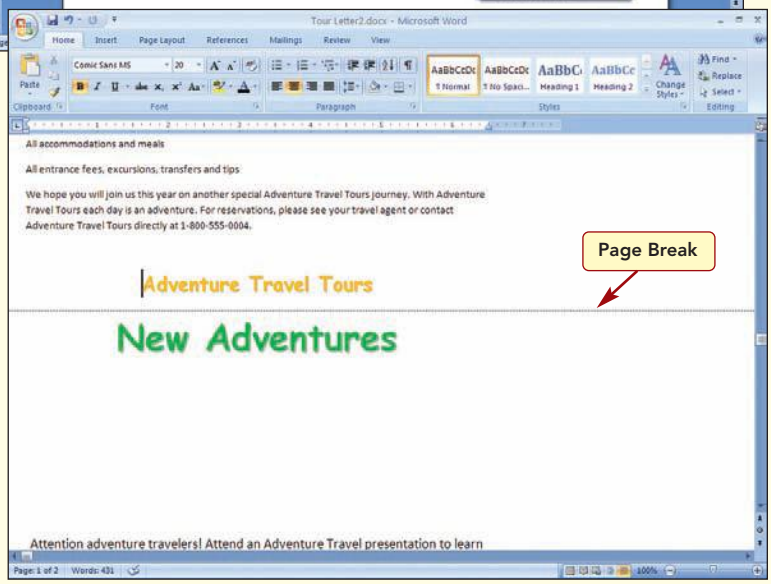
Move and Copy (WD2.12)

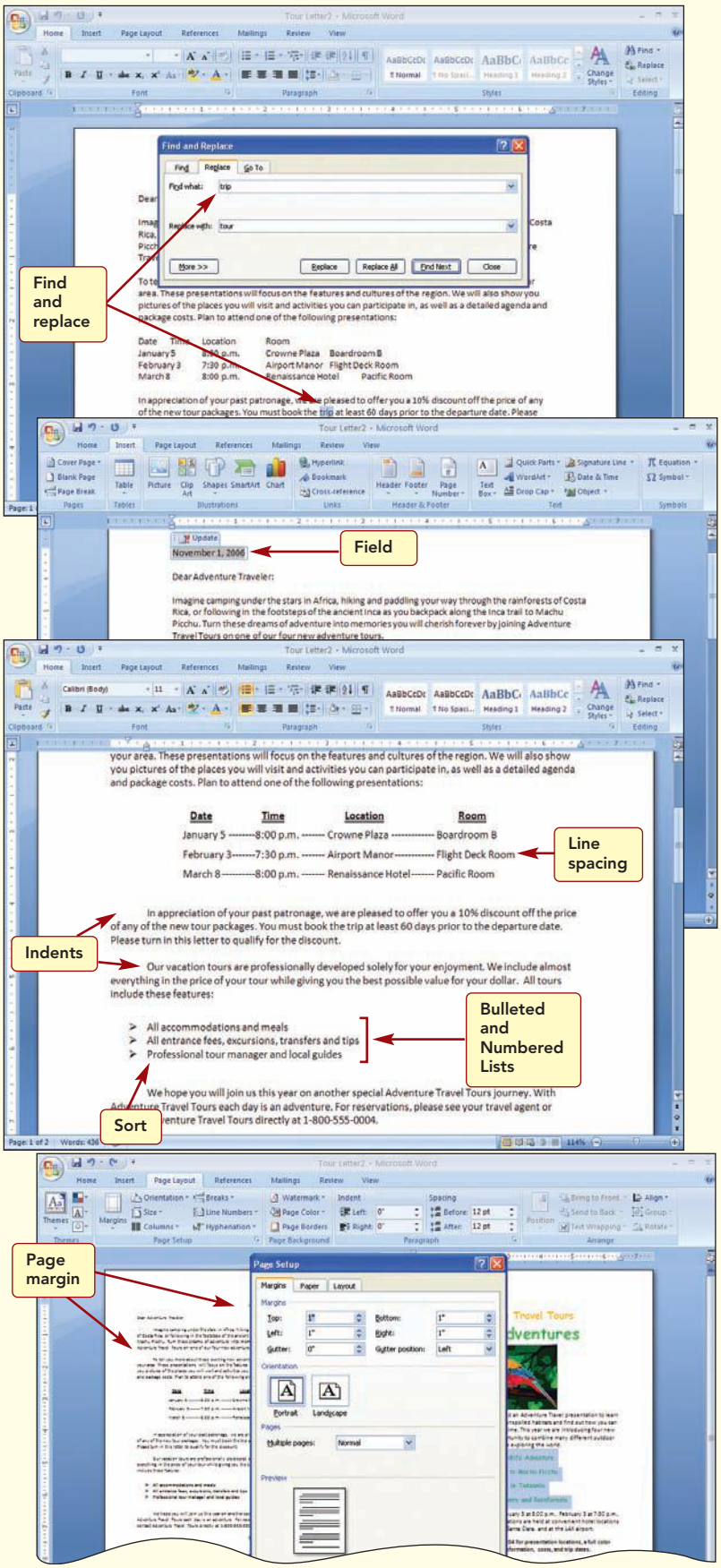
Text and graphic selections can be moved or copied to new locations in a document or between documents, saving you time by not having to retype the same information.



Page Break (WD2.20)

A page break marks the point at which one page ends and another begins. Two types of page breaks can be used in a document: soft page breaks and hard page breaks.





Find and Replace (WD2.22)

To make editing easier, you can use the Find and Replace feature to find text in a document and replace it with other text as directed.

Field (WD2.29)

A field is a placeholder that instructs Word to insert information into a document.

Indents (WD2.32)

To help your reader find information quickly, you can indent paragraphs from the margins. Indenting paragraphs sets them off from the rest of the document.

Line Spacing (WD2.41)

Adjusting the line spacing, or the vertical space between lines of text, helps set off areas of text from others and, when increased, makes it easier to read and edit text.

Bulleted and Numbered Lists (WD2.48)

Whenever possible, add bullets or numbers before items in a list to organize information and make your writing clear and easy to read.

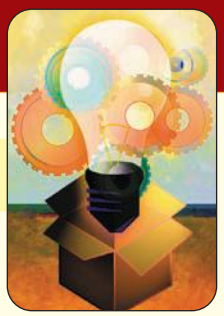
Sort (WD2.52)

Word can quickly arrange or sort text, numbers, or data in lists or tables in alphabetical, numeric, or date order based on the first character in each paragraph.

Page Margin (WD2.65)

The page margin is the blank space around the edge of the page. Standard single-sided documents have four margins: top, bottom, left, and right.

Lab Review



LAB 2

Revising and Refining a Document

key terms

active window WD2.17
antonym WD2.9
building blocks WD2.53
bulleted list WD2.48
case sensitive WD2.24
control WD2.54
destination WD2.12
drag and drop WD2.15
field WD2.29
field code WD2.29
field result WD2.29
Format Painter WD2.47
gradient WD2.59
hard page break WD2.20
hyperlink WD2.60
indent WD2.32
leader character WD2.38
line spacing WD2.41
numbered list WD2.48
Office Clipboard WD2.12
outline numbered list WD2.48
page break WD2.20
page margin WD2.65
soft page break WD2.20
sort WD2.52
source WD2.12
synchronized WD2.17
synonym WD2.9
system Clipboard WD2.12
tab stop WD2.35
thesaurus WD2.9
URL WD2.60

MCAS skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2 MCAS Certification Guide for a complete list of the skills that were covered in Lab 2.

command summary

Command	Shortcut	Action
Home tab		
Clipboard group		
Cut	Ctrl + X	Cuts selection to Clipboard
Copy	Ctrl + C	Copies selection to Clipboard
Paste	Ctrl + V	Pastes item from Clipboard
Editing group		
Find	Ctrl + F	Locates specified text
Replace	Ctrl + H	Locates and replaces specified text
Font group		
Underline	Ctrl + U	Underlines selected text with single line
Paragraph group		
Bullets		Creates a bulleted list
Numbering		Creates a numbered list
Sort		Rearranges information in a list in alphabetical order
Increase Indent		Increases indent of paragraph to next tab stop
Line Spacing		Changes spacing between lines of text
/ Tabs...		Specifies types and positions of tab stops
/Indents and Spacing/ Special/First Line	Tab	Indents first line of paragraph from left margin
/Indents and Spacing/ Line Spacing	Ctrl + #	Changes the spacing between lines of text
Insert tab		
Pages group		
Page Break	Ctrl + Enter	Inserts hard page break
Illustrations group		
Shapes		Inserts graphic shapes
Text group		
Quick Parts		Inserts Building Blocks
Date & Time		Inserts current date or time, in selected format

command summary

Command	Shortcut	Action
Page Layout tab		
Page Setup group		
		Sets margin sizes
		Inserts page and section breaks
Review tab		
Proofing group		
	F7	Starts Spelling and Grammar Checker
	Shift + F7	Opens Thesaurus tool
View tab		
Window group		
		Arranges all open windows horizontally on the screen
		Displays two document windows side by side to make it easy to compare content

Lab Exercises



matching

Match the item on the left with the correct description on the right.

1. 	_____	**a.** indents first line of paragraph
2. Tab	_____	**b.** mouse procedure that moves or copies a selection to a new location
3. synonyms	_____	**c.** placeholder that instructs Word to insert information into a document
4. 	_____	**d.** automatically starts a new page when a previous page is filled with text
5. drag and drop	_____	**e.** arranges selection in sorted order
6. field	_____	**f.** inserts a hard page break
7. soft page break	_____	**g.** words with similar meaning
8. Ctrl + ↵Enter	_____	**h.** copies formatting to another place
9. leader character	_____	**i.** vertical space between lines of text
10. line spacing	_____	**j.** solid, dotted, or dashed lines between tab stops

multiple choice

Circle the correct response to the questions below.

1. Word includes preformatted content, called _____, that gives you a head start in creating content such as page numbers, cover pages, headers and footers, and sidebars.
   - **a.** drag and drop
   - **b.** Format Painter
   - **c.** building blocks
   - **d.** AutoContent
2. A _____ marks the point at which one page ends and another begins.
   - **a.** leader character
   - **b.** selection point
   - **c.** field code
   - **d.** page break
3. The _____ is a reference tool that provides synonyms and antonyms.
   - **a.** find and replace feature
   - **b.** research
   - **c.** thesaurus
   - **d.** clipboard

4. The information that is displayed as a result of a field is called _____.
   a. a field code
   b. a field result
   c. a quick part
   d. a wildcard
5. The blank space around the edge of the page is called the _____.
   a. gutter
   b. indent
   c. margin
   d. white space
6. The field _____ contains the directions that identify the type of information to insert.
   a. results
   b. code
   c. placeholder
   d. format
7. To convey a sequence of events in a document, you should consider using a _____.
   a. bulleted list
   b. numbered list
   c. sorted list
   d. paragraph list
8. A _____ is a Web site address.
   a. URL
   b. RUL
   c. WSL
   d. ULR
9. The feature most useful for copying or moving short distances in a document is _____.
   a. drag and drop
   b. drop and drag
   c. move and place
   d. drag and place
10. _____ is a feature that applies the formats associated with a selection to another selection.
    a. Format Painter
    b. Find and Replace
    c. AutoFormat
    d. Format Designer

true/false

Circle the correct answer to the following questions.

1.	The thesaurus identifies synonyms for common words.	True	False
2.	Draft view does not display graphics.	True	False
3.	Indents are used to set paragraphs off from the rest of the text.	True	False
4.	The Find and Replace feature is used to locate misspelled words in a document.	True	False
5.	A sorted list conveys a sequence of events.	True	False
6.	A source is the location from which text is moved or copied.	True	False
7.	Soft page breaks are automatically inserted whenever the text reaches the bottom margin.	True	False
8.	The Clipboard is a permanent storage area.	True	False
9.	The Quick Parts feature can be used to quickly insert text and graphics.	True	False
10.	A hyperlink is a connection to a location in the current document, to another document, or to a Web site.	True	False

fill-in

Complete the following statements by filling in the blanks with the correct terms.

1. Windows that are _____ scroll together.

2. A(n) _____ code instructs Word to insert the current date in the document using the selected format whenever the document is printed.

3. As you add or remove text from a page, Word automatically _____ the placement of the soft page break.

4. Double-sided documents with facing pages typically use _____ margins.

5. _____ are reuseable pieces of content that can be quickly inserted in a document.

6. In a _____ style letter, all parts are aligned with the left margin.

7. _____ and _____ organize information and make your writing clear and easy to read.

8. A _____ is a gradual progression of colors and shades.

9. Two types of page breaks that can be used in a document are _____ and _____.

10. When a selection is moved or copied, the selection is stored in the _____ Clipboard, a temporary Windows storage area in memory.

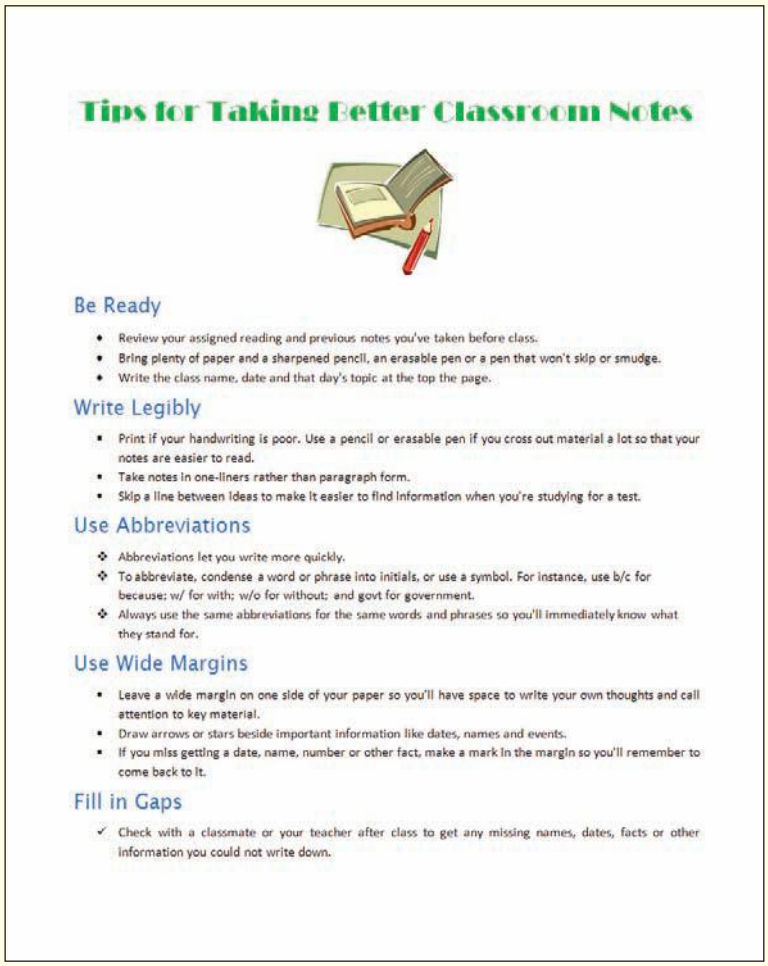
Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Expanding the Note-Taking Skills Handout ★

1. You are continuing to work on the handout to supplement your lecture on note-taking skills and tips. Although the content is nearly complete, there are several more tips you need to add to the document. You also want to rearrange the order of the tips. This handout is also going to be included in the freshman orientation information packet and needs to include formatting to make the document interesting and appealing to students. Your completed document will be similar to the one shown here.


Tips for Taking Better Classroom Notes

Be Ready
- Review your assigned reading and previous notes you've taken before class.
- Bring plenty of paper and a sharpened pencil, an erasable pen or a pen that won't skip or smudge.
- Write the class name, date and that day's topic at the top the page.

Write Legibly
- Print if your handwriting is poor. Use a pencil or erasable pen if you cross out material a lot so that your notes are easier to read.
- Take notes in one-liners rather than paragraph form.
- Skip a line between ideas to make it easier to find information when you're studying for a test.

Use Abbreviations
- Abbreviations let you write more quickly.
- To abbreviate, condense a word or phrase into initials, or use a symbol. For instance, use b/c for because; w/ for with; w/o for without; and govt for government.
- Always use the same abbreviations for the same words and phrases so you'll immediately know what they stand for.

Use Wide Margins
- Leave a wide margin on one side of your paper so you'll have space to write your own thoughts and call attention to key material.
- Draw arrows or stars beside important information like dates, names and events.
- If you miss getting a date, name, number or other fact, make a mark in the margin so you'll remember to come back to it.

Fill in Gaps
- Check with a classmate or your teacher after class to get any missing names, dates, facts or other information you could not write down.

   a. Open the file wd02_Note Taking Tips. Spell-check the document.
   b. Use the thesaurus to find a better word for "gist" in the first tip.
   c. Open the document Note Taking Skills you created in Step-by-Step Exercise 4 in Lab 1. Display the document windows side by side. Copy the tips from the wd02_Note Taking Tips document to the end of the tips in the Note Taking Skills document. Close the wd02_Note Taking Tips document without saving your changes.
   d. Increase the size of the title to 24 points. Use Format Painter to change the format of the five new headings to the same as the existing headings.
   e. Move the "Use Abbreviations" tip below the "Write Legibly" tip. Move the "Check the Board" tip to below the "Mark Questionable Material" tip.
   f. Change the margins to Moderate. Change the space after paragraphs to 6 points for the entire document. Remove any blank lines between topics.
   g. Break the tips under each topic heading into separate bulleted items using bullet styles of your choice. (A bulleted item may be more than one sentence if it contains an explanation or is a continuation of the same tip topic.)

h. Insert a hard page break before the Mark Questionable Materials topic.

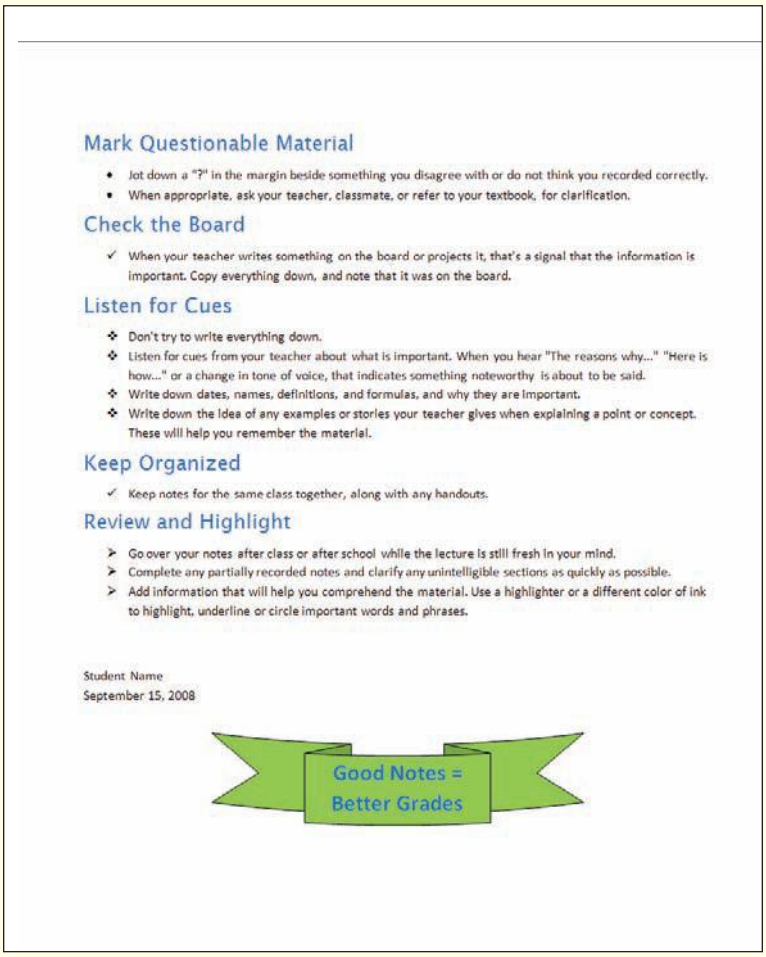
i. Left-align your name and the date. Delete your name and replace it using the Author quick part. Replace the date with a date field using a format of your choice.

j. Add the shape "Curved Down Ribbon" from the Stars and Banners category to the bottom of the document.

k. Add the text **Good Notes = Better Grades** to the shape. Bold, center, and size the text to 18 pt. Size the shape to display the text on two lines.

l. Add a fill color to the shape and color to the text to complement the colors you used in the document. Center the shape at the bottom of the document.

m. Add document properties. Save the document as Note Taking Skills2 and print it.



Mark Questionable Material

- Jot down a "?" in the margin beside something you disagree with or do not think you recorded correctly.
- When appropriate, ask your teacher, classmate, or refer to your textbook, for clarification.

Check the Board

- ✓ When your teacher writes something on the board or projects it, that's a signal that the information is important. Copy everything down, and note that it was on the board.

Listen for Cues

- ❖ Don't try to write everything down.
- ❖ Listen for cues from your teacher about what is important. When you hear "The reasons why..." "Here is how..." or a change in tone of voice, that indicates something noteworthy is about to be said.
- ❖ Write down dates, names, definitions, and formulas, and why they are important.
- ❖ Write down the idea of any examples or stories your teacher gives when explaining a point or concept. These will help you remember the material.

Keep Organized

- ✓ Keep notes for the same class together, along with any handouts.

Review and Highlight

- ➢ Go over your notes after class or after school while the lecture is still fresh in your mind.
- ➢ Complete any partially recorded notes and clarify any unintelligible sections as quickly as possible.
- ➢ Add information that will help you comprehend the material. Use a highlighter or a different color of ink to highlight, underline or circle important words and phrases.

Student Name
September 15, 2008

Water Conservation Article ★★

2. Each month, the town newsletter is included with the utility bill. This month the main article is about conserving water. You started the column a few days ago and need to expand the article by adding a few more suggestions. Then you need to edit and format the text and include a graphic to enhance the appearance of the article. Your completed article will be similar to that shown on the next page.

a. Open the document wd02_Water Conservation. Spell and grammar-check the document.

b. Center the title. Change the font to Impact with a point size of 24. Add a color of your choice to the title.

c. Change the three category heads to bold with a type size of 14 pt. Center the heads. Use the same color as in the title for the heads.

d. Change the alignment of the introductory paragraph to justified.

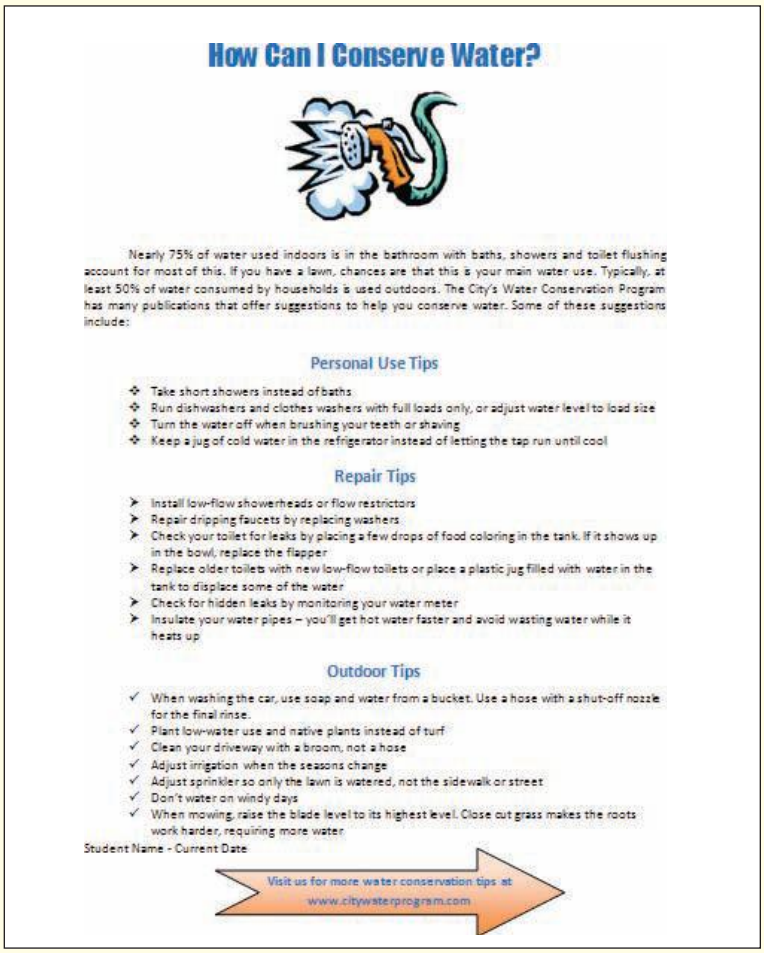
e. Insert the picture wd02_Water Hose (from your data files) below the main title of the article.

f. Size the picture to be 2 inches wide (use the ruler as a guide). Center it below the title.

g. Save the document using the file name Water Conservation Column.

h. Open the document wd02_Conservation Tips. Find and replace all occurrences of "h2o" with "water."

i. Display the document windows side by side. Copy the tips from the wd02_Conservation Tips document to the appropriate categories in the Water Conservation Column document. Close the wd02_Conservation Tips document without saving your changes.
j. Save the document again.
k. Change the line spacing of the tips by decreasing the spacing after to 0 points.
l. Change the top and bottom margins to 0.75 inch. Change the right and left margins to 1 inch.
m. Apply three different bullet styles to the tips under the three categories. Indent the bulleted tips to the 0.5-inch position.
n. Use the thesaurus to find a better word for "biggest" in the first paragraph. Indent the first line of the first paragraph.
o. Two lines below the last group of tips, insert a shape that includes the text **Visit us for more water conservation tips at www.citywaterprogram.com**. Remove the hyperlink formatting. Apply formatting, such as color and bold, of your choice to this line. Fill the shape with a gradient color. Size and center the shape appropriately.
p. Add your full name using the Author quick part and the current date as a date field below the last line of tips.
q. Preview the document and, if necessary, reduce the size of the graphic to make the entire document fit on one page. Print the document.
r. Add document properties. Save and close the document.



How Can I Conserve Water?

Nearly 75% of water used indoors is in the bathroom with baths, showers and toilet flushing account for most of this. If you have a lawn, chances are that this is your main water use. Typically, at least 50% of water consumed by households is used outdoors. The City's Water Conservation Program has many publications that offer suggestions to help you conserve water. Some of these suggestions include:

Personal Use Tips

- Take short showers instead of baths
- Run dishwashers and clothes washers with full loads only, or adjust water level to load size
- Turn the water off when brushing your teeth or shaving
- Keep a jug of cold water in the refrigerator instead of letting the tap run until cool

Repair Tips

- Install low-flow showerheads or flow restrictors
- Repair dripping faucets by replacing washers
- Check your toilet for leaks by placing a few drops of food coloring in the tank. If it shows up in the bowl, replace the flapper
- Replace older toilets with new low-flow toilets or place a plastic jug filled with water in the tank to displace some of the water
- Check for hidden leaks by monitoring your water meter
- Insulate your water pipes – you'll get hot water faster and avoid wasting water while it heats up

Outdoor Tips

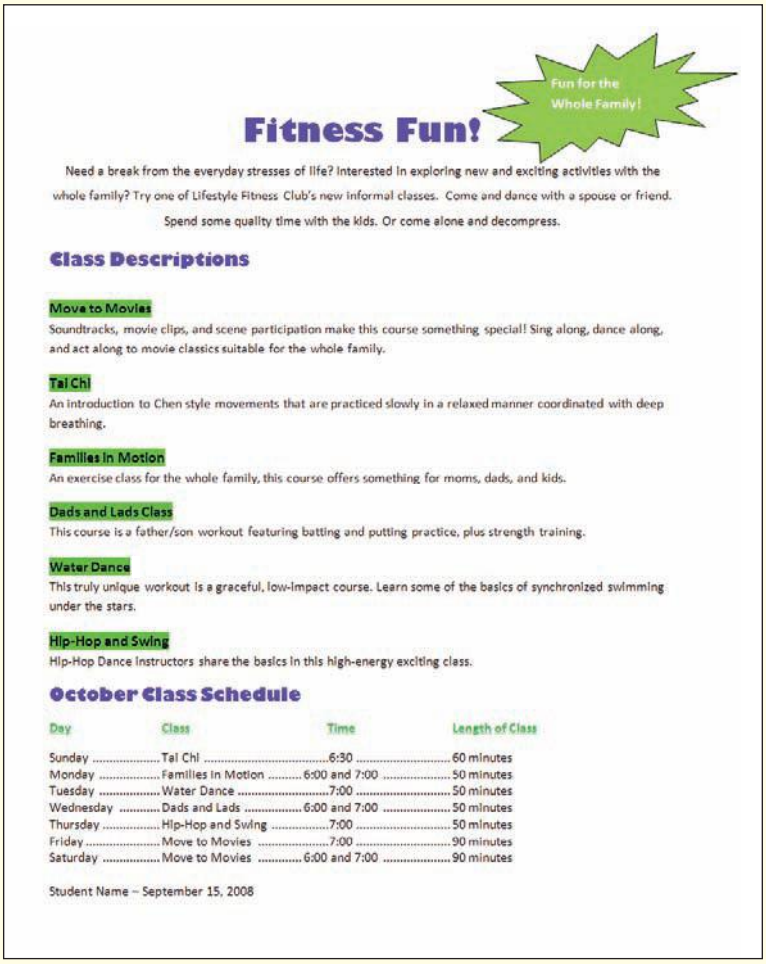
- When washing the car, use soap and water from a bucket. Use a hose with a shut-off nozzle for the final rinse.
- Plant low-water use and native plants instead of turf
- Clean your driveway with a broom, not a hose
- Adjust irrigation when the seasons change
- Adjust sprinkler so only the lawn is watered, not the sidewalk or street
- Don't water on windy days
- When mowing, raise the blade level to its highest level. Close cut grass makes the roots work harder, requiring more water

Student Name - Current Date

Visit us for more water conservation tips at www.citywaterprogram.com

Promoting New Fitness Classes ★★

3. The Lifestyle Fitness Club has just started a new series of informal classes for the members and their families. You want to spread the word by creating a flyer for club members to pick up at the front desk. You have created a Word document with the basic information that you want to include in the flyer. Now you just need to make it look better. Your completed flyer will be similar to the one shown here.



Fun for the Whole Family!

Fitness Fun!

Need a break from the everyday stresses of life? Interested in exploring new and exciting activities with the whole family? Try one of Lifestyle Fitness Club's new informal classes. Come and dance with a spouse or friend. Spend some quality time with the kids. Or come alone and decompress.

Class Descriptions

Move to Movies
Soundtracks, movie clips, and scene participation make this course something special! Sing along, dance along, and act along to movie classics suitable for the whole family.

Tai Chi
An introduction to Chen style movements that are practiced slowly in a relaxed manner coordinated with deep breathing.

Families in Motion
An exercise class for the whole family, this course offers something for moms, dads, and kids.

Dads and Lads Class
This course is a father/son workout featuring batting and putting practice, plus strength training.

Water Dance
This truly unique workout is a graceful, low-impact course. Learn some of the basics of synchronized swimming under the stars.

Hip-Hop and Swing
Hip-Hop Dance Instructors share the basics in this high-energy exciting class.

October Class Schedule

Day	Class	Time	Length of Class
Sunday	Tai Chi	6:30	60 minutes
Monday	Families in Motion	6:00 and 7:00	50 minutes
Tuesday	Water Dance	7:00	50 minutes
Wednesday	Dads and Lads	6:00 and 7:00	50 minutes
Thursday	Hip-Hop and Swing	7:00	50 minutes
Friday	Move to Movies	7:00	90 minutes
Saturday	Move to Movies	6:00 and 7:00	90 minutes

Student Name – September 15, 2008

a. Open the file wd02_Fitness Fun.
b. Find each occurrence of "class" and replace it with "Class" where appropriate. Be sure to use the match case and whole words only options. Find and replace all occurrences of "mins" with "minutes."
c. Use the spelling and grammar checker to correct the identified errors.
d. Save the document as Fitness Fun Flyer.
e. Change the title font to Gill Sans Ultra Bold (or a font of your choice), 26 pt, and a color of your choice. Center the title.
f. Center the introductory paragraph and set line spacing to 1.5.
g. Use Format Painter to format the "Class Descriptions" heading the same as the title. Reduce the font size to 14 and left align it. Add space before the paragraph.
h. Use Format Painter to increase the font size to 12; add bold and a color highlight to the eight class titles.
i. Delete the class title and description for Beginning Ballroom Dance as well as the scheduling information (at the bottom of the document) because you do not have an instructor for this month.
j. Set the margins to Moderate.
k. Use drag and drop to move the Tai Chi class description below the Move to Movies description. Adjust the line spacing as needed between descriptions.
l. Create a tabbed table of the schedule. Add left tab marks at 1.5, 3, and 5 inches. Bold, add color, and underline the words only of the table heads: Day, Class, Time, and Length of Class. Move the

tab marker from the 5-inch position to the 4.5-inch position for the entire table. Change the tab at the 3-inch position to a center tab stop at the 3.25-inch position. Add tab leaders of your choice between the columns of data. Add space after the heading line only of the tabbed table.

m. Above the table, add the heading **October Class Schedule**. Format it the same as the "Class Descriptions" heading. Insert a hard page break above the table heading.

n. Add the shape "Explosion 2" from the Stars and Banners section below the Line Dancing description at the bottom of page one. Add the text **Fun for the Whole Family!**. Bold and size the text to 12 pt. Add fill color and font color of your choice to the shape. Size and position the shape appropriately.

o. Delete the Line Dancing class title and description. Delete the hard page break. Move and size the shape to fit at the top right of the flyer title.

p. Add your name using the Author quick part and the current date (as a field) on the last line on the page. Adjust the line spacing as needed to fit the document on one page.

q. Add document properties. Save and print the document.

Orientation Meeting Schedule ★★★

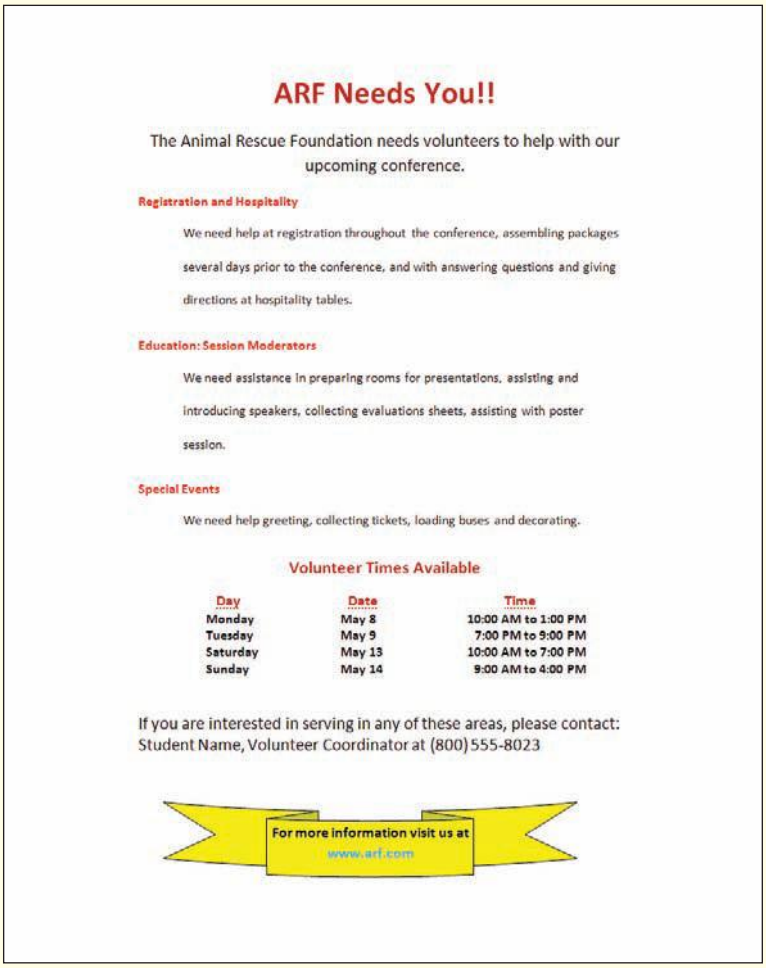
4. The Animal Rescue Foundation is actively seeking volunteers to help with an upcoming conference. You are preparing the information that will appear on the Web site and the flyer that will be distributed to local businesses. Your completed document will be similar to the one shown here.

a. Open a new document and set the left and right page margins to 1.5 inch.

b. On the first line, center the title **ARF Needs You!**. Increase the font to 26 points and apply formats of your choice.

c. Several lines below the title, type the following paragraphs:

The Animal Rescue Foundation needs volunteers to help with our upcoming conference.



ARF Needs You!!

The Animal Rescue Foundation needs volunteers to help with our upcoming conference.

Registration and Hospitality

We need help at registration throughout the conference, assembling packages several days prior to the conference, and with answering questions and giving directions at hospitality tables.

Education: Session Moderators

We need assistance in preparing rooms for presentations, assisting and introducing speakers, collecting evaluations sheets, assisting with poster session.

Special Events

We need help greeting, collecting tickets, loading buses and decorating.

Volunteer Times Available

Day	Date	Time
Monday	May 8	10:00 AM to 1:00 PM
Tuesday	May 9	7:00 PM to 9:00 PM
Saturday	May 13	10:00 AM to 7:00 PM
Sunday	May 14	9:00 AM to 4:00 PM

If you are interested in serving in any of these areas, please contact: Student Name, Volunteer Coordinator at (800) 555-8023

For more information visit us at www.arf.com

Registration and Hospitality

We need help at registration throughout the meeting, assembling packets several days prior to the meeting, and with answering questions and giving directions at hospitality tables.

Education: Session Moderators

We need help in preparing rooms for presentations, assisting and introducing speakers, collecting evaluation sheets, assisting with poster session.

Special Events

We need help greeting, collecting tickets, loading buses and decorating.

If you are interested in serving in any of these areas, please contact:

[Your Name], Volunteer Coordinator at (800) 555-8023

d. Spell-check the document. Use the thesaurus to find a better word for "help" in the Education: Session Moderators paragraph.

e. Find and replace all occurrences of "meeting" with "conference."

f. Save the document as Conference Volunteers.

g. Center the first line and increase the font size to 14. Add bold and color to the three headings. Indent the paragraphs below each heading 0.5 inch and set the line spacing to double.

h. Below the Special Events topic, enter the title **Volunteer Times Available**. Use the same formatting as the main title with a font size of 14 points.

i. Below this heading, you will create a table. Place center tab stops at 1, 2.5, and 4.25 inches on the ruler. Enter the word **Day** at the first tab stop, **Date** at the second tab stop, and **Time** at the third tab stop.

j. Press ↵Enter, then clear the tab stops. Create a left tab at 0.75 and 2.25 and a right tab stop at 5. Enter the schedule information shown here into the table.

Monday	**May 8**	**10:00 AM to 1:00 PM**
Tuesday	**May 9**	**7:00 PM to 9:00 PM**
Saturday	**May 13**	**10:00 AM to 7:00 PM**
Sunday	**May 14**	**9:00 AM to 4:00 PM**

k. Change the font size of the table headings to 12 points, bold, and the same color as the title. Add an underline style of your choice to the table headings. Bold the text in the remainder of the table. Change the line spacing of the entire table to single with no space after. Increase the font size of the last two lines in the flyer to 14 point.

l. Create a shape of your choice and add the text **For more information visit us at www.arf.com** using a font size of 12 points, centered and bold. Size the shape appropriately. Remove the hyperlink format from the URL. Add color to the URL. Add a fill color to the shape. Center the shape at the bottom of the page.

m. Add document properties. Save and print the document.

Advertising Weekly Specials ★★★

5. Now that the Downtown Internet Cafe has had its grand re-opening celebration, the owner wants to continue to bring in new and repeat customers by offering weekly specials. You want to create a flyer describing the coffee varieties and specials for the week. Your completed flyer will be similar to the one shown here.

a. Open a new document.
b. Enter the title **Downtown Internet Cafe** on the first line. Add three blank lines. Change the font of the title to Arial Rounded MT Bold.
c. Enter **Italian Market Reserve** on the line 4 followed by two blank lines.
d. On line 6, place a left tab stop at 0.5 and center tabs at 3.25 and 5.75 inches.
e. Enter the word **Coffee** at the first tab stop, **Description** at the second tab stop, and **Cost/Pound** at the third tab stop.
f. On the next line, clear all the tab stops and enter the rest of the information for the table shown in the final document (below) using left tabs at 0.5, 2, and 5.5.

Original	**Our Signature Coffee! With Old World charm**	**$10.49**
Decaffeinated	**All the original has to offer — decaffeinated natural**	**$13.49**
Reduced Caffeine	**All the original has to offer with half of the caffeine**	**$13.49**

g. Add tab leaders of your choice between the data in the table. Remove the space after each line in the table.
h. Center the first title line and change the font color to green with a font size of 28 pt.
i. Center the second title line and change it to purple with a font size of 22 pt.
j. Increase the font of the table headings to 14 pt. Add bold, color, and an underline style of your choice to the table headings.
k. Save the document as Weekly Specials.
l. Open the file wd02_Coffee Flyer. Display the document windows side by side. Copy the title and first two paragraphs and insert them above "Italian Market Reserve" in the Weekly Specials document.
m. Spell-check the Weekly Specials document. Use the thesaurus to find better words for "desire" and "giant" in the first paragraph.



n. Use Find and Replace to replace all occurrences of "java" with "coffee" (except the one following "high-powered").

o. Center the words **Weekly Specials** below the title. Use the same font as the title, change the font size to 24 points, and select a color of your choice.

p. Make the paragraph that begins with "Tired" bold, centered, and 14 pt, and set the line spacing to double. Add blue color to the URL.

q. Increase the font size of the line above "Italian Market Reserve" to 16 pt. Center the text.

r. Copy the remaining paragraph from the wd02_Coffee Flyer document and insert it at the bottom of the Weekly Specials document. Include two blank lines between the table and the paragraph. Close the wd02_Coffee Flyer document.

s. Bold and center the final paragraph. Remove the hyperlink format from the URL. Format the URL as italic and blue.

t. Create the Explosion 1 shape from the Stars and Banners group. Enter and center the text **Coffee Sale!** in red, 22 pt font size within it. Add a fill color. Move the shape to the left of the title. Size the shape appropriately.

u. Adjust the formatting of the document as needed to improve its appearance.

v. Add your name using the Author quick part and the current date (as a field) several lines below the final paragraph.

w. Add document properties. Save and print the document.

on your own

Requesting a Reference ★

1. Your first year as a business major is going well and you are looking for a summer internship with a local advertising firm. You have an upcoming interview and want to come prepared with a letter of reference from your last position. Write a business letter directed to your old supervisor, Kevin Westfall, at your former position, R & A Publishing. Use the modified block letter style shown in the lab. Be sure to include the date, a salutation, two paragraphs, a closing, and your name as a signature. Spell-check the document, save the document as Reference Letter, and print it.

Cell Phone Rates ★

2. MyRatePlan.com posts up-to-date rate information on cell phone rates and available minutes at each price break. The company wants you to create the following table of rates for quick reference. Create a tabbed table using the information shown below. Bold and underline the column heads. Add style 2 tab leaders to the table entries. Above the table, write a paragraph explaining the table contents.

	Cingular	NEXTEL	Sprint	T-Mobile	Verizon Wireless
$39.99	450	300-400	300-400	600-1,000	450
$49.99				1,000	
$59.99	900	500-1,000	500-1,000	1,500	900
$79.99	1,350	800-1,400	800-1,400		1,350
$99.99	2,000	1,000-2,000	1,000-2,000	2,500	2,000

Include your name and the date below the table. Save the document as Cell Phone Rates and print the document.

Yard Sale ★★

3. Create a flyer to advertise a yard sale you plan for Saturday morning. Include the following features on your flyer:
   - Different fonts in different sizes, colors, and styles.
   - Bulleted or numbered list.
   - Indents.
   - A shape with appropriate text.
   - A graphic.
   - A tabbed table with tab leaders.

Include your name as the contact information. Save the document as Yard Sale Flyer and print it.

Wyoming Relocation ★★

4. You work for the Department of Tourism for the state of Wyoming. You have been asked to produce a relocation packet to aid people planning to move to the state. This packet includes information on state history, the weather, geography, major cities, population statistics, and so forth. Research information on the Web about Wyoming and create a one-page fact sheet of your findings. Your completed project should include an introductory paragraph on relocation, graphics, table with the average weather statistics, a bulleted list of attractions, and shapes. Include your name as the contact and save the file as Wyoming Facts. Print the file.

Downloading Music ★★★

5. Your ethics class is studying the ethics of downloading free music from online sources. Your instructor has divided the class into groups and assigned each group a research project. Your group is to find out about court cases related to copyright infringement. Use the Web to research this topic and write a one-page report on your findings. Include a table of the data you found. Use other features demonstrated in this lab, including shapes, indents, bulleted lists, font colors, and so forth to make your report attractive and easy to read. Be sure to reference your sources on the Web for the data you located. Include your name and the current date below the report. Save the report as Ethics Report and print your report.

Creating Reports and Tables

LAB 3

Objectives

After you have completed this lab, you will know how to:

1. Create and modify an outline.
2. Create a cover page.
3. Apply and customize Document Themes.
4. Apply and customize Quick Styles.
5. Create and update a table of contents and table of figures.
6. Navigate using hyperlink, Document Map, and thumbnails.
7. Add citations and create a bibliography.
8. Add footnotes, captions, and cross-references.
9. Wrap text around graphics.
10. Create and format a simple table.
11. Create and format sections.
12. Add headers, footers, and page numbers.

Case Study

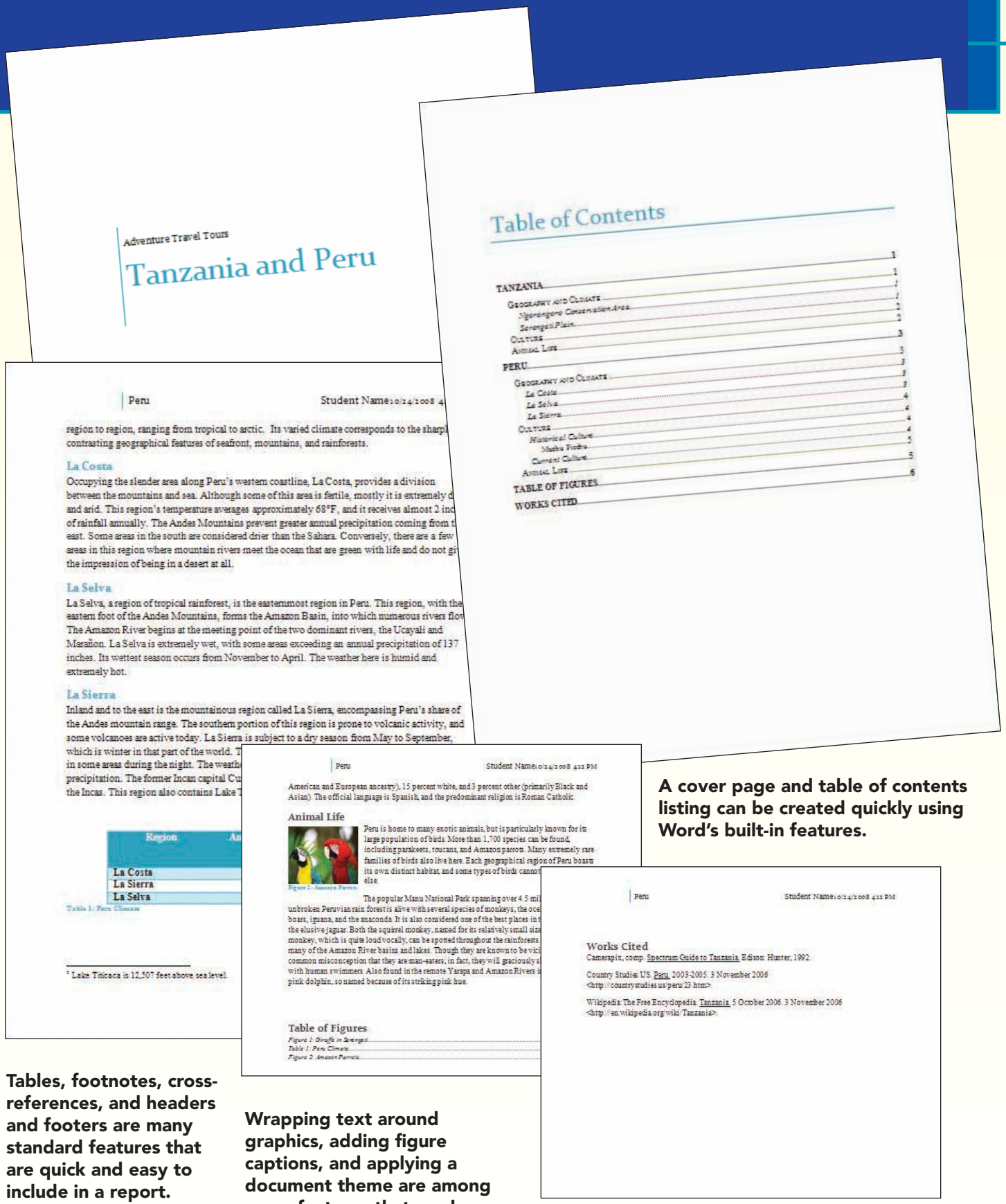
Adventure Travel Tours

Adventure Travel Tours provides information on their tours in a variety of forms. Travel brochures, for instance, contain basic tour information in a promotional format and are designed to entice potential clients to sign up for a tour. More detailed regional information packets are given to people who have already signed up for a tour, so they can prepare for their vacation. These packets include facts about each region's climate, geography, and culture. Additional informational formats include pages on Adventure Travel's Web site and scheduled group presentations.

Part of your responsibility as advertising coordinator is to gather the information that Adventure Travel will publicize about each regional tour. Specifically, you have been asked to provide background information for two of the new tours: the Tanzania Safari and the Machu Picchu trail. Because this information is used in a variety of formats, your research needs to be easily adapted. You will therefore present your facts in the form of a general report on Tanzania and Peru.



In this lab, you will learn to use many of the features of Office Word 2007 that make it easy to create an attractive and well-organized report. A portion of the completed report is shown here.



A cover page and table of contents listing can be created quickly using Word's built-in features.

Tables, footnotes, cross-references, and headers and footers are many standard features that are quick and easy to include in a report.

Wrapping text around graphics, adding figure captions, and applying a document theme are among many features that can be used to enhance a report.

A bibliography can be quickly generated from cited sources.

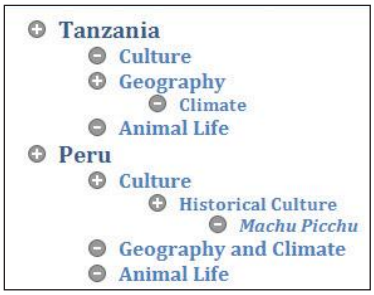
Concept Preview

The following concepts will be introduced in this lab:

1. **Quick Styles** Applying a quick style, a predefined set of formatting characteristics, allows you to quickly apply a whole group of formats to a selection in one simple step.
2. **Document Theme** A document theme is a predefined set of formatting choices that can be applied to an entire document in one simple step.
3. **Table of Contents** A table of contents is a listing of the topic headings that appear in a document and their associated page references.
4. **Citations and Bibliography** Parenthetical source references, called citations, give credit for specific information included in the document. Complete information for citations is included in a bibliography at the end of the report.
5. **Footnote and Endnote** Footnotes and endnotes are used in documented research papers to explain or comment on information in the text, or provide source references for text in the document.
6. **Text Wrapping** You can control the appearance of text around a graphic object by specifying the text wrapping style.
7. **Captions and Cross-References** A caption is a numbered label for a figure, table, picture, or graph. A cross-reference is a reference from one part of a document to related information in another part.
8. **Table** A table is used to organize information into an easy-to-read format of horizontal rows and vertical columns.
9. **Table of Figures** A table of figures is a list of the figures, tables, or equations used in a document and their associated page references.
10. **Header and Footer** A header is a line or several lines of text in the top margin of each page. A footer is a line or several lines of text in the margin space at the bottom of every page.
11. **Section** To format different parts of a document differently, you can divide a document into sections.

Creating and Modifying an Outline

After several days of research, you have gathered many notes from various sources including books, magazines, and the Web. However, the notes are very disorganized and you are having some difficulty getting started writing the report. Often the best way to start is by creating an outline of the main topics.



Word 2007 allows you to create and view document content easily as an outline using Outline view. Outline view shows the hierarchy of topics in a document by displaying the different heading levels indented to represent their level in the document's structure, as shown in the example at right. The

arrangement of headings in a hierarchy of importance quickly shows the relationship between topics. You can use Outline view to help you create a new document or to view and reorganize the topics in an existing document.

Using Outline View

You will use Outline view to help you organize the main topics of the report.

1. **Start Office Word 2007.**
2. **Click Outline View in the status bar.**
3. **If necessary, increase the zoom to 100%.**

Another Method

You also can use Outline in the Document Views group of the View tab.

Your screen should be similar to Figure 3.1

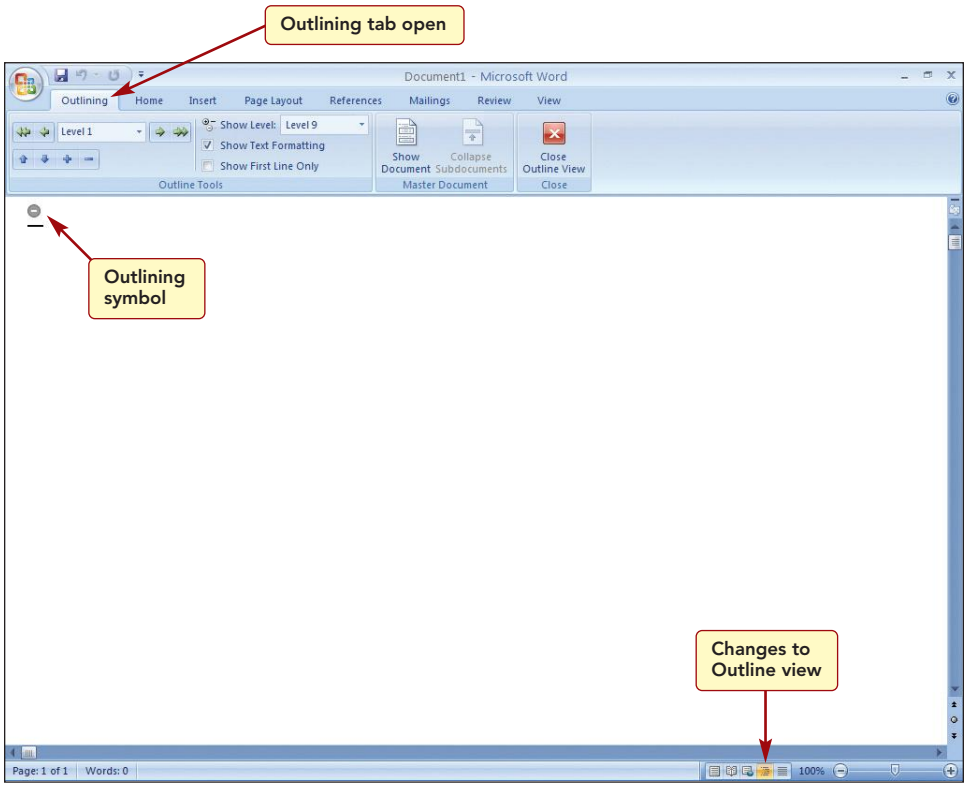


Figure 3.1

The Outlining tab containing buttons that make it easy to create and modify the outline is displayed. Notice the first line of the blank document displays the outline symbol. This symbol indicates that the line does not contain subtopics. You will begin by entering the main topic headings for the report.

2 **Type the following headings, pressing ↵Enter after each except the last:**

Tanzania

Climate

Geography

Animal Life

Peru

Culture

Historical Culture

Machu Picchu

Geography and Climate

Animal Life (do not press ↵Enter)

- **Correct any misspelled words and use Ignore All for any identified proper names.**

Your screen should be similar to Figure 3.2

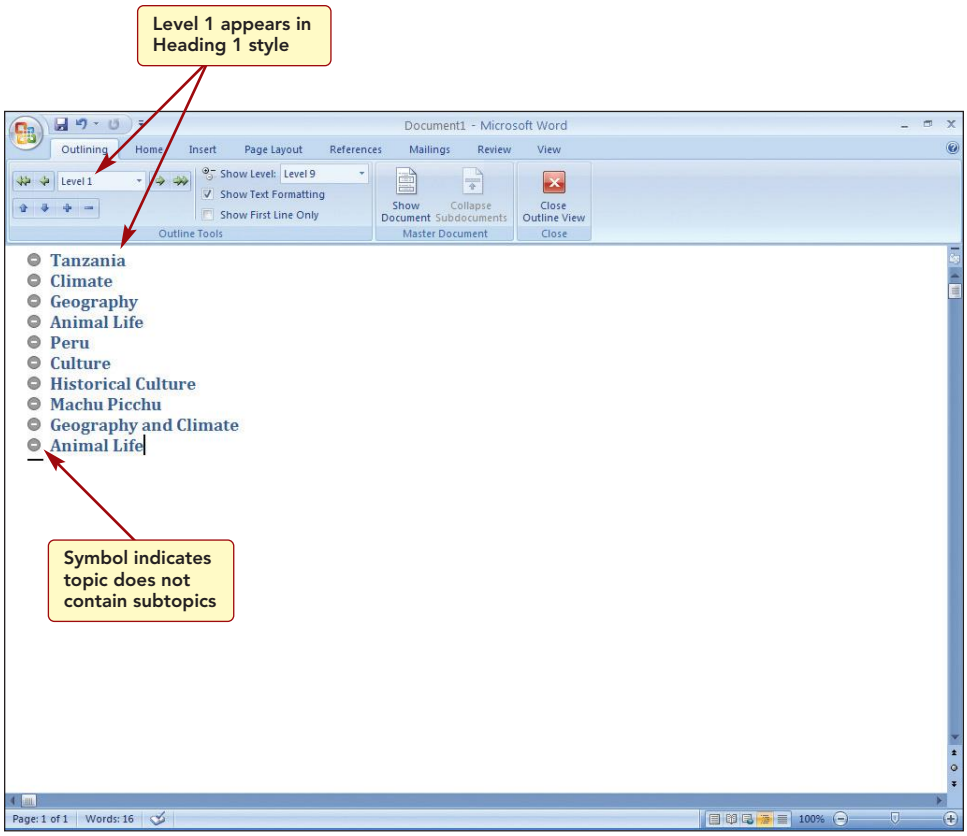


Figure 3.2

As you create a new document in Outline view, Word automatically applies styles to the text as it is entered in the outline.

Concept 1

Quick Styles

1 Applying a **quick style**, a predefined set of formatting characteristics, allows you to quickly apply a whole group of formats to a selection in one simple step. Word includes 75 predefined quick styles. Each quick style is assigned a name. You also can create your own custom styles. Many styles are automatically applied when certain features, such as footnotes, are used. Others must be applied manually to selected text.

Styles can be applied to characters, paragraphs, tables, and lists as described below.

Type of Style	Description
Character	Affects selected text within a paragraph, such as the font and size of text, and bold and italic formats.
Paragraph	Controls all aspects of a paragraph's appearance, such as text alignment, tab stops, and line spacing. It also can include character formatting. The default paragraph quick style is named Normal, which includes character settings of Calibri, 11 pt, and paragraph settings of left indent at 0, 1.15 line spacing, and left alignment. In addition, many paragraph styles are designed to affect specific text elements such as headings, captions, and footnotes.
Table	Provides a consistent look to borders, shading, alignment, and fonts in tables.
List	Applies similar alignment, numbering or bullet characters, and fonts to lists.

Having Trouble?
If your document does not display the styles, click Show Text Formatting in the Outline Tools group to turn on this feature.

The outline levels are automatically formatted using **heading styles**. They are designed to identify different levels of headings in a document. Heading styles include combinations of fonts, type sizes, color, bold, italics, and spacing. The heading styles used here are those associated with the default document settings. The heading styles and the formats associated with each are shown in the table below:

Heading Level	Appearance
Heading 1	**Cambria, 14 pt, bold, left align, spacing 24 pt before, 0 pt after, blue**
Heading 2	**Cambria, 13 pt, bold, left align, spacing 10 pt before, 0 pt after, blue**
Heading 3	Cambria, 13 pt, left align, spacing 10 pt before, 0 pt after, blue
Heading 4	***Cambria, 11 pt, bold italic, left align, spacing 10 pt before, 0 pt after, blue***

The Outline Level button in the Outlining tab shows that the selected item is a Level 1 heading, which is automatically assigned a Heading 1 style. This style is the largest and most prominent. The Level 2 headings (subheadings) are assigned the Heading 2 style, and so on. Headings give the reader another visual cue about how information is organized in your document.

Changing Outline Levels

Next, you need to arrange the headings by outline levels. As you rearrange the topic headings and subheadings, different heading styles are applied based upon the position or level of the topic within the outline hierarchy. Headings that are level 1 appear as the top level of the outline and appear in a Heading 1 style, level 2 headings appear indented below level 1 headings and appear in a Heading 2 style, and so on.

First you will make the Climate topic heading a subtopic below the main heading of Tanzania. The Promote and Demote buttons in the Outline Tools group are used to change outline levels one level at a time.

Additional Information

Clicking promotes the item directly to a Heading 1 level and demotes the item to body text.

1 **Click on the Climate topic.**

Click Demote in the Outline Tools group.

Your screen should be similar to Figure 3.3

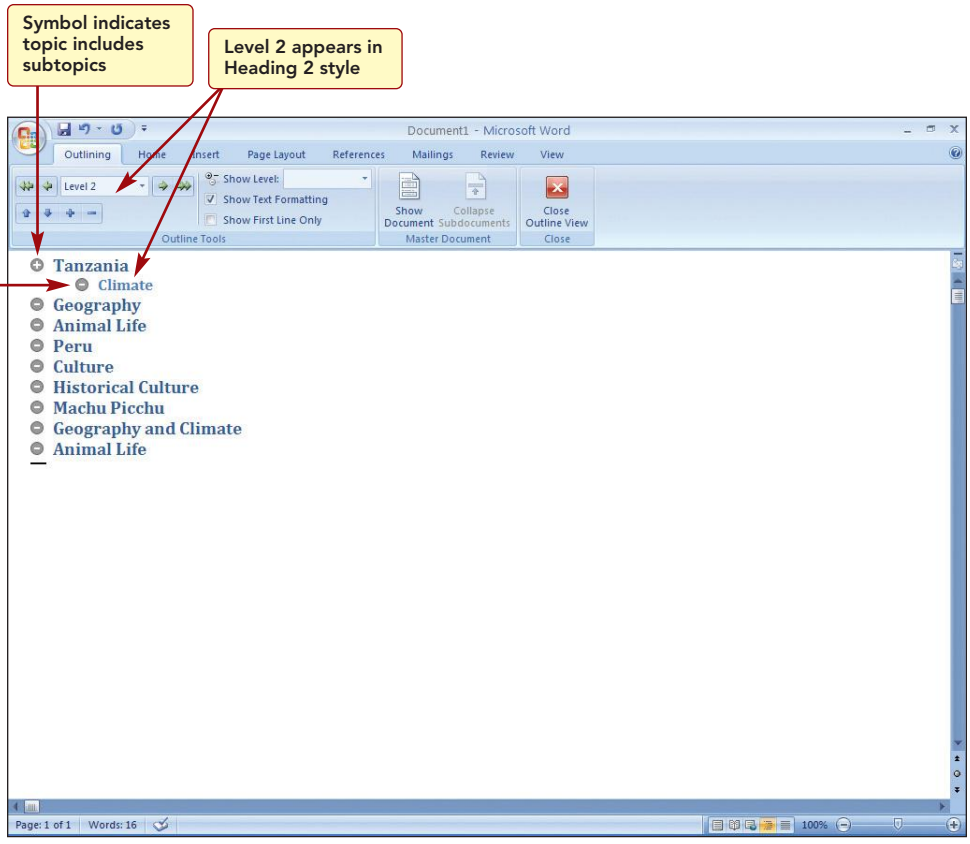


Figure 3.3

The Climate heading has changed to a Heading 2 style and the heading is indented one level to show it is subordinate to the heading above it. The Tanzania heading now displays an outline ⊕ symbol, which indicates the topic heading includes subtopics.

The outline symbols also can be used to select and move the heading to a new location or level within the document. Dragging the outline symbol to the right or left changes the level. To demote a heading to a lower level, drag the symbol to the right; to promote a heading to a higher level, drag the symbol to the left. As you drag the symbol, a vertical solid gray line appears at each outline level to show where the heading will be placed.

2 **Drag the ⊖ symbol of the Geography heading to the right two levels (Level 3).**

Additional Information

The mouse pointer changes to ✣, indicating that dragging it will move the heading.

Demote the remaining topics to the heading levels shown below.

Animal Life	Level 2
Culture	Level 2
Historical Culture	Level 3
Machu Picchu	Level 4
Geography and Climate	Level 2
Animal Life	Level 2

Your screen should be similar to Figure 3.4

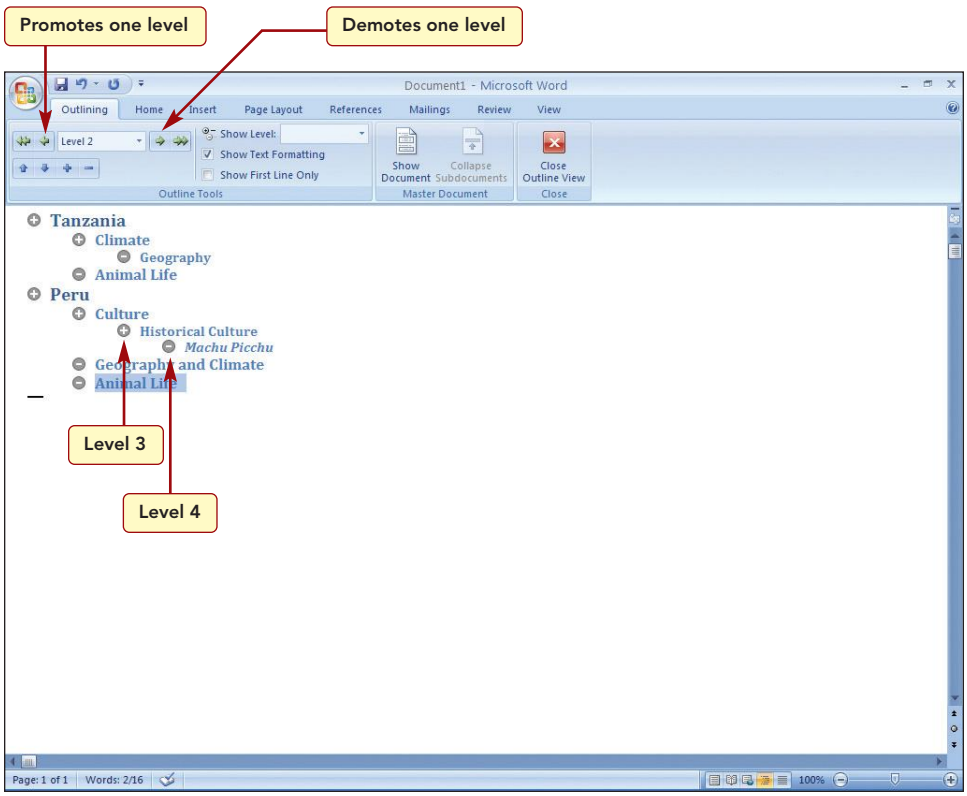


Figure 3.4

Another Method

You also can click Move Up and Move Down to move a topic or use the keyboard shortcuts Alt + Shift + ↑ or Alt + Shift + ↓.

Moving and Inserting Outline Topics

Next, you want to change the order of topics. To move a heading to a different location, drag the outline symbol up or down. As you drag, a horizontal line shows where the heading will be placed when you release the mouse button. You also realize you forgot to include a heading for Culture under Tanzania and will insert the new topic at the appropriate location in the outline.

1. **Drag the Geography heading up above the Climate heading.**
2. **Promote the Geography heading to a level 2.**
3. **Demote the Climate heading to a level 3.**
4. **Move to the beginning of the Geography heading.**
5. **Press ↵Enter to insert a blank topic heading.**
6. **Type Culture on the blank heading line.**

Your screen should be similar to Figure 3.5

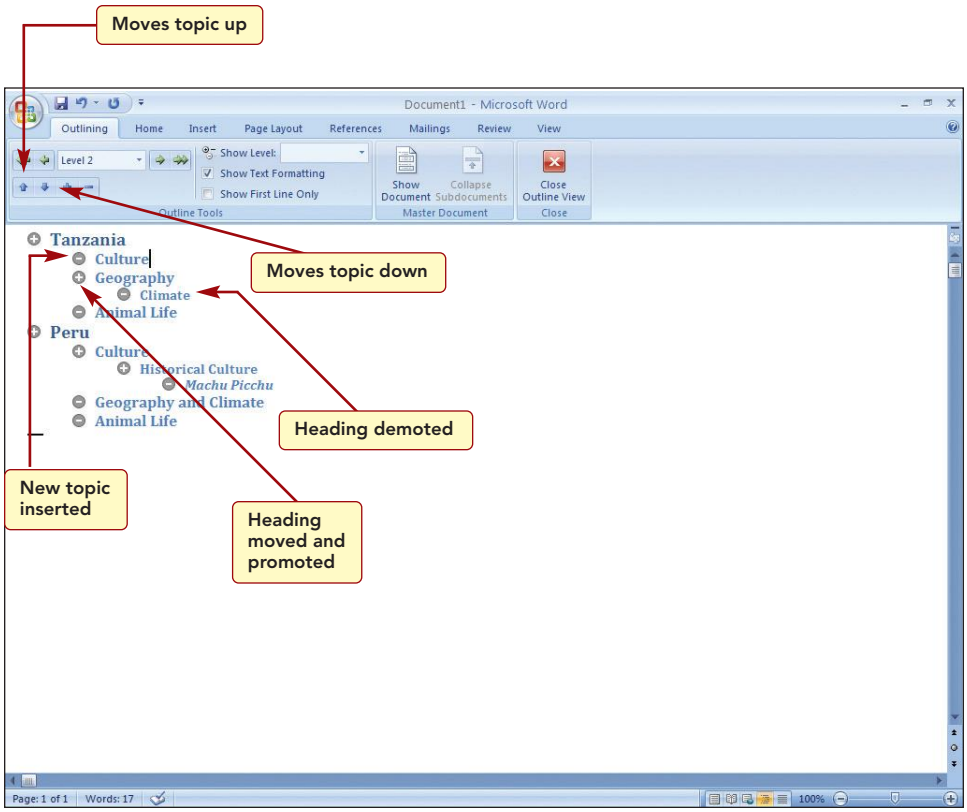


Figure 3.5

When you are satisfied with the organization, you can close Outline view to add detailed body text and graphics.

2. **Click Close Outline View in the Close group.**
3. **If necessary, set the zoom to 100%.**

Another Method

You also could switch directly to another view to close Outline view.

Your screen should be similar to Figure 3.6

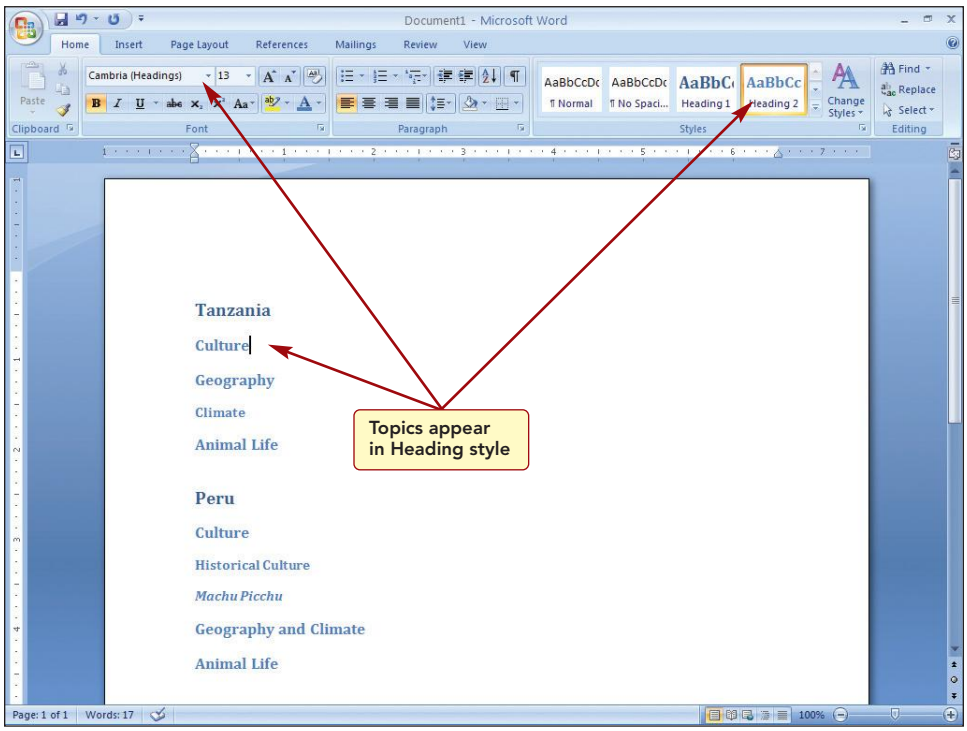


Figure 3.6

The topic headings appear left-aligned on the page in the heading style that was applied to the text as the outline was created. You will learn more about using Styles later in the lab.

Collapsing and Expanding the Outline

You have continued to work on the outline and report organization. Then you entered much of the information for the report and saved it. You will open the document to see the information that has been added to the report.

1. **Open the file** wd03_Tour Research.
2. **Switch to Outline view.**
3. **Scroll the window to view the entire document.**
4. **Return to the top of the document.**

Your screen should be similar to Figure 3.7

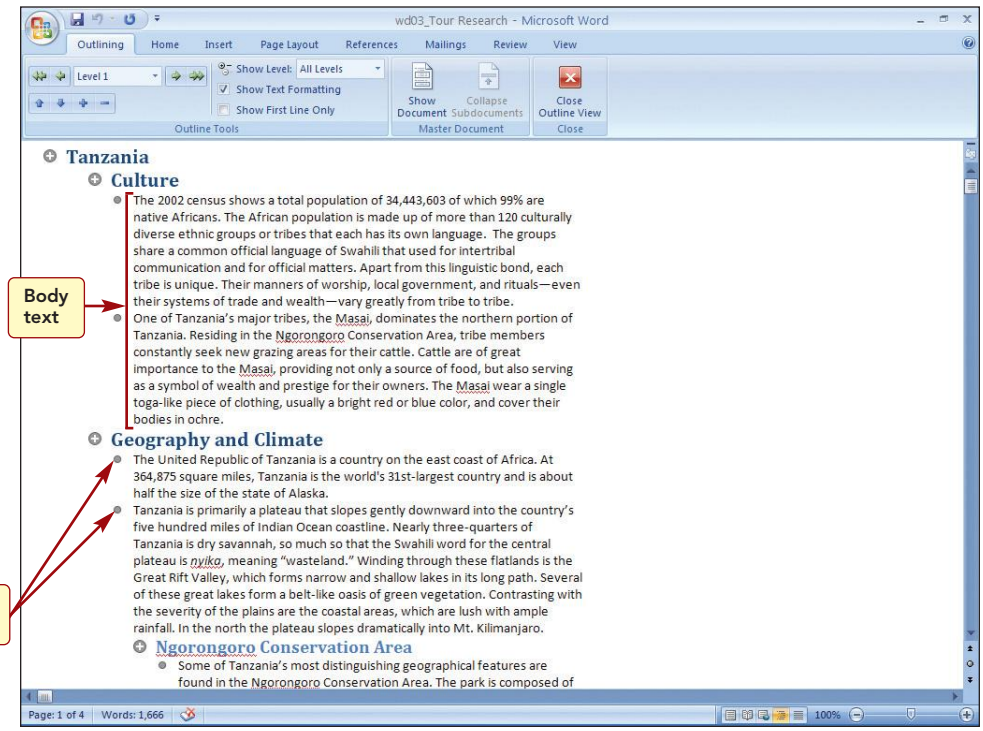


Figure 3.7

The document is displayed as an outline with the topic headings indented appropriately. The body text appears below the appropriate heading. Any text that has not been formatted in a heading style is considered body text and is identified in outline view by the small circles to the left of a paragraph.

In Outline view, you can display as much or as little of the document text as you want. To make it easier to view and reorganize the document's structure, you can "collapse" the document to show just the headings you want. Alternatively, you can "expand" the document to display part of the body text below each heading or the entire body text. You can then easily move the headings around until the order is logical, and the body text will follow the heading. The table below shows how you can collapse and expand the amount of text displayed in Outline view.

To Collapse	Do This
Text below a specific heading level	Select the lowest heading you want to display from the Show Level: Level 1 drop-down menu.
All subheadings and body text under a heading	Double-click ⊕ next to the heading.
Text under a heading, one level at a time	Click the heading text, and then click Collapse.
All body text	Select the heading level you want to see from the Show Level: Level 1 drop-down menu.
All body text except first line	Click Show First Line Only.
To Expand	**Do This**
All headings and body text	Select Show All Levels from the Show Level: Level 1 drop-down menu.
All collapsed subheadings and body text under a heading	Double-click ⊖ next to the heading.
Collapsed text under a heading, one level at a time	Click the heading text; then click Expand.

To change the amount of information displayed, you will collapse the display of the text under the Geography and Climate heading first. Then you will collapse everything below a level 3 heading so you can quickly check the report organization.

1. **Double-click ⊕ of the Tanzania Geography and Climate heading.**
2. **Open the Show Level: drop-down list.**
3. **Choose Level 3.**

Your screen should be similar to Figure 3.8

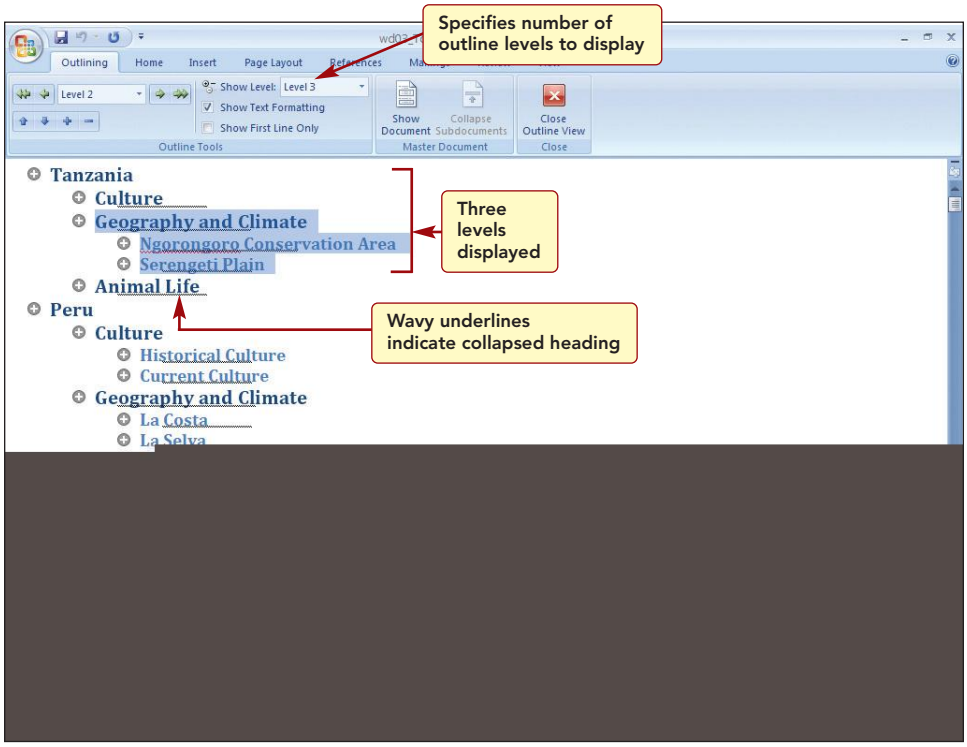


Figure 3.8

Now only the three heading levels are displayed. The wavy line below a heading means the heading includes hidden or collapsed headings or body text.

As you look at the organization of the report, you decide to move the discussion of culture to follow the Geography and Climate section. Moving headings in Outline view quickly selects and moves the entire topic, including subtopics and all body text.

2. **Drag the Culture heading in the Tanzania section down to above the Animal Life heading in the same section.**

- **Drag the Culture heading in the Peru section down to above the Animal Life heading in the same section.**
- **Choose All Levels from the** Show Level: Level 3 **drop-down list.**
- **Scroll the report up to see the top of the Peru Culture section on page 3.**
- **Click in the document to deselect the text.**

Your screen should be similar to Figure 3.9

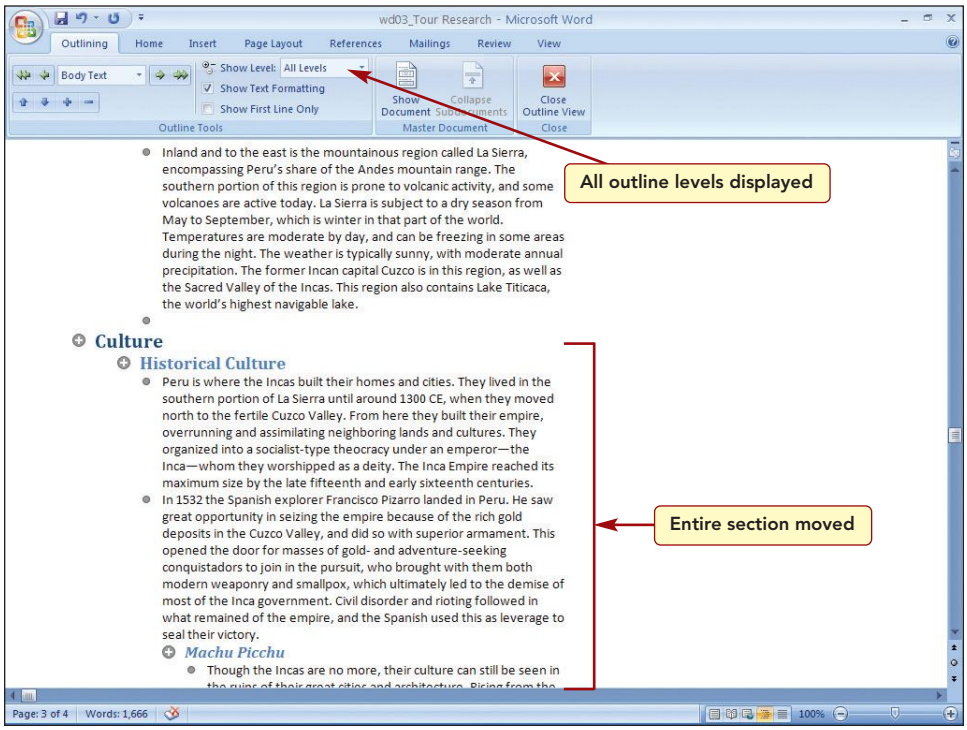


Figure 3.9

The subtopics and body text appear below the heading you moved. When you move or change the level of a heading that includes collapsed subordinate text, the collapsed text also is selected. Any changes you make to the heading, such as moving, copying, or deleting it, also affect the collapsed text.

Saving to a New Folder

Next, you will save the outline and the research document with its changes in a folder that you will use to hold files related to the report. You can create a new folder at the same time you save a file.

1. **Switch to Print Layout view.**
2. **Click Office Button and choose Save As.**
3. **Change the Save In location to the appropriate location for your data files.**
4. **Click Create New Folder.**

Another Method
The keyboard shortcut to create a new folder is Alt + 4.

Your screen should be similar to Figure 3.10

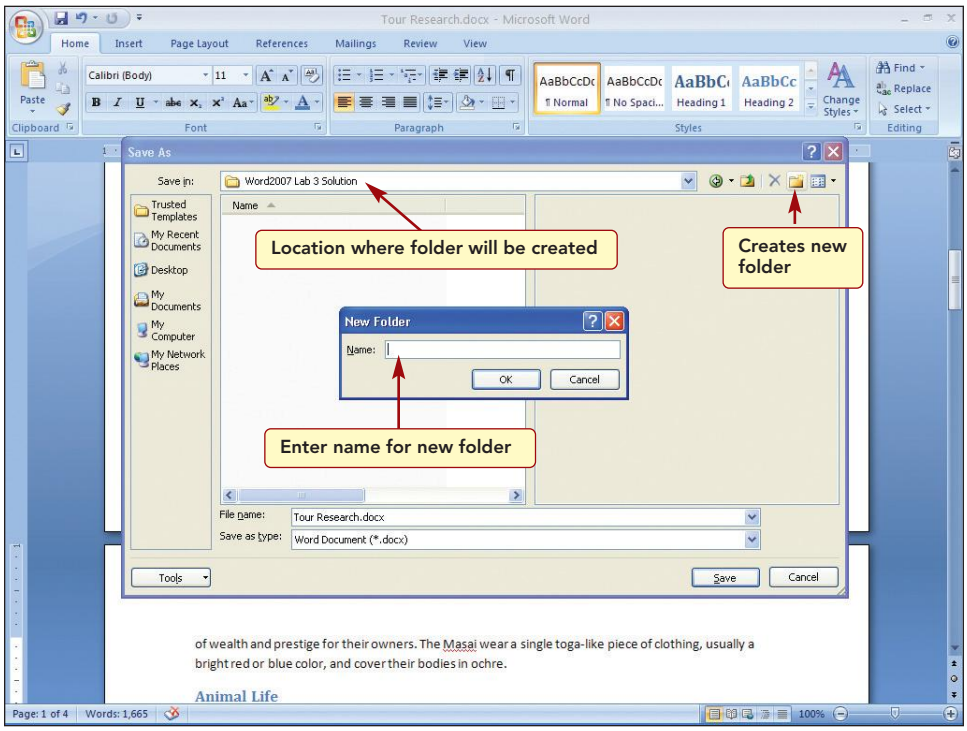


Figure 3.10

Additional Information
See "Saving, Closing, and Opening Files" in Lab 1 for file-naming rules.

In the New Folder dialog box, you enter the folder name. The rules for naming folders are the same as for naming files, except they typically do not include an extension.

2. **Type Report in the Name text box and click OK.**

Additional Information
You can rename an existing folder by choosing Rename from the folder's shortcut menu and entering the new name.

- **Enter the file name Tour Research and click Save.**
- **Switch to Document1 containing the outline document.**

Having Trouble?
Click the document name in the taskbar or use View/Switch Windows.

- **Save the outline to the Report folder with the file name Research Outline.**
- **Close the Research Outline document.**

The documents are saved in the newly created folder, Report.

Hiding Spelling and Grammar Errors

As you have been working on the report, you have noticed that many spelling and grammar errors are identified. You want to scroll the document to take a quick look at the types of errors identified. You have noticed that scrolling a larger document in Print Layout view takes more time because the view displays the extra blank (white) space on the page and the space allocated for the headers and footers. You can hide the display of this white space to make it faster to move through the document.

1. **Double-click on the blue page separator space between any pages.**

Additional Information
The mouse pointer appears as ↕ when you can hide the white space.

- **Scroll to see the bottom of page 1 and the top of page 2.**

Additional Information
The page number appears in a ScreenTip as you scroll by dragging the scroll box.

Your screen should be similar to Figure 3.11

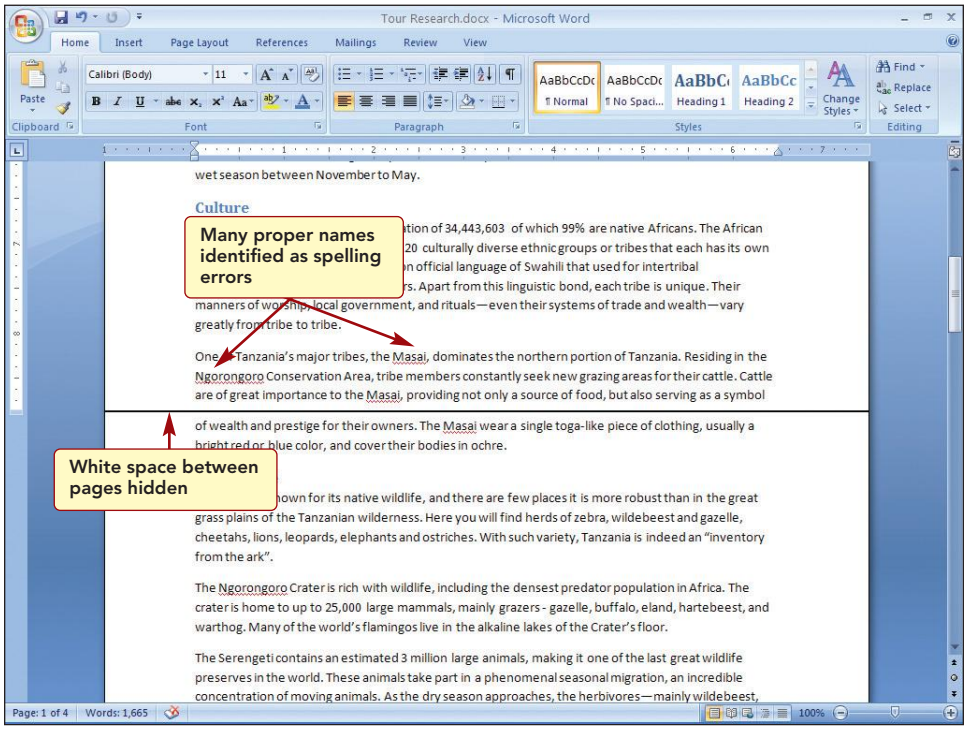


Figure 3.11

Any extra white space is eliminated, making scrolling much faster. As you scrolled the document, you noticed that most of the identified errors are for proper names and words that are not in the dictionary. While working on a document, you can turn off the display of these errors so that they are not distracting.

2. Click Office Button.
   Click Word Options.
   Open the Proofing group.

Your screen should be similar to Figure 3.12

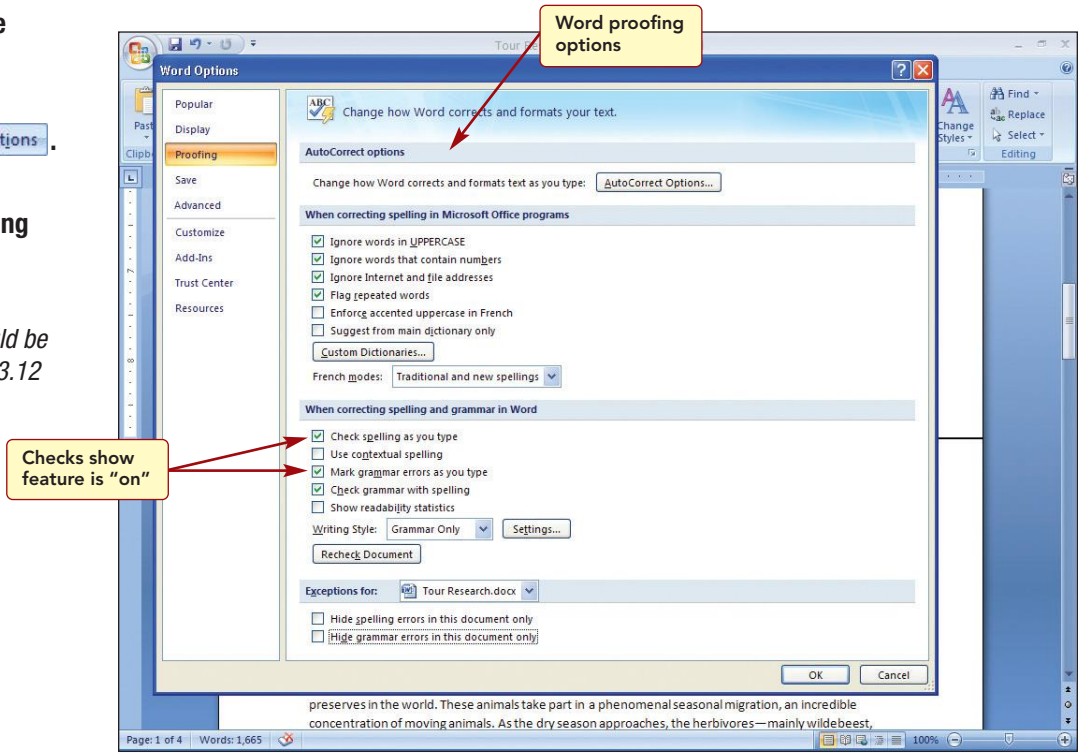


Figure 3.12

The Proofing options are used to change the way the AutoCorrect and Spelling and Grammar features operate. Checkmarks next to options indicate the setting is on. You want to turn off the display of spelling and grammar errors.

3. Select Hide spelling errors in this document only.
   Select Hide grammar errors in this document only.
   Click OK.
   Double-click on the page separator line to show the white space again.

Additional Information
The mouse pointer appears as ↕ when you can show white space.

Your screen should be similar to Figure 3.13

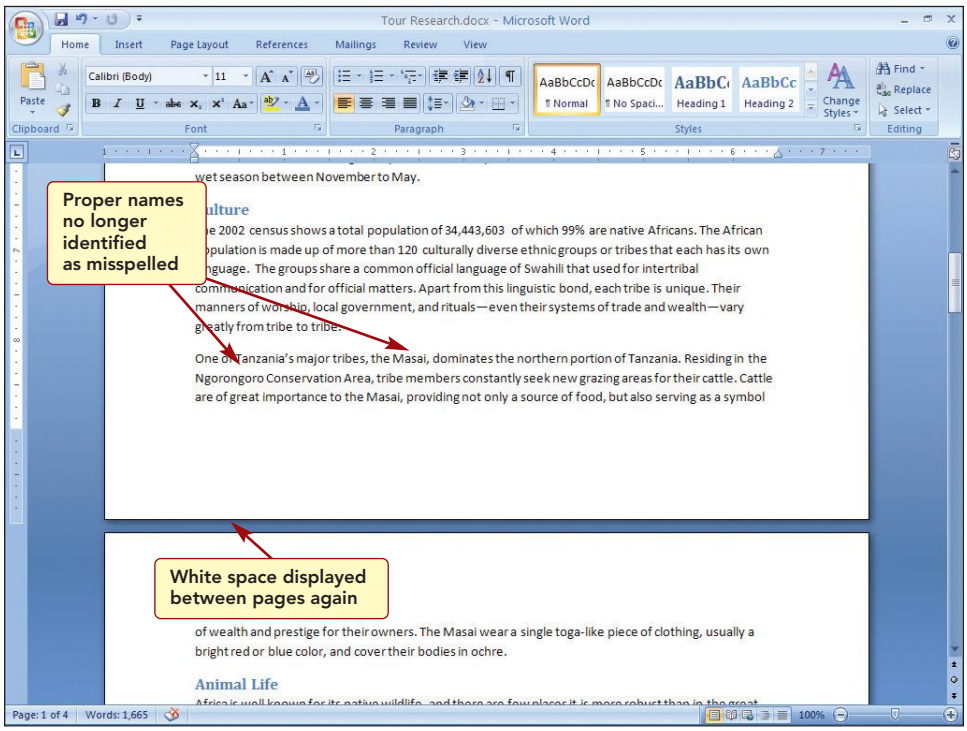


Figure 3.13

The red and green wavy lines are no longer displayed. You can still run spelling and grammar checking manually to check errors at any time. The extra blank space at the bottom of page 3 and the header and footer space are displayed again. Now that you know how to use this feature, you can turn it on and off whenever you want.

Creating a Cover Page

Now that you have finished reorganizing the report, you want to add a title or cover page. Generally, this page includes information such as the report title, the name of the author, and the date.

When preparing research reports, two styles of report formatting are commonly used: MLA (Modern Language Association) and APA (American Psychological Association). Although they require the same basic information, they differ in how this information is presented. For example, MLA style does not include a separate title page, but APA style does. The report you will create in this lab will use many of the style requirements of the MLA. However, because this report is not a formal report to be presented at a conference or other academic proceeding, some liberties have been taken with the style to demonstrate Word 2007 features.

Inserting and Modifying a Cover Page

Word 2007 includes many preformatted building blocks that help you quickly create professional-looking documents. The preformatted content includes cover pages, pull quotes, and headers and footers. They are fully formatted and provide spaces where you enter the title, date, and other information. You will use this feature to insert a cover page. Regardless of the location of the insertion point in a document, a cover page is always inserted at the beginning of the document.

1. **Open the Insert tab.**
2. **Choose Cover Page from the Pages group.**
3. **Scroll the gallery and choose the Mod cover page design.**
4. **Change the zoom to display two pages.**

Having Trouble?
Use the Zoom slider or Two Pages on the View tab.

Your screen should be similar to Figure 3.14

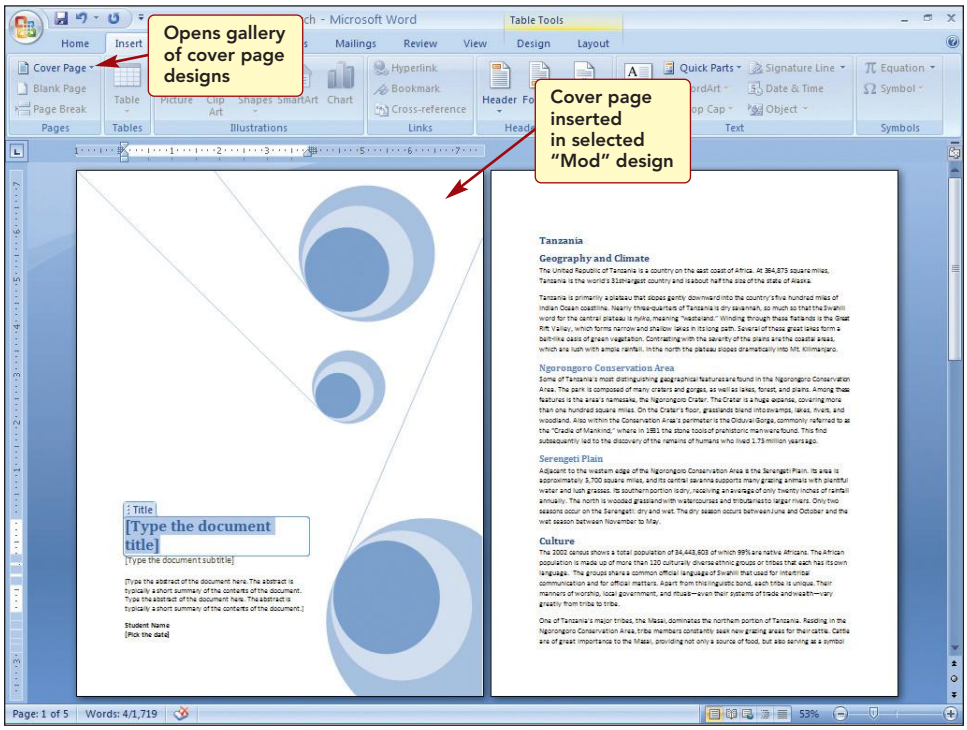


Figure 3.14

A new page is inserted at the beginning of the document with the selected cover page design. After looking at this design, you decide to change it to a more traditional cover page look.

2 **Click** Cover Page **.**

Choose the Sideline design.

Your screen should be similar to Figure 3.15

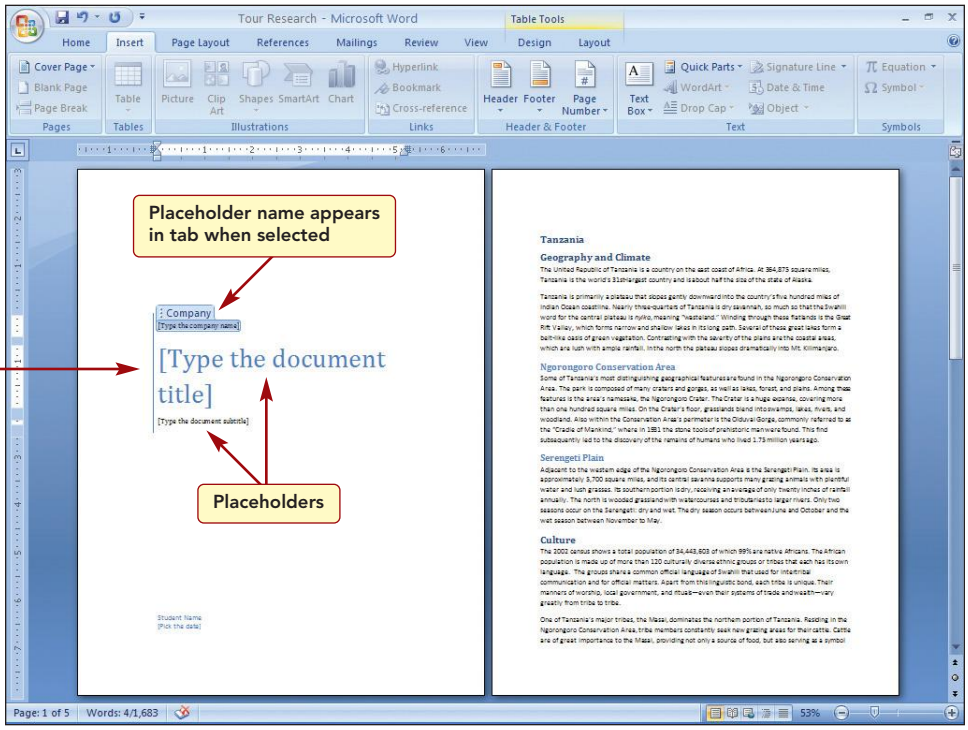


Figure 3.15

The new cover page design you selected replaces the first cover page you inserted. This design includes a blue vertical line to the left of the sample title information centered on the page. The title text is a larger font size and blue. Additionally, the design includes the author and date information in blue at the bottom of the page. In addition to the design elements, the cover page includes placeholders for the information you need to enter. A **placeholder** is a graphic element that is designed to contain specific types of information. In this case, placeholders identify the content that should be entered to complete the information for the cover page. If the company name and document title have already been entered in the document properties, the placeholders will automatically display this information.

Additional Information

To delete a cover page, choose Remove Current Cover Page from the Cover Page menu.

When you click on a placeholder, the placeholder name appears in a tab and the placeholder text is selected and ready to be replaced. You will replace the Company and Title placeholder text.

3 **Increase the zoom to 80 percent and scroll the page so you can see both the report title and the author and date areas.**

- **Click the Company placeholder and type Adventure Travel Tours.**
- **Click the Title placeholder and type Tanzania and Peru.**

Your screen should be similar to Figure 3.16

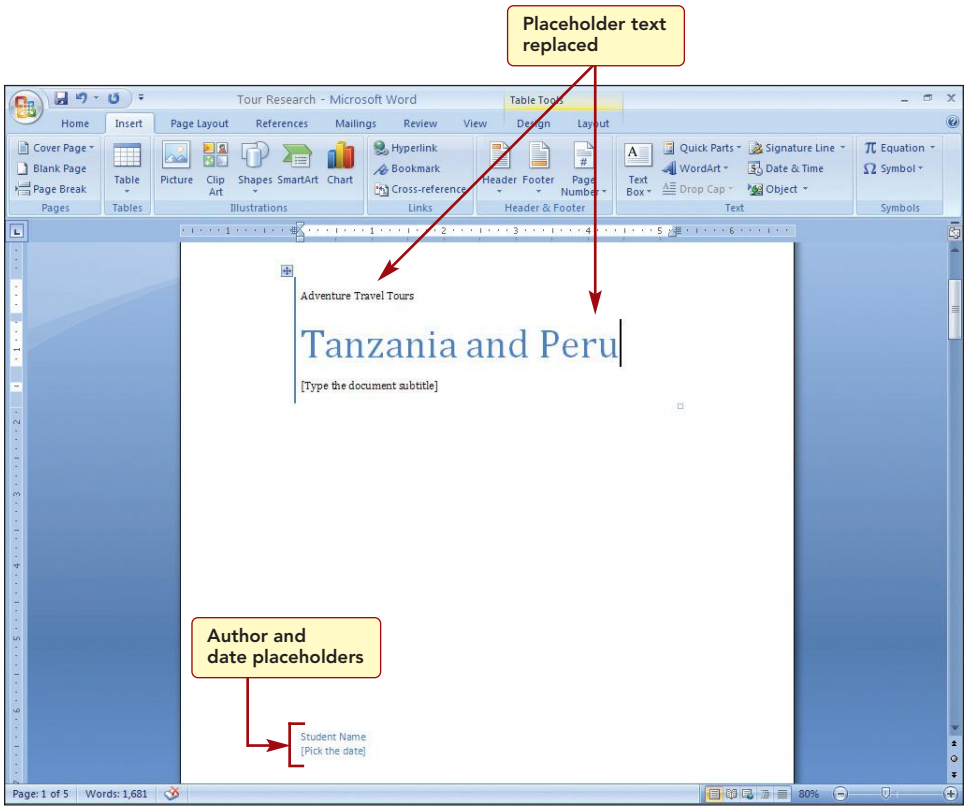


Figure 3.16

The placeholder text was replaced with the text you typed. Additionally, the company name and title information you entered have been automatically added to the document properties.

Finally, you will delete the Subtitle placeholder and add your name as author and the current date. Notice Student Name appears as the Author because this is the name that is stored in the document properties. Since the name is not placeholder text, you will need to select it before replacing it with your name. When you click on the date placeholder, you will use the date picker feature to quickly enter the current date from the pop-up calendar.

4. **Select the Subtitle placeholder and press Delete twice to delete the contents and then the placeholder.**

- **Click the Author placeholder, select the author name text, and enter your name.**
- **Click the Date placeholder and open the drop-down list to display the date-picker calendar.**
- **Choose Today to display the current date.**

Additional Information
You also can click on a specific date in the calendar that you want and use the right and left arrow buttons to scroll through the months.

- **Click outside the placeholder.**
- **Save the document.**

Your screen should be similar to Figure 3.17

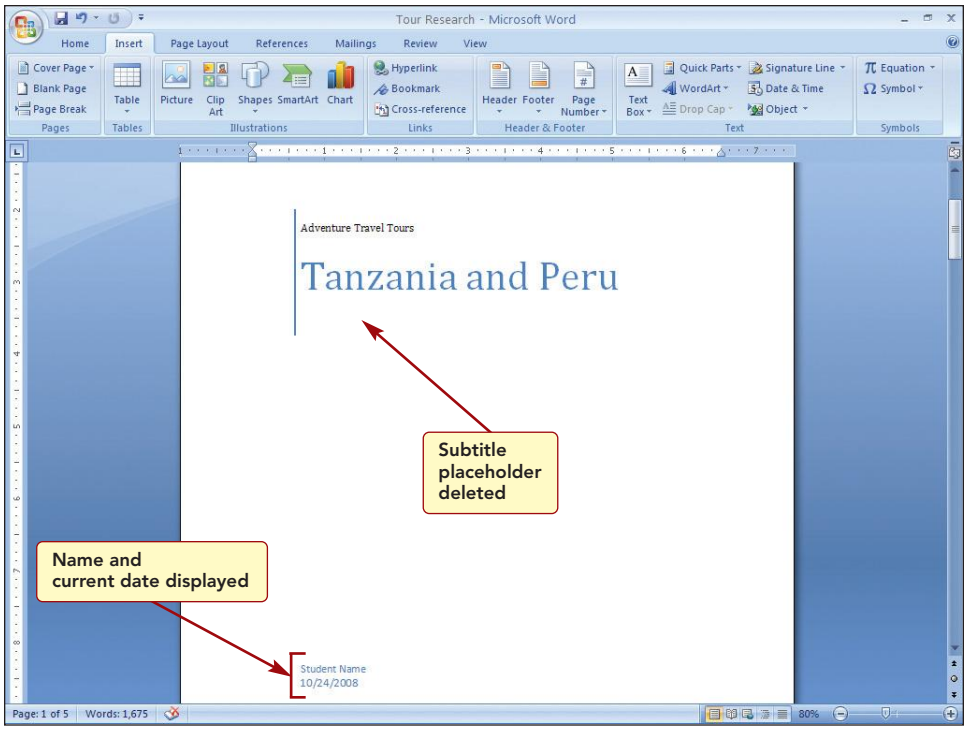


Figure 3.17

The cover page is now complete.

Using Document Themes

Because color and design are important elements of documents, Word includes a collection of built-in document themes.

Concept 2

Document Theme

2

A **document theme** is a predefined set of formatting choices that can be applied to an entire document in one simple step. Word includes 20 named built-in document themes. Each document theme includes three subsets of themes: colors, fonts, and effects. Each color theme consists of 12 colors that are applied to specific elements in a document. Each fonts theme includes different body and heading fonts. Each effects theme includes different lines and fill effects. You also can create your own custom themes by modifying an existing document theme and saving it as a custom theme. The default document (Normal.dotm) uses the Office theme.

Using themes gives your documents a professional and modern look. Because document themes are shared across 2007 Office applications, all your office documents can have the same uniform look.

Applying a Theme

You decide to see how the report would look using a different document theme.

1. **Change the zoom to display two pages.**
2. **Open the Page Layout tab.**
3. **Click Themes from the Themes group.**

Your screen should be similar to Figure 3.18

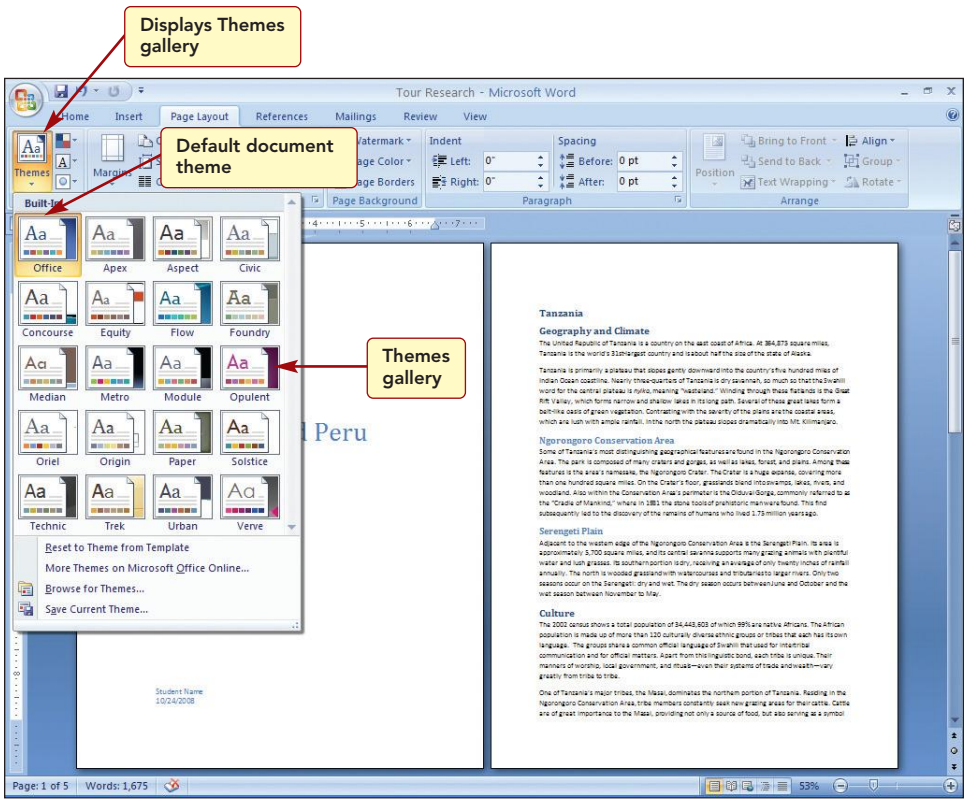


Figure 3.18

A gallery of 20 built-in named themes is displayed. A sample shows the color and font effects included in each theme. The Office theme is highlighted because it is the default theme and is the theme that is used in this document. Pointing to each theme will display a Live Preview of how it will appear in the document.

2. **Point to several themes to preview them.**

3. **Choose the Trek theme.**

Your screen should be similar to Figure 3.19

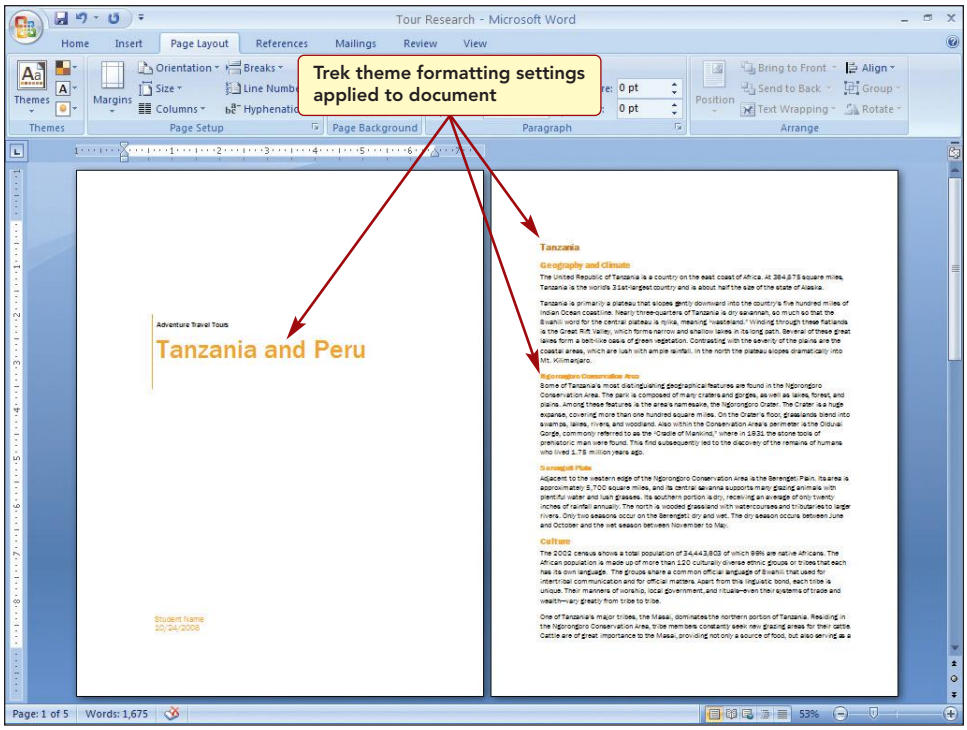


Figure 3.19

Additional Information

If you made manual changes to text, for example, by changing the font and font size of the title as opposed to applying a Title style, these changes are not updated to the new theme design.

The formatting settings associated with the selected theme have been applied to the entire document. The two obvious changes are the color and font changes for the titles and heading levels. The font of all heading styles has changed to Franklin Gothic medium from the default of Cambria. The color associated with the different heading levels also has changed. Additionally, the body text font has changed from Calibri to Franklin Gothic Book.

Customizing a Theme

Sometimes, you cannot find just the right combination of features in a built-in theme. To solve this problem, you can customize a theme by changing the color scheme, fonts, and effects. Although you like much of the Trek theme design, you decide to try customizing the theme by changing the color scheme and fonts.

First you will change the color scheme. Each theme has an associated set of colors that you can change by applying the colors from another theme to the selected theme.

MORE ABOUT

To learn how to customize theme colors, see 1.1 Format Documents in the More About appendix.

1 Click **Theme Colors.**

Additional Information

The colors you see in the Theme Colors button represent the current text and background colors.

Your screen should be similar to Figure 3.20

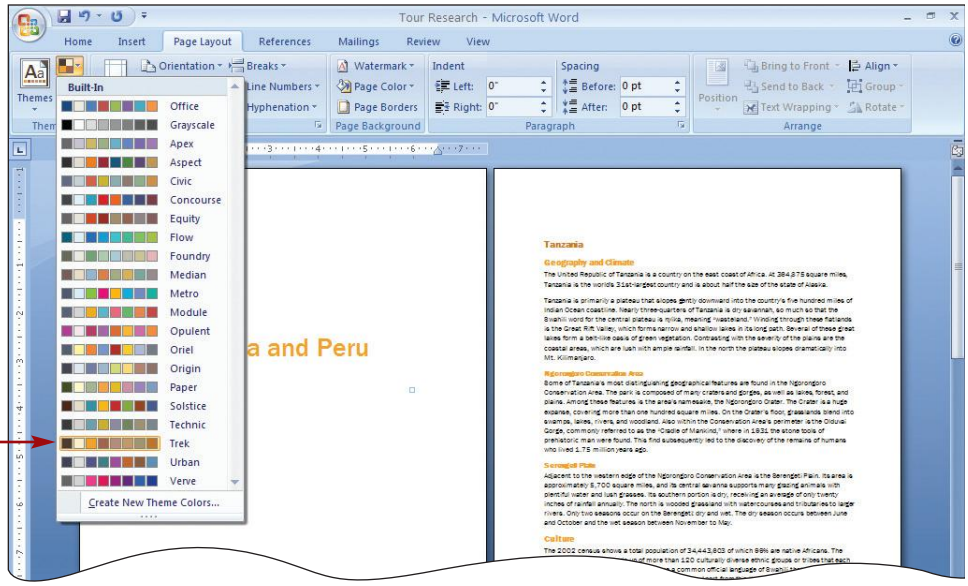


Figure 3.20

The colors used in each of the themes are displayed in the Built-In drop-down list. The set of eight colors that appears next to each theme color name represent the text, background, accent, and hyperlink colors. The Trek color scheme is selected because it is the color scheme currently in use. You want to see how the Concourse color scheme would look.

2 **Point to several color schemes to preview them.**

Choose the Concourse theme.

Your screen should be similar to Figure 3.21

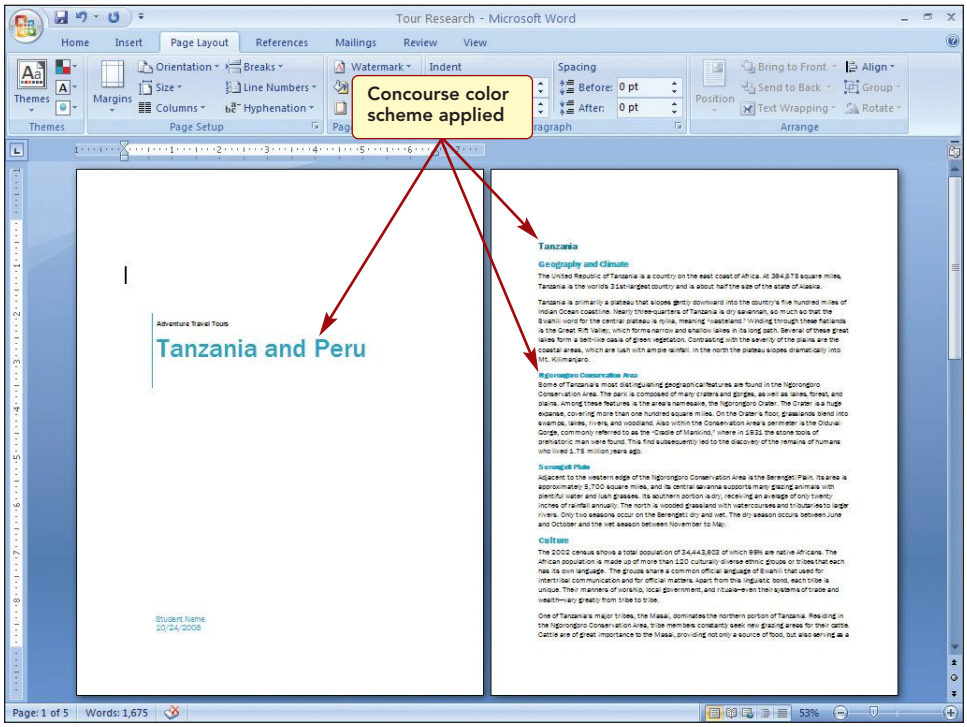


Figure 3.21

The new color scheme has been applied to different elements such as the headings. All other aspects of the Trek theme are unchanged.

Next, you will change the theme fonts. Just like theme colors, you could change fonts by applying fonts from another theme to the selected theme. This time, however, you will specify your own font settings for the selected theme. Each theme contains a heading font and a body text font.

3 **Click Theme Fonts.**

Additional Information

The name of the heading and body text fonts for each theme appears below the Theme Fonts name in the Theme Fonts gallery.

Choose Create New Theme Fonts

Your screen should be similar to Figure 3.22

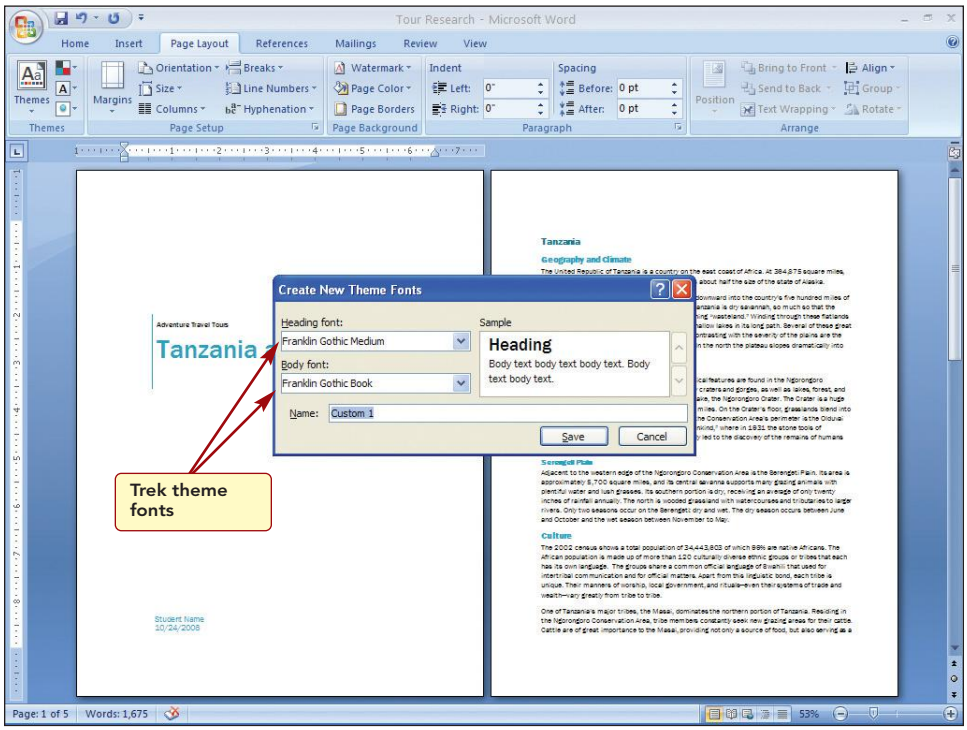


Figure 3.22

The fonts used in the current theme are displayed in the Heading and Body font text boxes. You will change the heading font to Constantia and the body font to Times New Roman.

4. **From the Heading font drop-down list, choose Constantia.**
- **From the Body font drop-down list, choose Times New Roman.**
- **Replace the default name with Report Font.**
- **Click Save.**
- **Click Theme Fonts.**

Additional Information
To remove a custom theme font, choose Delete from the Theme Font shortcut menu.

Your screen should be similar to Figure 3.23

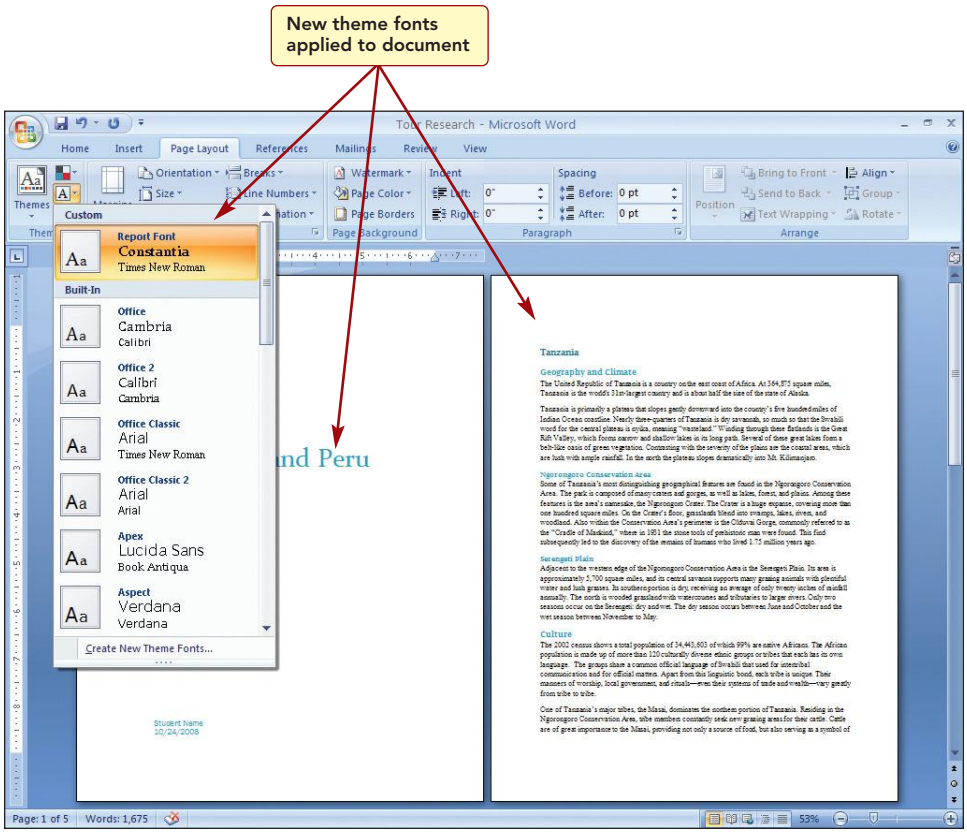


Figure 3.23

MORE ABOUT

To learn how to customize theme effects, see "Change Theme Effects" in the 1.1 Format Documents section of the More About appendix.

The name of the custom theme font appears at the top of the Theme Fonts gallery list and could be applied simply by selecting it from the list. As you add other features to the document, they will be formatted using the customized Trek theme colors and fonts.

Saving a Custom Theme

After making all these changes to the Trek theme, you decide to save the changes as a custom theme. This will make it easy to reapply the same settings to another document in the future.

1. Click Themes.
2. Choose Save Current Theme.
3. Enter Trek1 as the theme file name.

Additional Information
Custom document themes are saved in the Document Themes folder by default and have the .thmx file extension, which identifies the file as an Office theme template file.

4. Click Save.

Having Trouble?
If the Trek1 custom theme already exists, click Yes to replace it.

5. Click Themes.

Additional Information
To remove a custom theme, choose Delete from the theme's shortcut menu.

Your screen should be similar to Figure 3.24

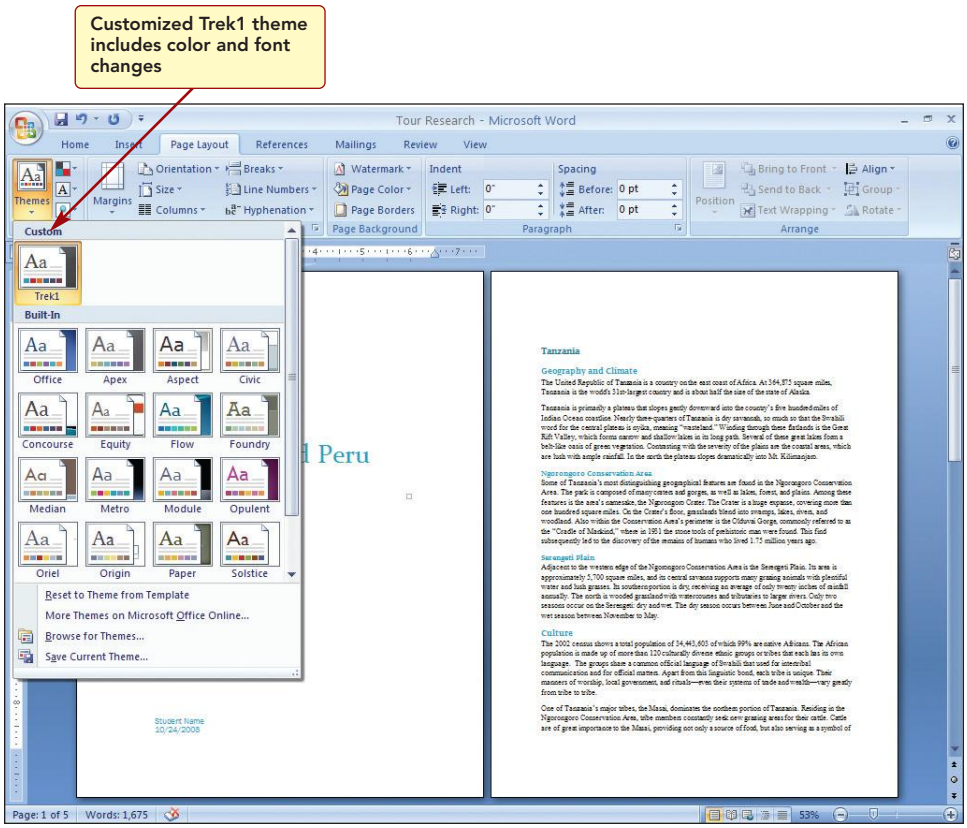


Figure 3.24

Additional Information
You can quickly return a document back to the default style using Reset to Theme from Template on the Themes menu.

The custom theme you created appears at the top of the Themes gallery. Now you can quickly reapply this entire theme in one step to another document, just like the built-in themes.

Inserting a Blank Page

Next you will create a new page to contain a table of contents. You will enter a title for the page and then improve the appearance of the title by applying a style to the title. You want the new page to be inserted above the Tanzania topic heading. Blank pages are inserted above the location of the insertion point.

MORE ABOUT
To learn how to set a theme as a default theme and how to restore template themes, see these topics in the 1.1 Format Documents section of the More About appendix.

1. **Move to the blank line above the Tanzania heading at the top of page 2.**

2. **Open the Insert tab and click Blank Page in the Pages group to create a blank page above it.**

Another Method

You also could press Ctrl + Enter to insert a blank page.

Your screen should be similar to Figure 3.25

Having Trouble?

If a second blank page is also inserted, change to Draft view and delete one of the hard page break lines.

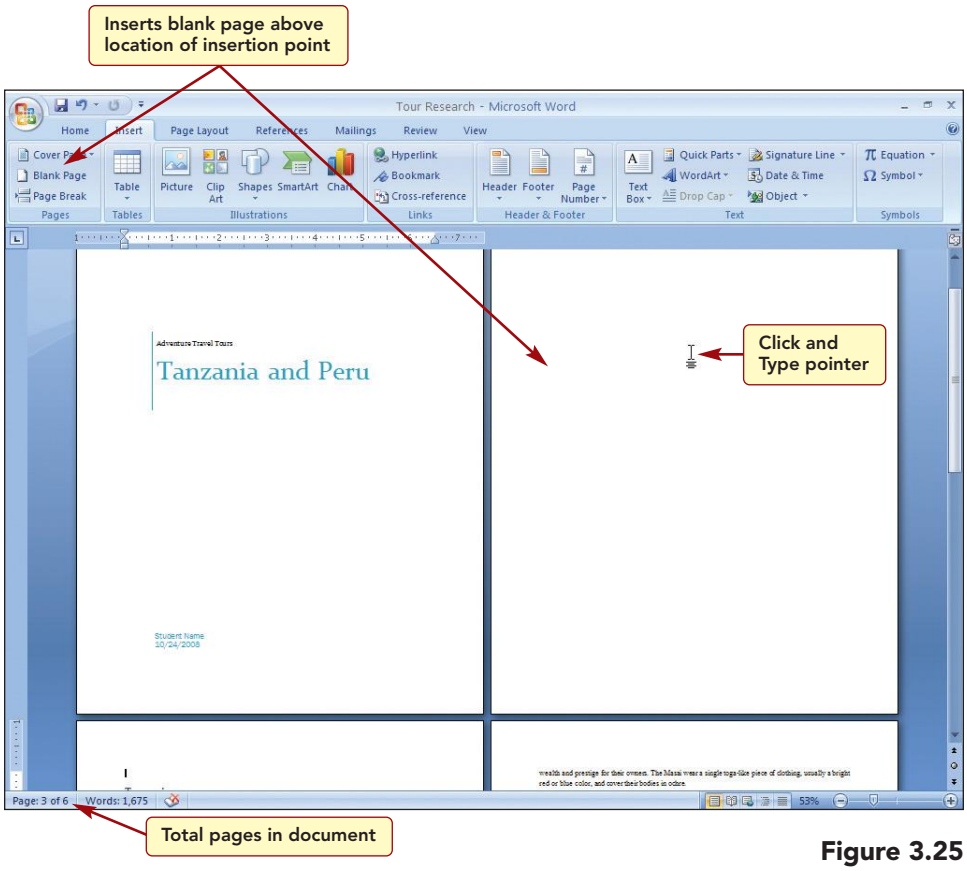


Figure 3.25

A blank page has been inserted in the document making the document six pages long.

Using Click and Type

Next you want to enter a title for the table of contents that you plan to display on this page. You will use the **Click and Type** feature to enter this information. This feature, available in Print Layout and Web Layout views, is used to quickly insert text, graphics, and other items in a blank area of a document, avoiding the need to enter blank lines. This feature also applies the paragraph formatting needed to position an item at the location you clicked.

Print Layout view includes formatting "zones" that control the formatting that will be applied. As you move the mouse pointer through the zones, the I-beam pointer displays an icon that indicates the formatting that will be applied when you double-click at that location. This is the Click and Type pointer. The pointer shapes and their associated formatting are described in the table below.

Pointer shape	Formatting applied
	Align left
	Align center
	Align right
	Left indent

To enable the Click and Type pointer, first click on a blank area; then, as you move the mouse pointer, the pointer shape indicates how the item will

Additional Information
The Click and Type feature must be enabled (/ Word Options /Advanced) and your video driver must support this feature.

be formatted. Double-clicking on the location in the page moves the insertion point to that location and applies the formatting to the entry. You will enter the page title, Table of Contents, centered on the page.

1. **Click at the top of the new page to enable Click and Type.**
- **Increase the zoom to 100%.**
- **If necessary, display the ruler.**
- **Slowly move the mouse pointer from left to right across the blank page and observe the change in the mouse pointer.**
- **Double-click on the center of the page at the 1-inch vertical ruler position while the mouse pointer is a I.**
- **Type Table of Contents.**

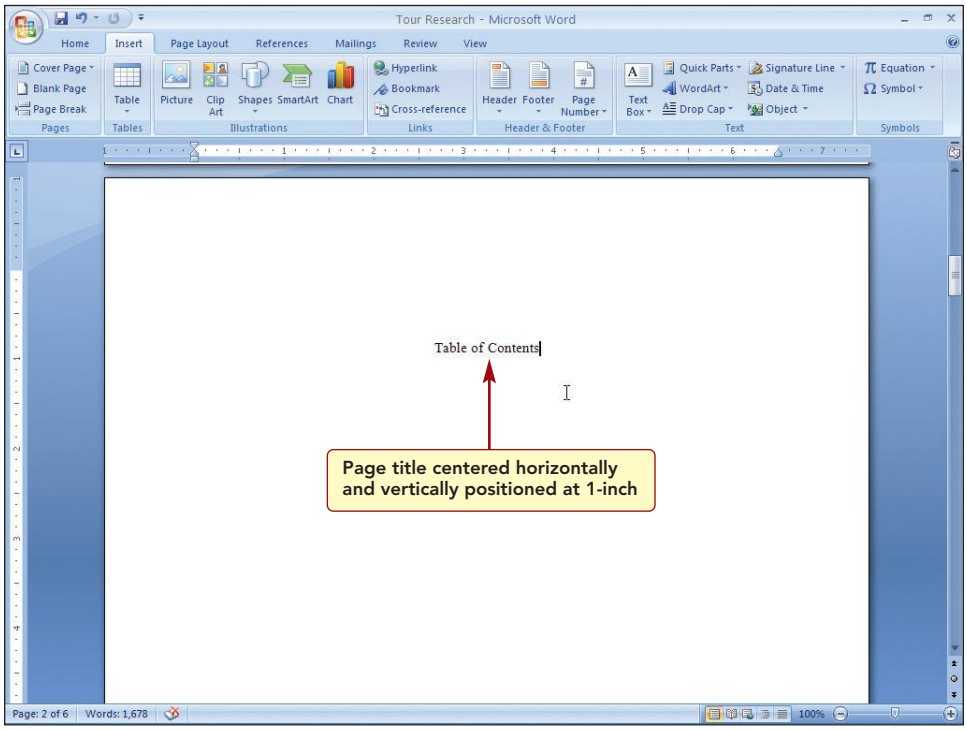


Figure 3.26

In one quick step, the insertion point moves to the location where you clicked and the center format was applied to the text you typed.

Having Trouble?
If the Click and Type feature is not working, enter and center the text manually at the 1-inch vertical position.

Your screen should be similar to Figure 3.26

Applying a Quick Style

Next, you will improve the appearance of the title by applying a quick style. As you learned when creating the outline, many styles are applied automatically to text. Others can be applied manually by selecting the quick style you want to use from the Styles gallery.

1. **Open the Home tab.**
2. **If necessary, move to anywhere in the line containing the Table of Contents title.**
3. **Click More in the Styles group to open the Styles gallery.**

Another Method
You also can scroll the list of styles.

Your screen should be similar to Figure 3.27

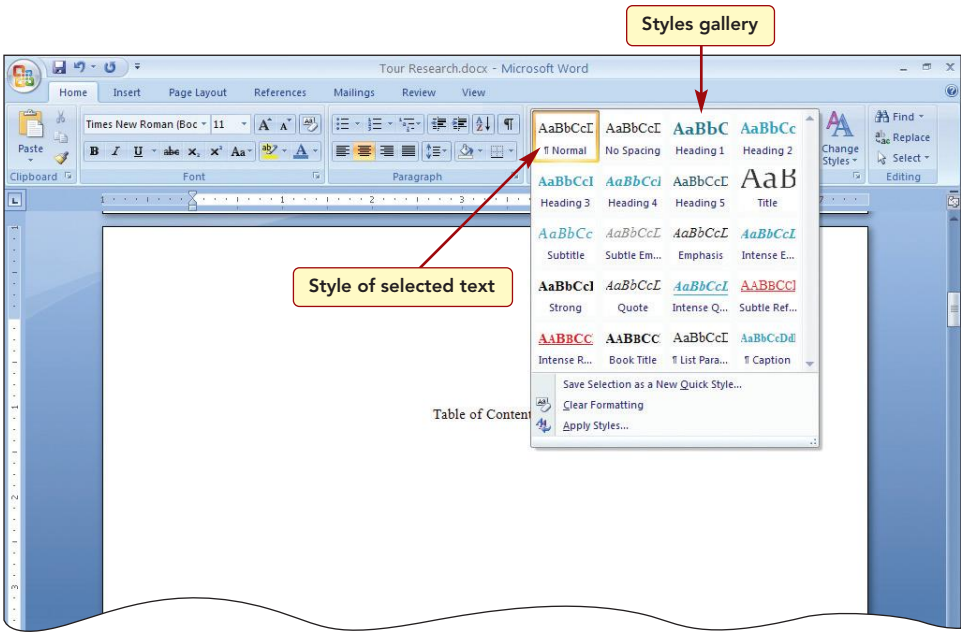


Figure 3.27

The Styles gallery appears with the current style of Normal for the selected text highlighted. Each quick style is named and displays a sample of the style above the name. The formatting of the different styles in the gallery reflects the new theme colors, fonts, and effects. When you point to a style, the document displays a Live Preview of how that style would appear if selected. If it is a paragraph style, the entire table of contents title will be affected. If it is a text style, only the word the insertion point is on will be affected.

2. **Point to several quick styles to see how they would look.**
3. **Choose Title.**

Having Trouble?
If you accidentally apply the wrong style, simply reselect the correct style.

Your screen should be similar to Figure 3.28

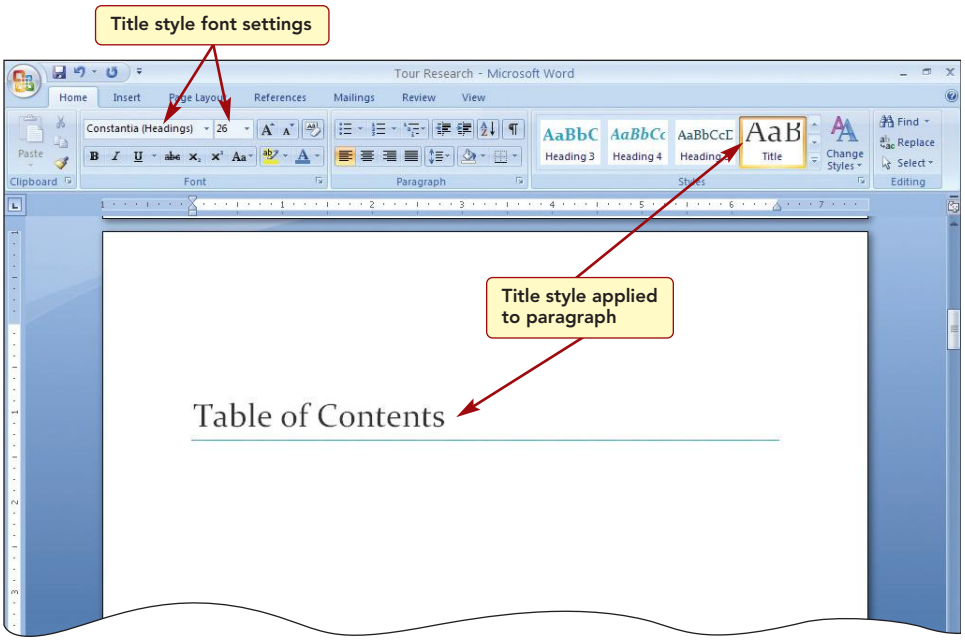


Figure 3.28

Notice that the entire title appears in the selected style. This is because the Title style is a paragraph style, affecting the entire paragraph at the insertion point. The Title style includes font settings of Constantia, 26 pt. in black. It also includes a blue line below the title that is part of the Trek theme effects.

Creating a Custom Quick Style

Although the Title quick style looks good, you decide instead that you want the title to be the same color as the title on the cover page. To do this, you will modify the Title style and then save the modified design as a custom quick style so you can quickly apply the style in the future.

1. **Right-click on the Table of Contents title and select Styles.**
2. **Choose Save selection as a New Quick Style from the submenu.**
3. **Click** Modify... **from the Create New Style from Formatting dialog box.**

Your screen should be similar to Figure 3.29

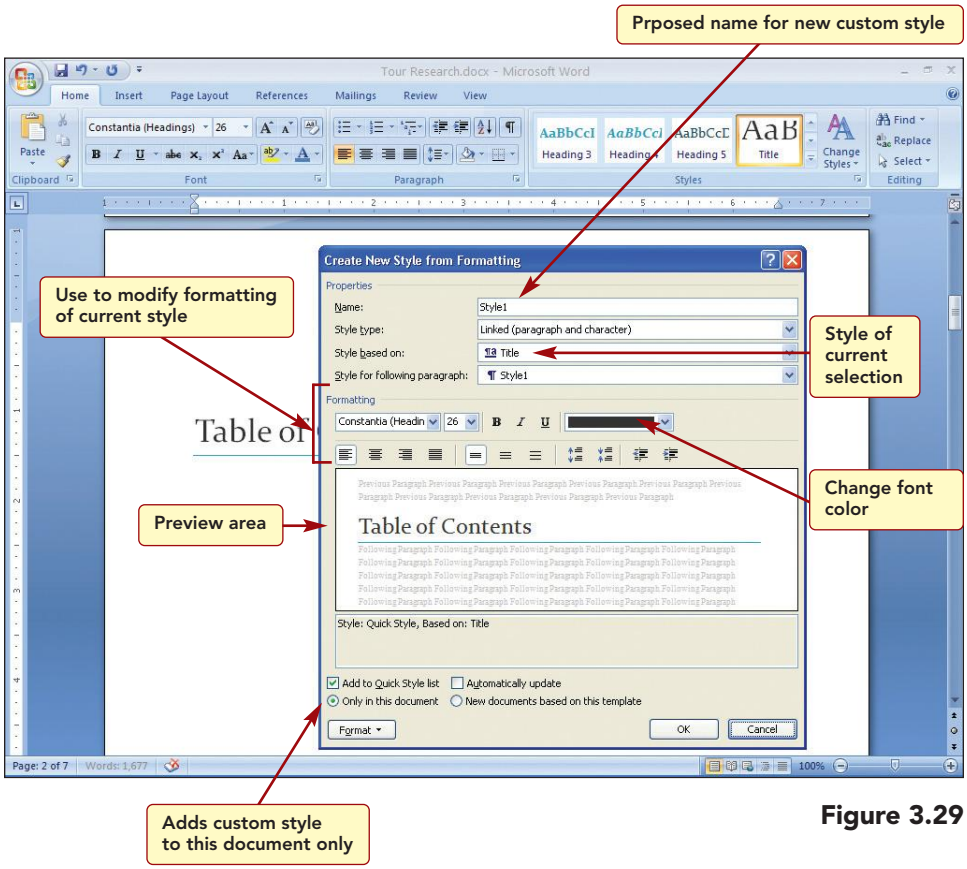


Figure 3.29

Additional Information

If you wanted a custom style to be available in future documents, you would use the New documents based on this template option.

The Create New Style from Formatting dialog box displays the settings associated with the selected text. The only action you need to take is to

change the font color and then give the custom style a descriptive name. The options to add the new style to the quick style list for this document only are appropriately selected. The preview area will show you how your selections will look.

1. **Open the Font Color drop-down menu and choose the Turquoise, Accent 1 theme color.**
2. **In the Name text box, replace the default name with TOC Title.**
3. **Click** OK **.**

Your screen should be similar to Figure 3.30

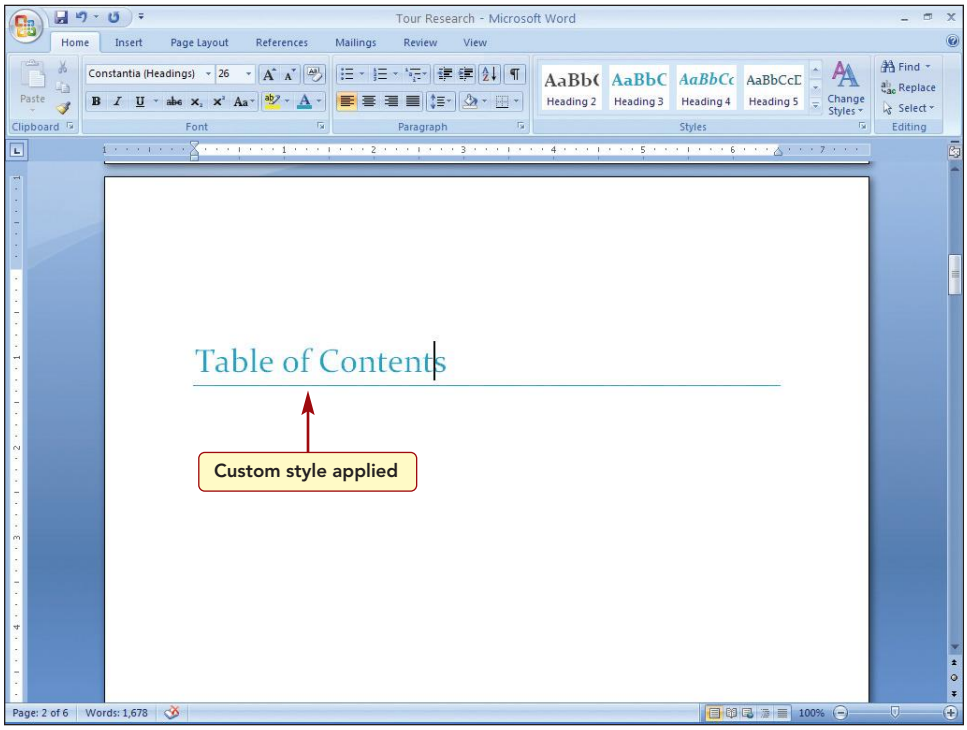


Figure 3.30

The new TOC Title style is applied to the selection and added to the gallery of quick styles. If you ever need to change a style back to the default document style, you can easily clear the style by moving to the text whose style you want removed and choosing Clear Formatting from the Style gallery or clicking Clear Formatting in the Font group.

Formatting Body Text

The last style change you want to make is to increase the font size of all body text to 12 points. You think this will make the report easier to read.

1. **Select and format the body text of the first paragraph below the Tanzania heading to 12 points.**
2. **Clear the selection.**
3. **Right-click on the paragraph and select Styles from the context menu.**
4. **Choose Update Normal to Match Selection.**

Your screen should be similar to Figure 3.31

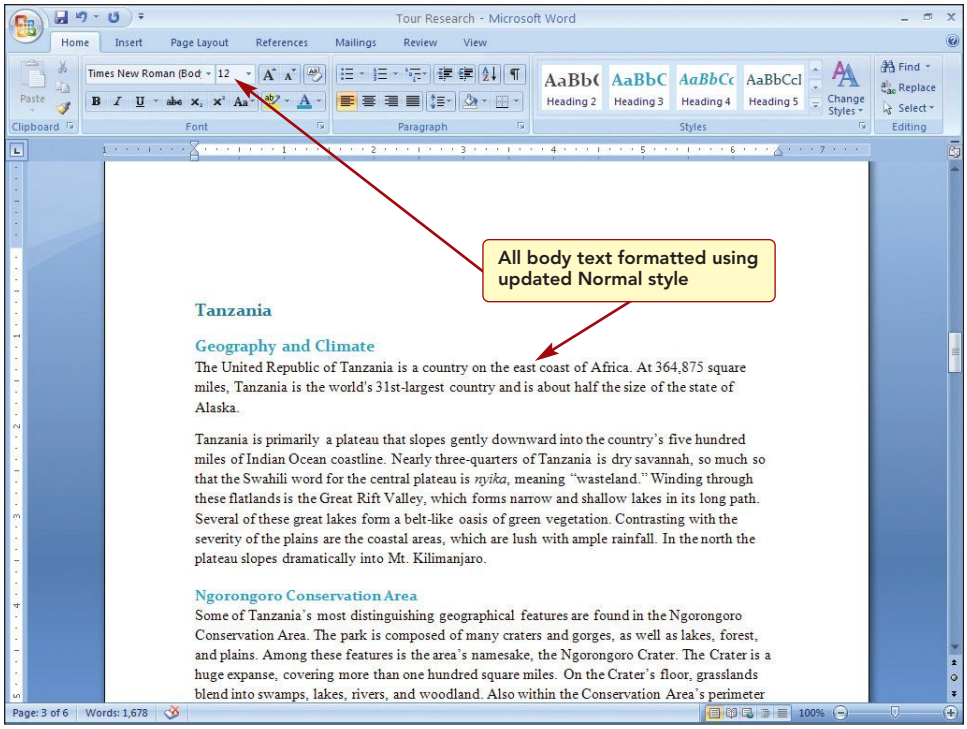


Figure 3.31

MORE ABOUT

To learn how to change all text formatted with one style to another style, see 2.1 Format Text and Paragraphs in the More About appendix.

All body text in the document that uses the Normal style has been immediately updated to the new font size of 12 points.

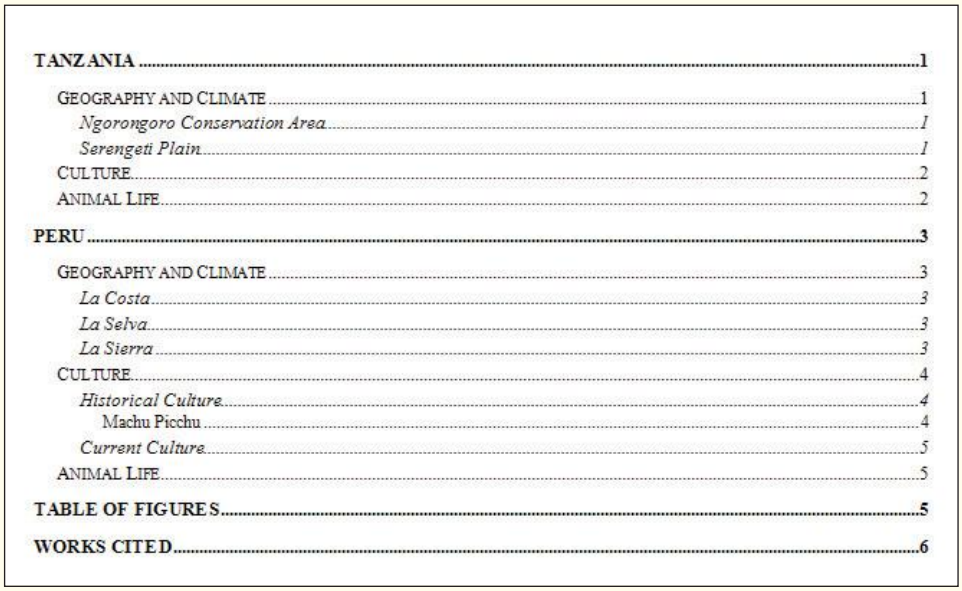
Creating a Table of Contents

Now you are ready to create the table of contents.

Concept 3

Table of Contents

3 A **table of contents** is a listing of the topic headings that appear in a document and their associated page references (see the sample below). It shows the reader at a glance the topics that are included in the document and makes it easier for the reader to locate information. Word can generate a table of contents automatically after you have applied heading styles to the document headings. To do this, Word first searches the document for headings. Then it formats and inserts the heading entry text into the table of contents. The level of the heading style determines the table of contents level.



TANZANIA 1
GEOGRAPHY AND CLIMATE 1
Ngorongoro Conservation Area 1
Serengeti Plain 1
CULTURE 2
ANIMAL LIFE 2
PERU 3
GEOGRAPHY AND CLIMATE 3
La Costa 3
La Selva 3
La Sierra 3
CULTURE 4
Historical Culture 4
Machu Picchu 4
Current Culture 5
ANIMAL LIFE 5
TABLE OF FIGURES 5
WORKS CITED 6

The table of contents that is generated is a field that can be easily updated to reflect changes you may make to the document after the list is generated. Additionally, each entry in the table is a hyperlink to the heading in the document.

Generating a Table of Contents

The report already includes heading styles to identify the different topics in the report. Now, all you need to do is select the style you want to use for the table of contents. You want the table of contents listing to be displayed several lines below the table of contents heading.

Additional Information
MLA and APA styles do not use a table of contents.

1. **Move to the blank line below the Table of Contents heading.**
2. **Open the References tab.**
3. **Click**  **in the Table of Contents group.**

Your screen should be similar to Figure 3.32

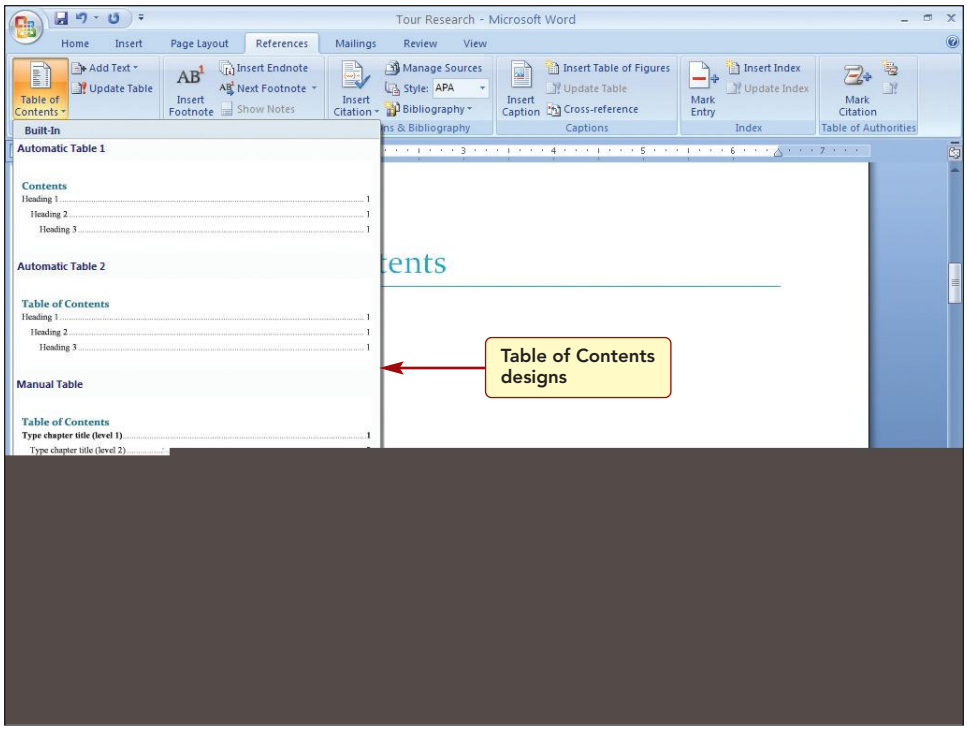


Figure 3.32

A gallery of three preformatted table of contents styles is displayed. The first two options automatically create a table of contents list using the heading 1–3 styles in the document. The main difference between these two options is that the title used in Automatic Table 1 is Contents and in Automatic Table 2 it is Table of Contents. The third option, Manual Table, creates a table of contents that you can fill out independent of the content in the document.

2. **Choose Automatic Table 2.**
3. **Scroll upward to see the table of contents.**
4. **Click in the table of contents to select it.**

Your screen should be similar to Figure 3.33

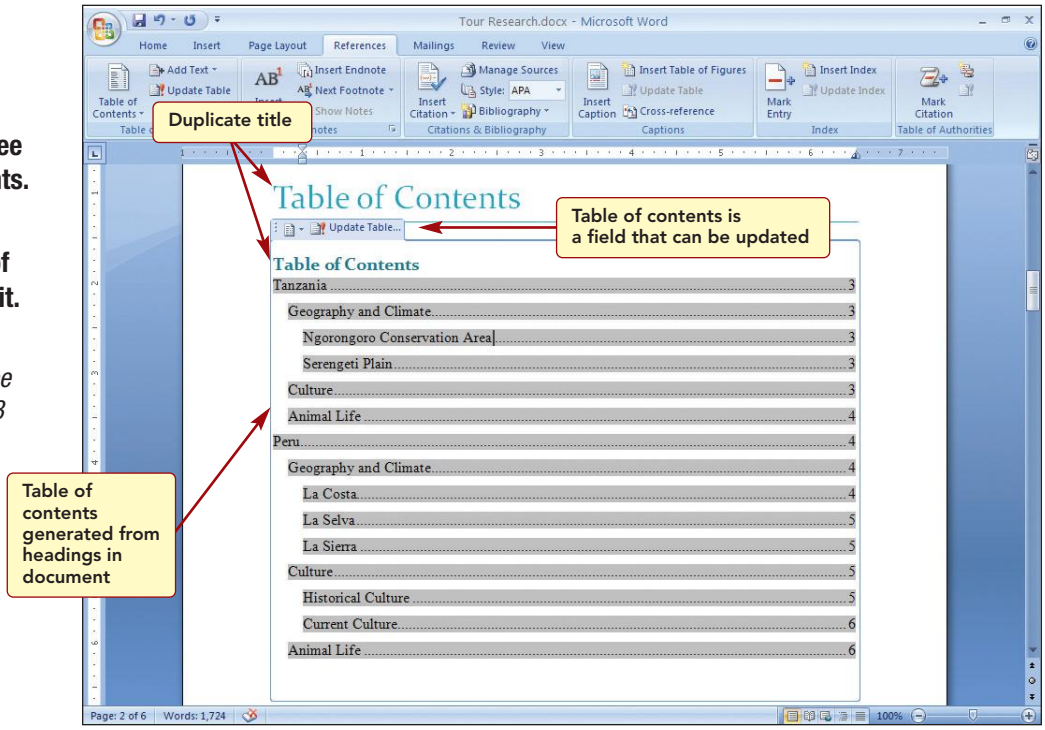


Figure 3.33

Word searched for headings with the specified styles, sorted them by heading level, referenced their page numbers, and displayed the table of contents using the selected style in the document. The headings that were assigned a Heading 1 style are aligned with the left margin, and subordinate heading levels are indented as appropriate. The table of contents displays the page numbers flush with the right margin with a dotted-line tab leader between the heading entry and the page number. It includes all entries in the document that are formatted with Headings 1, 2, and 3.

The table of contents is a field that is highlighted and enclosed in a box when selected. The field tab provides quick access to the Table of Contents menu by clicking and the Update Table... command button. Because it is a field, the table of contents can be easily updated to reflect changes you may make to the document after the list is generated.

Modifying a Table of Contents

You want the table of contents to include topics formatted with the Heading 4 style also. Additionally, you want to remove the table of contents title that was automatically included with the listing. To do this, you need to modify the table of contents settings.

1. **Click** Table of Contents.
2. **Choose Insert Table of Contents.**

Your screen should be similar to Figure 3.34

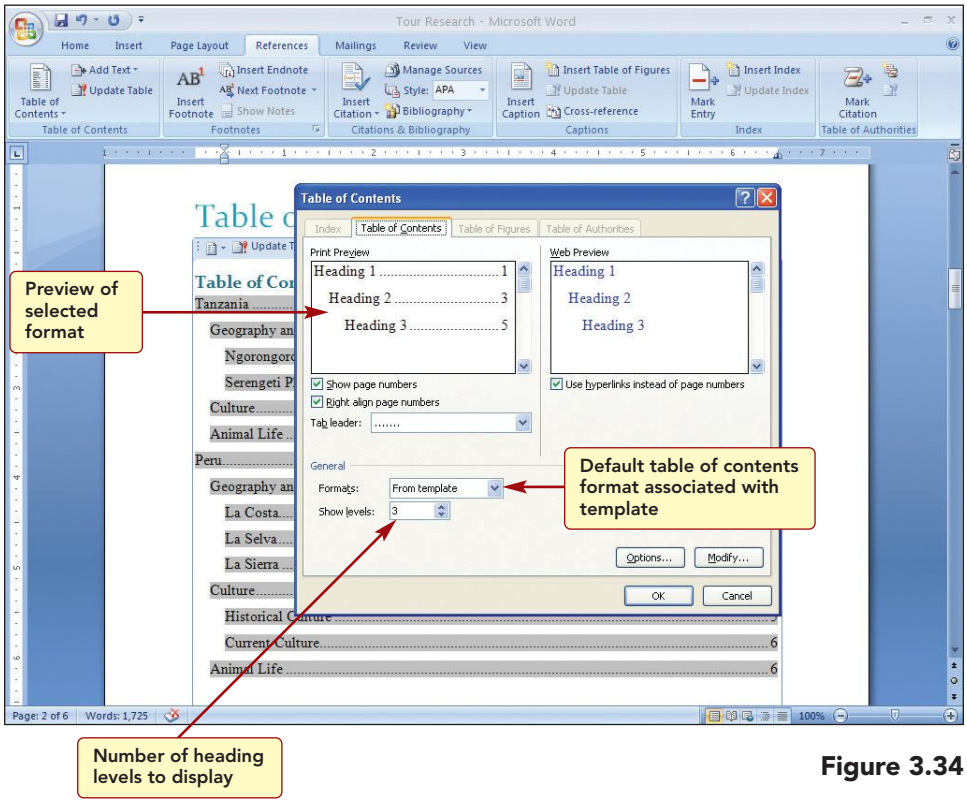


Figure 3.34

Additional Information
You also can create a new table of contents list directly from the Table of Contents dialog box.

From the Table of Contents dialog box, you select the format (style) of the table and the number of levels to show. The default style is determined by the Normal template and the number of levels to show is set to three. The two Preview boxes display an example of how the selected format will look in a printed document or in a document when viewed in a Web browser. You will change the format to another and the level to four. You also will remove the duplicate table of contents title. The title is static text that can be removed without affecting the table of contents field.

MORE ABOUT
You also can add static text to tables of contents. To learn how to do this, see 1.3 Make Documents and Content Easier to Find in the More About appendix.

2. **Select Formal from the Formats list.**

- **Specify 4 in the Show Levels box.**
- **Click** OK.
- **Click** OK **to replace the current contents list.**
- **Select and delete the table of contents title in the table of contents field.**

Your screen should be similar to Figure 3.35

Additional Information

To remove a table of contents, choose Remove Table of Contents from the Table of Contents menu or from the table of contents field's tab menu.

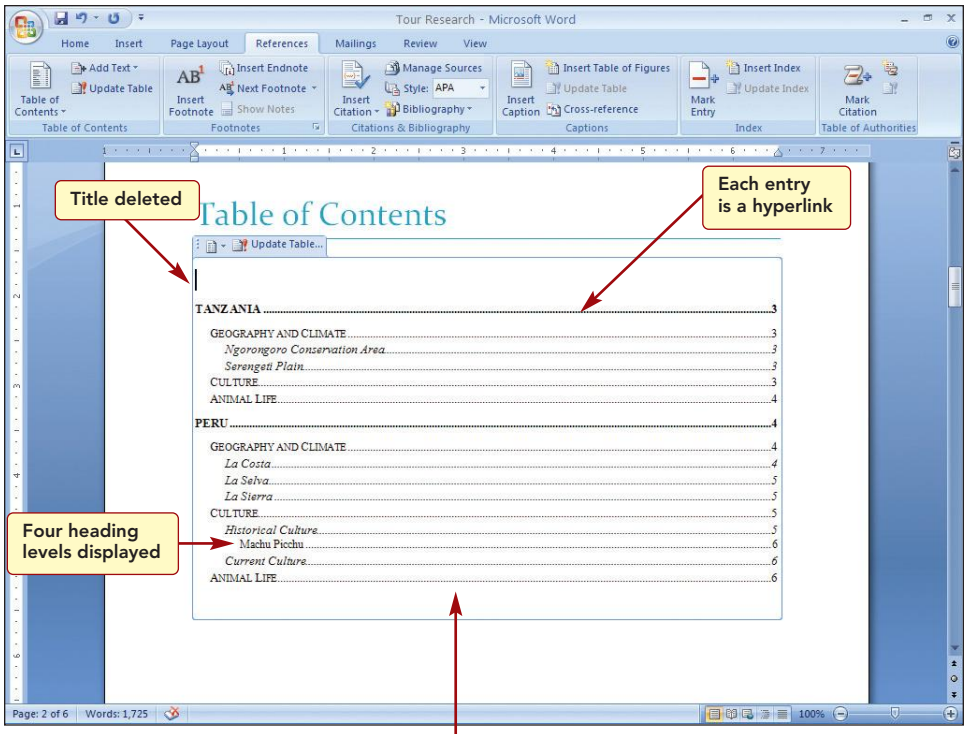


Figure 3.35

The table is regenerated using the new style and the one level 4 heading for Machu Picchu is now displayed in the table of contents.

Navigating a Document

In a large document, locating and moving to an area of text you want to view can take a lot of time. However, after headings have been applied to different areas of a document, there are several features that can make navigation easier. As a help when scrolling by dragging the scroll box, a ScreenTip identifies the topic heading in addition to the page number that will be displayed when you stop dragging the scroll box. If you have generated a table of contents, you can use the table of contents entries to quickly move to different areas. Even more convenient, however, is to use the Navigation window features to jump to a selected location.

Using a Table of Contents Hyperlink

Additional Information
Pointing to an entry in a table of contents displays a ScreenTip with directions on how to follow the hyperlink.

Not only does the table of contents display the location of topic headings in the report, but it also can be used to quickly move to these locations. This is because each entry in the table is a hyperlink to the heading in the document. A hyperlink, as you have learned, is a connection to a location in the current document, another document, or a Web site. To use a hyperlink in Word, hold down Ctrl while clicking on the hyperlink.

1. **Hold down Ctrl and click the Peru table of contents hyperlink.**

Additional Information
The mouse pointer shape changes to a hand when holding down Ctrl and pointing to a hyperlink.

Your screen should be similar to Figure 3.36

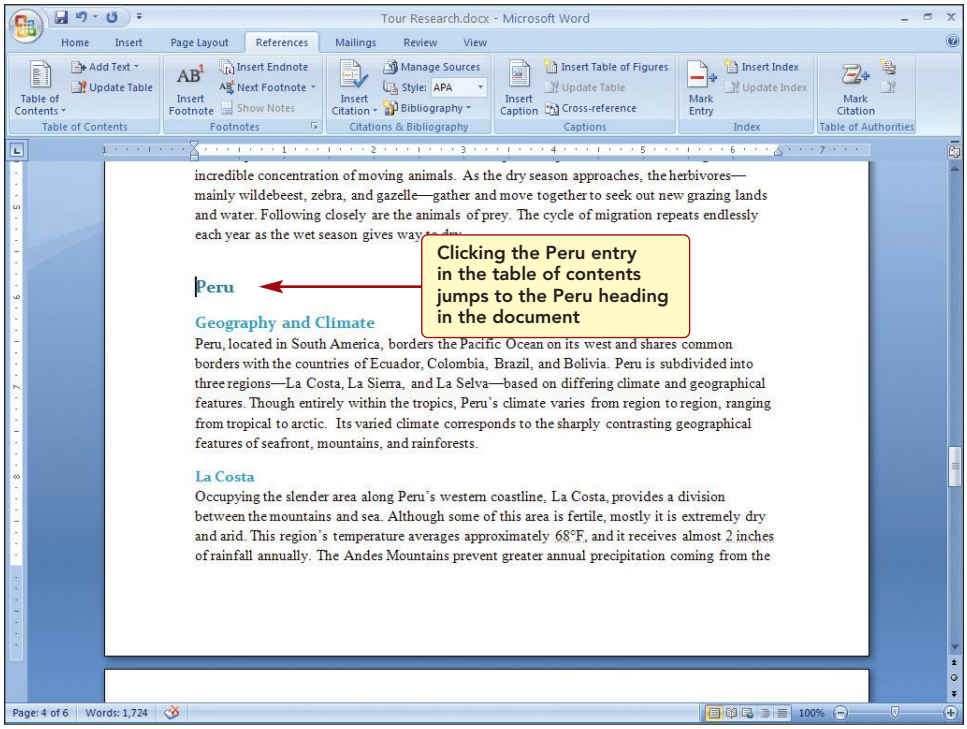


Figure 3.36

The insertion point jumps to the Peru heading in the document. Now, however, the table of contents is no longer visible. If you wanted to move to a different topic, you would need to return to the table of contents page and select another hyperlink.

Using Document Map

Another way to quickly move to different locations in the document is to use the Document Map feature. **Document Map** displays in a separate pane called the **navigation window** a list of the items in a document that have been formatted using a heading style. It is used to quickly navigate through the document by clicking on a heading and keeps track of your location in it.

1 **Open the View tab.**

Click Document Map **from the Show/Hide group.**

Your screen should be similar to Figure 3.37

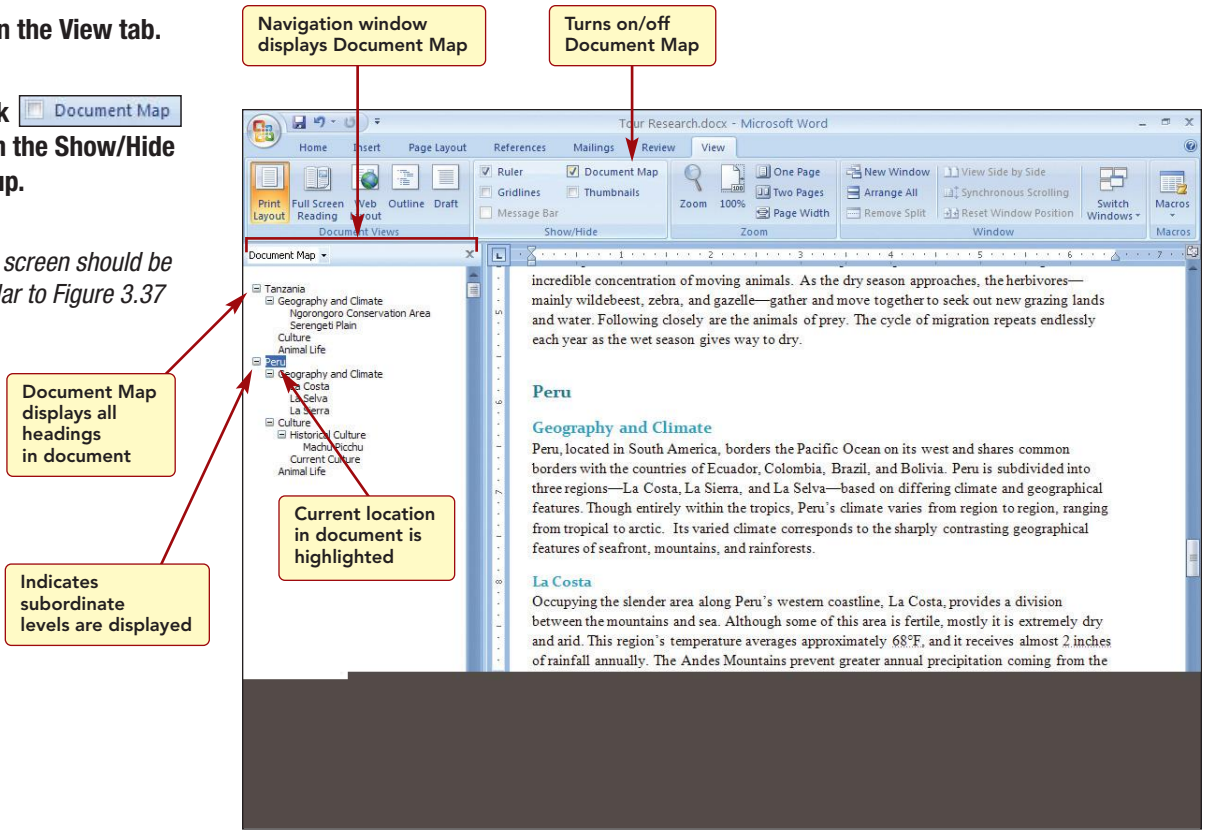


Figure 3.37

Additional Information
The navigation window pane can be resized by dragging the divider line between the panes.

The Document Map opens in the navigation window and displays a list of all the document headings. When your document does not contain any headings formatted with heading styles, the program automatically searches the document for paragraphs that look like headings (for example, short lines with a larger font size) and displays them in the Document Map. If it cannot find any such headings, the Document Map is blank.

Notice the ⊟ symbol to the left of many of the headings; this symbol indicates that all subordinate headings are displayed. A ⊞ symbol would indicate that subordinate headings are not displayed. The highlighted heading shows your location in the document. Clicking on a heading in the Document Map quickly jumps to that location in the document.

2. **Click on Culture (under Peru) in the Document Map.**

3. **Click on Tanzania.**

Your screen should be similar to Figure 3.38

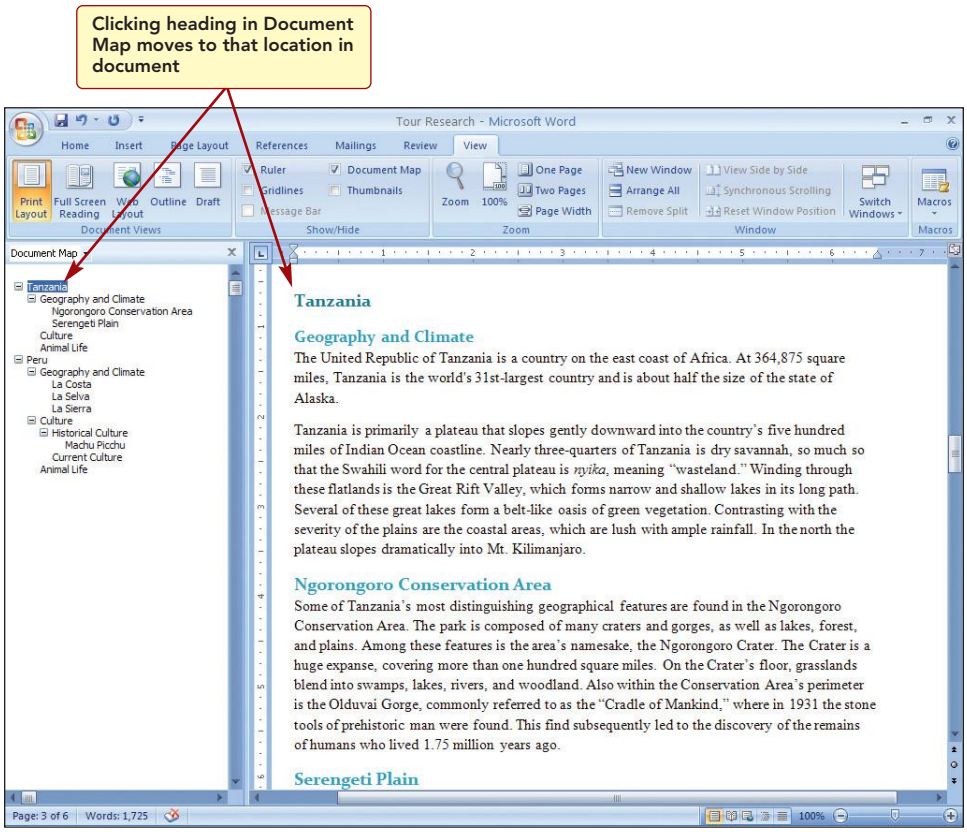


Figure 3.38

You quickly moved from one topic location in the document to another. When using the Document Map, the selected topic appears at the top of the window.

Using Thumbnails

The navigation window also can display **thumbnails**, miniature images of each page in the document. Clicking on a thumbnail moves directly to that page.

1. Open the Document Map drop-down button at the top of the navigation window.
2. Choose Thumbnails.
3. Scroll the navigation window and click on page 5.

Another Method

You also can click Thumbnails in the Show/Hide group.

Your screen should be similar to Figure 3.39

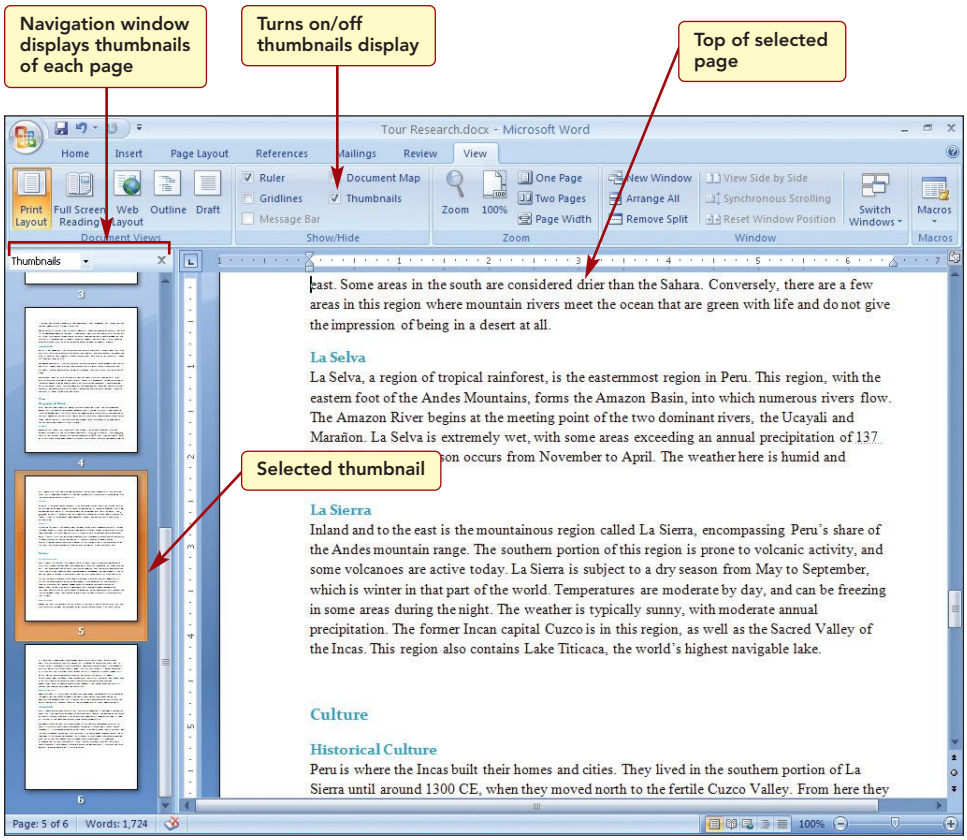


Figure 3.39

The selected page is displayed in the document window and the selected thumbnail is highlighted.

The Document Map and Thumbnails features are available in all views. The navigation window remains open in the view you are using until you close the window or turn off the feature. It must be turned on and off in each view independently.

Note: If you are running short on time to complete this lab, this is an appropriate time to stop. Close the navigation window and save the document. When you begin again, open the saved document and the navigation window.

Including Source References

Documented research papers typically provide credit for the sources of information that were used in developing the document. These sources are cited both within the text of the document and in a bibliography.

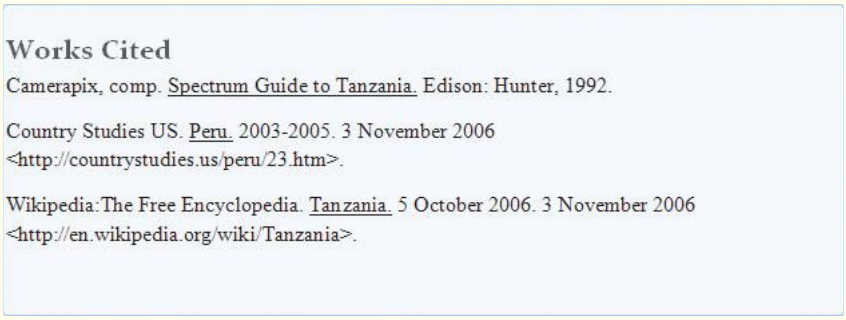
Concept 4

Citations and Bibliography

4 Parenthetical source references, called **citations**, give credit for specific information included in the document. Complete source information for citations is included in a **bibliography** at the end of the report. Citations and bibliographies must be entered using the appropriate reference style, such as MLA or APA style. Word includes a feature that will automatically format citations and bibliographies according to different reference styles. This saves you the time it would take to learn the style from the documentation manuals, and of entering the citations and bibliographies using the correct format.

As you insert citations, Word asks for the bibliography information for each source. Once a source is created, it is stored in two places: a Master List and a Current List. The Master List is a database of all sources ever created. The Current List includes all of the sources that will be used in the current document. The purpose of the Master List is to save you from retyping and reentering information about sources that you commonly use. This is because you can select and copy sources in your Master List to add them to your Current List.

Word uses the information in the Current List to quickly generate a complete bibliographic list (similar to the sample shown here) of the information for each source according to the selected reference style.



Works Cited

Camerapix, comp. Spectrum Guide to Tanzania. Edison: Hunter, 1992.

Country Studies US. Peru. 2003-2005. 3 November 2006 <http://countrystudies.us/peru/23.htm>.

Wikipedia:The Free Encyclopedia. Tanzania. 5 October 2006. 3 November 2006 <http://en.wikipedia.org/wiki/Tanzania>.

Both citations and bibliography entries are inserted as fields in the document. This means that any changes you may make to the source information is automatically updated in both the citation and the bibliography.

Selecting a Reference Style

You have been following the MLA reference style guidelines for this report and will specify the MLA reference style before you begin inserting citations. You can change the reference style at any point while working on your document and your citations and bibliography will be automatically updated to reflect the new style.

Additional Information

Changing reference styles allows you to repurpose documents to be submitted to a number of publications requiring different reference standards.

1. **Open the References tab.**
2. **Open the Style: APA drop-down list in the Citations and Bibliography group.**
3. **Choose MLA from the drop-down list.**

Now, as you enter citations and create a bibliography, they will be formatted using the MLA style guidelines.

Creating Citations

Research papers using the MLA style require citations to include the author's last name and a page number or range within parentheses. The first citation that needs to be included in the document is to credit the source of the geography statistics about Tanzania. The source of this information was from the Wikipedia Web site. To create a citation, the bibliography information for the source is entered first.

1. **Display the Document Map.**
2. **Move to the end of the first paragraph (before the period) of the Tanzania Geography section.**
3. **Click Insert Citation in the Citations and Bibliography group.**
4. **Choose Add New Source.**

Your screen should be similar to Figure 3.40

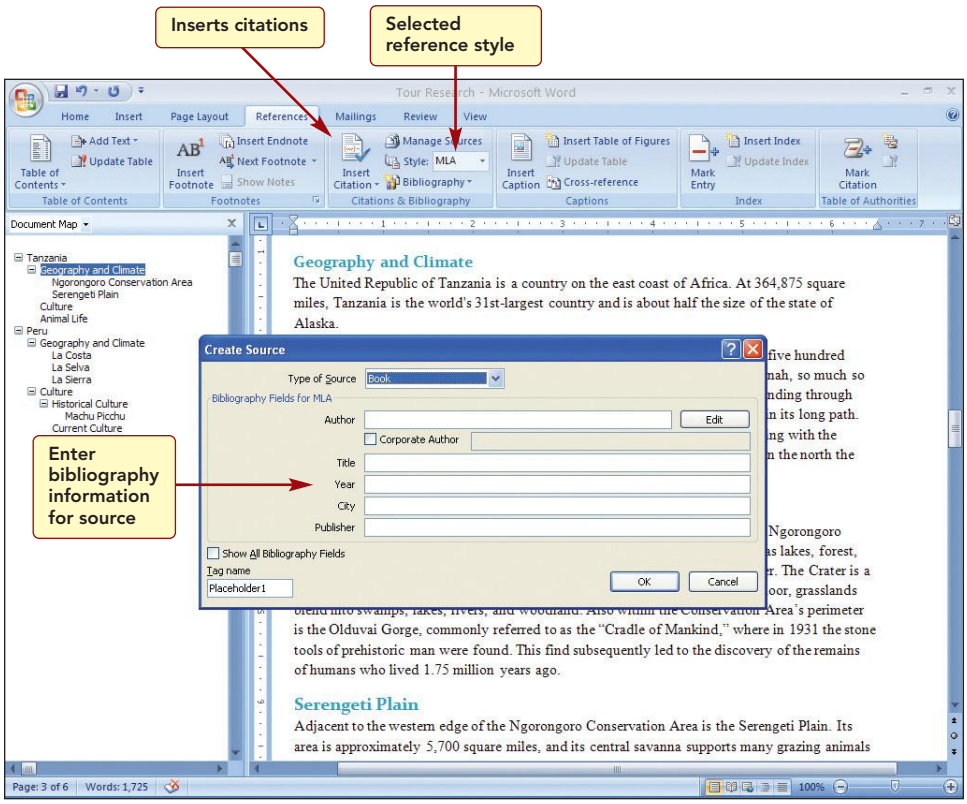


Figure 3.40

Additional Information

Word includes the capability to search an external library through the Research and Reference pane to locate data and import it with one click.The source information is automatically entered in the Create Source form for you.

In the Create Source dialog box, you first select the type of source, for example, a book, a journal article, or a Web site. Then you enter the bibliography information for the source in the appropriate text boxes for the selected source type.

2. **Choose Web site as the type of source.**

- **Enter the following in the appropriate locations to complete the bibliography information for this citation.**

Author	**Wikipedia**
Name of Web Page	**Tanzania**
Year	**2006**
Month	**October**
Day	**5**
Year Accessed	**Enter the current year**
Month Accessed	**Enter the current month**
Day Accessed	**Enter the current day**
URL	**http://en.wikipedia.org/wiki/Tanzania**

- **Click** OK **.**

Your screen should be similar to Figure 3.41

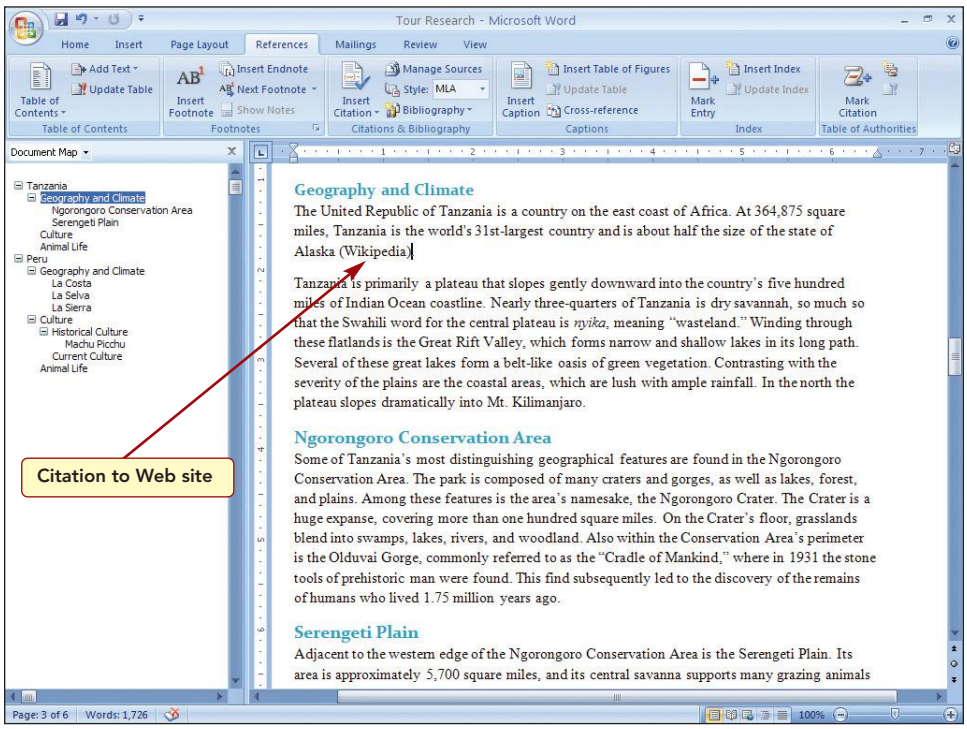


Figure 3.41

Additional Information

You also can create a citation placeholder to mark the place in a document where you need to add a citation. You can then complete the bibliographic information later by editing the citation. The default citation placeholder tag is "Placeholder" followed by a number. You can use the default placeholder tag names or you can enter whatever you want.

The citation is inserted at the location of the insertion point. It is a field that is linked to the source information. The source information is now stored in both the Master List and the Current List.

The next citation is also to the Wikipedia Web site. Once source information has been specified, it is easy to insert the citation again. This is because the Insert Citation drop-down menu displays a brief bibliographic entry for each source in the Current List. You will insert another citation for the same source in the report and then you will add a citation for the quote at the end of the first paragraph of the Tanzania Animal Life topic. This

quote was found on page 252 of a book that was compiled by Camerapix Publishers International. Because this citation is to a quote, the page number must be included in the citation. You will enter the source information and then edit the citation to include the page.

3 **Using the Document Map, move to the end of the third sentence (before the period) in the first paragraph of the Tanzania Culture section.**

- **Click**  **and choose the Wikipedia entry from the Citation list.**
- **Using the Document Map, move to the end of the first paragraph (before the period) of the Tanzania Animal Life section.**
- **Click**  **and choose Add New Source.**
- **Choose Book as the type of source.**
- **Enter the following in the appropriate locations to complete the bibliography information for this citation.**

Author	**Camerapix, comp.**
Title	**Spectrum Guide to Tanzania**
Year	**1992**
City	**Edison**
Publisher	**Camerapix Publishers International**

- **Click** OK.
- **Click on the citation and open the drop-down menu.**
- **Choose Edit Citation.**
- **Enter 252 as the page number.**
- **Click** OK.

Your screen should be similar to Figure 3.42

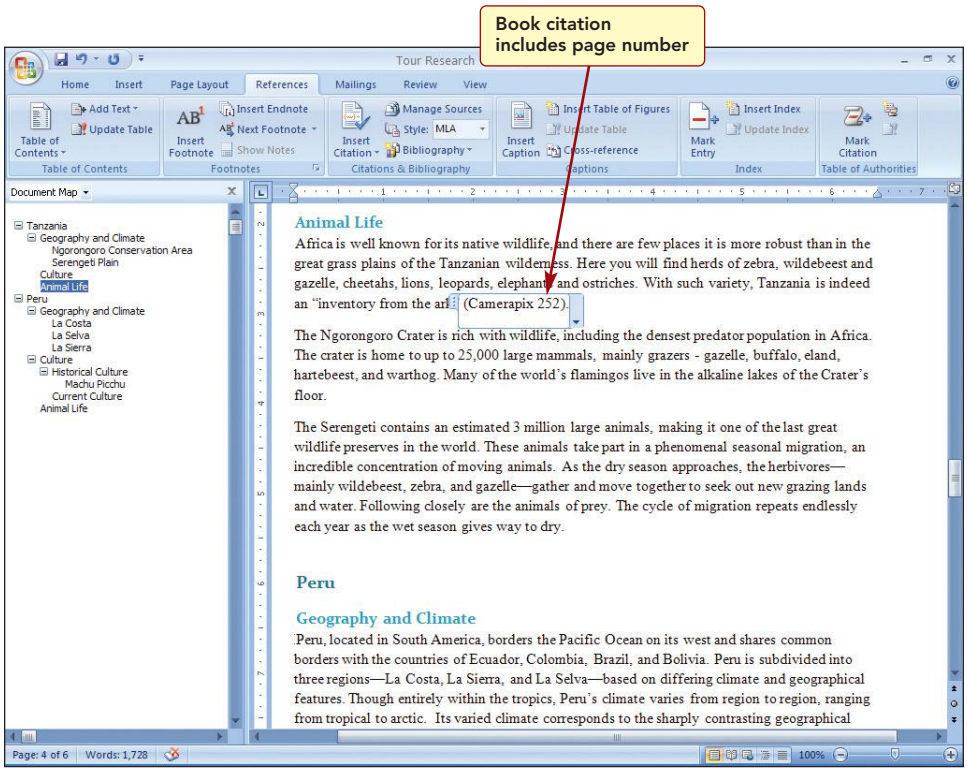


Figure 3.42

The last citation you will complete for now is to credit the source of the geography statistics about Peru. The source of this information was from the Country Studies Web site. This Web site contains the online versions of books that were published by the Federal Research Division of the Library of Congress as part of the Country Studies/Area Handbook series.

4 **Using the Document Map, move to the end of the second sentence (before the period) in the first paragraph in the Peru Geography and Climate section.**

Insert a Web site citation using the following source information:

Corporate Author	**Country Studies US**
Name of Web Page	**Peru**
Year	**2003-2005**
Year Accessed	**Enter the current year**
Month Accessed	**Enter the current month**
Day Accessed	**Enter the current day**
URL	**http://countrystudies.us/peru/23.htm**

Your screen should be similar to Figure 3.43

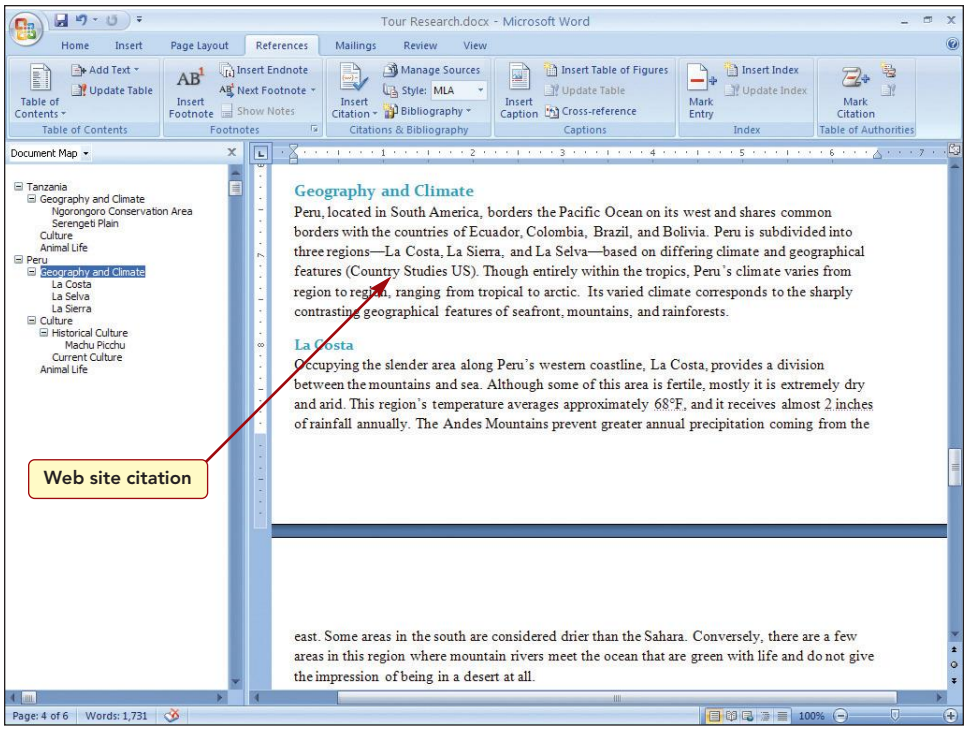


Figure 3.43

Editing a Source

As you look back at the citations you just entered, you realize the author for the Wikipidea Web site should have been entered as a corporate author, not an individual author. Additionally, the Web site name is incomplete. You will quickly return to this citation using the GoTo feature and edit the source.

1. Click Find on the Home tab and open the Go To tab.

Another Method
You also can click on the page count indicator in the status bar to open the Go To dialog box.

- Select Field from the Go to What list.
- Click Previous three times to search backward through the document.
- Click Close when the Wikipidea citation is located.
- Choose Edit Source from the citation's drop-down list.
- Click Corporate Author to move the information in the Author text box to the Corporate Author text box.
- Type :The Free Encyclopedia following Wikipedia in the Author box.
- Click OK.
- Click Yes to update both the Master and Current Lists.

Your screen should be similar to Figure 3.44

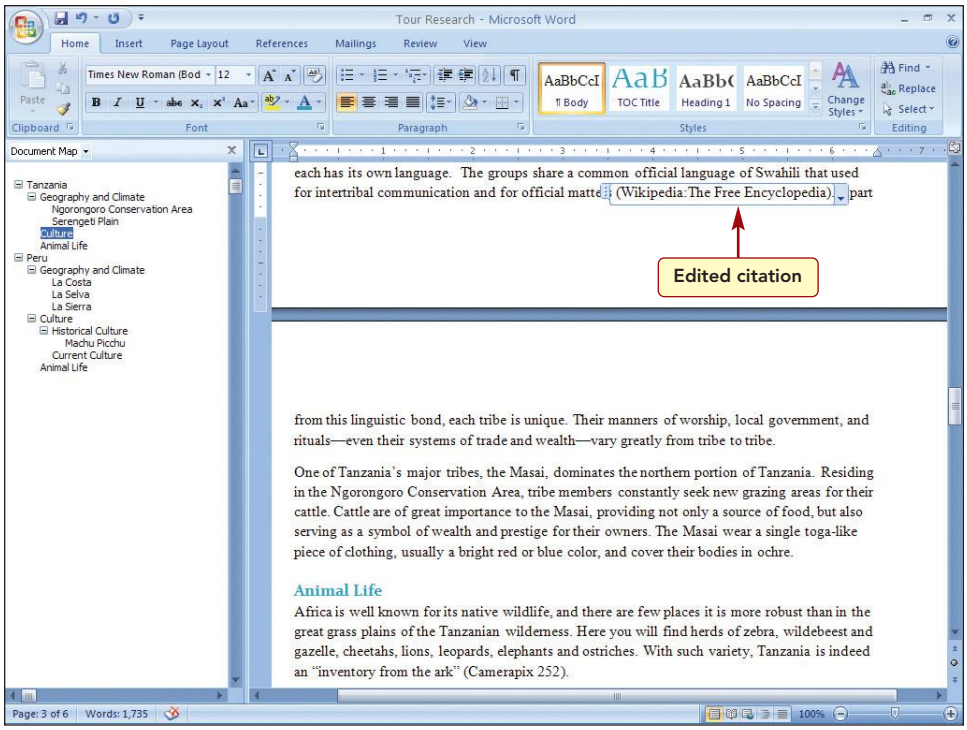


Figure 3.44

The information for the source is now correct and both citations to this source have been updated appropriately.

Including Footnotes

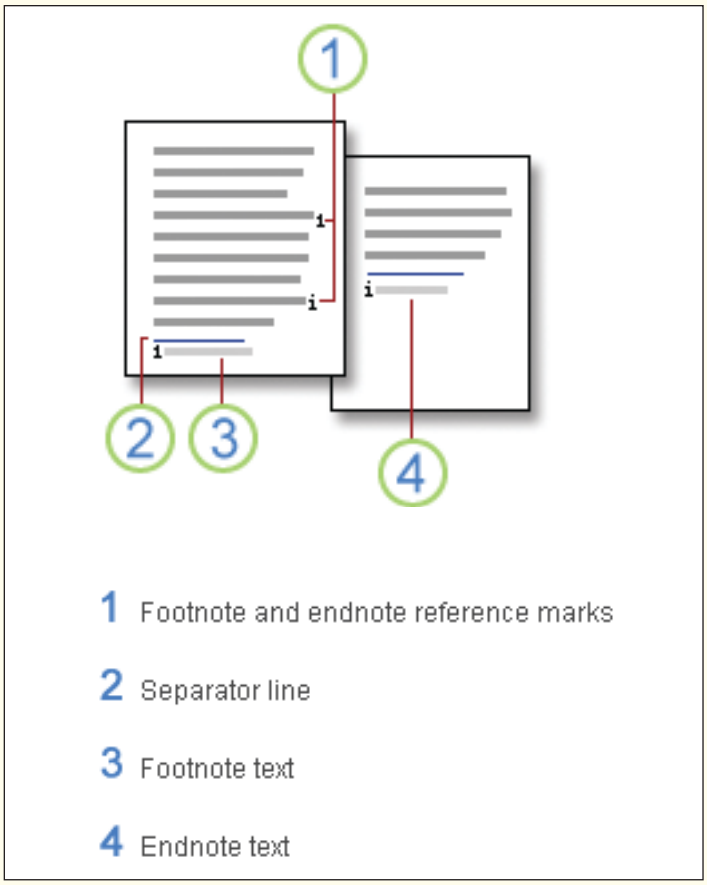
You still have several reference notes you want to include in the report as footnotes to help clarify some information.

Concept 5

Footnote and Endnote

5 Footnotes and endnotes are used in documented research papers to explain or comment on information in the text, or provide source references for text in the document. A **footnote** appears at the bottom of a page containing the material that is being referenced. An **endnote** appears at the end of a document. You can have both footnotes and endnotes in the same document.

Footnotes and endnotes consist of two parts, the **note reference mark** and the **note text**. The default note reference mark is a superscript number appearing in the document at the end of the material being referenced (for example, text). You also can use custom marks consisting of any nonnumeric character or combination of characters, such as an asterisk. The note text for a footnote appears at the bottom of the page on which the reference mark appears. The footnote text is separated from the document text by a horizontal line called the **note separator**. Endnote text appears as a listing at the end of the document.



Note text can be of any length and formatted just as you would any other text. You also can customize the appearance of the note separators.

Inserting Footnotes in Draft View

The first footnote reference you want to add is the height of Mt. Kilimanjaro. This note will follow the reference to the mountain at the end of the second paragraph in the Geography and Climate section for Tanzania. To identify the location of the footnote number in the document, you position the insertion point at the document location first. You want to create numbered footnotes, so the default settings are acceptable.

1. **Using the Document Map, move to the Tanzania Geography and Climate heading.**
2. **Switch to Draft view.**
3. **Move to the end of the second paragraph.**
4. **Open the References tab.**
5. **Click**  **from the Footnotes group.**

Another Method

The keyboard shortcut to insert a footnote using the default settings is Alt + Ctrl + F.

Your screen should be similar to Figure 3.45

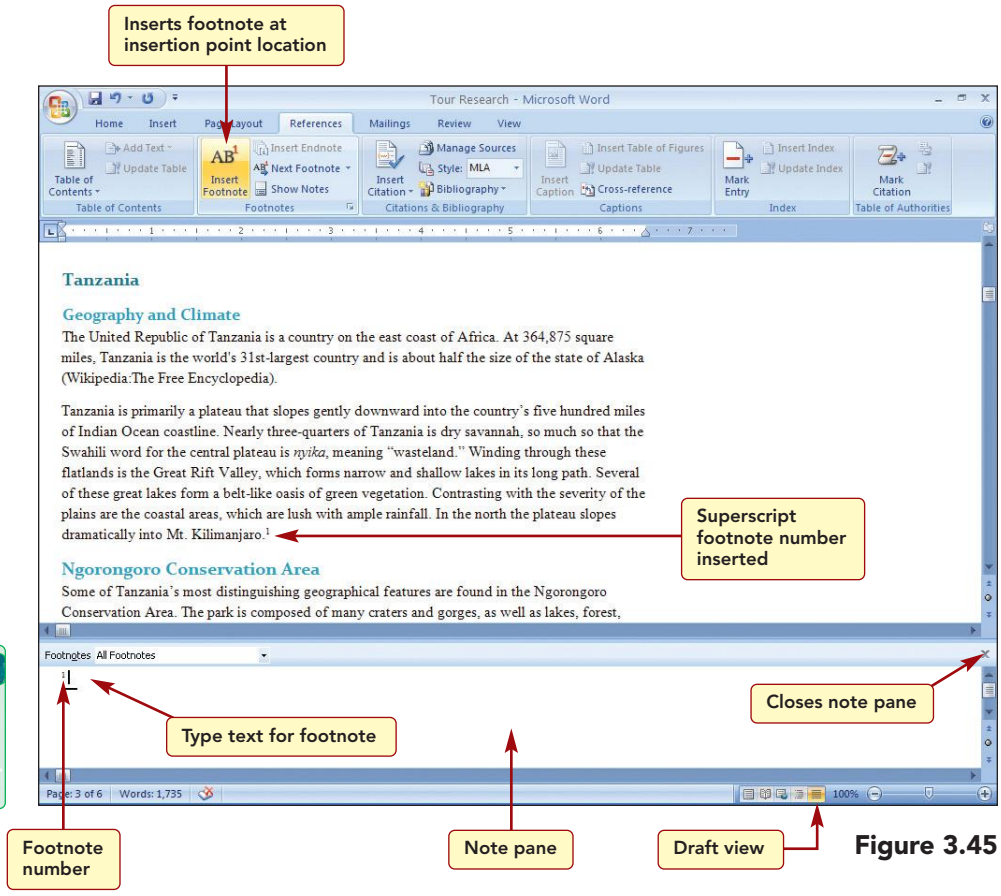


Figure 3.45

The document window is now horizontally divided into upper and lower panes. The report is displayed in the upper pane. The footnote number, 1, appears as a superscript in the document where the insertion point was positioned when the footnote was created. The **note pane** displays the footnote number and the insertion point. This is where you enter the text for the footnote.

When you enter a footnote, you can insert, edit, and format footnotes just like any other text.

2 **Type Mt. Kilimanjaro is 19,340 feet high, making it the fourth tallest mountain in the world.**

Having Trouble?
If you make a typing or spelling error, correct it like any other text in a document.

- **Click [x] to close the note pane.**
- **Point to note reference mark 1 in the document.**

Additional Information
You can hide and display the note pane anytime by using Insert Footnote or by double-clicking on a note reference mark.

Your screen should be similar to Figure 3.46

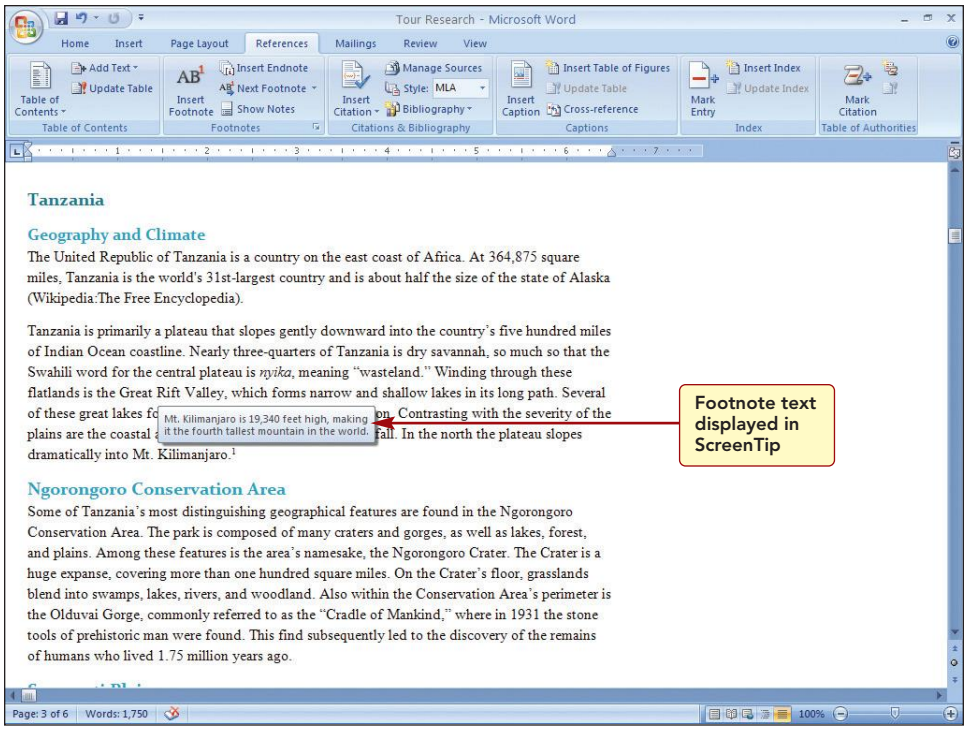


Figure 3.46

In Draft view, the only way to see the footnote text when the footnote pane is not open is in the reference mark's ScreenTip.

Inserting Footnotes in Print Layout View

The second footnote you want to add is in the Geography and Climate section under Peru. You also can insert footnotes in Print Layout view. After using the command to insert a footnote, the footnote number appears in the footnote area at the bottom of the page, ready for you to enter the footnote text. You want to add a note about Lake Titicaca.

1. **Switch to Print Layout view at 100% zoom.**
2. **Using the Document Map, move to the La Sierra heading in the Peru Geography and Climate section.**
3. **Click at the end of the paragraph in the La Sierra section after the word "lake."**
4. **Click** 

.
5. **Type Lake Titicaca is 12,507 feet above sea level.**

Your screen should be similar to Figure 3.47

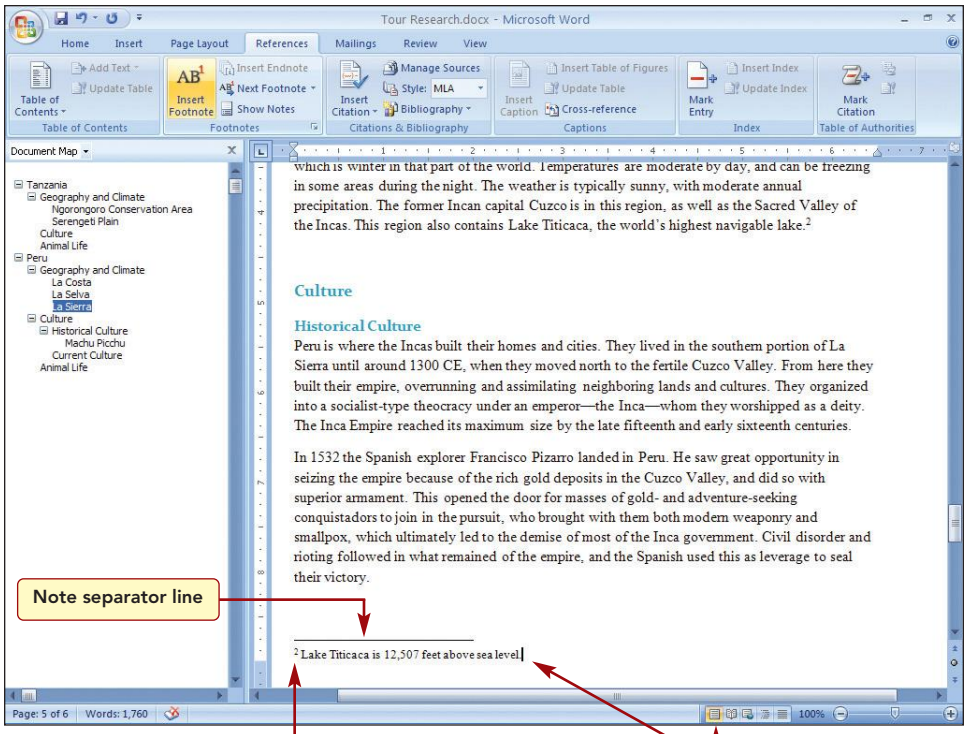


Figure 3.47

Additional Information

A footnote or endnote can be copied or moved by selecting the note reference mark and using Cut or Copy and Paste. You also can use drag and drop to copy or move a note.

Additional Information

In Print Layout view, you also can display the footnote text in a ScreenTip by pointing to the note reference mark.

The footnote number 2 was automatically entered at the location of the insertion point in the text and the footnote text is displayed immediately above the bottom margin separated from the text by the note separator line. Footnotes are always displayed at the bottom of the page containing the footnote reference mark. Print Layout view displays footnotes as they will appear when the document is printed.

Now you realize that you forgot to enter a footnote earlier in the document, on page 2.

2. **Using the Document Map, move to the Ngorongoro Conservation Area heading.**

- **Move to after the period at the end of the first sentence of the first paragraph, following the word "Area."**
- **Insert the following footnote at this location: The Conservation Area is a national preserve spanning 3,196 square miles.**
- **Save the document.**

Your screen should be similar to Figure 3.48

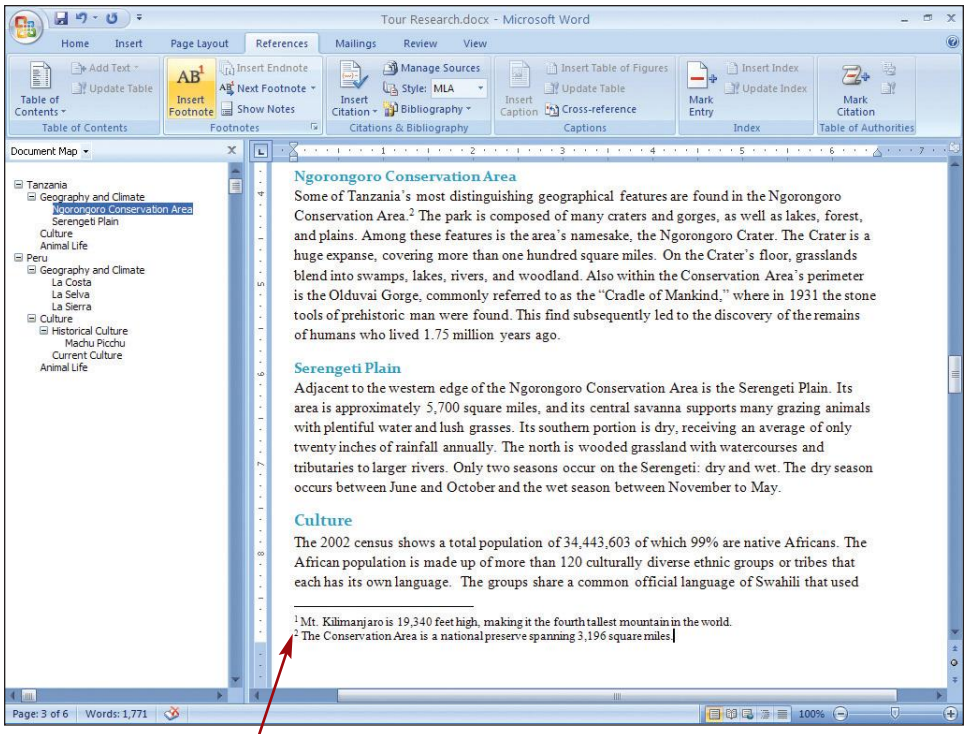


Figure 3.48

Additional Information

To delete a footnote or endnote, highlight the reference mark and press Delete. The reference mark and associated note text are removed, and the following footnotes are renumbered.

Notice that this footnote is now number 2 in the document. Word automatically adjusted the footnote numbers when the new footnote was inserted.

You are finished entering footnotes for now. Footnotes can quickly be converted to endnotes and vice versa by right-clicking on the note you want to convert and choosing Convert from the context menu.

Formatting Picture Layout

Next you want to add two pictures to the report and you want the text to wrap around the pictures. To do this, you change the text-wrapping layout for the picture.

Concept 6

Text Wrapping

6 You can control the appearance of text around a graphic object by specifying the **text wrapping** style. The text in the paragraph may wrap around the object in many different ways as shown below.



Inline with Text | Square | Tight | Through | Top and Bottom | Behind Text | In Front of Text

When a picture is inserted into a Word document, it is an **inline object**. This means it is positioned directly in the text at the position of the insertion point. It becomes part of the paragraph and any paragraph alignment settings that apply to the paragraph also apply to the picture.

By changing a graphic to a **floating object**, it is inserted into the **drawing layer**, a separate layer from the text that allows graphic objects to be positioned precisely on the page. You can change an inline object to a floating picture by changing the wrapping style of the object.

Wrapping Text around Graphics

You will insert a picture of a giraffe next to the second paragraph on page 2.

1. **Use the Document Map to move to the Geography and Climate head under Tanzania.**
2. **Close the Navigation window.**
3. **Move to the beginning of the second paragraph.**
4. **Insert the picture wd03_Giraffe from your data files.**
5. **Reduce the size of the picture to approximately 2 by 2 inches.**

Additional Information
Dragging the corner handle maintains the original proportions of the picture.

Your screen should be similar to Figure 3.49

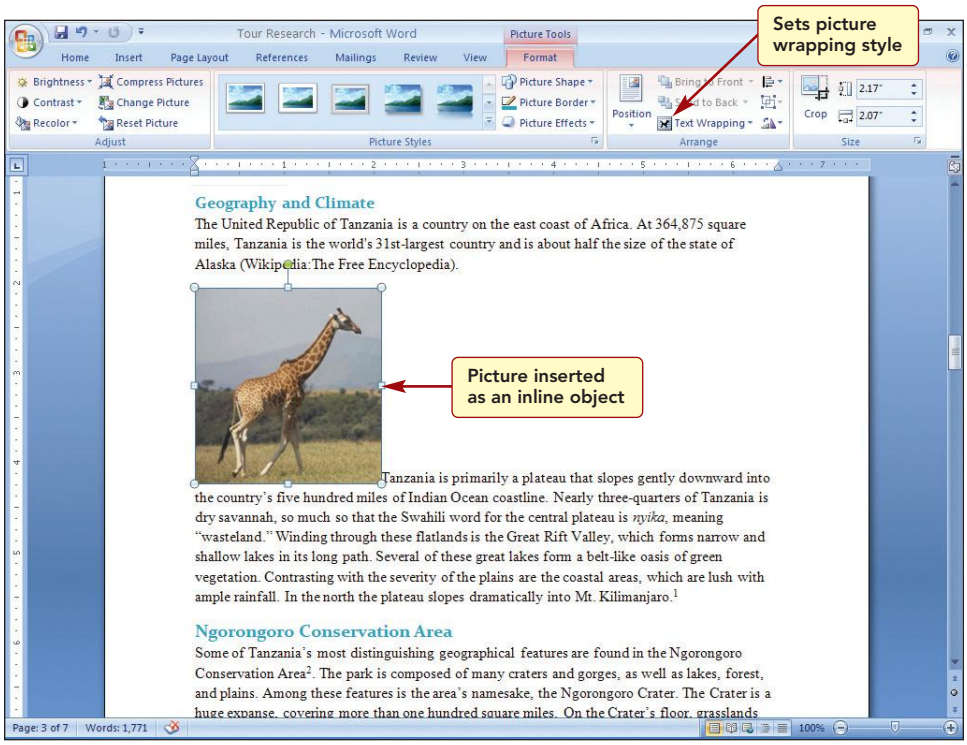


Figure 3.49

The picture has been inserted as an inline object and appears at the beginning of the paragraph like the first text characters of the paragraph. The text continues to the right of the picture. The Picture Tools Format tab is automatically displayed and is used to modify the selected picture object.

You want to change the wrapping style so that the text wraps around the picture. To do this, you will change the wrapping style to Square.

2. **Click Text Wrapping from the Arrange group.**
   - **Choose Square from the submenu.**
   - **If necessary, resize and position the picture until the text wraps around it as in Figure 3.50.**

Your screen should be similar to Figure 3.50

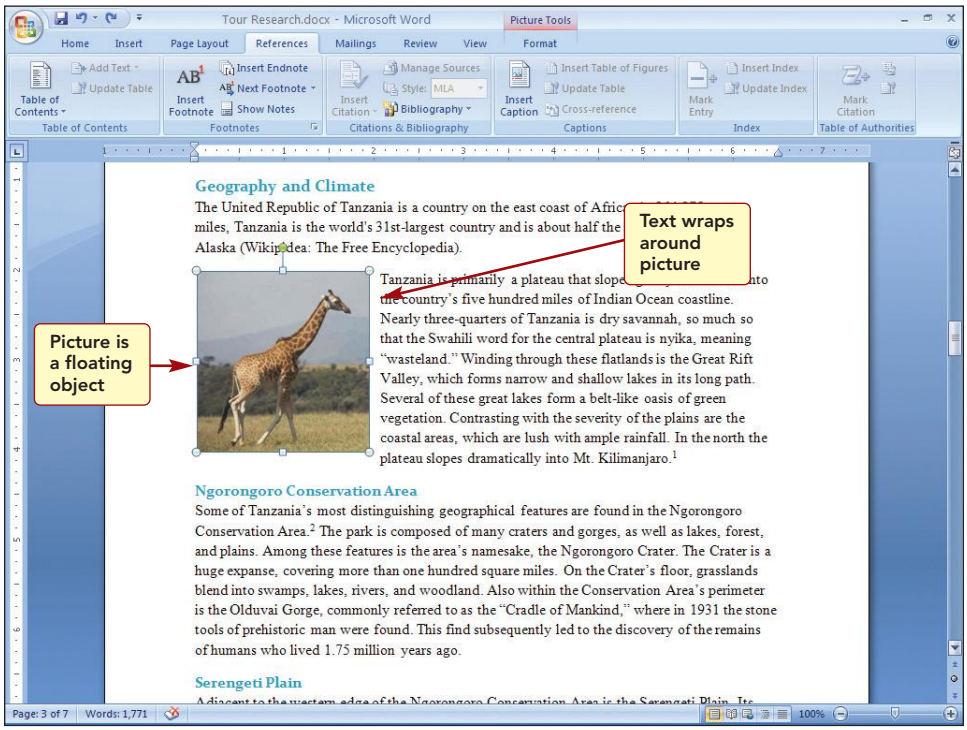


Figure 3.50

Additional Information

Sometimes a floating object is hidden behind another. If this happens, you can press Tab to cycle forward or Shift + Tab to cycle backward through the stacked objects.

The picture is changed to a floating object that can be placed anywhere in the document, including in front of or behind other objects including the text. Because the picture is even with the left margin, the text wraps to the right side of the object. If you moved the picture, because the wrapping style is Square, the text would wrap around the object on all sides.

3. **Move the picture to the center of the page to see how the text wraps around it.**

Your screen should be similar to Figure 3.51

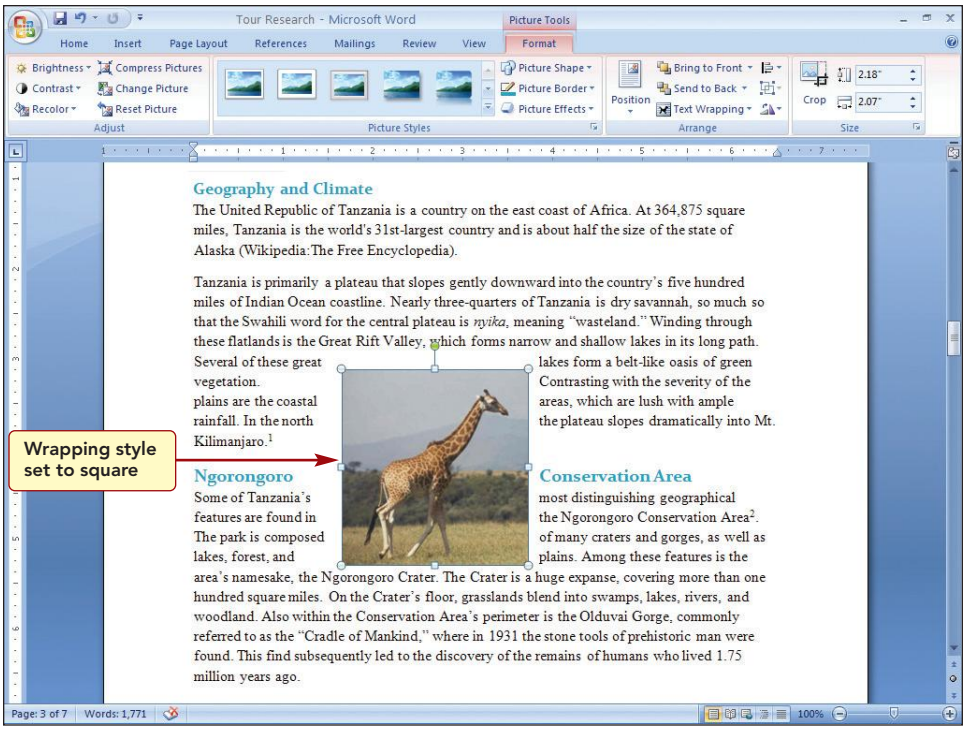


Figure 3.51

The text wraps on all sides of the object, depending on its location in the text. You will align this picture with the left margin again. Then you will add a second picture in the Peru Animal Life section.

4. **Move the picture back to the left margin and aligned with the top of the paragraph (see Figure 3.50).**
   - **Move to the beginning of the first paragraph in the Peru Animal Life section.**
   - **Insert the picture wd03_Parrots to the left of the first paragraph.**
   - **Change the wrapping style to Square.**
   - **Size and position the picture as in Figure 3.52.**
   - **Save the document.**

Your screen should be similar to Figure 3.52

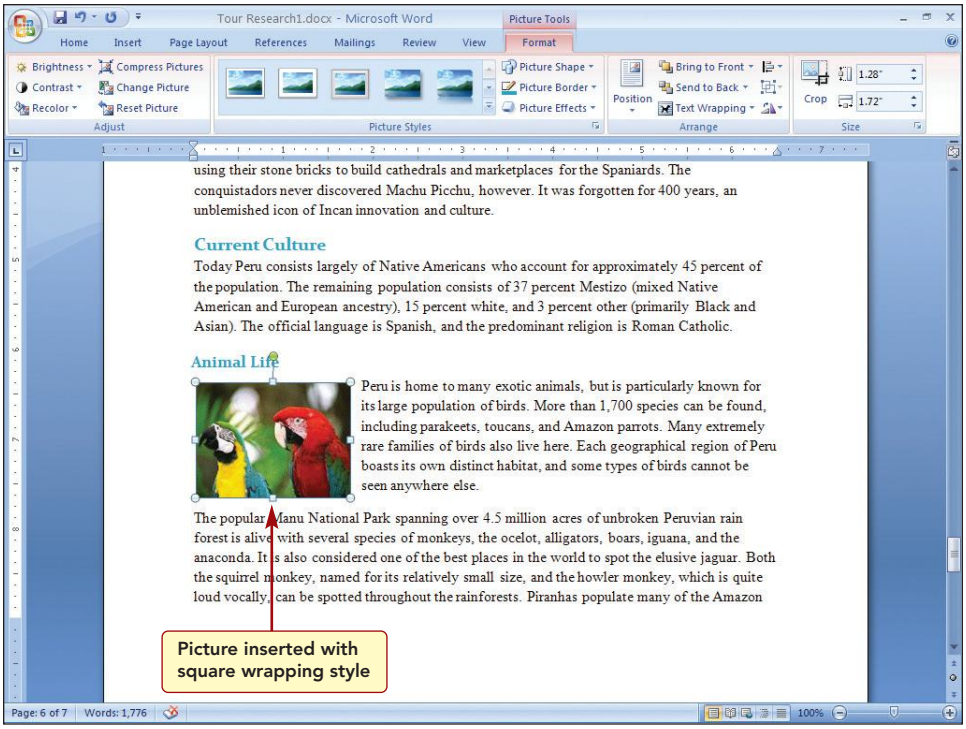


Figure 3.52

Referencing Figures

After figures and other illustrative items have been added to a document, it is helpful to include figure references to identify the items. Figure references include captions and cross-references. If the reader is viewing the document online, the captions and cross-references become hyperlinks to allow the reader to jump around in the document.

Concept 7

Captions and Cross-References

7 Using captions and cross-references in a document identifies items in a document and helps the reader locate information quickly. A **caption** is a numbered label for a figure, table, picture, or graph. Word can automatically add captions to graphic objects as they are inserted, or you can add them manually. The caption label can be changed to reflect the type of object to which it refers, such as a table, chart, or figure. In addition, Word automatically numbers graphic objects and adjusts the numbering when objects of the same type are added or deleted.

A **cross-reference** is a reference from one part of a document to related information in another part. Once you have captions, you also can include cross-references. For example, if you have a graph in one part of the document that you would like to refer to in another section, you can add a cross-reference that tells the reader what page the graph is on. A cross-reference also can be inserted as a hyperlink, allowing you to jump to another location in the same document or in another document.

Adding a Figure Caption

Next, you want to add a caption below the picture of the giraffe.

1. **Select the Giraffe picture in the Tanzania section.**
2. **Open the References tab.**
3. **Click** Insert Caption.

Your screen should be similar to Figure 3.53

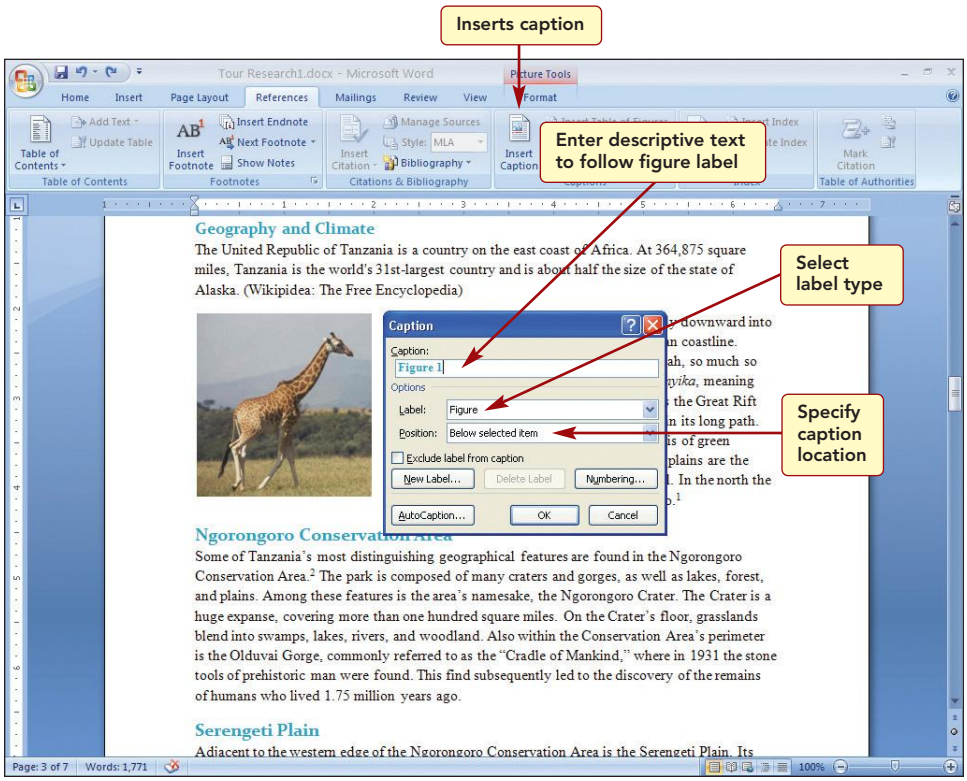


Figure 3.53

The Caption options are described in the following table.

Option	Description
Label	Select from one of three default captions: Table, Figure, or Equation.
Position	Specify the location of the caption, either above or below a selected item. When an item is selected, the Position option is available.
New Label	Create your own captions.
Numbering	Specify the numbering format and starting number for your caption.
AutoCaption	Turns on the automatic insertion of a caption (label and number only) when you insert selected items into your document.

The default caption label is Figure 1. You will use this caption and add additional descriptive text. The default setting of "Below selected item" is also correct.

2. **In the Caption text box, following "Figure 1," type : Giraffe in Serengeti.**

- **Click** OK **.**
- **If necessary, size and position the picture and caption as in Figure 3.54.**

Your screen should be similar to Figure 3.54

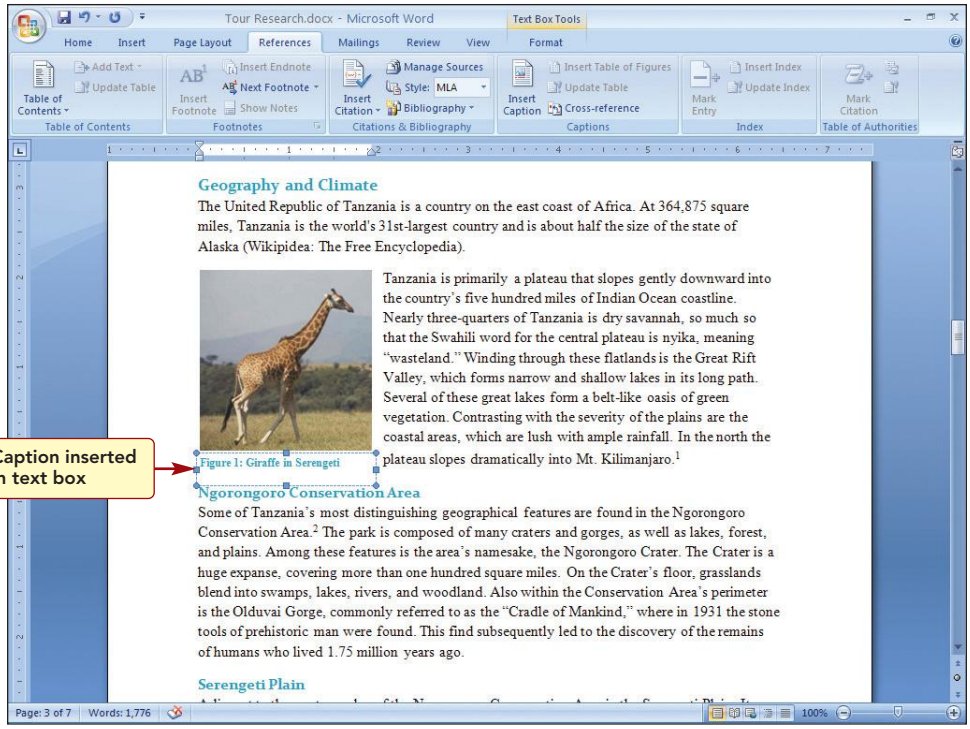


Figure 3.54

Additional Information
Only captions that are associated with floating graphic objects are in text boxes. Otherwise, they are text entries.

Additional Information
You will learn more about text boxes in later labs.

The caption label appears below the figure. It is formatted using the caption style associated with the selected theme. The figure number is a field that will update automatically as you add or delete captions in the document. The caption is contained in a **text box**, a container for text and other graphic objects that can be moved like any other object.

3. **In a similar manner, add a Figure 2: Amazon Parrots caption below the parrot picture.**

   Size and position the picture and caption as in Figure 3.55.

   Your screen should be similar to Figure 3.55

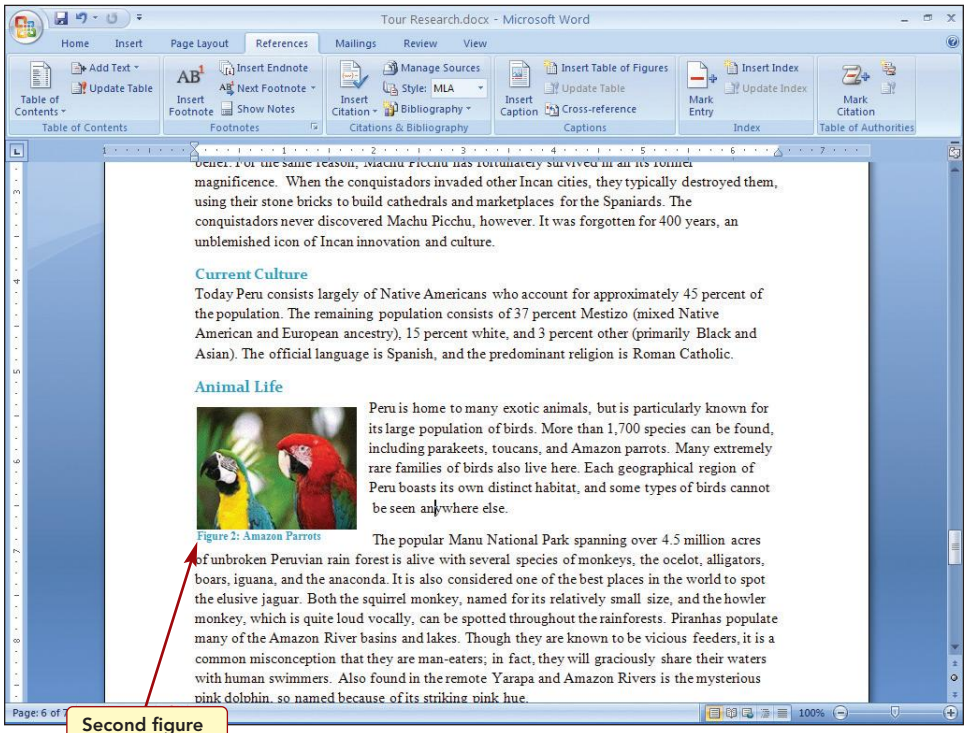


Figure 3.55

Adding a Cross-Reference

In the Animal Life section of the report, you discuss the animals found in the Serengeti. You want to include a cross-reference to the picture at this location. While doing this, you will **split** the document **window** into separate viewing areas so you can see the figure you will reference in one area and the text where you will enter the cross-reference in the other area.

1. **Open the View tab.**
2. **Choose Split from the Window group.**
3. **Drag the split bar to the position shown in Figure 3.56.**
4. **Click to position the split at that location.**

Another Method

You also can drag the split box located above the vertical scroll bar to create a split.

Your screen should be similar to Figure 3.56

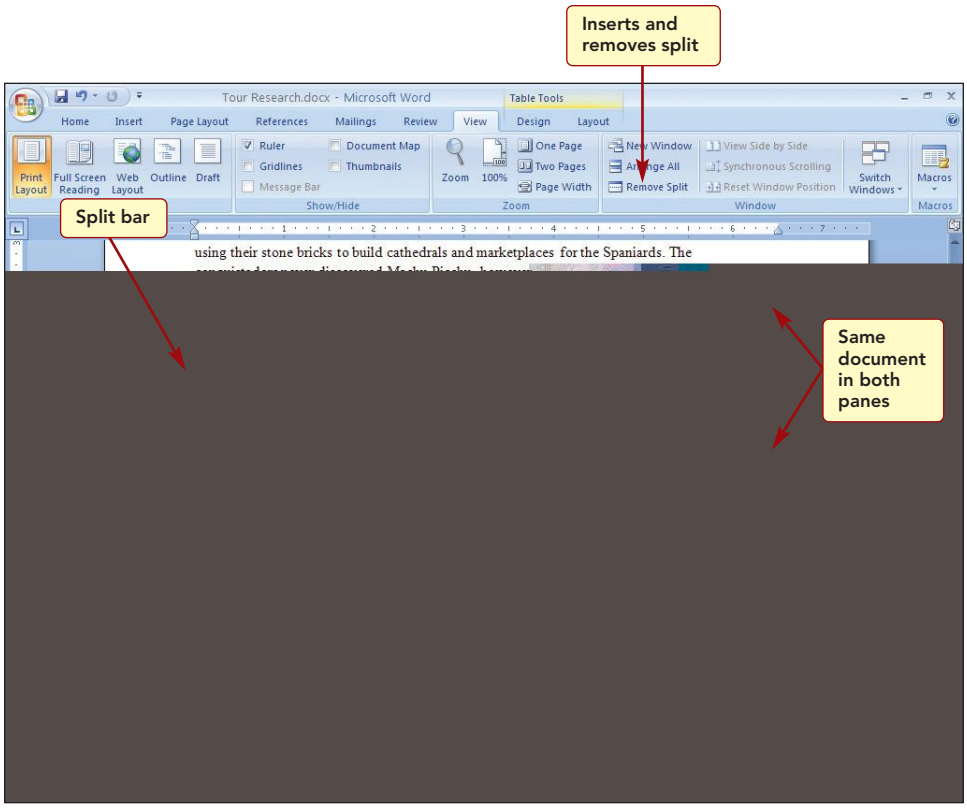


Figure 3.56

Additional Information

You can display the document in different views in each pane. For example, you can display the document in Print Layout view in one pane and Draft view in the other.

The document area is divided into two horizontal sections. Each section is displayed in a pane that can be scrolled and manipulated independently.

Next, you will scroll the document in the panes to display the areas you want to view. While using panes, the insertion point and the ruler are displayed in the active pane or the pane in which you are currently working.

2. **Scroll the upper pane to display the Figure 1 caption below the giraffe picture.**
3. **Scroll the lower pane to display the third paragraph in the Tanzania Animal Life section (page 4).**

Your screen should be similar to Figure 3.57

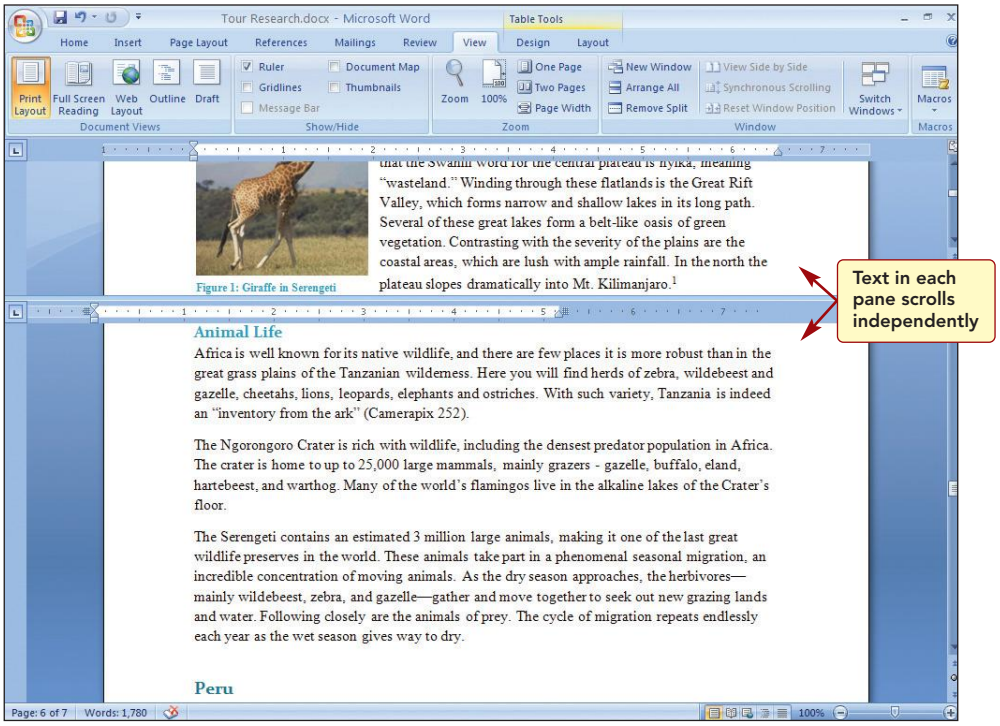


Figure 3.57

The text in each pane scrolls independently. Now you can conveniently see both areas of the document while you enter the cross-reference.

3. **Move to after the word "water" (before the period) in the third paragraph in the Tanzania Animal Life section.**
- **Press** Spacebar.
- **Type (see and press** Spacebar.
- **Open the References tab.**
- **Click** Cross-reference **from the Captions group.**

Your screen should be similar to Figure 3.58

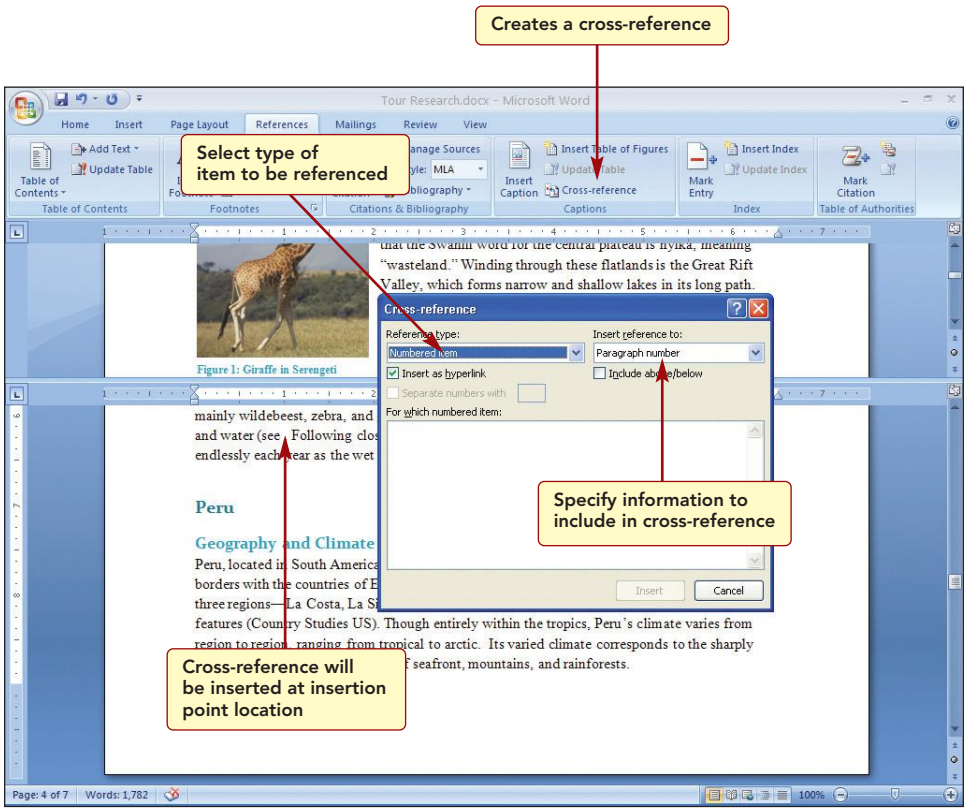


Figure 3.58

In the Cross-reference dialog box, you specify the type of item you are referencing and how you want the reference to appear. You want to reference the giraffe picture, and you want only the label "Figure 1" entered in the document. From the For Which Caption list box, you select the figure you want to reference from the list of all figure captions in the document. Notice that the Insert as Hyperlink option is selected by default. This option creates a hyperlink between the cross-reference and the caption. The default setting is appropriate.

4 **From the Reference Type drop-down list box, select Figure.**

- **From the Insert Reference To drop-down list box, select Only label and number.**
- **Click** Insert
- **Click** Close.
- **Type).**
- **Click on the Figure 1 cross-reference.**

Your screen should be similar to Figure 3.59

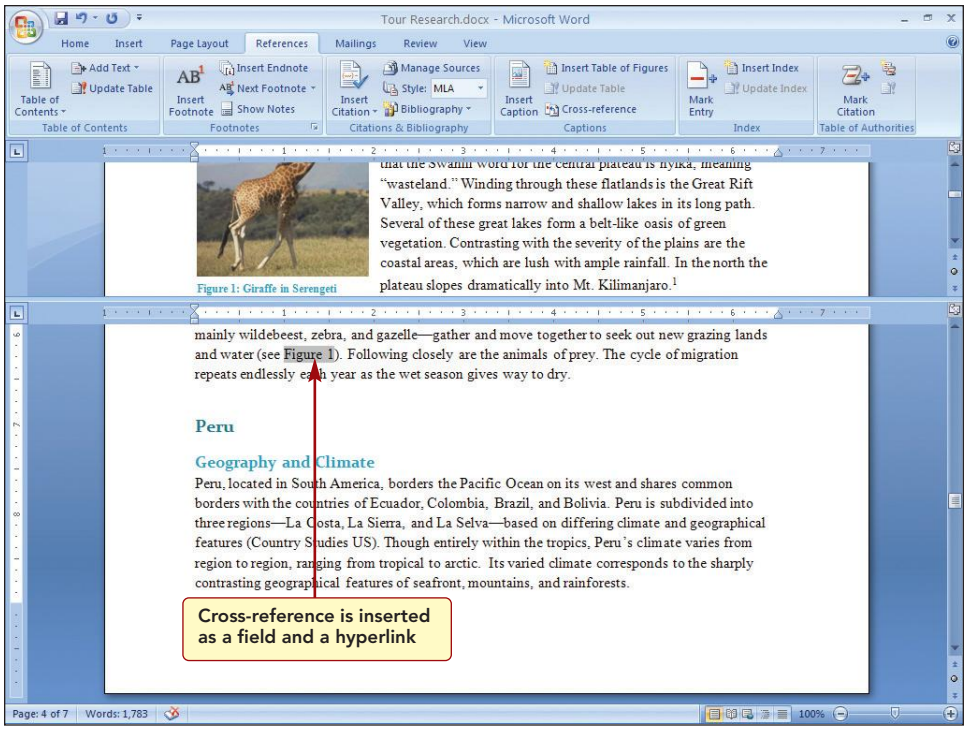


Figure 3.59

The cross-reference to Figure 1 is entered into the document as a field. Therefore, if you insert another picture or item that is cross-referenced, the captions and cross-references will renumber automatically. If you edit, delete, or move cross-referenced items, you should manually update the cross-references using Update Field. When you are working on a long document with several figures, tables, and graphs, this feature is very helpful.

Using a Cross-Reference Hyperlink

The cross-reference field is also a hyperlink and, just like a table of contents field, can be used to jump to the source it references.

1. **Hold down Ctrl and click on the Figure 1 cross-reference.**

Your screen should be similar to Figure 3.60

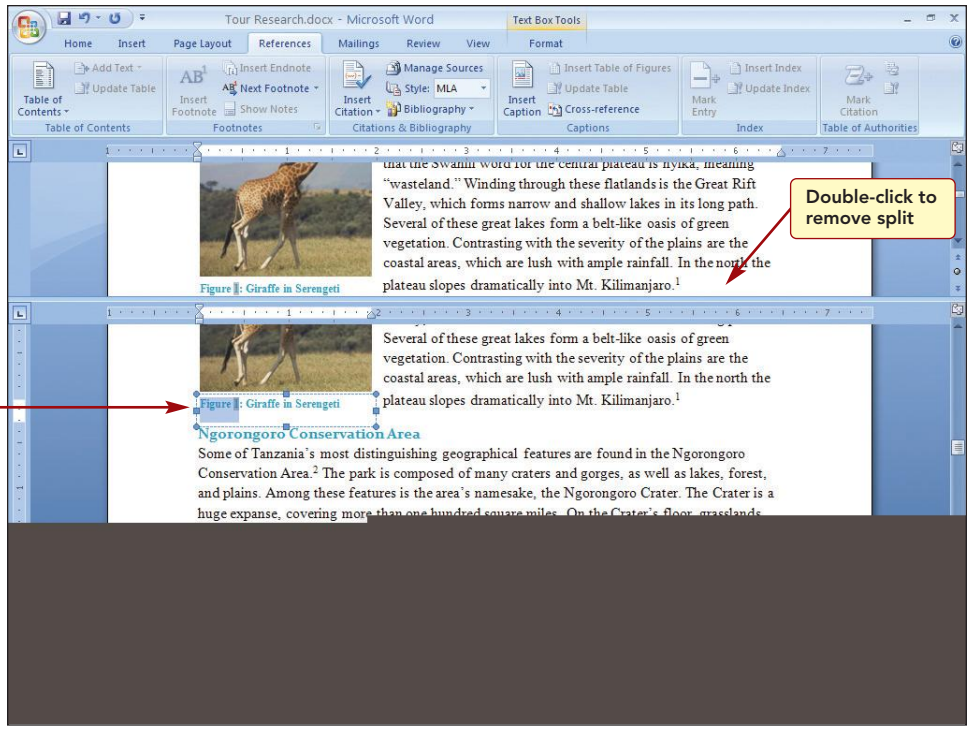


Figure 3.60

The document in the lower pane jumped to the caption beneath the figure. You will clear the split and save the document next.

2. **Double-click on the split bar (above the ruler) to remove the split.**

3. **Save the document.**

Another Method

You also can choose Remove Split from the Window group of the View tab or drag the split bar to the top of the document window.

The split is removed and the document window returns to a single pane. As you can see, splitting the document window is most useful for viewing different sections of the document at the same time and allows you to quickly switch between panes to access information in the different sections without having to repeatedly scroll to the areas.

Creating a Simple Table

Next, you want to add a table comparing the rainfall and temperature data for the three regions of Peru.

Concept 8

Table

8 A **table** is used to organize information into an easy-to-read format of horizontal rows and vertical columns. The insertion of a row and column creates a **cell** in which you can enter data or other information. Cells in a table are identified by a letter and number, called a **table reference.** Columns are identified from left to right beginning with the letter A, and rows are numbered from top to bottom beginning with the number 1. The table reference of the top-leftmost cell is A1 because it is in the first column (A) and first row (1) of the table. The second cell in column 2 is cell B2. The fourth cell in column 3 is C4.

A	B	C	D	E
(A1)	Jan	Feb	Mar	Total
East	7 (B2)	7	5	19
West	6	4	7	17
South	8	7 (C4)	9	24
Total	21	18	21	60

Tables are a very effective method for presenting information. The table layout organizes the information for readers and greatly reduces the number of words they have to read to interpret the data. Use tables whenever you can to make your documents easier to read.

The table you want to create will display columns for regions, rainfall, and temperature. The rows will display the data for each region. Your completed table will be similar to the one shown below.

Region	Annual Rainfall (Inches)	Average Temperature (Fahrenheit)
La Costa	2	68
La Sierra	35	54
La Selva	137	80

Inserting a Table

Word includes several methods you can use to create tables. One method will quickly convert text that is arranged in tabular columns into a table. Another uses the Draw Table feature to create any type of table, but is most useful for creating complex tables that contain cells of different heights or a varying number of columns per row. Another method inserts a preformatted table containing sample data that you replace with your data.

The last method, which you will use, creates a simple table consisting of the same number of rows and columns by highlighting boxes in a grid to define the table size.

1. **Move to the blank line below the paragraph on La Sierra.**
- **Press ↵Enter to insert another blank line.**
- **Open the Insert tab.**
- **Click Table.**
- **Point to the boxes in the grid in the drop-down menu to highlight a 3-by-3 section.**

Additional Information
The dimensions are reflected at the top of the grid and Live Preview shows you how it will look in the document.

- **Click on the lower-right corner of the selection to insert it.**

Your screen should be similar to Figure 3.61

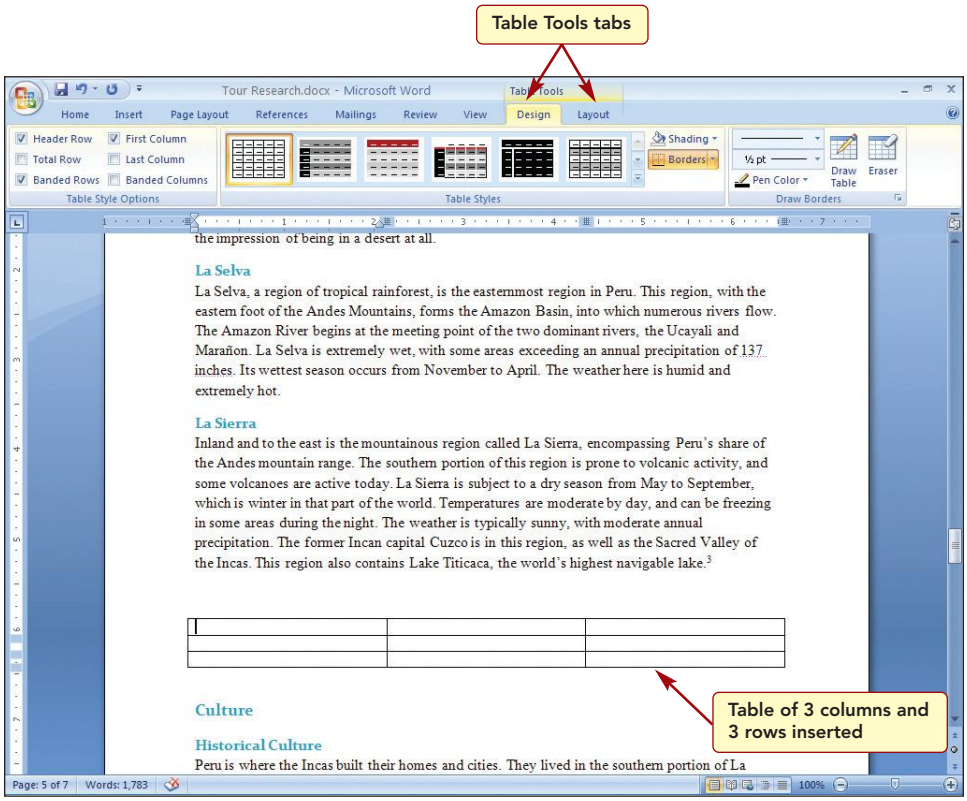


Figure 3.61

A table the full width of the page is drawn. It has equal-sized columns and is surrounded by a black borderline. The Table Tools tab is automatically open and includes a Design tab and a Layout tab that are used to work with the table.

Entering Data in a Table

Now you are ready to enter information in the table. Each cell contains a single line space where you can enter data. You can move from one cell to another by using the arrow keys or by clicking on the cell. The insertion point appears in the cell that is selected. In addition, you can use the keys shown in the table below to move around a table.

To Move to	Press
Next cell in row	Tab
Previous cell in row	Shift + Tab
First cell in row	Alt + Home
Last cell in row	Alt + End
First cell in column	Alt + Page Up
Last cell in column	Alt + Page Down
Previous row	↑
Next row	↓

Additional Information
Pressing Tab when in the last cell of a row moves to the first cell of the next row.

The mouse pointer also may appear as a solid black arrow when pointing to the table. When it is a ↓, you can click to select the entire column. When it is ↗, you can click to select a cell. You will learn more about this feature shortly.

You will begin by entering the information for La Costa in cells A1 through C1. You can type in the cell as you would anywhere in a normal document.

1. **If necessary, click cell A1 to select it.**
2. **Type La Costa.**
3. **Press Tab.**
4. **In the same manner, type 2 in cell B1 and 68 in cell C1.**
5. **Continue entering the information shown below, using Tab to move to the next cell.**

Cell	Entry
A2	La Sierra
B2	35
C2	54
A3	La Selva
B3	137
C3	80

Your screen should be similar to Figure 3.62

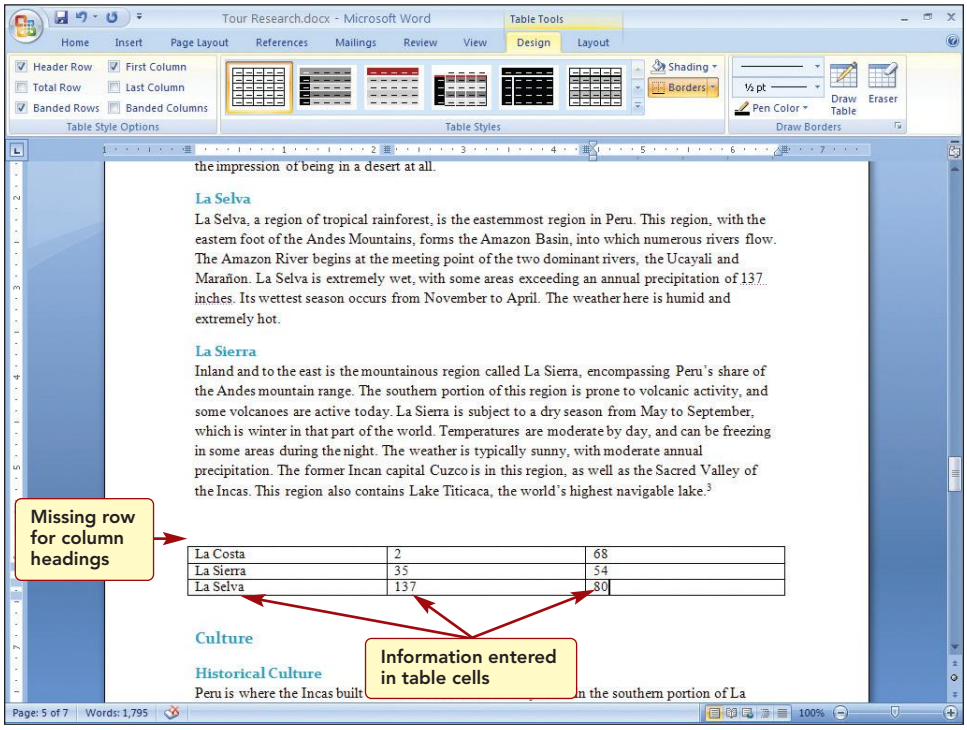


Figure 3.62

Inserting a Row

After looking at the table, you realize you need to include a row above the data to display the descriptive column headings. To add a row, simply click in any cell above or below the location where you want to add the row and then use the appropriate command to insert a row. Once the row is inserted, you will enter the column headings in the cells.

1. **Move to any cell in row 1.**
- **Open the Table Tools Layout tab.**
- **Click**  **from the Rows & Columns group.**
- **In cell A1 type Region.**
- **In cell B1 type Annual Rainfall.**
- **Press Enter to insert a second line in the cell.**
- **Type (Inches).**
- **In cell C1 type Average Temperature on the first line and (Fahrenheit) on the second.**

Your screen should be similar to Figure 3.63

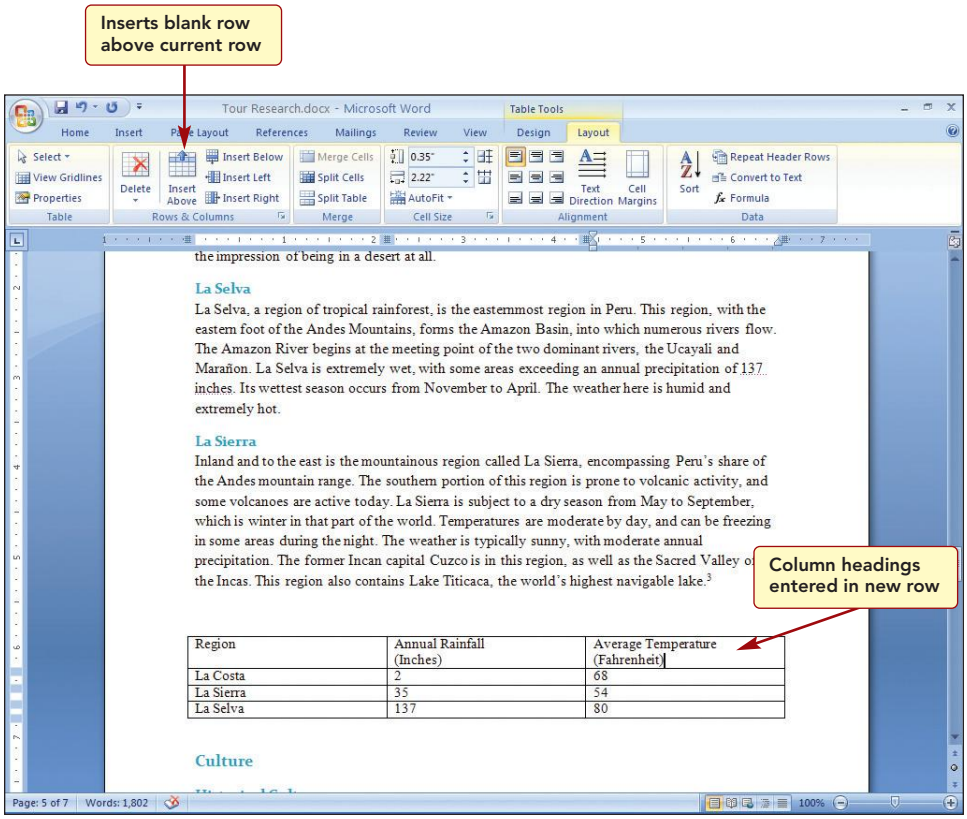


Figure 3.63

Sizing a Table

The table is much wider than it needs to be. To quickly reduce the overall table size, you can drag the resize handle ◻. This handle appears in the lower-right corner whenever the mouse pointer rests over the table. Once the table is smaller, you will select the entire table by clicking the ✣ move handle and center it between the margins.

1 **Point to the table and drag the ☐ resize handle to decrease the width of the table to 5 inches (see Figure 3.64).**

Additional Information
The mouse pointer appears as ↔ when you point to the ☐ resize handle.

Click ✣ to select the entire table.

Additional Information
The mouse pointer appears as ✣ when you point to the ✣ select handle.

Click ≡ Center on the Mini toolbar.

Another Method
You also can drag the ✣ move handle to move the table to any location or click ▣ Center in the Table Properties dialog box.

Your screen should be similar to Figure 3.64

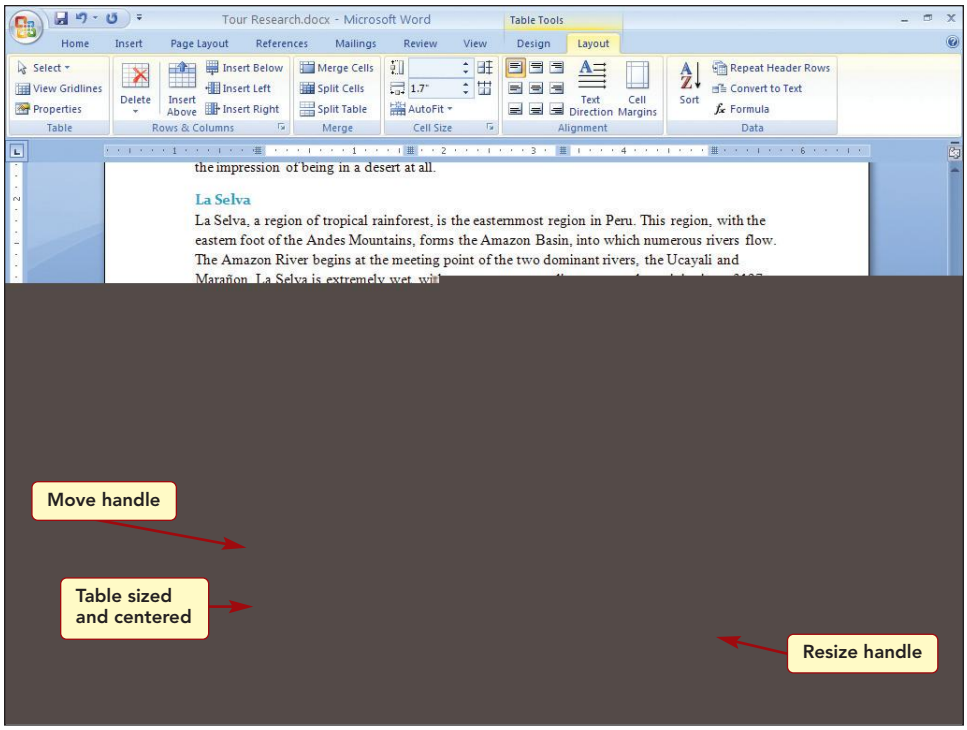


Figure 3.64

Having Trouble?
See Concept 9: Sort in Lab 2 to review this feature.

Sorting a Table

Next you decide you want the three regions to appear in alphabetical order as they are presented in the report. To make this change quickly, you can **sort** the table. The process is similar to sorting a list.

You will use the default Sort settings that will sort by text and paragraphs in ascending order. Additionally, when sorting a table, the program assumes the first row of the table is a header row and uses the information in that row for you to select the column to sort on. The default is to sort on the first column. In this case, this is acceptable because you want to sort the table by Region.

1. Click Sort in the Data group of the Table Tools Layout tab.
2. Click OK to accept all the default settings.
3. Click in the table to clear the highlight.

Your screen should be similar to Figure 3.65

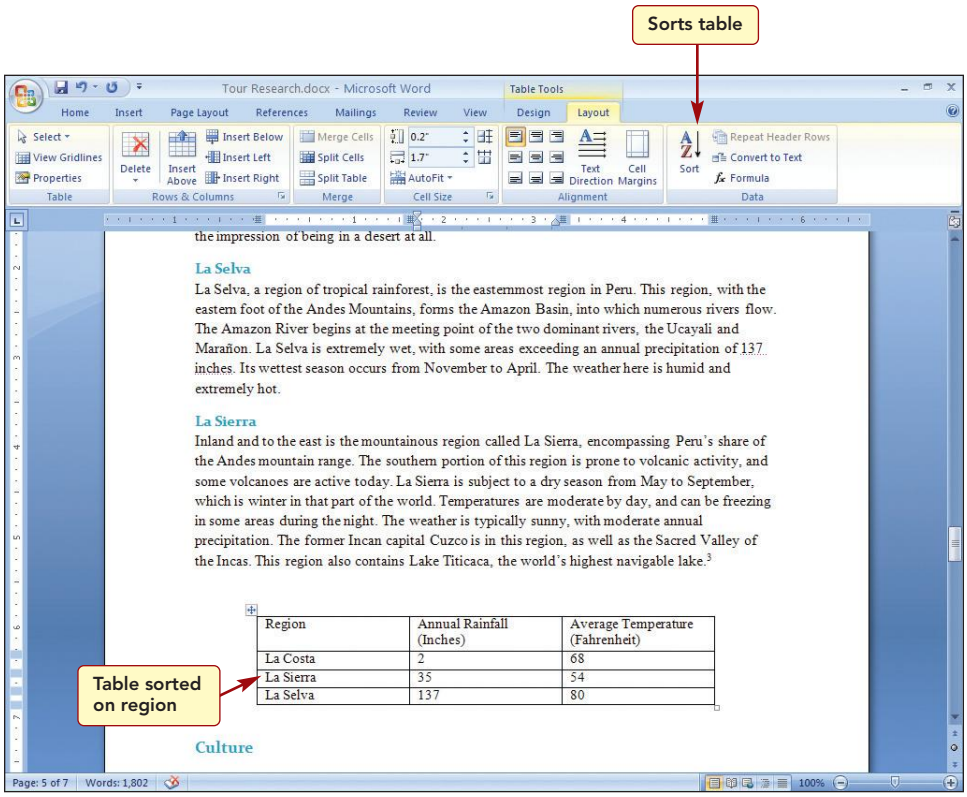


Figure 3.65

The three regions now appear in ascending sort order in the table.

Formatting a Table

To enhance the appearance of the table, you can apply many different formats to the cells. This process is similar to adding formatting to a document, except that the formatting affects the selected cells only or the entire table.

The quickest way to apply formats to a table is to use a table style. This feature includes built-in combinations of formats that consist of different fill or background colors, patterns, borders, fonts, and alignment settings.

1 **Open the Table Tools Design tab.**

Click More to open the table styles gallery.

Your screen should be similar to Figure 3.66

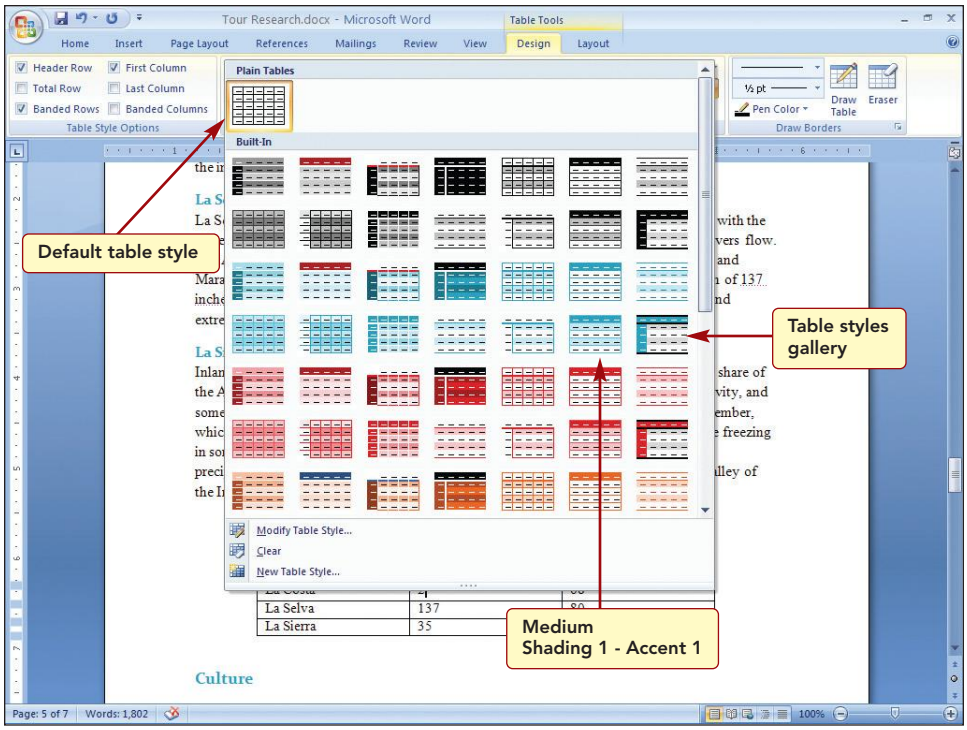


Figure 3.66

Additional Information
If a custom style has been saved, it appears in a Custom styles area.

Additional Information
The Table Grid style is the default style.

From the table styles gallery, you select the table design you want to use. There are 146 Built-in styles. As you point to the style, the style name appears in a ScreenTip and Live Preview shows how it will look.

2 **Point to several styles and look at the Live Preview.**

Choose Medium Shading 1 - Accent 1 (4th row).

Your screen should be similar to Figure 3.67

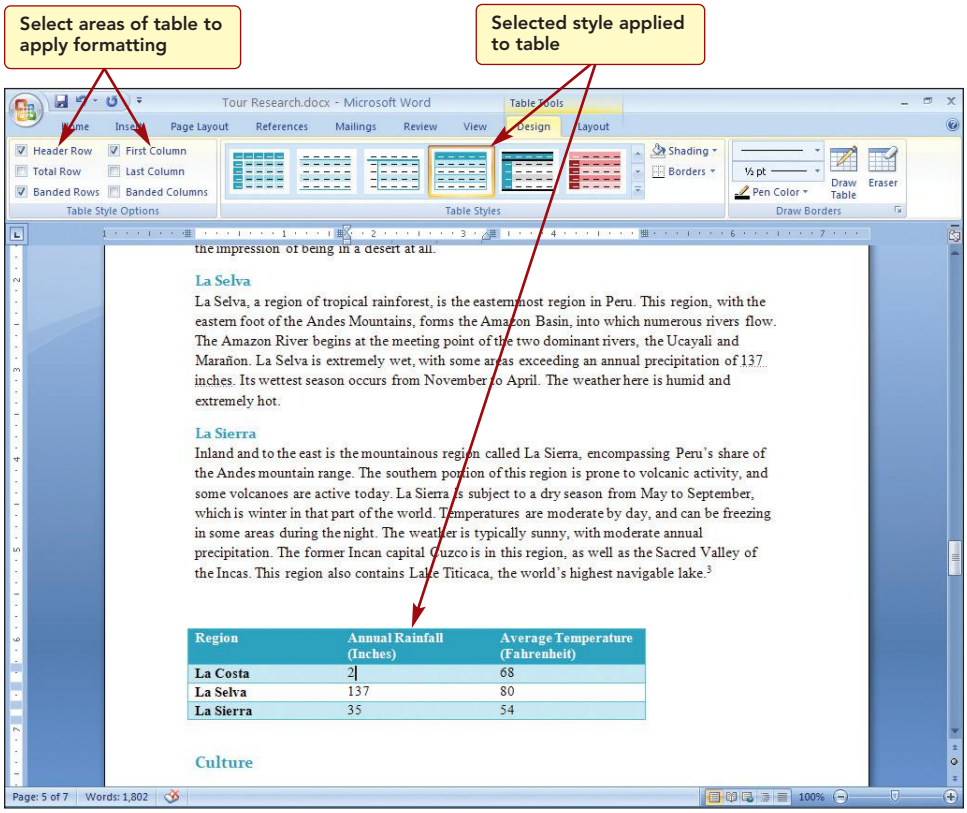


Figure 3.67

The table is reformatted to the new design. It includes a different color background for the heading row and banded shades of color for the table data. In addition, the row heading text is bold and the column heading text is white. Notice that the table is no longer centered; however, the table size was not changed. The table alignment was changed because the new design includes left alignment. Using a table style was much faster than applying these features individually.

Even after applying a table style, you may want to make additional changes. For example, the selected table style applies special formatting to the header row and first column. It also uses a banded row effect for the table data. If you do not want one or all of these features, you can turn them off using the quick styles options. You would like to see how the table would look without some of these features.

3 **Choose** Header Row **and** First Column **in the Table Style Options group to turn off these features.**

Click Last Column **to turn on this feature.**

Your screen should be similar to Figure 3.68

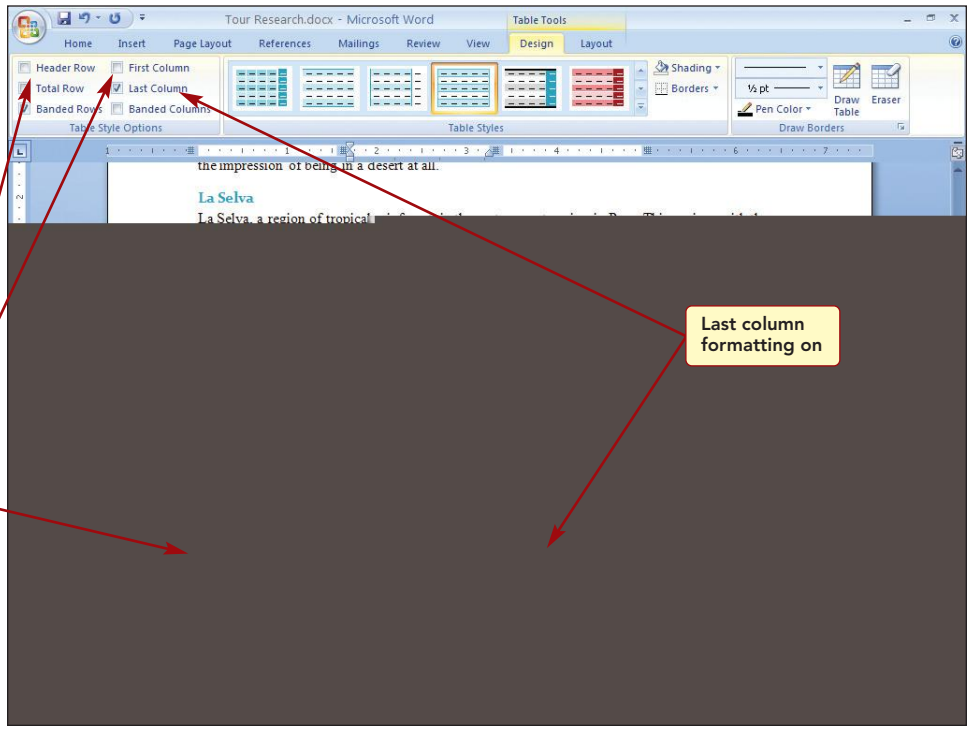


Figure 3.68

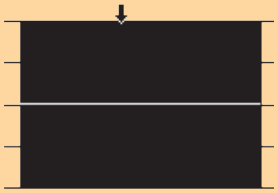
Additional Information
The gallery of table styles also reflects the changes in the style options.

The dark blue color background was removed from the table header and the bold effect was removed from the row headings. Bold was added to the last column to emphasize the data. As you can see, the Table Style Options allow you to quickly emphasize different areas of the table. You prefer how the table looked before these changes and will restore these features.

4 **Choose** Header Row **and** First Column **to restore these settings.**

Click Last Column **to turn off this feature.**

However, there are a few changes you would like to make. As you continue to modify the table, many cells can be selected and changed at the same time. The table below describes the procedures to select information in a table.

Area to Select	Procedure
Cell 	Click the left edge of the cell when the pointer is ↗.
Row 	Click to the left of the row when the pointer is ↗.
Column 	Click the top of the column when the pointer is ↓.
Multiple cells, rows, or columns	Drag through the cells, rows, or columns when the pointer is ↓, or select the first cell, row, or column and hold down Shift while clicking on another cell, row, or column.
Contents of next cell	Press Tab.
Contents of previous cell	Press Shift + Tab.
Entire table	Press Alt + 5 (on the numeric keypad with Num Lock off) or click ✣.

You want the entries in the header row (cells A1 through C1), and the table date in cells B2 through C4, to be centered in their cell spaces. You also want to increase the font size of the header text. Finally, you will add a caption below the table.

5. Select cells A1 through C1 containing the table headings.
- Open the Table Tools Layout tab.
- Click Align Top Center from the Alignment group.
- In the same manner, center cells B2 through C4.
- Select the header row again.
- Click Grow in the Mini toolbar.
- Select the table and center it again.
- Add the caption Table 1: Climate below the table.
- Click outside the table to deselect it.
- Insert a blank line below the caption.
- Save the document.

Your screen should be similar to Figure 3.69

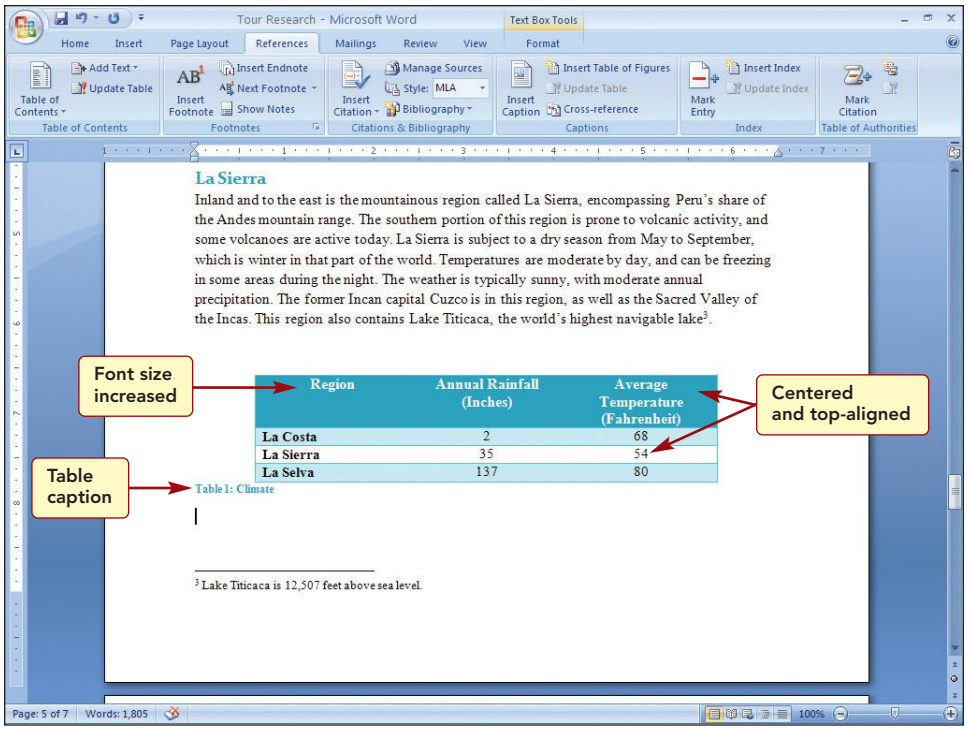


Figure 3.69

Including a Table of Figures

The report is near completion and you want to add a table of figures to the report.

Concept 9

Table of Figures

9 A **table of figures** is a list of the figures, tables, or equations used in a document and their associated page number, similar to how a table of contents lists topic headings. The table of figures is generated from captions that are included in the document and is a field that can be easily updated to reflect changes you may make to the document after the list is generated.

Table of Figures

Figure 1: Giraffe in Serengeti 1
Table 1: Peru Climate 4
Figure 2: Amazon Parrots 5

Additionally, each entry in the table is a separate field that is a hyperlink to the caption in the document. It can then be used to quickly locate specific figures or other items in the document.

The table of figures is typically placed at the end of a long document.

Creating a Table of Figures

Because you have already added captions to several items in the report, creating a table of figures will be a simple process.

1. **Move to the end of the report.**
2. **Enter the title Table of Figures and format it with a Heading 1 style.**
3. **Press ↵Enter to move to a blank line below the title.**
4. **Open the References tab.**
5. **Click Insert Table of Figures in the Captions group.**

Your screen should be similar to Figure 3.70

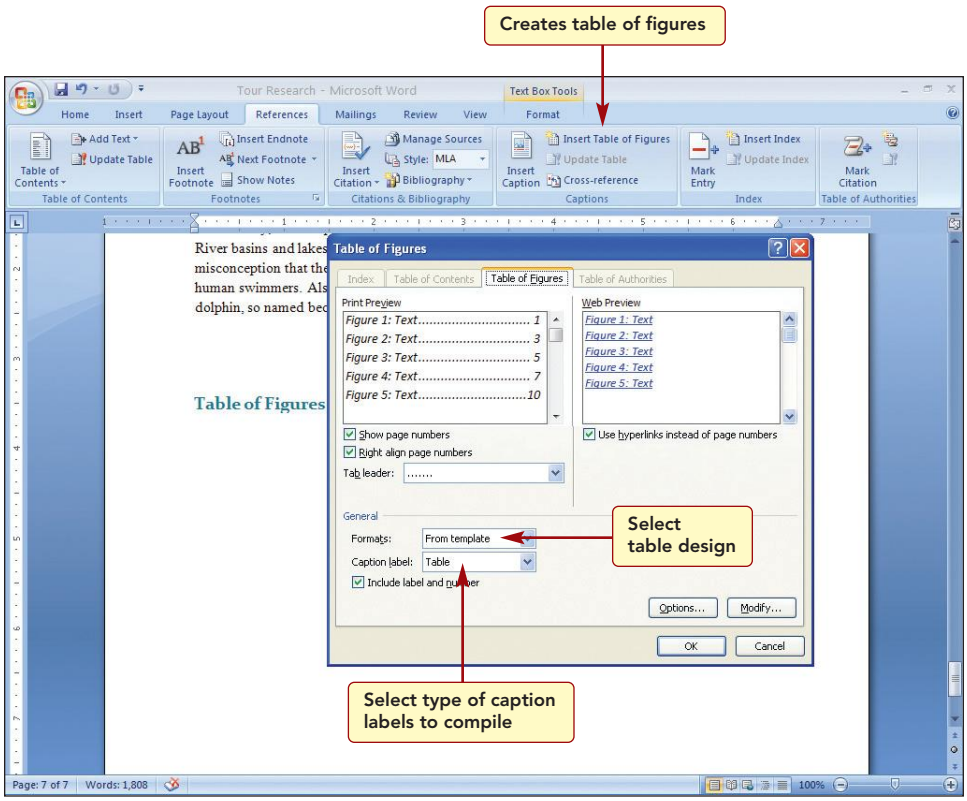


Figure 3.70

The Table of Figures dialog box options are very similar to those in the Table of Contents dialog box. The default options to show and right-align page numbers are appropriate as well as the use of the tab leaders. The Formats box is used to select a design for the table of figures. The default design is the design included in the Normal template and is displayed in the Preview boxes. In the Caption label box, you select the type of caption label you want to compile in the table of figures. The default is to display Table caption labels. You will change the Format to another style and the caption label to compile figures.

2. **Select Distinctive from the Formats drop-down list.**

- **Choose Figure from the Caption label drop-down list.**
- **Click** OK **.**

Your screen should be similar to Figure 3.71

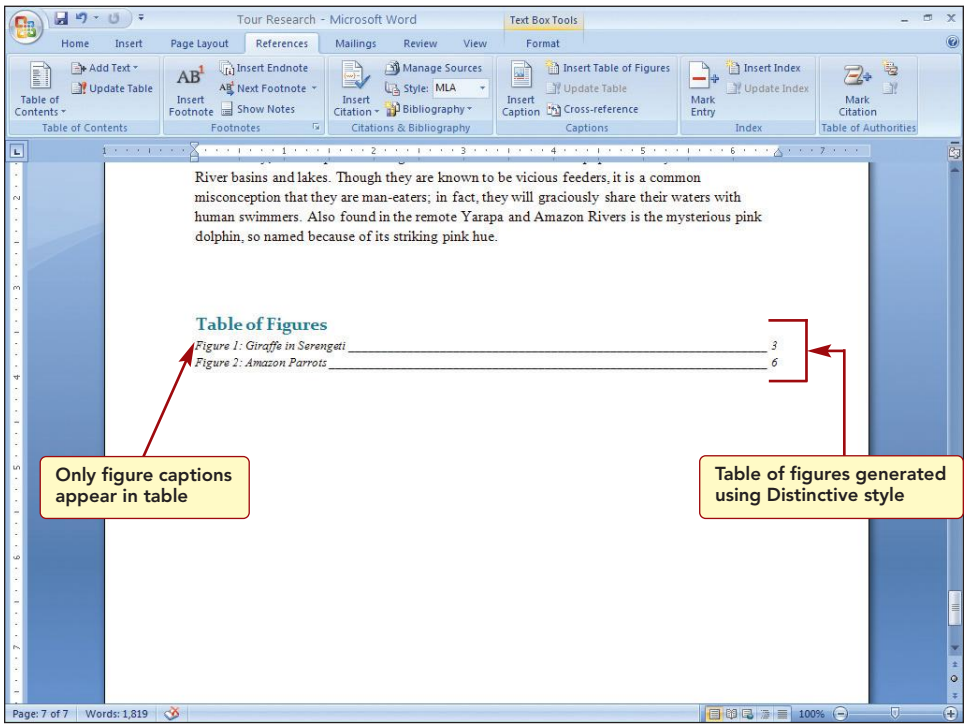


Figure 3.71

The program searched for all figure captions in the document and displays them in the table of figures in sorted order by number. The table appears formatted in the selected style.

Modify a Table of Figures

You also want to include the table references in the table of figures. To do this, you could create a second table of figures to display the table references only. Alternatively, you can modify the table of figures to display all types of captions in a single table. You decide, since there are only three captions, to use one table. You also decide that you do not like how the Distinctive format looks and will use the default template formatting instead.

1. Click Insert Table of Figures from the Captions group.
2. Click Options... .
3. Choose Caption from the Style drop-down list.
4. Click OK.
5. Change the Formats setting to From Template.
6. Click OK.
7. Click Yes to replace the table of figures.

Your screen should be similar to Figure 3.72

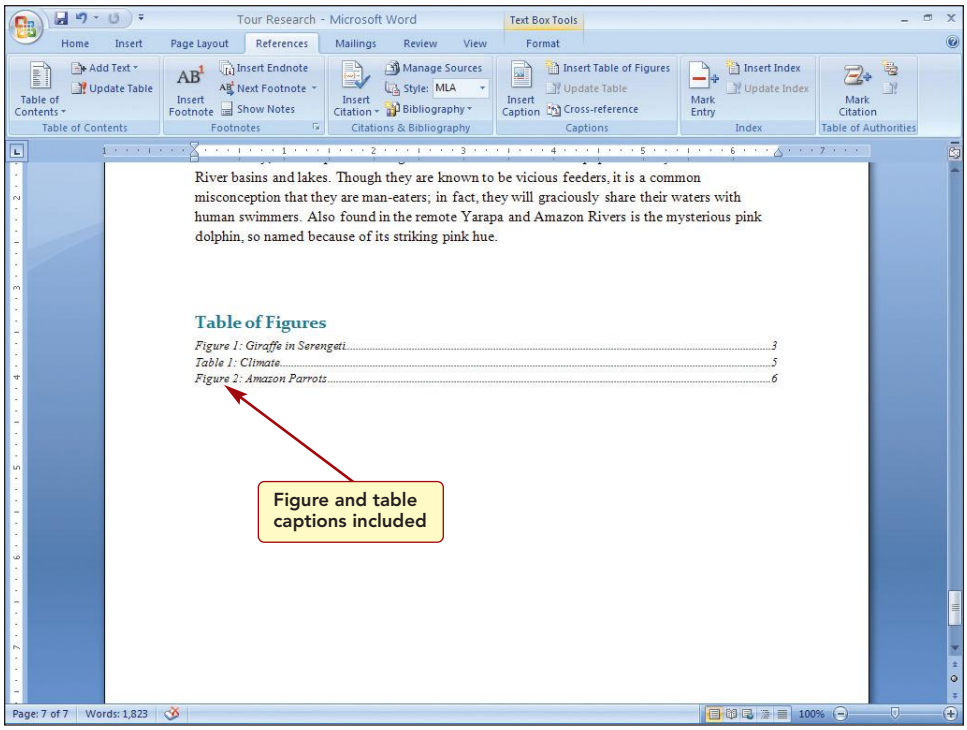


Figure 3.72

The table of figures now includes both table and figure captions using the default template style.

Updating a Table of Figures

You have decided to change the table caption to Peru Climate to make it more descriptive of the table contents. Then you will update the table of figures to reflect this change.

1. **Use the Table 1: Climate hyperlink in the table of figures to jump to that location in the document.**
2. **Click in the caption before the word Climate, type Peru, and press Spacebar.**
3. **Click on the table of figures to select it and click Update Table in the Captions group.**
4. **Choose Update entire table and click OK.**

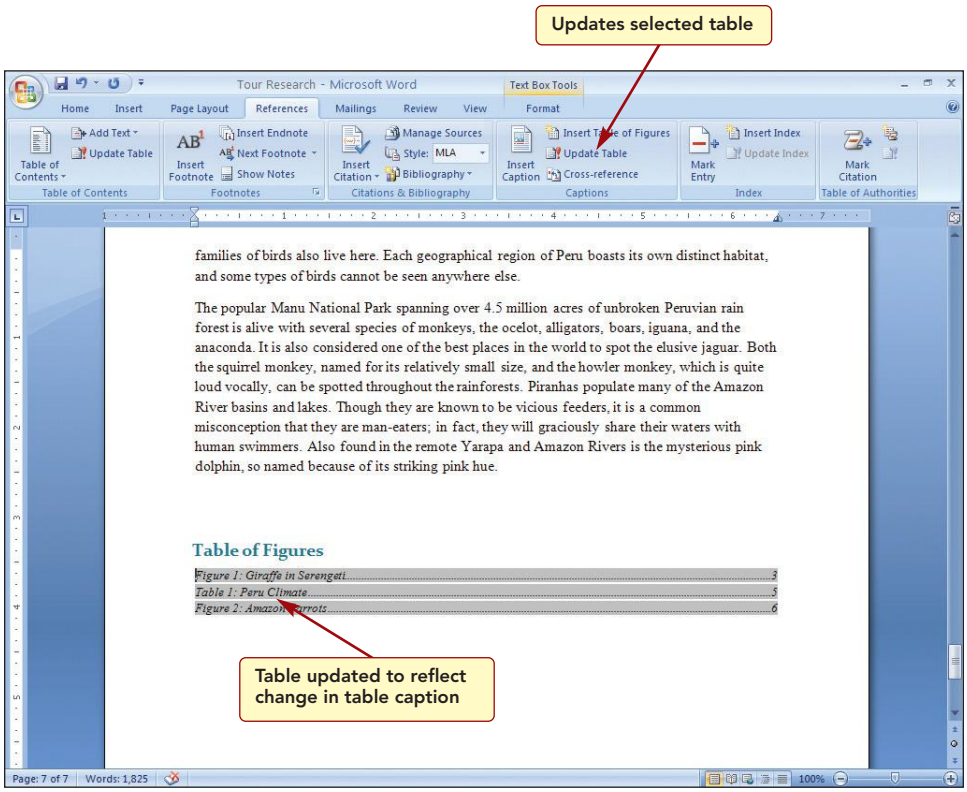


Figure 3.73

Another Method

You also could press F9 to update the table of figures or choose Update table from the table's context menu.

Your screen should be similar to Figure 3.73

MORE ABOUT

To learn about creating, modifying, and updating a table of authorities and an index, see 4.4 Insert and Format References and Captions in the More About appendix.

The entry for the table is updated in the table of figures to reflect the change you made to the table caption.

Creating a Bibliography

Finally, you are ready to create the bibliography for the report (see Concept 4). Word makes the process of creating a bibliography effortless by automatically generating the bibliography using the selected report style from the source information you entered when creating citations.

Additional Information

Word can automatically generate a complete bibliography that lists all sources associated with the document or an abbreviated bibliography that lists only those sources that have been cited.

Generating the Bibliography

The requirements for formatting a bibliography vary depending on the report style used. You are using the MLA style for this report. This style requires that each work directly referenced in the paper be listed in alphabetical order by author's last name on a separate page with the title "Works Cited."

Because you have already specified the MLA reference style, when the Works Cited bibliography is generated, the entries will automatically appear using the selected reference style.

1. **Insert a new blank page after the table of figures.**
- **Click** Bibliography **in the Citations and Bibliography group of the References tab.**
- **Choose the Works Cited option from the gallery.**
- **If necessary, scroll to the top of the page to see the bibliography.**

Your screen should be similar to Figure 3.74

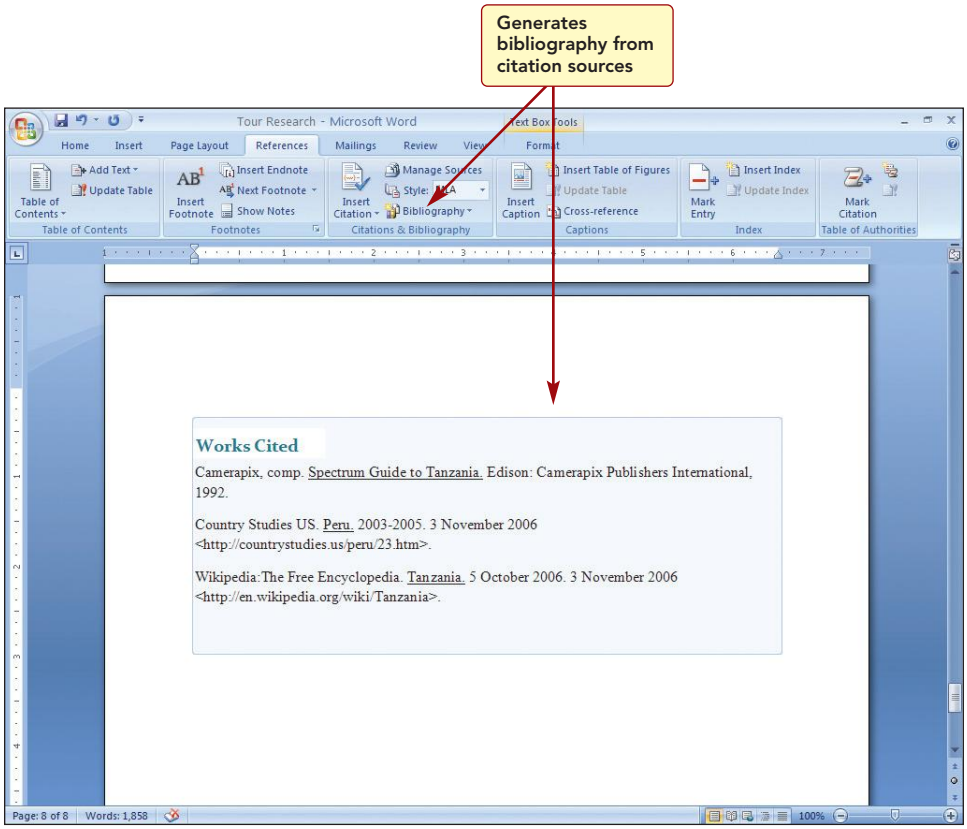


Figure 3.74

The Works Cited bibliography is formatted using the selected MLA documentation style. The page is labeled with a Works Cited heading and each citation source is listed in ascending alphabetical order.

Updating a Bibliography

Now, as you look at the Works Cited list, you believe you entered the wrong publisher information for the Camerapix source. Even though the bibliography has been generated, it can easily be updated to reflect additions and modifications to the sources. This is because the bibliography is a field that is linked to the sources in the Current List. You will fix the source information and update the bibliography. Rather than return to the citation in the document for this source to edit it, you will use the Source Manager.

1. **Click Manage Sources in the Citations & Bibliography group.**

Your screen should be similar to Figure 3.75

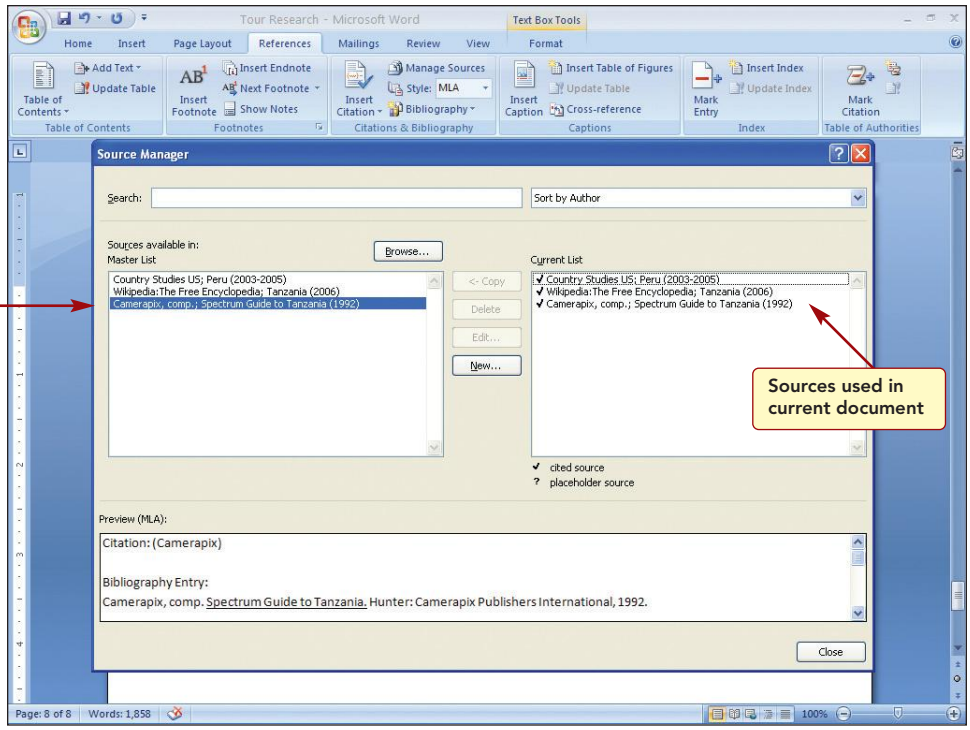


Figure 3.75

The Source Manager dialog box displays the three sources you entered in both the Master and Current List boxes. It is used to add, copy, delete, and edit sources. Notice that the items in the Current List are preceded with checkmarks. This indicates they have all been cited in the document. All items in the Current List will appear in the bibliography when it is generated. If a source appears in the Master List that you want to appear in the bibliography, you can select it and copy it to the Current List. You need to edit the Camerapix bibliography information.

2. **Select the Camerapix citation in the Current List box.**
   - **Click Edit... .**
   - **Change the Publisher to Hunter.**
   - **Click OK .**
   - **Click Yes to update both lists.**
   - **Click Close .**
   - **Select the bibliography and click Update Citations and Bibliography to update the list.**

Your screen should be similar to Figure 3.76

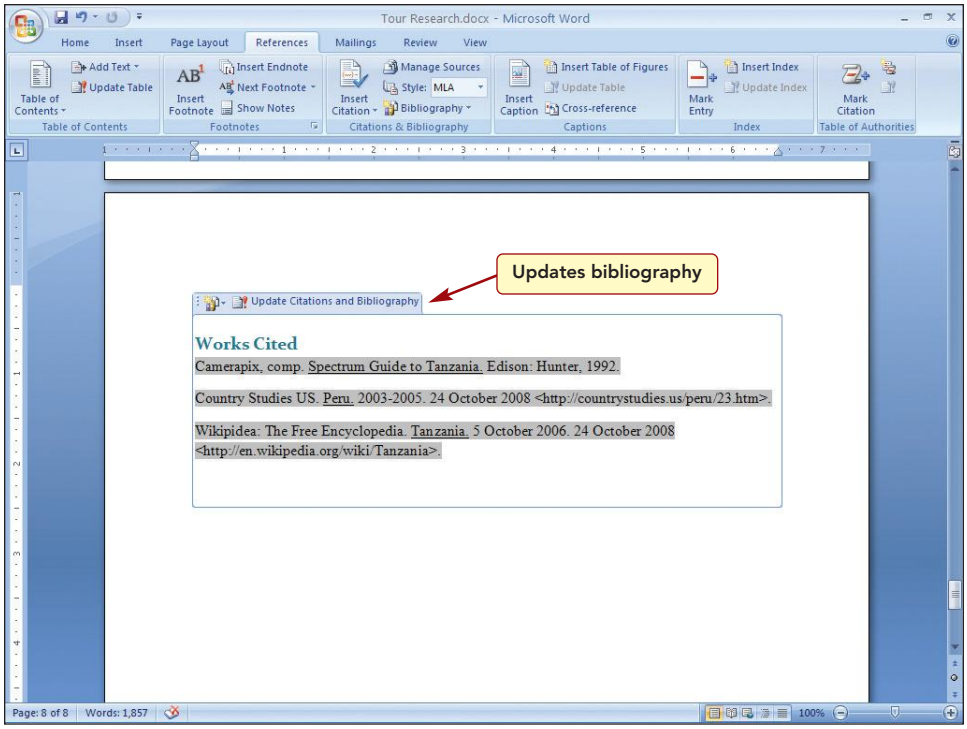


Figure 3.76

The bibliography information for the Camerapix source is now correct and the Works Cited list has been appropriately updated.

Modifying a Bibliography

Finally, you will modify the format of the Works Cited page to more closely meet the MLA requirements. The page title should be centered at the top of the page. The bibliography entries must be formatted as hanging indents—the first line is even with the left margin and subsequent lines of the same work are indented 0.5 inch. MLA formatting for the Works Cited page also requires that it should be double-spaced, as is the entire report.

First you will format the page title. In addition to centering the title at the top of the page, you decide to change the style of the title to the same as the table of contents title. Then you will change the paragraph formatting to a hanging indent.

1. **Move to anywhere in the Works Cited title.**
- **Choose TOC Title from the Styles group of the Home tab.**
- **Click Center.**
- **Select the three entries in the Works Cited list.**
- **Drag the hanging indent marker on the ruler to the 0.5-inch position.**
- **Clear the highlight.**

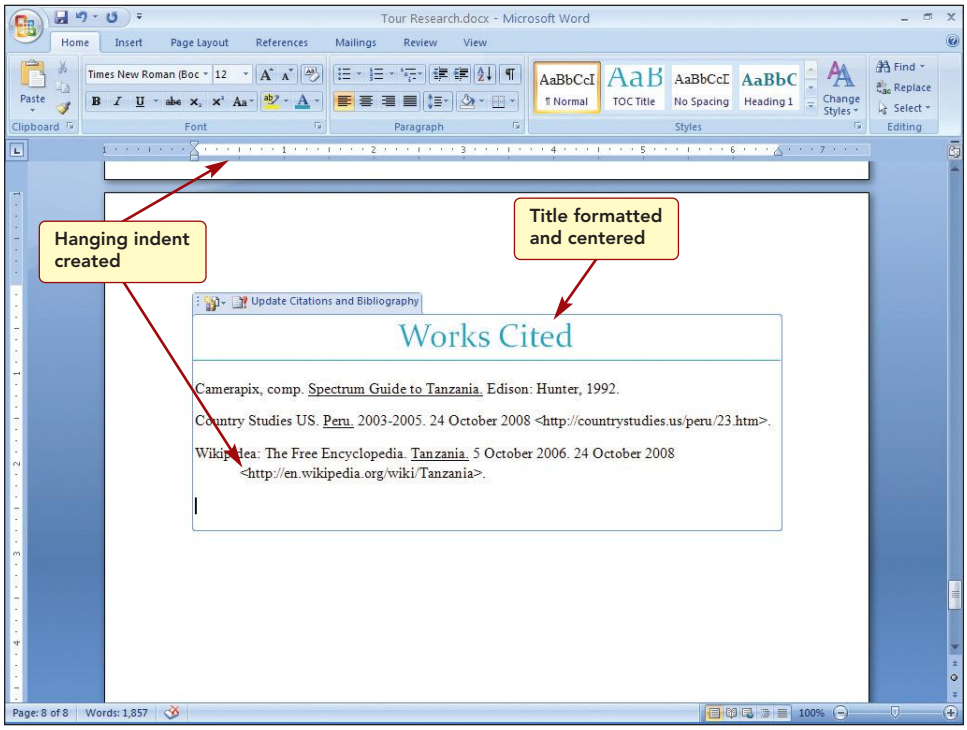


Figure 3.77

Another Method

You also could choose Hanging from the Special drop-down list of the Paragraph dialog box or press Ctrl + T.

Any entries that are longer than one line appear with a hanging indent.

Your screen should be similar to Figure 3.77

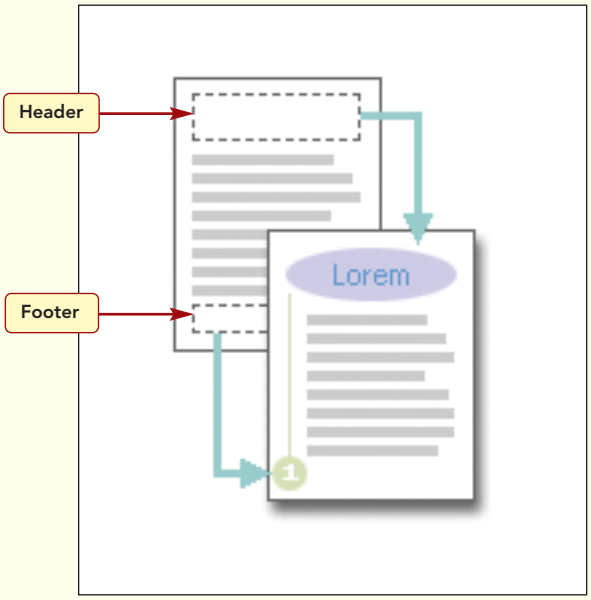
Creating Headers and Footers

Next you want to add information in a header and footer to the report.

Concept 10

Header and Footer

10 Headers and footers provide information that typically appears at the top and bottom of each page in a document and helps the reader locate information in a document. A **header** is a line or several lines of text in the top margin of each page. The header usually contains the title and the section of the document. A **footer** is a line or several lines of text in the margin space at the bottom of every page. The footer usually contains the page number and perhaps the date. Headers and footers also can contain graphics such as a company logo.



The same header and footer can be used throughout a document, or a different header and footer can be used in different sections of a document. For example, a unique header or footer can be used in one section and a different one in another section. You also can have a unique header or footer on the first page, or omitted entirely from the first page, or use a different header and footer on odd and even pages.

You want to add a header and footer to the entire document except for the first two pages.

Creating Document Sections

Many format and layout settings, including headers and footers, when applied affect an entire document. To apply layout or formatting changes to a portion of a document, you need to create separate sections in the document by inserting section breaks

Concept 11

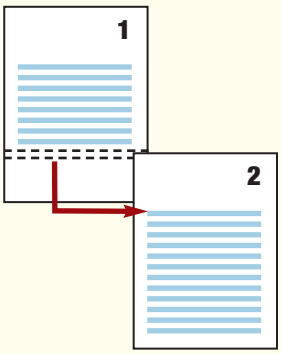
Section

11

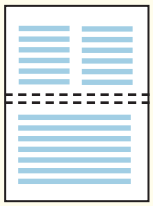
To format different parts of a document differently, you can divide a document into **sections**. Initially a document is one section. To separate it into different parts, you insert section breaks. The **section break** identifies the end of a section and stores the document format settings associated with that section of the document. Once a document is divided into sections, the following formats can be changed for individual sections: margins, paper size and orientation, paper source for a printer, page borders, vertical alignment, headers and footers, columns, page numbering, line numbering, and footnotes and endnotes.

The three types of section breaks, described below, control the location where the text following a section break begins.

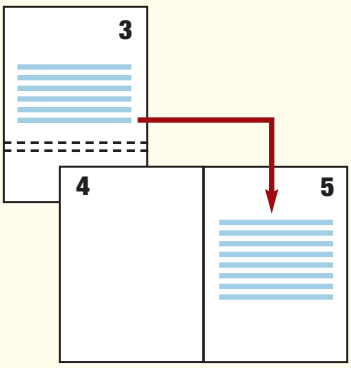
NEXT PAGE
Starts the new section on the next page.



CONTINUOUS
Starts the new section on the same page.



ODD OR EVEN
Starts the new section on the next odd or even numbered page.



If you delete a section break, the preceding text becomes part of the following section and assumes its section formatting.

Because you do not want headers and footers on the first two pages of the document, you need to divide the document into two sections. You will replace the hard page break that you inserted when creating the table of contents page with a Next Page section break.

1. **Move to the table of contents page.**
- **Turn on display of paragraph marks.**
- **Select the hard page break line below the table of contents and press Delete to remove it.**
- **Open the Page Layout tab.**
- **Click Breaks from the Page Setup group.**
- **Choose Next Page from the Section Breaks category.**
- **If necessary, scroll to see the bottom of the table of contents list.**

Your screen should be similar to Figure 3.78

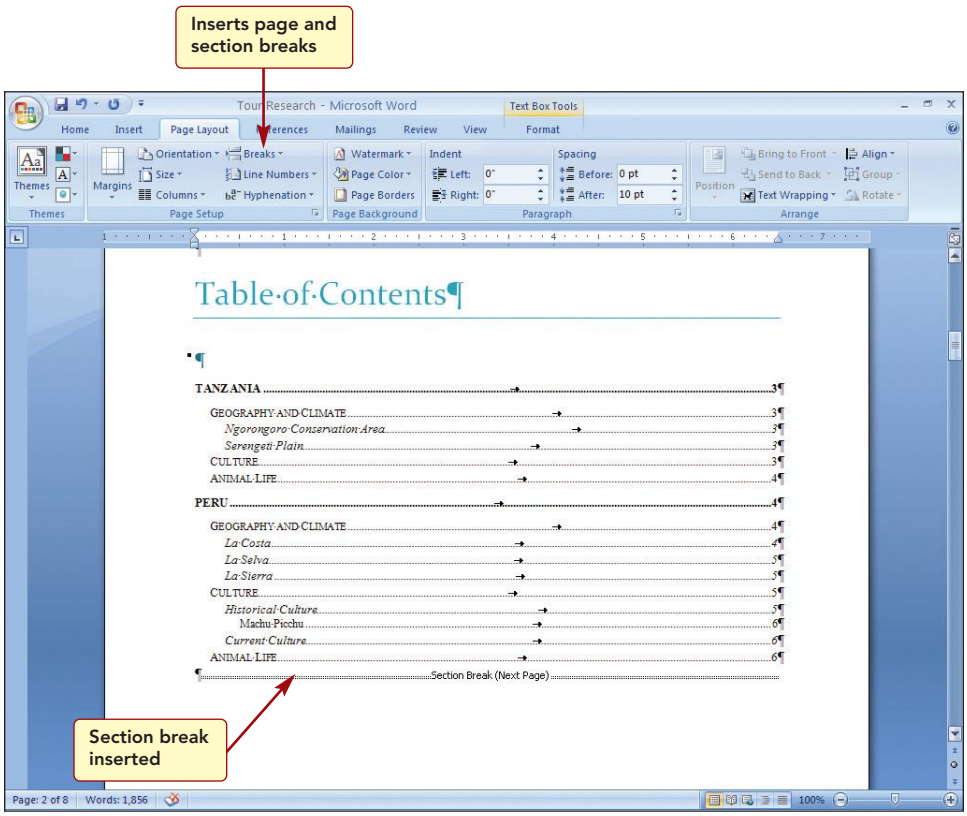


Figure 3.78

MORE ABOUT

To learn how to delete a section break, see 2.3 Control Pagination in the More About appendix.

A double dotted line and the words "Section Break" identify the type of document break that was inserted. A section break, like a hard page break line, can be deleted.

You also decide to insert another section break at the beginning of the Peru topic. Again you want it to start on a new page.

2. **Move to the Peru topic heading and insert a Next Page section break at that location.**

Additional Information

If you do not create a section break first, Word will automatically insert a section break for you if you change the formatting of selected text, such as inserting columns or centering selected text vertically on a page.

The report now contains two section breaks that divide the report into three sections that can each be formatted independently if needed.

Additional Information

MLA style requires that headers and footers be placed 0.5 inch from the top and bottom of the page. This is the default layout for the normal document. Headers are to include the page number preceded by the author's last name, right-aligned.

Using a Predesigned Header

Word includes many features that help you quickly create attractive headers and footers. Among these features are predesigned built-in header and footer designs that include placeholders to help you enter information. You will create a header for the report using this feature.

1. **Move to the Tanzania heading on page 3.**
2. **Press Ctrl + * to turn off the display of paragraph marks.**

Having Trouble?

Hold down Shift while pressing the 8 number key to access the *.

3. **Open the Insert tab and click Header in the Header & Footer group.**
4. **From the gallery of header designs, choose Sideline.**

Your screen should be similar to Figure 3.79

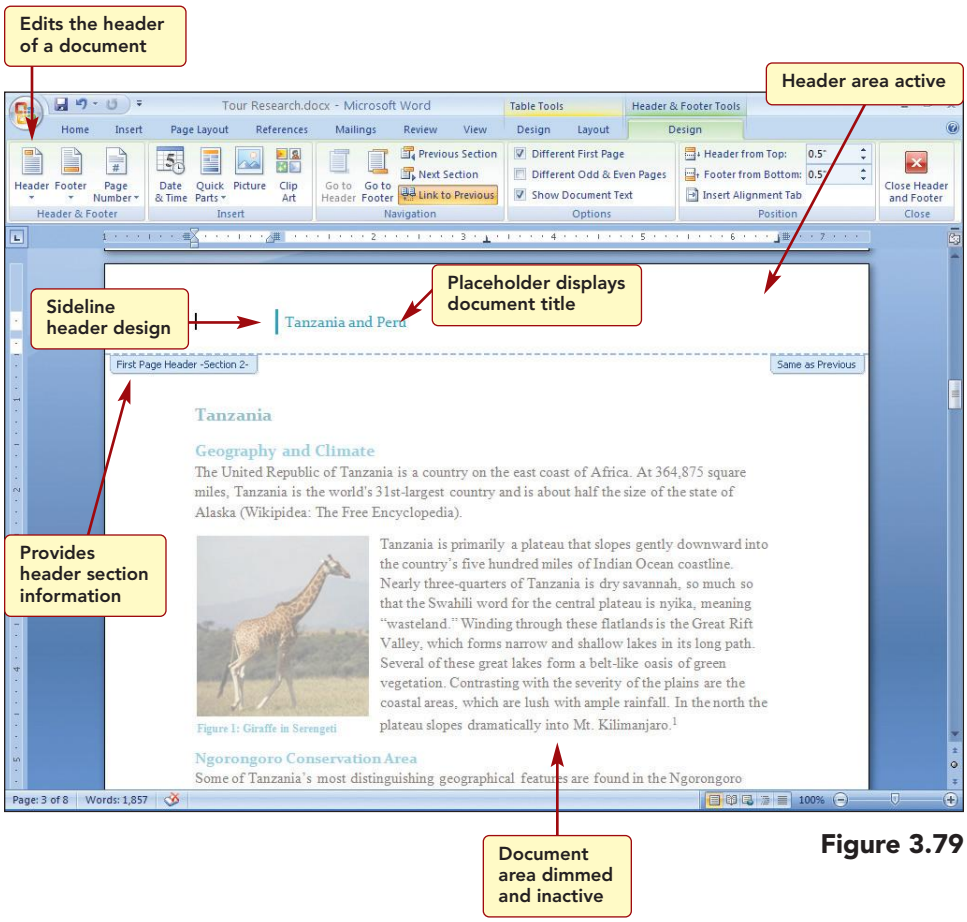


Figure 3.79

Additional Information

You can hide the display of the document text while working with headers and footers by deselecting Show Document Text in the Options group of the Design tab.

The document area dims and the header area, above the dashed line, is active. The Header and Footer Tools Design tab is automatically displayed. Its buttons are used to add items to the header and footer and to navigate between headers and footers.

The Sideline design includes a graphic bar like that used in the cover page and the report title placeholder that displays the title from the document properties in blue. Notice that in addition to the Header and Footer Tools tab, the Table Tools tab is displayed. This is because the design is contained in a table consisting of a single cell that is used to control the placement of items.

MORE ABOUT

You also can insert pre-designed headers using the Quick Parts Building Blocks Organizer. To learn how to do this, see 4.1 Structure Content Using Quick Parts in the More About appendix.

Modifying Header Settings

Notice the tab on the left below the dashed line of the header. This tab identifies the section information for each page of the document. Each section has its own header areas that can be formatted differently.

1. **Change the zoom to 39%.**

Your screen should be similar to Figure 3.80

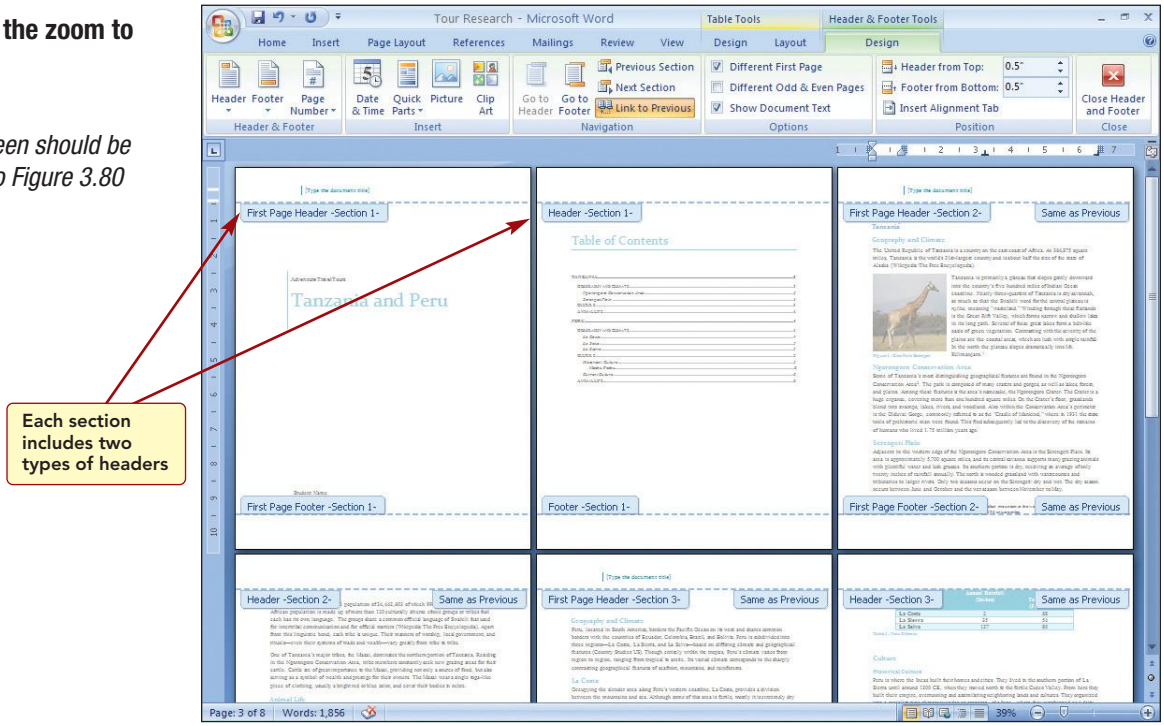


Figure 3.80

Now you can see that each section is made up of two types of headers: "First Page Headers" and running "Headers." Word automatically added first page headers because it detected that the document includes a cover page. This allows you to create a unique header for the first page. Notice the Sidelines design has been inserted only in the "First Page Header" headers and that the headers on the following pages of the same section are blank.

Since it is not necessary to have a separate First Page Header in sections 2 and 3, you will remove them and then insert the Sideline design again for the running headers in the two sections.

2. Click Different First Page to turn off this feature for Section 2.
- Click Next Section to move to the First Page Header of Section 3.
- Click Different First Page.
- Scroll up to see the top of the window.
- Click in the Header of the first page of section 2.
- Click Header in the Header & Footer group and choose Sideline.

Your screen should be similar to Figure 3.81

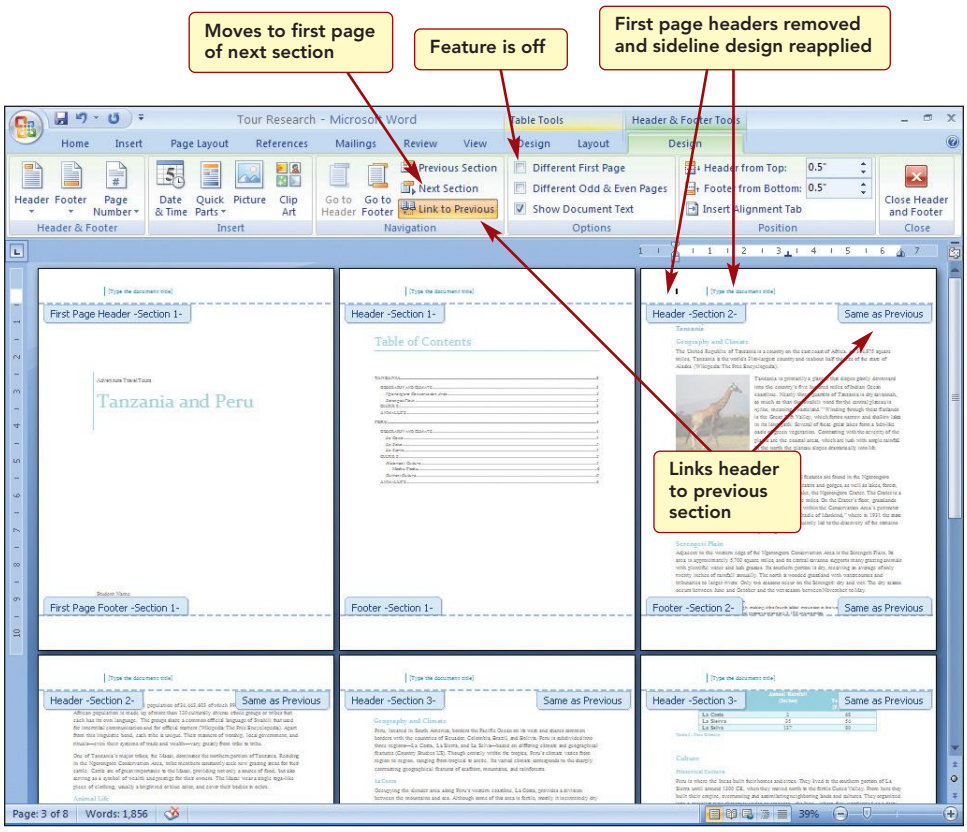


Figure 3.81

Now all headers in all sections of the document are formatted using this design. The same design was applied to all sections because the headers are initially linked even though the document is divided into sections. Notice the tab on the right displays "Same as Previous." When this setting is on, the header in the previous sections will have the same settings as the header in the section you are defining. Because you do not want the title or contents pages in section 1 to display information in the header, you will break the connection between sections 1 and 2 by turning off this option. Then you will remove the header from section 1.

3. Click Link to Previous.
   - Click Previous Section
   - Click Different First Page.
   - Click Header and choose Remove Header.

Your screen should be similar to Figure 3.82

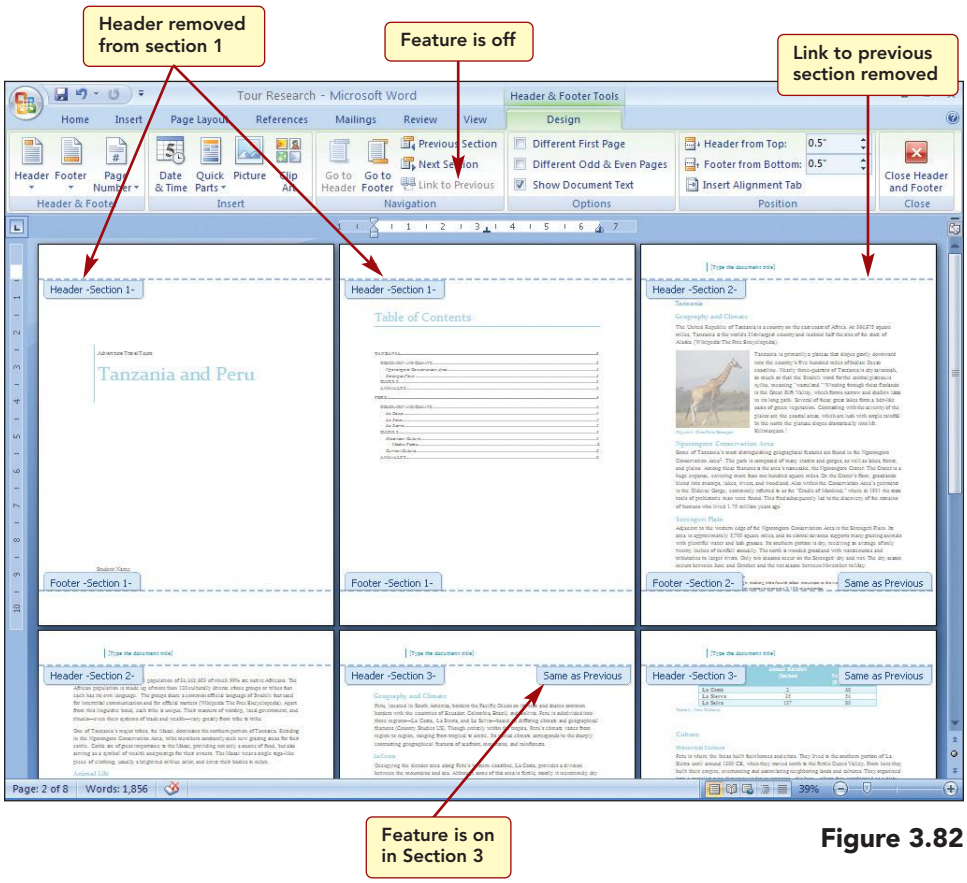


Figure 3.82

The header information is removed from Section 1. It is displayed in Section 3 because the Same as Previous option is on for that section. You can tell if the headers are linked because "Same as Previous" appears in a tab below the header area.

Changing Header Content

Instead of the report title, you want to display the section title, Tanzania. To do this, you need to remove the title placeholder and type the section heading. You edit the content of a header as if it were a mini-document.

1. Click Next Section.
2. Increase the zoom to 100%.
3. Triple-click on the document title placeholder and press Delete to remove it.
4. Type Tanzania.

Your screen should be similar to Figure 3.83

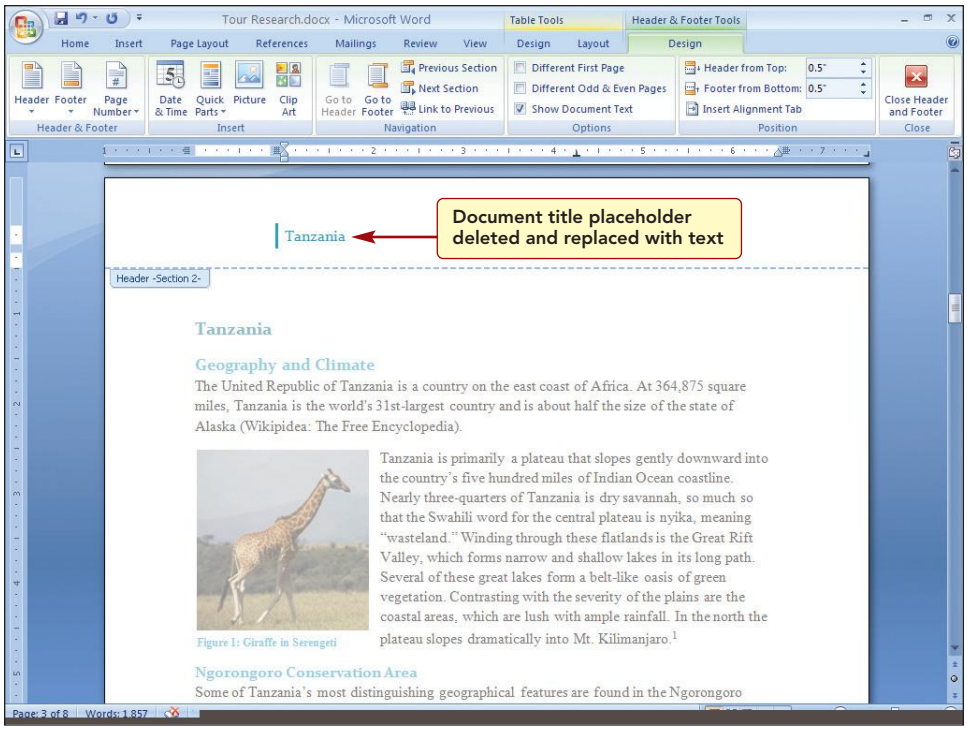


Figure 3.83

Next, you want to add your name right-aligned to the header. To quickly add this information, you will use a Quick Parts entry. Quick Parts insert built-in information automatically for you, such as document and user information.

2. Click Insert Alignment Tab.
3. Choose Right and click OK.
4. Click Quick Parts in the Insert group.
5. Select Document Property and choose Author.

Your screen should be similar to Figure 3.84

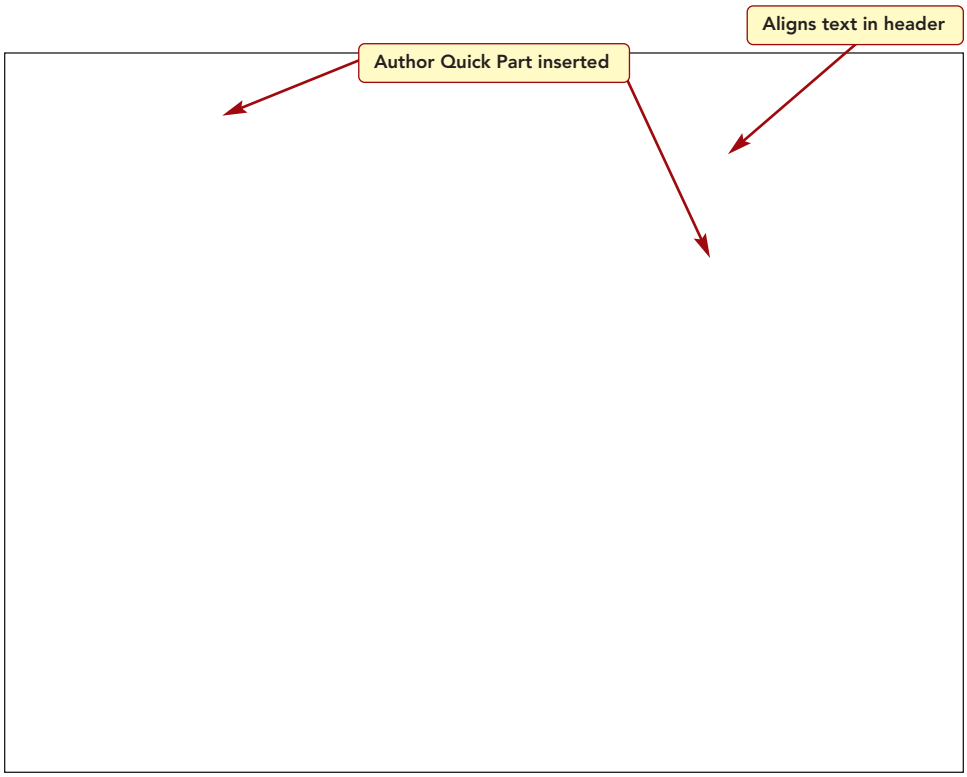


Figure 3.84

The Author placeholder is right-aligned in the header and displays your name because this information is stored in the document properties.

Inserting and Modifying the Date

Finally, you will add an automatic date stamp to display the current date after your name in the header.

1. **Press Tab, →, and Spacebar to move to the end of the Author placeholder and enter a space.**
2. **Click Date & Time in the Insert group.**
3. **If necessary, select Update Automatically to turn on this feature.**
4. **Click OK to insert the date in the default format.**

Your screen should be similar to Figure 3.85

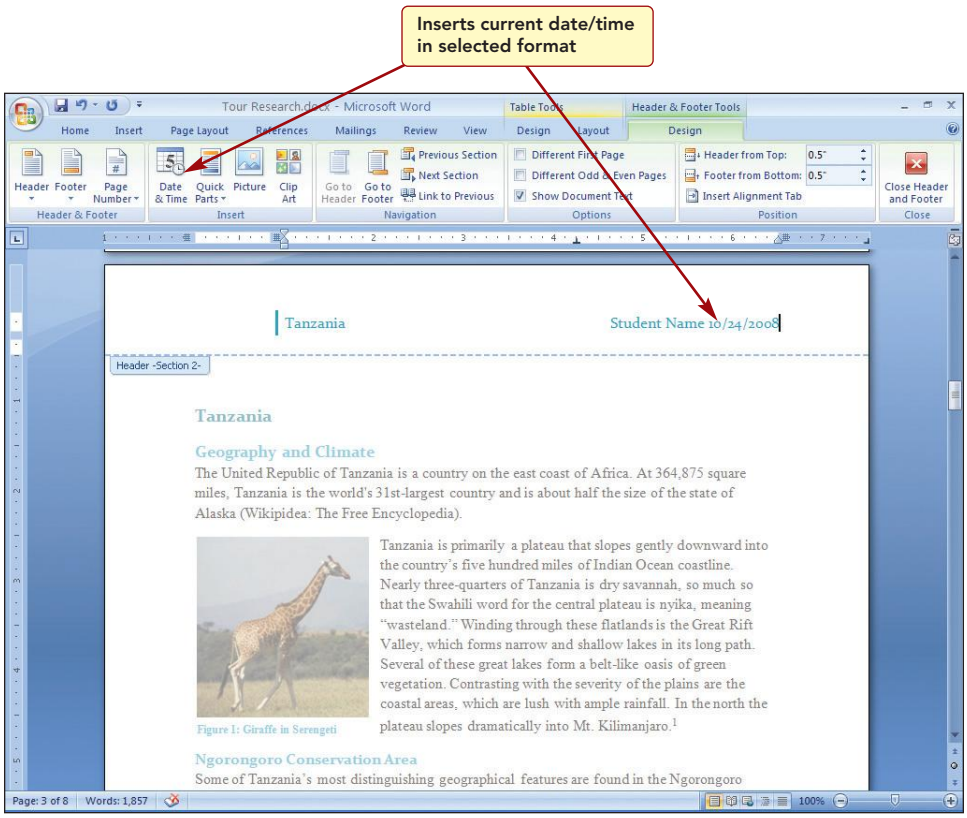


Figure 3.85

The current date is inserted as a field and will update when the system date changes. Instead you decide to change the date to display the date the document was last saved using a Quick Parts entry.

2. **Select and delete the date placeholder.**

- **Click** Quick Parts **and choose Field.**
- **Choose Date and Time from the Categories list.**
- **Choose SaveDate from the Field Names list.**
- **Choose the M/d/yyyy h:mm am/pm date and time format (10/12/2008 11:09 AM).**
- **Click** OK.
- **Reduce the zoom to 39%.**

Your screen should be similar to Figure 3.86

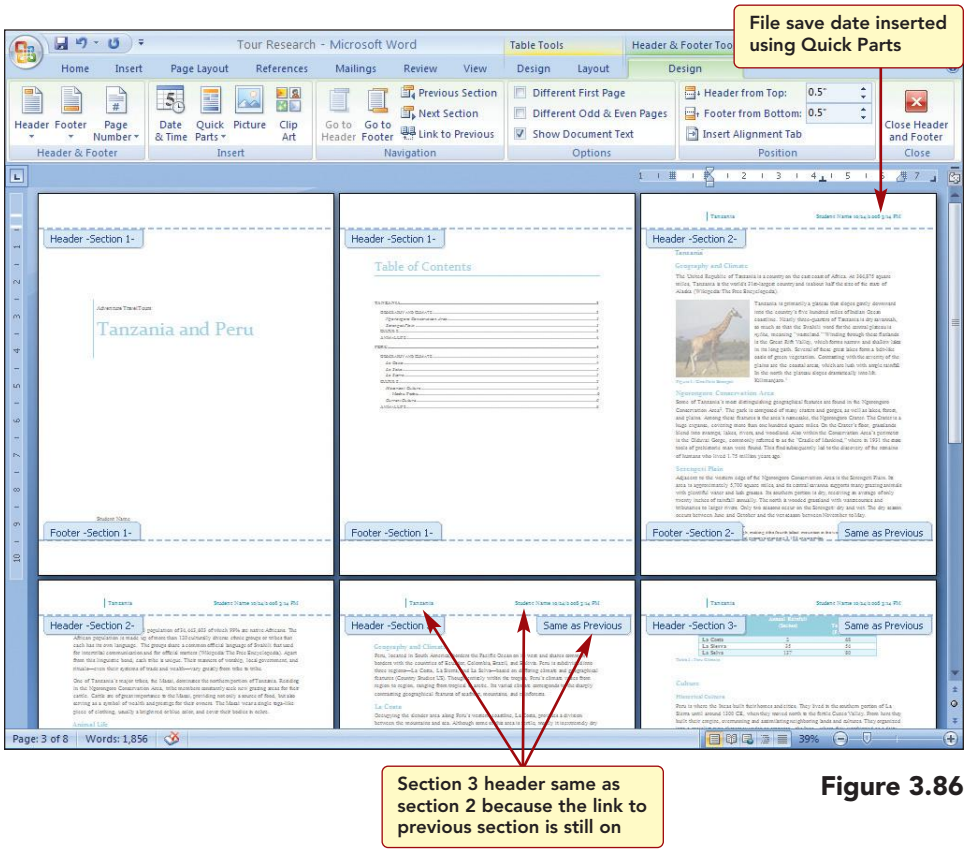


Figure 3.86

The date and time reflect the date and time the file was last saved. It can be updated when you save the file again. Notice that the same header information is used in Section 3. You want to break the link between the Section 3 header and the Section 2 header so you can change the section title from Tanzania to Peru in the Section 3 header.

3. **Click on the Section 3 header and click** Link to Previous **to break the link.**

- **Select the text Tanzania and replace it with Peru.**
- **Scroll up to see the first six pages as in Figure 3.87.**

Your screen should be similar to Figure 3.87

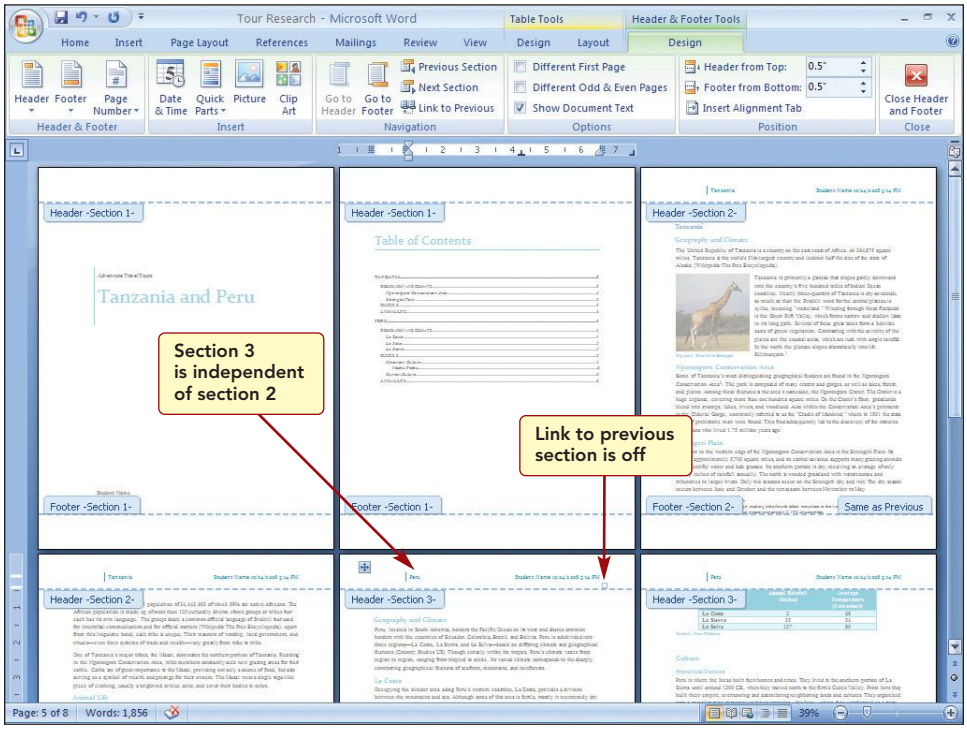


Figure 3.87

You can now see that the header for Sections 2 and 3 are formatted independently and that Section 1 does not display any header information.

Inserting and Modifying Page Numbers

Next, you will add information to the footer. You want the footer to display the page number, file name, and date. Page numbers can be added to the top, bottom, or side margins of the page. Word includes many built-in page number designs that include formatting and graphic elements to help you quickly create attractive page numbers. You will add the number to the bottom of the page, which inserts it in the footer.

MORE ABOUT

You also can insert page numbers in the text of a document. To learn about this feature, see 1.2 Lay Out Document in the More About appendix.

1. **Click Page Number from the Header & Footer group.**
2. **Select Bottom of Page.**

Additional Information
You also can easily change the built-in designs or create your own custom designs and save them to the gallery using the Save Selection as Page Number option.

3. **Scroll the list of page number styles and choose Large Color 3.**

Your screen should be similar to Figure 3.88

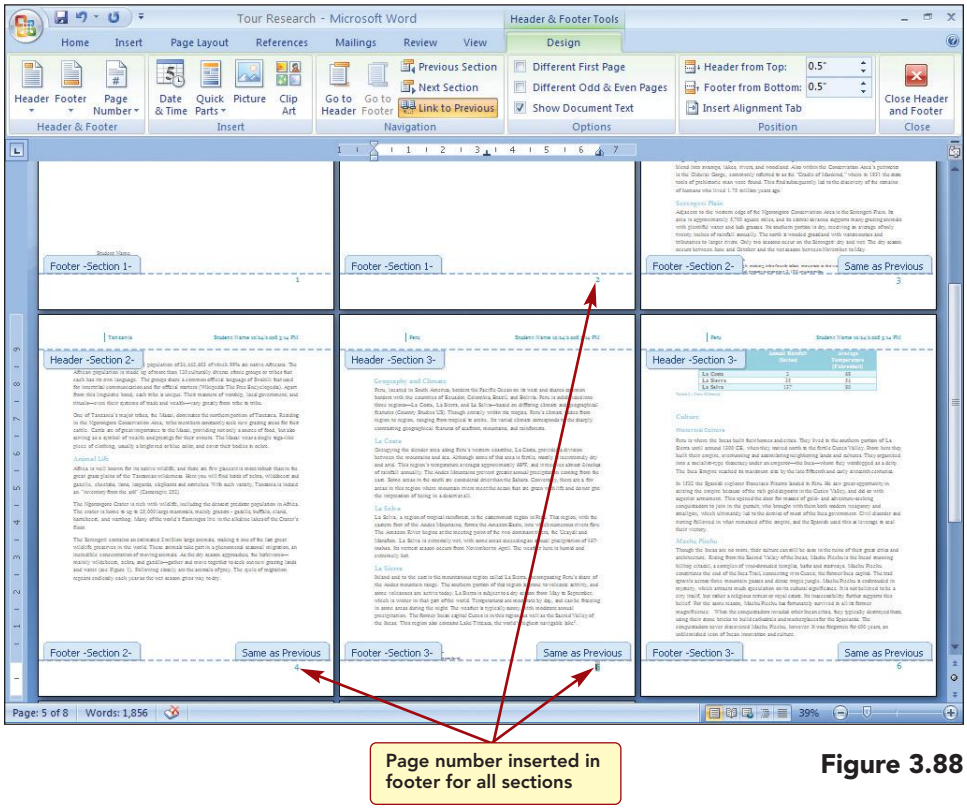


Figure 3.88

Additional Information
You also can display different information on odd and even pages for both headers and footers using Different Odd & Even Pages.

Additional Information
You also can change the format of page numbers from Arabic to Roman Numerals or letters and include chapter numbers.

The footer area is active and the page number appears right-aligned in the selected design in the footer of all sections. The number is a field that updates to reflect the document page. By default, when you insert sections, page numbering continues from the previous section. Because you do not want the title or contents pages in section 1 to display the footer information, you will break the connection between sections 1 and 2 by turning off this option. Then you will remove the footer from section 1 and begin page numbering with section 2.

2. **Move to the section 2 footer.**

- **Click** Link to Previous.
- **Move to the footer of section 1.**
- **Click** Footer **and choose Remove Footer.**
- **Move to the footer of section 2.**
- **Click** Page Number **in the Header and Footer group.**
- **Choose Format Page Numbers.**
- **Choose Start At.**

Additional Information
The default Start At setting begins numbering with 1.

- **Click** OK.
- **Increase the zoom to 100%.**
- **Click in the footer area to clear the selection.**

Your screen should be similar to Figure 3.89

Additional Information
You also can use Footer on the Insert tab or the Header & Footer Tools Design tab to insert a predesigned footer with placeholders for items such as the date and page number.

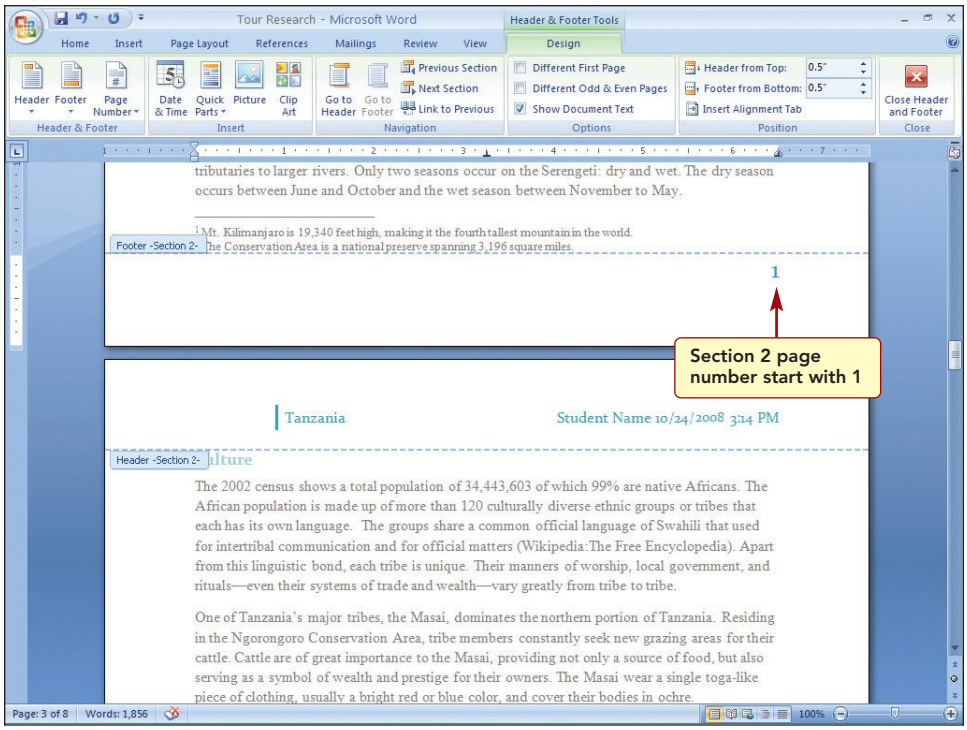


Figure 3.89

The Section 2 footer now displays "1" as the current page number.

Adding the File Name Quick Parts

Next, you will add the file name centered in the footer. To quickly add the file information, you will use a Quick Parts entry. Then you will save the document and update the date field in the header.

1. **Use the Click and Type pointer to insert a center tab in the Section 2 footer.**
2. **Click Quick Parts and choose Field.**
3. **Choose Document Information from the Categories list and choose FileName from the Field Names list.**
4. **Click OK.**
5. **Save the report.**
6. **Right-click on the date field in the header and choose Update Field from the context menu.**

Your screen should be similar to Figure 3.90

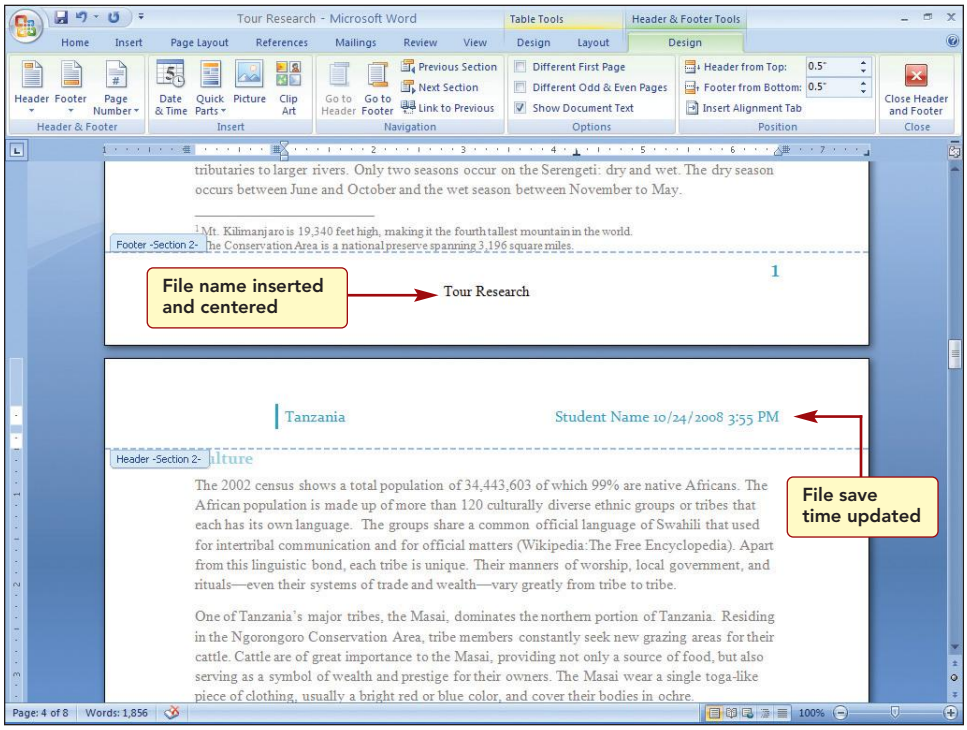


Figure 3.90

The date and time have updated to reflect the last time the file was saved. Likewise, because the file name is also a field, it can be updated if you change the file name to another. Notice the file name is in black font. This is because it was not entered using a design style and formats using the default font color setting.

2. **Select the file name and use the Mini toolbar to change the font color to the Turquoise, Accent 1 theme color.**

- **Click** 

.

Another Method

You also can double-click in the document area to make it active again.

Your screen should be similar to Figure 3.91

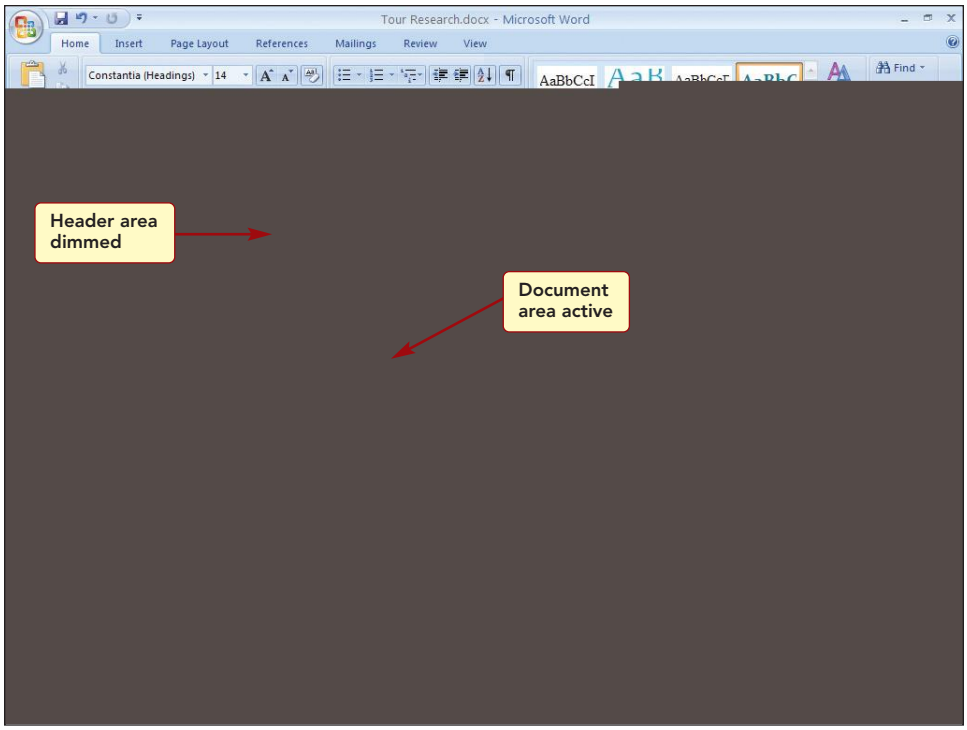


Figure 3.91

Additional Information

Headers and footers can be removed from the entire document by making the document area active and clicking 

or 

on the Insert tab and choosing Remove Header or Remove Footer from the menu.

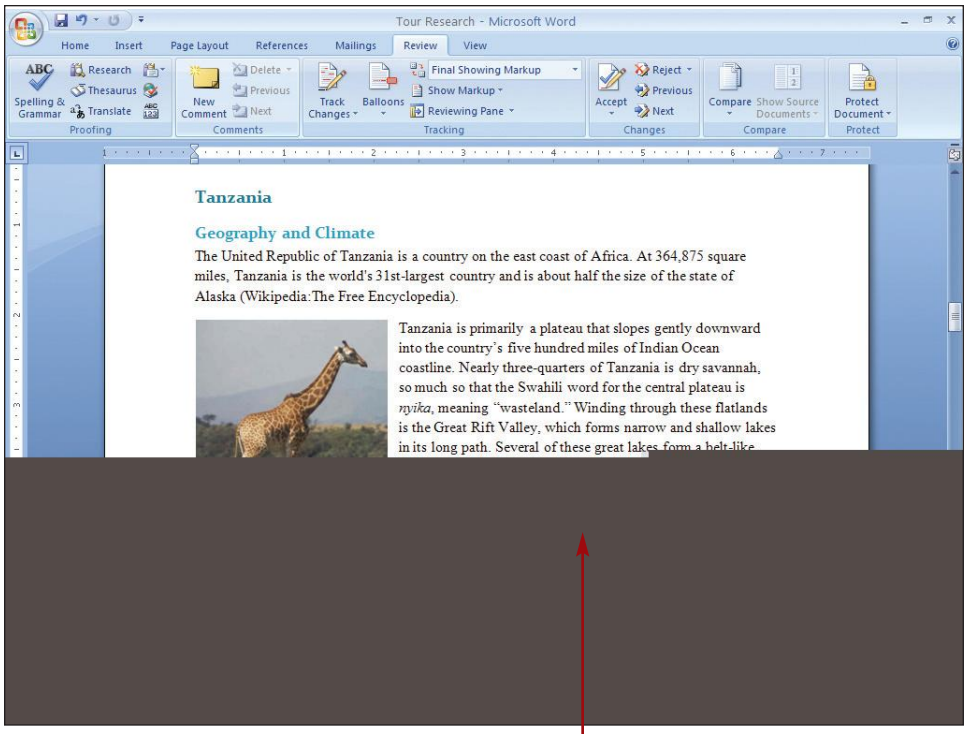
The document area is active again, and the header and footer text appears dimmed. The header and footer can only be seen in Print Layout view and when the document is printed.

Redisplaying Spelling and Grammar Errors

Now you will turn on the display of spelling and grammar errors again and then spell and grammar check the document.

1. If necessary, move to the top of page 1 of section 2 and delete any blank lines above the Tanzania heading.
2. Choose Office Button/ Word Options /Proofing.
3. Clear the checkmark from Hide spelling errors in this document only.
4. Clear the checkmark from Hide grammar errors in this document only.
5. Click OK.
6. Open the Review tab.
7. Click Spelling & Grammar in the Proofing group.
8. Respond appropriately to any other located errors and choose Ignore All for all proper names, special terms, and abbreviations.
9. Click OK to end spelling and grammar checking.

Your screen should be similar to Figure 3.92



Spelling and grammar errors checked and cleared

Figure 3.92

The Spelling and Grammar Checker first checked the document text for errors, then the footnotes, and finally the headers and footers.

Updating a Table of Contents

You have made many modifications to the report since generating the table of contents, so you want to update the listing. Because the table of contents is a field, if you add or remove headings, rearrange topics, or make other changes that affect the table of contents listing, you can quickly update the table of contents. In this case, you have added pictures, a table, a bibliography, and a table of figures that have affected the paging and content of the document. You will update the table of contents to ensure that the page references are accurate and that any new content is included.

1. **Move to the table of contents page.**
- **Click anywhere on the table of contents area.**
- **Click** Update Table **in the field tab.**

Another Method

You also can use Update Table on the References tab, or choose Update Field from the table of contents context menu, or press F9 to quickly update a table of contents field.

- **Choose Update entire table.**
- **Click** OK.

Your screen should be similar to Figure 3.93

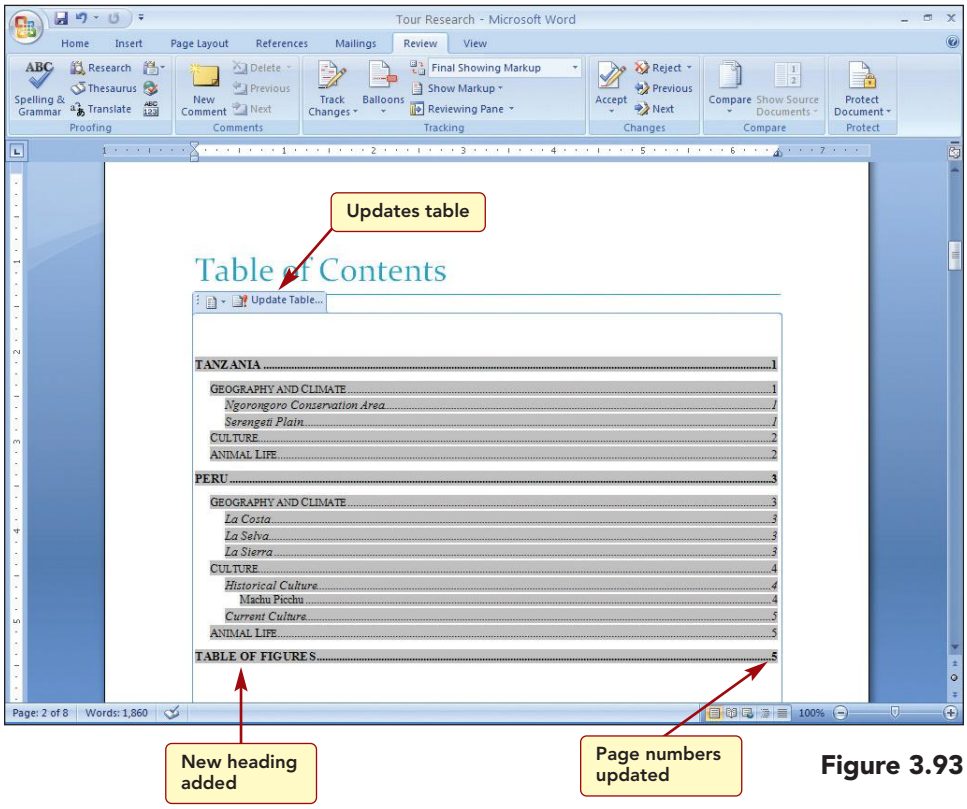


Figure 3.93

The page numbers referenced by each table-of-contents hyperlink have been updated as needed and the Table of Figures heading has been added to the list. However, the Works Cited page is not included. This is because the Works Cited page title is formatted using the TOC Title style, not a heading style. You will add the Works Cited page to the table of contents listing by marking the individual entry.

2. **Move to the Works Cited page title.**
- **Click Add Text in the Table of Contents group of the References tab.**
- **Choose Level 1 as the level for the heading.**
- **Click Update Table in the Table of Contents group.**
- **Choose Update entire table.**
- **Click OK.**
- **Display the table of contents page.**

Your screen should be similar to Figure 3.94

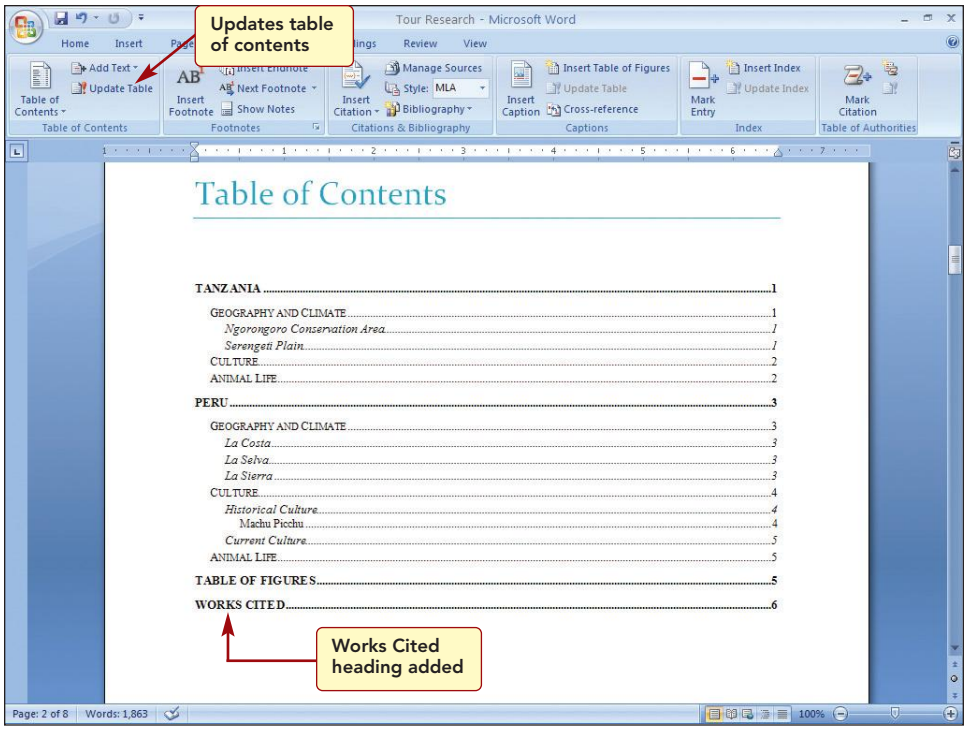


Figure 3.94

The listing now includes a hyperlink to the Works Cited page.

MORE ABOUT

To learn how to update a table of contents with selected text, see 1.3 Make Documents and Content Easier to Find in the More About appendix

Printing Selected Pages

You are now ready to print the report.

1. **Click Save.**
- **Choose Office Button/Print/Print Preview.**
- **Reduce the zoom to display all eight pages.**

Your screen should be similar to Figure 3.95

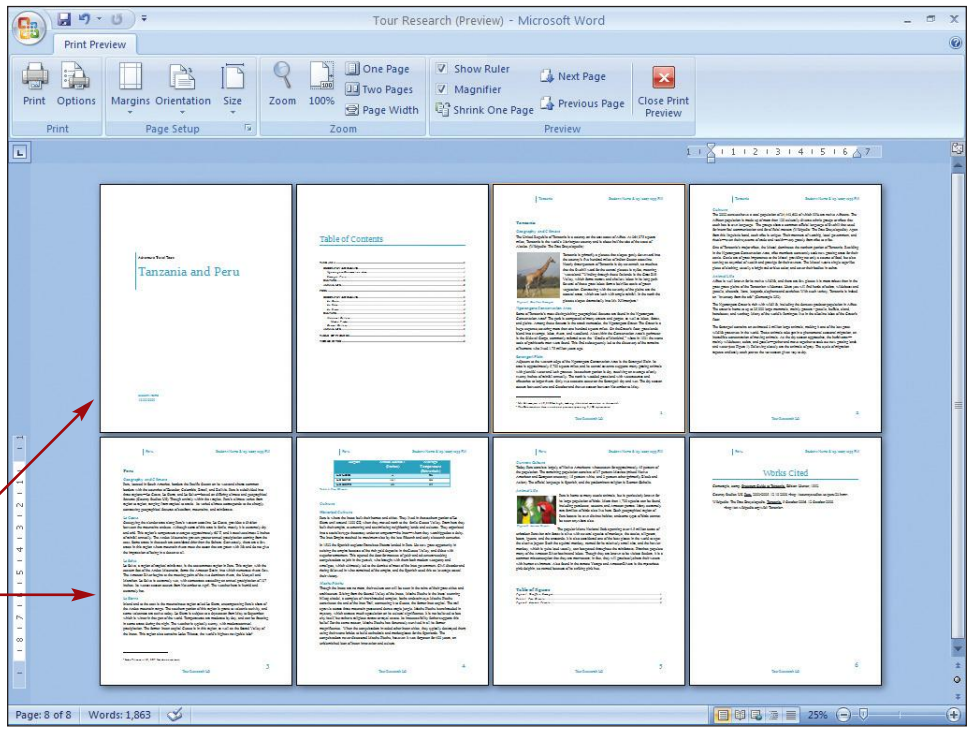


Figure 3.95

Additional Information
Page numbers begin with 1 for each section in the document when printing.

You would like to print only the first and second pages in section one, and the sixth, seventh, and eighth pages in section three of the document. To do this, you use the Print dialog box to select the pages you want to print. When printing pages in different sections, the page number and section number (p#s#) must be identified in the page range.

2. **Click** Print.
   - **If necessary, select the appropriate printer for your computer system.**
   - **Type p1s1, p2s1, p2s3-p4s3 in the Pages text box.**
   - **Click** OK.
   - **Return the zoom to Whole Page.**
   - **Click** Close Print Preview.
   - **Exit Word.**

Your printed output should be similar to that shown in the Case Study at the beginning of the lab.



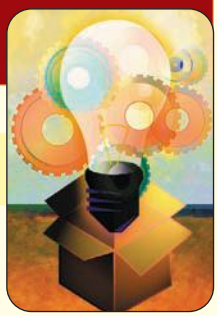
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Market Research Analyst

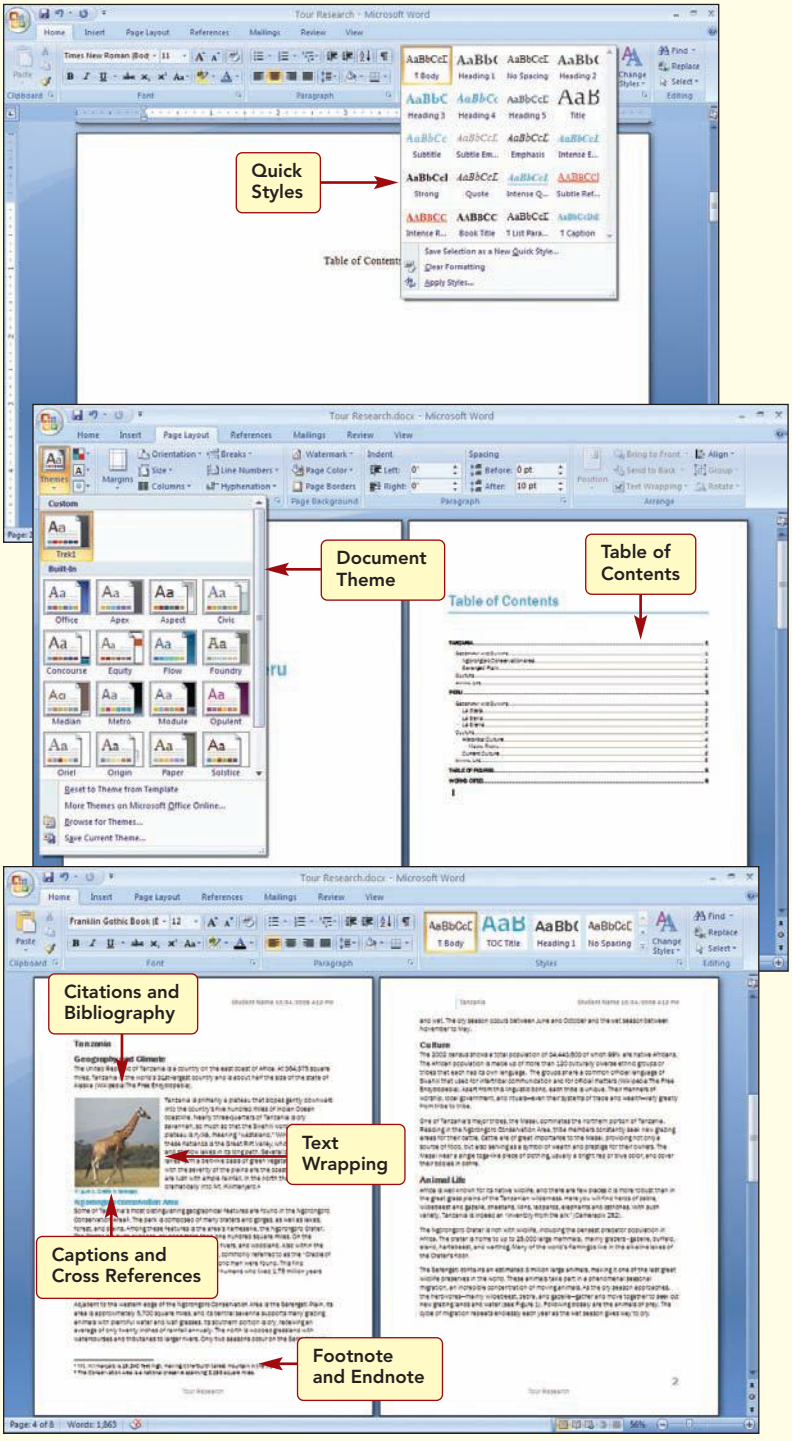
Have you ever wondered who investigates the market for new products? Ever thought about the people who put together phone surveys? Market research analysts are responsible for determining the potential sales for a new product or service. They conduct surveys and compile statistics for clients or their employer. These reports usually include report features like a table of contents, cross-references, headers and footers, and footnotes for references. Market research analysts may hold positions as faculty at a university, work for large organizations, or hold governmental positions. The salary range for an entry-level market research analyst position is $39,300 to $49,400 and demand is high in a strong economy.

Concept Summary



LAB 3

Creating Reports and Tables



Quick Styles (WD3.7)

Applying a style, a predefined set of formatting characteristics, allows you to quickly apply a whole group of formats in one simple step to a selection.

Document Theme (WD3.21)

A document theme is a predefined set of formatting choices that can be applied to an entire document in one simple step.

Table of Contents (WD3.33)

A table of contents is a listing of the topic headings that appear in a document and their associated page references

Citations and Bibliography (WD3.41)

Parenthetical source references, called citations, give credit for specific information included in the document. Complete source information for citations is included in a bibliography at the end of the report.

Footnote and Endnote (WD3.47)

Footnotes and endnotes are used in documented research papers to explain or comment on information in the text, or provide source references for text in the document.

Text Wrapping (WD3.52)

You can control the appearance of text around a graphic object by specifying the text wrapping style.

Captions and Cross-References (WD3.55)

A caption is a numbered label for a figure, table, picture, or graph. A cross-reference is a reference from one part of a document to related information in another part.

Table (WD3.62)

A table is used to organize information into an easy-to-read format of horizontal rows and vertical columns.

Table of Figures (WD3.72)

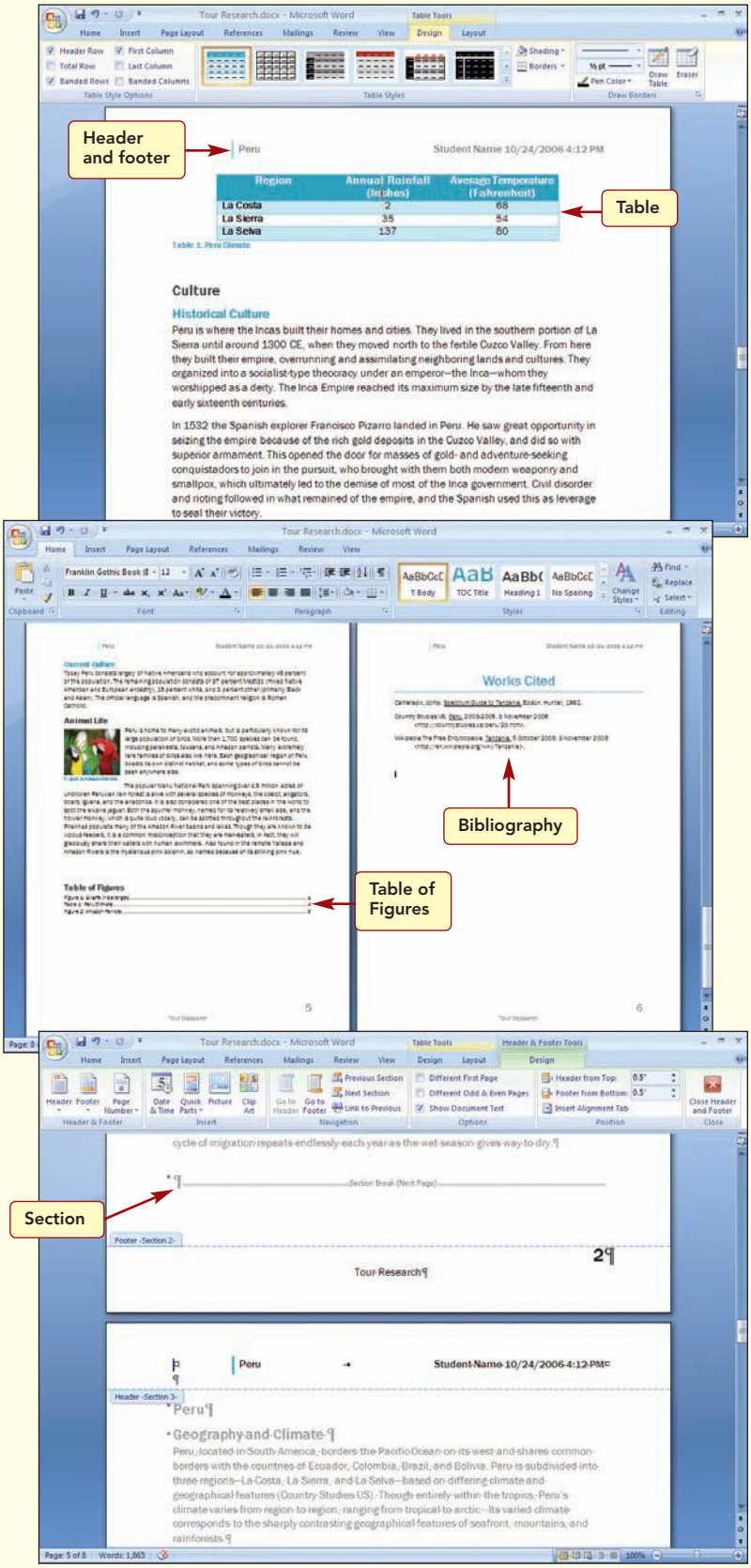
A table of figures is a list of the figures, tables, or equations used in a document and their associated page number.

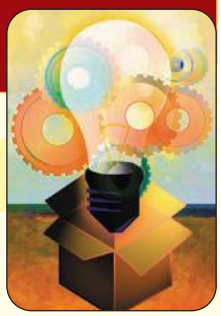
Header and Footer (WD3.79)

A header is a line or several lines of text in the top margin of each page. A footer is a line or several lines of text in the margin space at the bottom of every page.

Section (WD3.80)

To format different parts of a document differently, you can divide a document into sections.





LAB 3

Creating Reports and Tables

key terms

bibliography WD3.41
caption WD3.55
cell WD3.62
citations WD3.41
Click and Type WD3.27
cross-reference WD3.55
Document Map WD3.37
document theme WD3.21
drawing layer WD3.52
endnote WD3.47
floating object WD3.52
footer WD3.79
footnote WD3.47
header WD3.79
heading style WD3.7
inline object WD3.52
navigation window WD3.37
note pane WD3.48
note reference mark WD3.47
note separator WD3.47
note text WD3.47
placeholder WD3.18
quick style WD3.7
section WD3.80
section break WD3.80
sort WD3.66
split window WD3.57
table WD3.62
table of contents WD3.33
table of figures WD3.72
table reference WD3.62
text box WD3.57
text wrapping WD3.52
thumbnails WD3.39

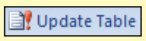
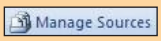
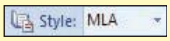
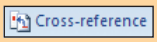
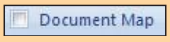
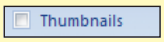
MCAS skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2 MCAS Certification Guide for a complete list of the skills that were covered in Lab 3.

command summary

Button/Command	Shortcut	Action
Office Button Menu		
Print/Print Preview		Displays document as it will appear when printed
Word Options/Proofing		Changes settings associated with Spelling and Grammar checking
Word Options/Advanced/Mark formatting inconsistencies		Checks for formatting inconsistencies
Home tab		
Font group		
Grow Font		Increases selected font size by increments
Paragraph group		
Sort		Rearranges items in a selection into ascending alphabetical/numerical order
Styles group		
More		Opens Quick Styles gallery
Insert tab		
Pages group		
Cover Page		Inserts a preformatted cover page
Blank Page		Inserts a blank page
Tables group		
Table		Inserts table at insertion point
Header and Footer group		
Header		Inserts predesigned header style
Footer		Inserts predesigned footer style
Page Layout tab		
Themes group		
Themes		Applies selected theme to document
		Changes colors for current theme
		Changes fonts for current theme

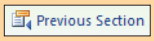
command summary

Button/Command	Shortcut	Action
Page Setup group		
		Inserts page and section breaks
Arrange group		
		Controls how text wraps around a selected object
References tab		
Table of Contents group		
		Generates a table of contents
		Adds selected text as an entry in table of contents
	F9	Updates the table of contents field
Footnotes group		
	Alt + Ctrl + F	Inserts footnote reference at insertion point
Citations & Bibliography group		
		Creates a citation for a reference source
		Displays list of all sources cited
		Sets the style of citations
		Creates a bibliography list of sources cited
Captions group		
		Adds a figure caption
		Creates figure cross-references
View tab		
Document Views group		
		Changes to Outlining view
Show/Hide group		
		Displays or hides Document Map in navigation pane
		Displays or hides thumbnails in navigation pane

command summary

Button/Command	Shortcut	Action
Window group		
Split		Divides a document into two horizontal sections
Picture Tools Format tab		
Arrange group		
Text Wrapping		Specifies how text will wrap around picture
Table Tools Design tab		
Table Style Options group		
Header Row		Turns on/off formats for header row
First Column		Turns on/off formats for first column
Last Column		Turns on/off formats for last column
Table Styles group		
More		Opens Table Styles gallery
Table Tools Layout tab		
Rows & Columns group		
Insert Above		Inserts a new row in table above selected row
Alignment group		
Align top center		Aligns text at top center of cell space
Header & Footer Tools Design tab		
Header & Footer Group		
Page Number		Inserts page number in header or footer
Insert group		
Date & Time		Inserts current date or time in header or footer
Quick Parts/Document Property		Inserts selected document property into header or footer
Quick Parts/Field		Inserts selected field Quick Part

command summary

Button/Command	Shortcut	Action
Navigation group		
		Switches to footer area
		Navigates to next section
		Navigates to previous section
		Turns on/off link to header or footer in previous section
Option group		
		Specify a unique header and footer for the first page
Position group		
		Inserts a tab stop to align content in header/footer
Close group		
		Closes header/footer area
Outlining tab		
Outline Tools group		
Promote to Heading 1		Promotes selected item to Heading 1 level
Promote	Alt + Shift + ←	Promotes selected item one level
Level 1 Outline Level		Choose outline level for selected item
Demote	Alt + Shift + →	Demotes selected item one level
Demote to body text		Demotes selected item to body text
Move Up	Alt + Shift + ↑	Moves selected item up
Move Down	Alt + Shift + ↓	Moves selected item down
Expand	Alt + Shift + +	Expand the selected item
Collapse	Alt + Shift + -	Collapse the selected item
Level 9 Show Level		Choose levels to display in outline
		Show the outline as formatted text
		Shows only the first line of each item
		Closes Outline view and displays last used view



matching

Match the item on the left with the correct description on the right.

1. citation	_____	**a.** combination of fonts, type sizes, bold, and italics used to identify different topic levels in a document
2. heading style	_____	**b.** inserts built-in pieces of information automatically
3. cross-reference	_____	**c.** graphic positioned directly in the text
4. tight wrap	_____	**d.** a predefined set of formatting choices
5. Document Map	_____	**e.** letter and number used to identify table cells
6. section break	_____	**f.** uses headings to navigate through the document
7. inline image	_____	**g.** text closely follows contours around a graphic
8. Quick Parts	_____	**h.** reference from one part of the document to another part
9. document theme	_____	**i.** instructs Word to end one set of format settings and begin another
10. table reference	_____	**j.** parenthetical source reference

multiple choice

Circle the correct response to the questions below.

1. A _____ allows you to see two parts of the same document at the same time.
- **a.** divided window
- **b.** split window
- **c.** sectioned window
- **d.** note pane

2. _____ are lines of text at the top and bottom of a page outside the margin lines.
- **a.** Characters and paragraphs
- **b.** Headers and footers
- **c.** Tables and text wrappers
- **d.** Styles and sections

3. A(n) _____ displays information in horizontal rows and vertical columns.
- **a.** Document Map
- **b.** cell reference
- **c.** object
- **d.** table

4. A _____ is inserted automatically when a new page is created in a document.
   a. hard page break
   b. section break
   c. soft page break
   d. page division
5. _____ shows the hierarchy of topics in a document.
   a. Full Screen Reading view
   b. Outline view
   c. Print Layout view
   d. Multiple page view
6. You can control how text appears around a graphic with _____ styles.
   a. sorting
   b. text wrapping
   c. section
   d. caption
7. A(n) _____ is a predesigned set of formats that can be applied to an entire document.
   a. AutoFormat
   b. document theme
   c. style
   d. Quick Part
8. A _____ is a reference from one part of a document to related information in another part of the same document.
   a. citation
   b. caption
   c. heading
   d. cross-reference
9. _____ inserts items in a blank area of a document, avoiding the need to press ↵Enter.
   a. Type and Point
   b. Click and Type
   c. Point and Type
   d. Type and Click
10. A _____ is a line of text that describes the object that appears above it.
    a. citation
    b. cross-reference
    c. caption
    d. footnote

true/false

Circle the correct answer to the following questions.

1. Character styles are a combination of any character formats and paragraph formats that affect all text in a paragraph. True False
2. Word automatically applies styles to the text in an outline as it is entered. True False

3. Footnotes must be manually renumbered as you move text around in a document. True False
4. The navigation window displays the headings in your document. True False
5. A document theme is applied to selected characters and paragraphs. True False
6. A section break identifies the end of a section and stores the document format settings. True False
7. A table of contents hyperlink is used to jump directly to a specific location in a document. True False
8. A style is a combination of character formats. True False
9. A table of contents and a cross-reference are fields. True False
10. Thumbnails are small pictures of each page of a document. True False

fill-in

Complete the following statements by filling in the blanks with the correct terms.

1. A _____ identifies the content to be entered in a cover page.
2. A(n) _____ is a set of formats that is assigned a name and can be quickly applied to a document.
3. The _____ for a footnote appears at the bottom of the page on which the reference mark appears.
4. By changing a graphic to a(n) _____, it is inserted into the drawing layer.
5. The intersection of a row and a column creates a(n) _____.
6. A _____ is a small picture of each page of the document.
7. A(n) _____ is a line or several lines of text at the top of each page in a document.
8. A(n) _____ is used to organize information into horizontal rows and vertical columns.
9. Specifying _____ controls how text appears around a graphic object.
10. The _____ is used to move by headings or pages in a document.

Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

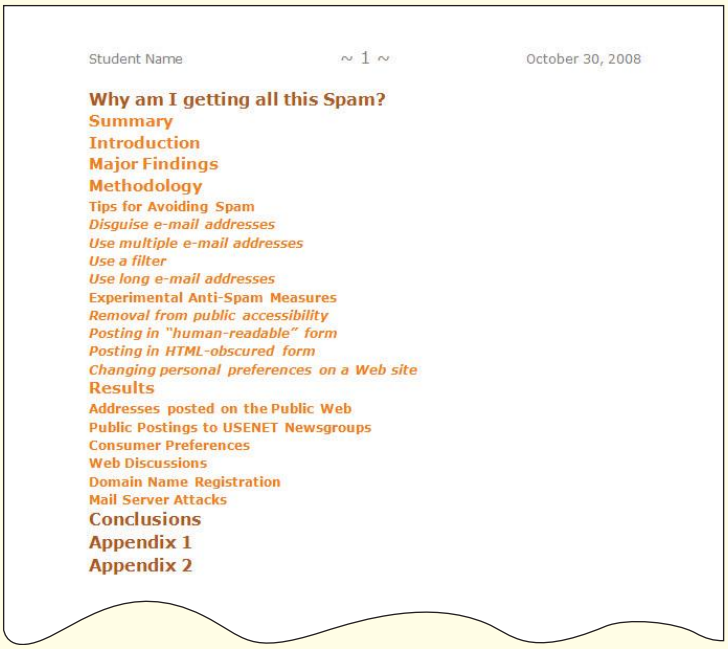
Creating and Modifying an Outline ★

1. You are just starting work on a research report on Internet Spam. To help organize your thoughts, you decide to create an outline of the main topics to be included. Your completed outline will be similar to the one shown here.

   a. Open a new blank document. Switch to Outline view.

   b. The topics you want to discuss are shown below. Enter these topics at the outline level indicated, pressing ↵Enter at the end of each.

   Why Am I Getting All This Spam? (Level 1)
   Summary (Level 2)
   Introduction (Level 2)
   Major Findings (Level 2)
   Methodology (Level 2)
   Experimental Anti-Spam Measures (Level 3)
   Removal from public accessibility (Level 4)
   Posting in "human-readable" form (Level 4)
   Posting in HTML-obscured form (Level 4)
   Posting in unreadable form (Level 4)
   Changing personal preferences on a Web site (Level 4)
   Tips for Avoiding Spam (Level 3)
   Disguise e-mail addresses (Level 4)
   Use multiple e-mail addresses (Level 4)
   Use long e-mail addresses (Level 4)
   Use a filter (Level 4)
   Results (Level 2)
   Addresses Posted on the Public Web (Level 3)
   Public Postings to USENET Newsgroups (Level 3)
   Consumer Preferences (Level 3)
   Web Discussions (Level 3)
   Domain Name Registration (Level 3)
   Conclusions (Level 2)
   Appendix 1 (Level 2)
   Appendix 2 (Level 2)



   c. Correct any spelling errors.

   d. Move the "Experimental Anti-Spam Measures" topic and all subtopics to below the "Tips for Avoiding Spam" topic. In the "Tips for Avoiding Spam" topic, move "Use long e-mail addresses" to below "Use a filter."

e. Change the level of the "Conclusions", "Appendix 1", and "Appendix 2" topics to level 1.

f. Add a new level 3 topic, **Mail Server Attacks**, as the last subtopic under "Results."

g. Delete the "Posting in unreadable form" topic under "Experimental Anti-Spam Measures."

h. Switch to Print Layout view. Remove the space before paragraphs. Change the theme to Aspect.

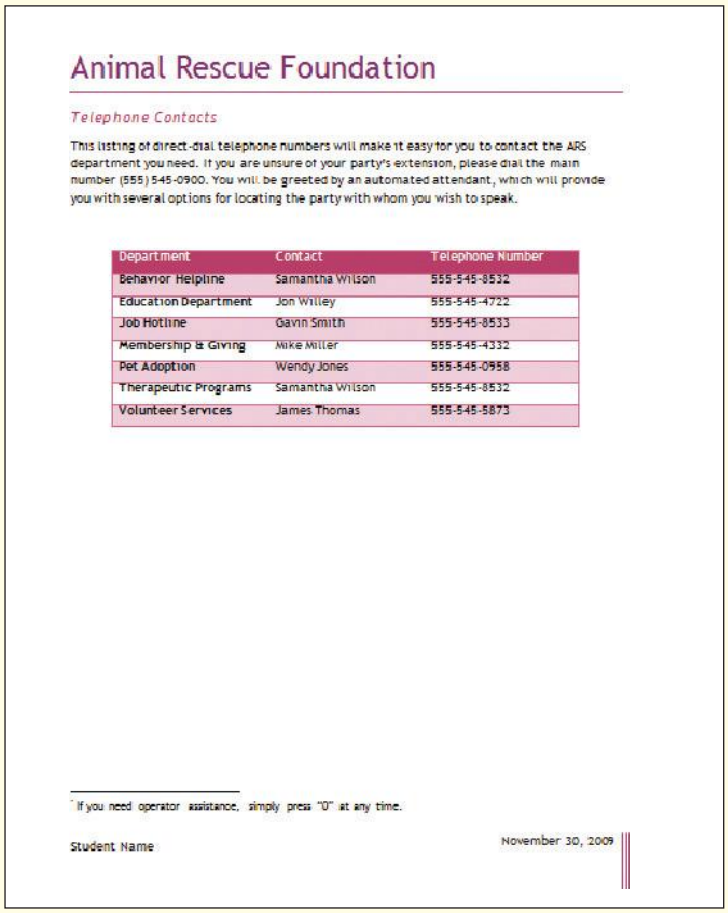
i. Insert the Blank (Three Columns) built-in header. Use the Author quick part to add your name in the left placeholder. Insert the page number in the middle placeholder using the Current Position page number option and the Tildes design. Enter the current date in the right placeholder using the month xx, xxxx format.

j. Save the outline as Spam Outline in a new folder named Research.

k. Print the outline. Close the file.

Creating a Table ★

2. You work for the Animal Rescue Foundation and are putting together a list of contact information. You would like to display the information in a table. Your completed document will be similar to the one shown here.



Animal Rescue Foundation

Telephone Contacts

This listing of direct-dial telephone numbers will make it easy for you to contact the ARS department you need. If you are unsure of your party's extension, please dial the main number (555) 545-0900. You will be greeted by an automated attendant, which will provide you with several options for locating the party with whom you wish to speak.

Department	Contact	Telephone Number
Behavior Helpline	Samantha Wilson	555-545-8532
Education Department	Jon Willey	555-545-4722
Job Hotline	Gavin Smith	555-545-8533
Membership & Giving	Mike Miller	555-545-4332
Pet Adoption	Wendy Jones	555-545-0958
Therapeutic Programs	Samantha Wilson	555-545-8532
Volunteer Services	James Thomas	555-545-5873

If you need operator assistance, simply press "0" at any time.

Student Name November 30, 2009

a. Open a new document and enter the title **Animal Rescue Foundation** left-aligned at the top of the document on the first line and **Telephone Contacts** on the second line. Apply the Title style to the first line and the Subtitle style to the second line.

b. Enter the following introductory paragraph left-aligned below the subtitle.

This listing of direct-dial telephone numbers will make it easy for you to contact the ARS department you need. If you are unsure of your party's extension, please dial the main number, (555) 545-0900. You will be greeted by an automated attendant, which will provide you with several options for locating the party with whom you wish to speak.

c. Several lines below the paragraph, insert a simple table with 3 columns and 7 rows. Enter the following information into the table:

Pet Adoption	**Wendy Jones**	**555-545-0958**
Behavior Helpline	**Samantha Wilson**	**555-545-8532**
Education Department	**Jon Willey**	**555-545-4722**
Therapeutic Programs	**Samantha Wilson**	**555-545-8532**

Volunteer Services	**James Thomas**	**555-545-5873**
Job Hotline	**Gavin Smith**	**555-545-8533**
Membership & Giving	**Mike Miller**	**555-545-4332**

d. Insert a new row above the first entry and enter the following headings:

Department	**Contact**	**Telephone Number**

e. Change the sort order of the table so that it is sorted by department in ascending order.

f. Select a document theme and then apply a table style of your choice to the table.

g. Reduce the size the table to just small enough to display the data in each row on a single line. Center the table.

h. Insert the footnote **If you need operator assistance, simply press "0" at any time.** using the * symbol instead of a number. Place the reference mark at the end of the introductory paragraph.

i. Add a footer to the document using the Motion (Odd Page) design. Use the Author quick part to display your name left-aligned in the footer.

j. Save the document as ARS Department Contacts.

k. Print the document.

Creating an Informational Sheet ★★

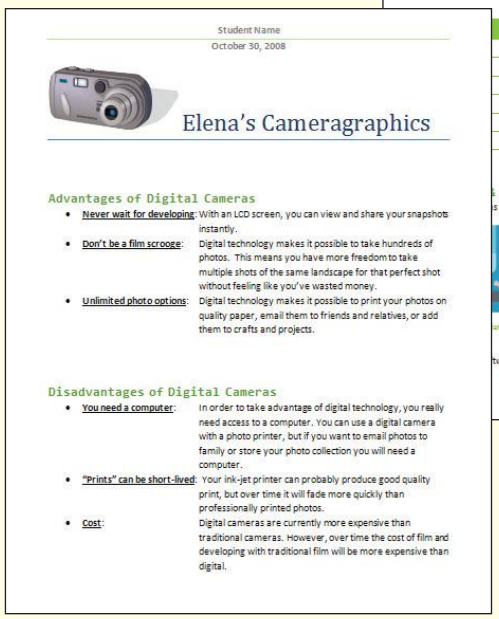
3. You are the manager of Elaina's Cameragraphics, a small camera repair and retail shop. You have fielded many different questions about digital cameras lately and have decided to compile these questions into an informational sheet. Your completed informational sheet will answer your customer's most frequently asked questions about digital technology to help them make an informed choice when buying a new camera. Your completed document will be similar to the one shown here.

a. Open the file wd03_Digital Cameras.

b. Apply the Title style to the main title.

c. Use the Document Map to locate the headings in the document and apply Heading 1 styles to them.

d. Create a bulleted list in the Advantages of Digital Cameras section. Change the hanging indent to the 2.25 position and add a left tab at the 0.5 position. Use Format Painter to add bold and underlines to the beginning of each sentence, before the semicolon. Do the same for the Disadvantages of Digital Cameras section.


Student Name
October 30, 2008

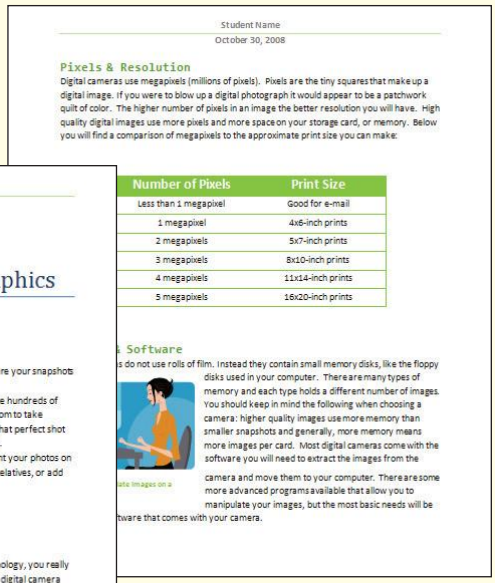
Elena's Cameragraphics

Advantages of Digital Cameras

- Never wait for developing: With an LCD screen, you can view and share your snapshots instantly.
- Don't be a film scrooge: Digital technology makes it possible to take hundreds of photos. This means you have more freedom to take multiple shots of the same landscape for that perfect shot without feeling like you've wasted money.
- Unlimited photo options: Digital technology makes it possible to print your photos on quality paper, email them to friends and relatives, or add them to crafts and projects.

Disadvantages of Digital Cameras

- You need a computer: In order to take advantage of digital technology, you really need access to a computer. You can use a digital camera with a photo printer, but if you want to email photos to family or store your photo collection you will need a computer.
- "Prints" can be short-lived: Your ink-jet printer can probably produce good quality print, but over time it will fade more quickly than professionally printed photos.
- Cost: Digital cameras are currently more expensive than traditional cameras. However, over time the cost of film and developing with traditional film will be more expensive than digital.


Student Name
October 30, 2008

Pixels & Resolution

Digital cameras use megapixels (millions of pixels). Pixels are the tiny squares that make up a digital image. If you were to blow up a digital photograph it would appear to be a patchwork quilt of color. The higher number of pixels in an image the better resolution you will have. High quality digital images use more pixels and more space on your storage card, or memory. Below you will find a comparison of megapixels to the approximate print size you can make:

Number of Pixels	Print Size
Less than 1 megapixel	Good for e-mail
1 megapixel	4x6-inch prints
2 megapixels	5x7-inch prints
3 megapixels	8x10-inch prints
4 megapixels	11x14-inch prints
5 megapixels	16x20-inch prints

Software

s do not use rolls of film. Instead they contain small memory disks, like the floppy disks used in your computer. There are many types of memory and each type holds a different number of images. You should keep in mind the following when choosing a camera: higher quality images use more memory than smaller snapshots and generally, more memory means more images per card. Most digital cameras come with the software you will need to extract the images from the camera and move them to your computer. There are some more advanced programs available that allow you to manipulate your images, but the most basic needs will be tware that comes with your camera.

e. Select a document theme of your choice.

f. Use the following information to create a simple table below the paragraph on Pixels & Resolution.

Number of Pixels	Print Size
Less than 1 megapixel	Good for e-mail
1 megapixel	4×6-inch prints
2 megapixels	5×7-inch prints
3 megapixels	8×10-inch prints
4 megapixels	11×14-inch prints
5 megapixels	16×20-inch prints

g. Remove the space after paragraphs in the table. Apply a table style of your choice. Turn off the first column style effect. Center-align all the text in the table. Increase the font size of the column headings to 16 points. Size the table to the contents and center the table.

h. Insert the wd03_Camera image to the left side of the main title.

i. Insert the wd03_Computer image in front of the Storage & Software paragraph. Use the tight wrapping style and position the graphic to the left of the paragraph. Add the following caption below the graphic: **Figure 1: Manipulate images on a computer**.

j. Insert a hard page break above the Pixels & Resolution section.

k. Insert the Stacks style footer and enter the name of the store followed by the phone number **(555) 977-1650**.

l. Insert the Conservative style header. Replace the document title with your name using the Quick Parts feature. Enter the current date.

m. Make any adjustments to make the information sheet layout look similar to the one pictured.

n. Save the document as Digital Cameras. Print the document.

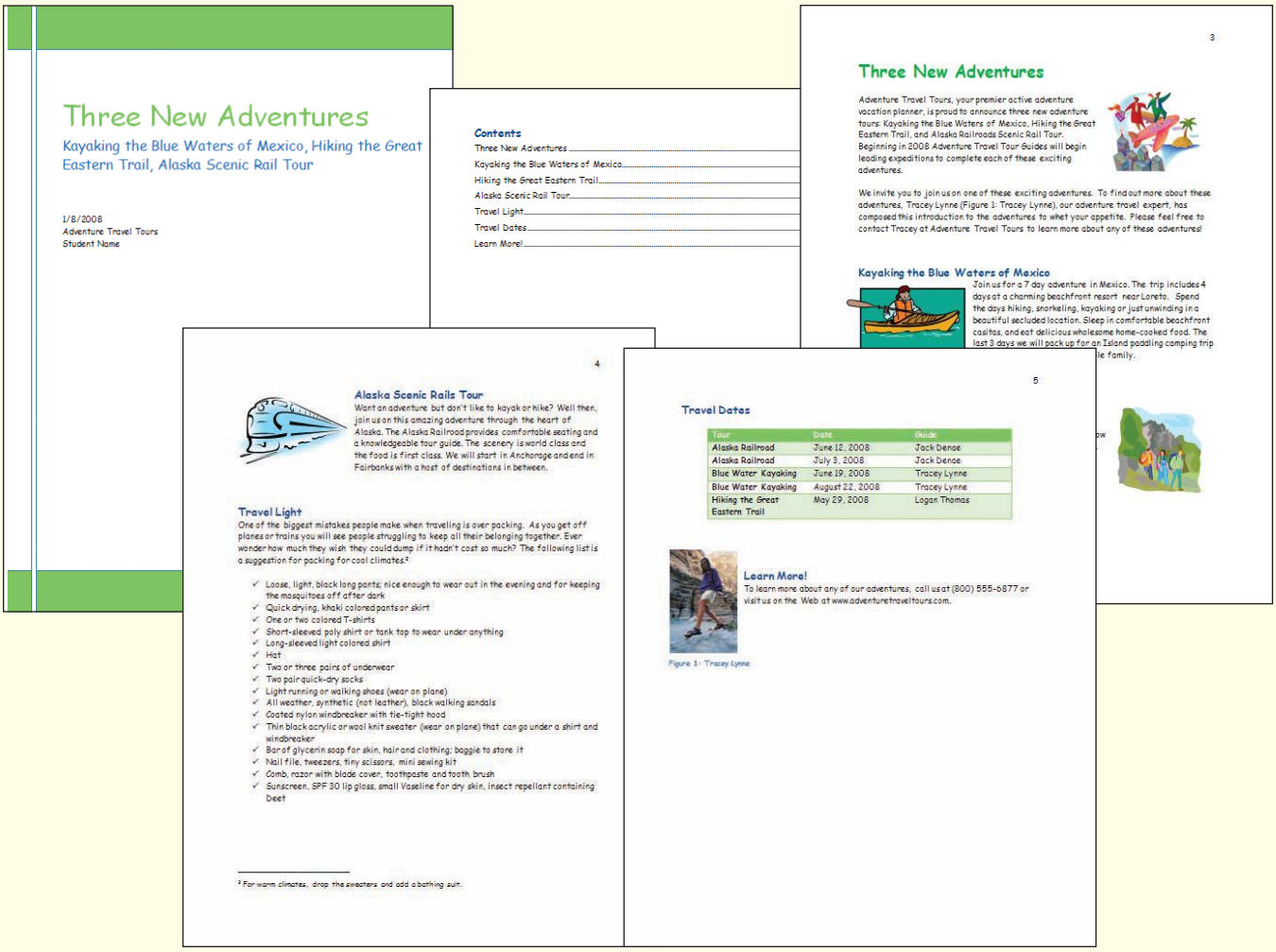
Creating a Brochure ★★★

4. Your next project as marketing coordinator at Adventure Travel Tours is to create a brochure promoting three new adventures. You have already started working on the brochure and have added most of the text content. Because this brochure is for clients, you want it to be both factual and attractive. To do this, you plan to enhance the appearance of the document by adding some finishing formatting touches. Additionally, you want to include a table of contents on the second page of the document, several pictures, and a table of tour dates. Your completed brochure will be similar to that shown here.

a. Open the file wd03_ATT Brochure.

b. Create a cover page using the Pinstripes design. Enter the title **Three New Adventures** and subtitle **Kayaking the Blue Waters of Mexico, Hiking the Great Eastern Trail, Alaska Scenic Rail Tour**. Select the current date. Add your name as the Author and **Adventure Travel Tours** as the Company Name.

c. Create a custom document theme that includes custom colors and fonts for the brochure. Add a coordinating color to the title and subtitle on the cover page.



d. Create a custom heading style for the first topic heading line. Apply Heading 1 styles to the following five topic headings.

e. Insert a new page as page 2 and insert a Contents listing.

f. In this step, you will be inserting several graphics. For each of these, size the graphic appropriately. Wrap the text around the picture using a text wrapping style of your choice.

- Insert the graphic wd03_ATT to the right of the first paragraph.
- Insert the graphic wd03_Kayaking to the left of the first paragraph of the "Kayaking the Blue Waters of Mexico" section.
- Insert the graphic wd03_Hiking to the right of the first paragraph of the "Hiking the Great Eastern Trail" section.
- Insert the graphic wd03_Train to the left of the paragraph in the "Alaska Railroads Scenic Rail Tours" section.

- Insert wd03_Tracey to the left of the last paragraph in the last section of the report.

g. Add the caption **Tracey Lynne** below her photograph.

h. In the second paragraph of the "Three New Adventures" section, after the word "Lynne," add a cross-reference, with the figure number and caption, for the photo of Tracey. Use the split window feature to add the cross-reference.

i. Add a bullet style of your choice to the packing list items.

j. At the end of the first sentence in the section "Hiking the Great Eastern Trail," add the following text as a footnote: **The Appalachian Trail is 2,155 miles long.**

k. At the end of the first paragraph in the "Travel Light" section, add the following text as a footnote: **For warm climates drop the sweaters and add a bathing suit.**

l. Add a new section titled **Travel Dates** before the "Learn More!" section. Apply a Heading 1 style to the section heading. Insert a hard page break above this section.

m. Enter the following information in a table:

Tour	Date	Guide
Hiking the Great Eastern Trail	May 29, 2008	Logan Thomas
Alaska Railroad	June 12, 2008	Jack Denae
Blue Water Kayaking	June 19, 2008	Tracey Lynne
Alaska Railroad	July 3, 2008	Jack Denae
Blue Water Kayaking	August 22, 2008	Tracey Lynne

n. Size the table appropriately. Apply formatting of your choice to the new table. Sort the table in ascending sort order by tour. Center the table.

o. Change the heading for the Alaska railroad tour to **Alaska Scenic Rails Tour**. Insert a hard page break above this section.

p. Update the table of contents and adjust formatting as needed.

q. Add a header that includes a right-aligned page number.

r. Save the document as ATT Brochure. Print the report.

Writing a Report ★★★

5. As a senior trainer at Lifestyle Fitness Club, you are responsible for researching new fitness trends and sharing your findings with other trainers and clients. You have written a Beginner's Guide to Yoga for this purpose. Pages two and three contain the body of your report. You still need to add several pictures, footnotes, and citations to the report. Your completed report will be similar to that shown here.

a. Open the file wd03_Yoga Guide.

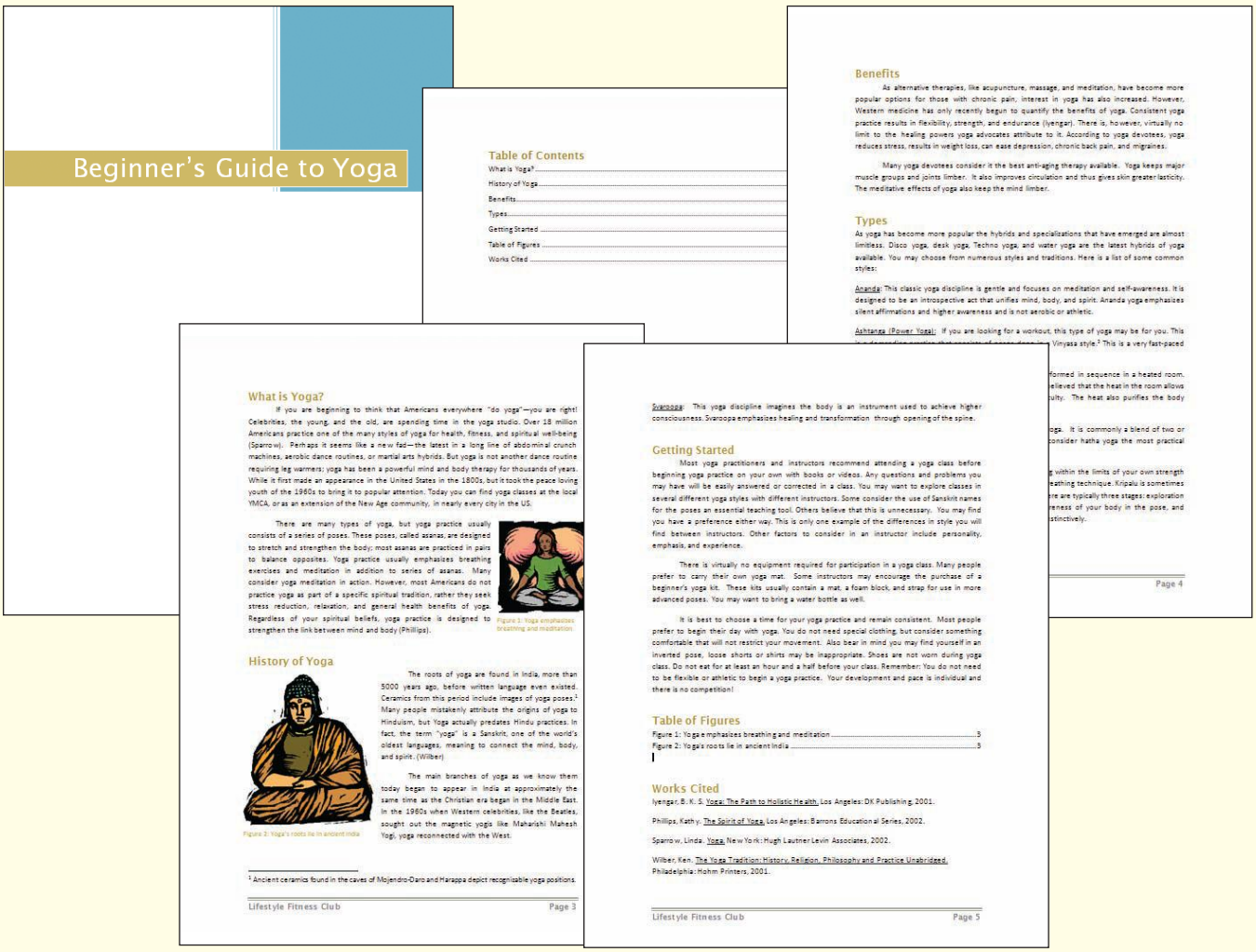
b. Turn off the display of spelling and grammar errors.

c. Create a cover page using a design of your choice. Include the report title, **Beginner's Guide to Yoga** and your name as the author and the current date. Remove any other placeholders.

d. Apply a Heading 1 style to the five topic headings.

e. Create a table of contents on a separate page after the cover page.

f. Insert the graphic wd03_Yoga Pose to the right of the second paragraph in the "What is Yoga" section as shown in the example. Size the graphic appropriately and use the square text wrapping style. Include the figure caption **Yoga emphasizes breathing and meditation** below the graphic.



g. Insert the graphic wd03_History to the left of the first two paragraphs in the "History of Yoga" section as shown in the example. Size the graphic appropriately and use the square text wrapping style. Include the figure caption **Yoga's roots lie in ancient India** below the graphic.

h. Apply a document theme of your choice for the report.

i. In the "History of Yoga" section, move to the end of the second sentence in the first paragraph after the word "poses" and add the following text as a footnote:

Ancient ceramics found in the caves of Mojendro-Daro and Harappa depict recognizable yoga positions.

j. In the "Ashtanga (Power Yoga)" description, move to the end of the second sentence after the word "style" and add the following text as a footnote:

Vinyasa is a flow or sequence of poses.

k. Display the six types of yoga in alphabetical order.

l. Using MLA style, enter citations in the text at the locations specified below using the information in the following four reference sources:

Location	Source
First paragraph, end of third sentence	Sparrowe
End of third paragraph	Wilber
Fifth paragraph, end of third sentence	Iyengar
End of second paragraph	Phillips

Type	Author	Title	Year	City	Publisher
Book	Linda Sparrow	Yoga	2002	New York	Hugh Lautner Levin Associates
Book	B. K. S. Iyengar	Yoga: The Path to Holistic Health	2001	Los Angeles	DK Publishing
Book	Kathy Phillips	The Spirit of Yoga	2002	Los Angeles	Barrons Educational Series
Book	Ken Wilber	The Yoga Tradition: History, Religion, Philosophy and Practice Unabridged	2001	Philadelphia	Hohm Printers

m. At the end of the document, create a table of figures and a Works Cited bibliography. Add a title above the table of figures formatted using the Heading 1 style.

n. Update the table of contents and adjust any formatting in the document as necessary.

o. Use the Alphabet footer design and use the document quick part to add the company name, **Lifestyle Fitness Club**. Do not display the footer on the cover page.

p. Redisplay spelling and grammar errors. Check the document for errors and fix any located errors appropriately.

q. Save the document as Yoga Guide in a new folder named Yoga. Print the report.

on your own

Designing a Flyer ★

1. The Sports Company is introducing a new line of kayaking and equipment. It is holding a weekend promotional event to familiarize the community with paddling equipment. You have already started designing a flyer to advertise the event, but it still needs additional work.

- Open the file wd03_Kayaking Flyer.
- Create the following table of data below the " . . . boat giveaway!" paragraph. Use an appropriate table style.

TIME	EVENT
12:00 p.m.	Freestyle Whitewater Panel Discussion
1:15 p.m.	Kids Canoe Relay Race

1:30 p.m.	**Becky Andersen & Brad Ludden Autographed Boats Charity Auction**
2:30 p.m.	**Drawing for Extrasport Joust Personal Flotation Device**
3:00 p.m.	**Team Dagger Autograph Session**
5:00 p.m.	**Free BBQ dinner**

- Insert the picture wd03_Kayacking from your data files to the right of the text "Meet Team Dagger." Size and position the graphic appropriately.
- Add a caption below the image.
- Add formatting and styles of your choice to the document.
- Make any editing changes you feel are appropriate.
- Enter your name and the date centered in the footer.
- Save the document as Kayaking Flyer.
- Print the document.

Creating a Report from an Outline ★★

2. You are working on the Downtown Internet Café Web site and want to include information about coffee characteristics, roasting, grinding and brewing. You have created an outline that includes information on these topics. Open the file wd03_Coffee Outline and using the Web as your resource, complete the report by providing the body text for the topics in the outline. Include the following features in your report:

- Create a cover page and table of contents.
- Select a Document theme.
- The body of the report should include at least three footnotes and two cross-referenced images.
- Include three citations. Generate a bibliography of your sources.
- Add page numbers to the report, excluding the title page.
- Include your name, file name, and the date in the footer.
- Save the report as Coffee Report in a new folder. Preview and print the title page, the first page, and the works cited page.

Preparing for a Job Search ★★

3. You are graduating next June and plan to begin your job search early. To prepare for getting a job, locate three sources of information on how to conduct a job search. Use your school's career services department, the library, newspapers, magazine articles, and the Web as possible sources. Begin by creating an outline of the topics you will include in the report. Using the outline, write a brief report about your findings. Include the following features in your report:

- A cover page that displays the report title, your name, and the current date.
- A table of contents page.
- The body of the paper should include at least two levels of headings.
- A minimum of three citations and three footnotes.
- A header that includes your name and page numbers on the top-right corner of every page (excluding the title page).
- At least one picture with a caption and cross-reference.

- A table that compares the jobs you are interested in and a table caption.
- A table of figures that has a formatted title that will appear in the table of contents.
- A bibliography of your reference sources. Format the bibliography appropriately.
- Include a page title and format it to appear in the table of contents.

Save the report as Job Search in a new folder. Print the document.

Writing a Research Paper ★★★

4. Create a brief research report (or use a paper you have written in the past) on a topic of interest to you. The paper must include the following features:

- A cover page that displays the report title, your name, and the current date.
- A table of contents.
- At least two levels of headings and a minimum of three footnotes and three citations.
- At least one picture with a caption and cross-reference.
- A table of information with a caption.
- A table of figures.
- A bibliography page of your reference sources.
- A header and/or footer that displays the page numbers, file name, and date. Do not include this information on the cover page or table of contents page.

Save the document as Research in a new folder. Print the cover page, table of contents page, and the last page of the report.

Researching Virus Hoaxes ★★★

5. There are a lot of real computer viruses that can wreak havoc with your computer. This makes virus hoaxes even more annoying, as they may lead some users to ignore all virus warning messages, leaving them vulnerable to a genuine, destructive virus.

Use the Web as a resource to learn more about virus hoaxes. Write a brief report defining virus hoaxes. Describe three hoaxes, how they are perpetuated, and the effect they could have if the receiver believes the hoax. The report must include the following features:

- A cover page that displays the report title, your name, and the current date.
- A table of contents.
- The body of the paper should include at least two levels of headings and a minimum of two footnotes and three citations.
- At least one picture with a caption and cross-reference.
- A table of information with a caption.
- A table of figures.
- A bibliography page of your reference sources.
- The page numbers, file name, and date in a header and/or footer. Do not include this information on the cover page or table of contents page.

Save the document as Computer Viruses. Print the document.

Working Together 1: Word 2007 and Your Web Browser

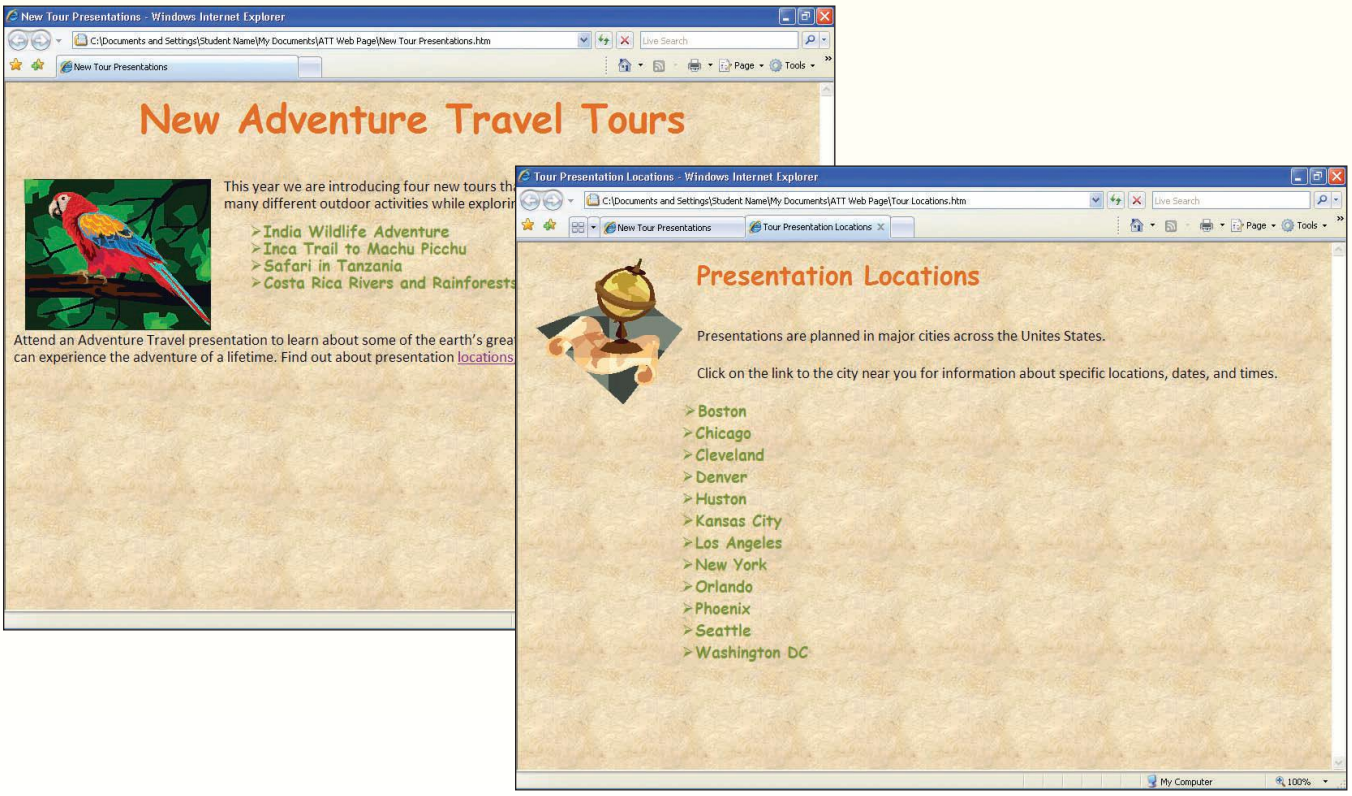
Case Study

Adventure Travel Tours

The Adventure Travel Tours Web site is used to promote its products and broaden its audience of customers. In addition to the obvious marketing and sales potential, it provides an avenue for interaction between the company and the customer to improve customer service. The company also uses the Web site to provide articles of interest to customers. The articles, which include topics such as travel background information and descriptions, changes on a monthly basis as an added incentive for readers to return to the site.

You want to use the flyer you developed to promote the new tours and presentations on the Web site. To do this, you will use Word 2007's Web-editing features that help you create a Web page quickly and easily. While using the Web-editing features, you will be working with Word and with a Web browser application. This capability of all 2007 Microsoft Office applications to work together and with other applications makes it easy to share and exchange information between applications. Your completed Web pages are shown here.

Note: The Working Together tutorial is designed to show how two applications work together and to present a basic introduction to creating Web pages.



Saving a Word Document as a Web Page

You want to create a Web page to be used on the company's Web site. A **Web page** is a document that can be used on the World Wide Web (WWW). The Web page you will create will provide information about the tour presentations. Word offers two ways to create or **author** Web pages. One way is to start with a blank Web page and enter text and graphics much as you would a normal document. Another is to quickly convert an existing Word document to a Web page.

Because the tour flyer has already been created as a Word document and contains much of the information you want to use on the Web page, you will convert it to a Web page document. You made a couple of changes to the flyer, giving it a title that is more appropriate for the Web page and removing the banner. You will use the modified version of the flyer as the basis for the Web page.

1. **Start Word 2007.**
2. **Open the file** wdwt_Presentations **from the appropriate location.**

Your screen should be similar to Figure 1

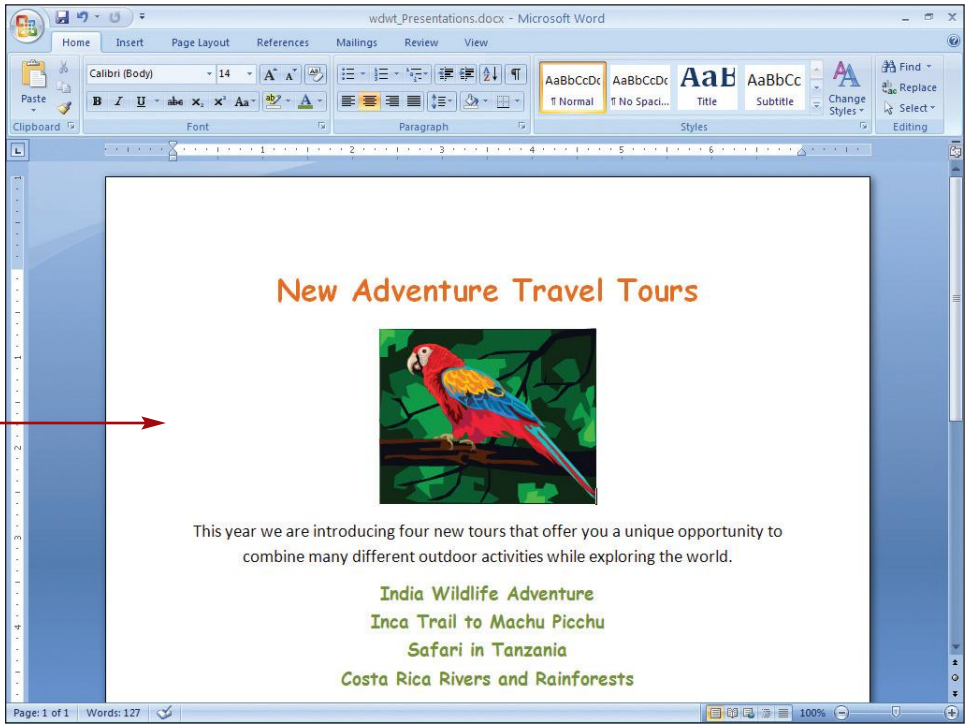


Figure 1

Word converts a document to a Web page by adding HTML coding to the document. **HTML (HyperText Markup Language)** is a programming language used to create Web pages. HTML commands control the display of information on a page, such as font colors and size, and the way an item will be processed. HTML also allows users to click on hyperlinks and

jump to other locations on the same page, other pages in the same site, or other sites and locations on the WWW. HTML commands are interpreted by the browser software you are using. A **browser** is a program that connects you to remote computers and displays the Web pages you request.

When a file is converted to a Web page, the HTML coding is added and it is saved to a new file with an .html file extension. You want to save the Web page using the file name New Tour Presentations in a new folder.

2. **Click Office Button and choose Save as.**
- **If necessary, change the location to save to the appropriate save location.**
- **Create a new folder named ATT Web Page.**
- **Change the file name to New Tour Presentations.**
- **From the Save as Type drop-down list, choose Web Page.**

Your screen should be similar to Figure 2

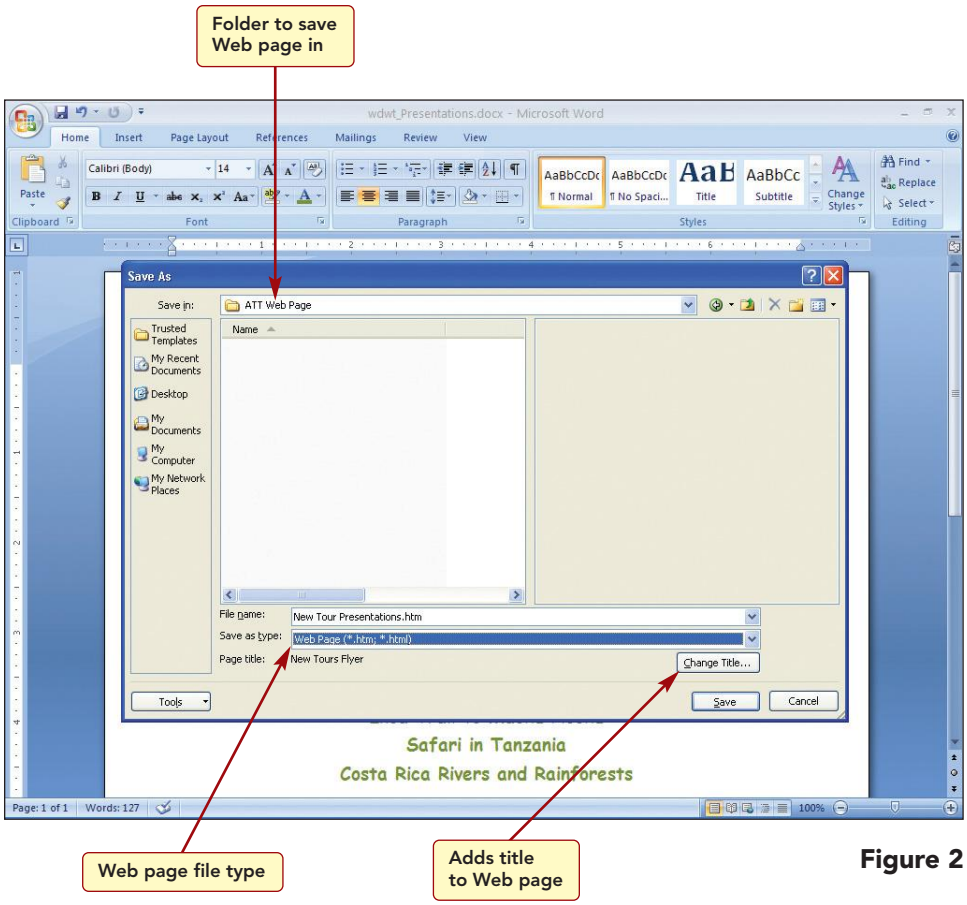


Figure 2

You also need to provide a title for the page. This is the text that will appear in the title bar of the Web browser when the page is displayed. You want the title to be the same as the file name.

3. Click Change Title... .
   - Change the title to **New Tour Presentations**.
   - Click OK .
   - Click Save .

Your screen should be similar to Figure 3

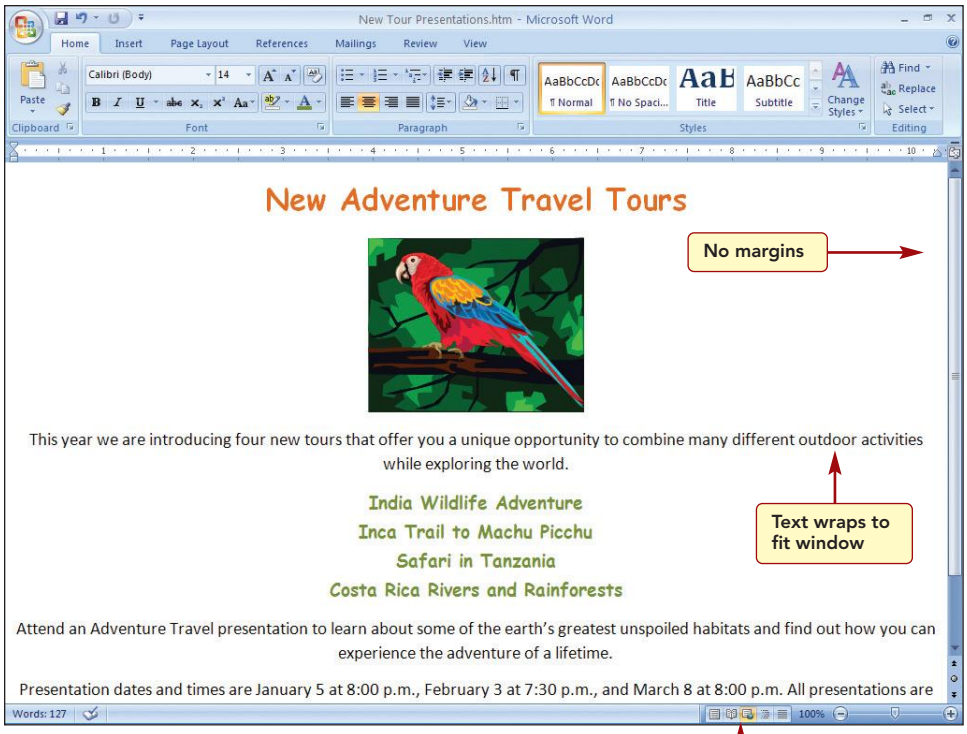


Figure 3

Additional Information

Some formatting features, such as emboss and shadow effects, are not supported by HTML or other Web browsers and are not available when authoring Web pages.

The flyer has been converted to an HTML document and is displayed in Web Layout view. This view displays the document as it will appear if viewed using a Web browser. This document looks very much like a normal Word document. In fact, the only visible difference is the margin settings. A Web page does not include margins. Instead, the text wraps to fit the window space. However, the formatting and features that are supported by HTML, in this case the paragraph and character formatting such as the font style, type size, and color attributes, have been converted to HTML format.

Making Text Changes

Next, you want to change the layout of the Web page so that more information is displayed in the window when the page is viewed in the browser. To do this, you will delete any unnecessary text and change the paragraph alignment to left-aligned.

1. **Delete the last two paragraphs.**
2. **Left-align all the text below the picture.**
3. **Add bullets preceding the list of four tours.**
4. **Increase the font size of the title to 36 points.**
5. **Clear the highlight.**

Your screen should be similar to Figure 4

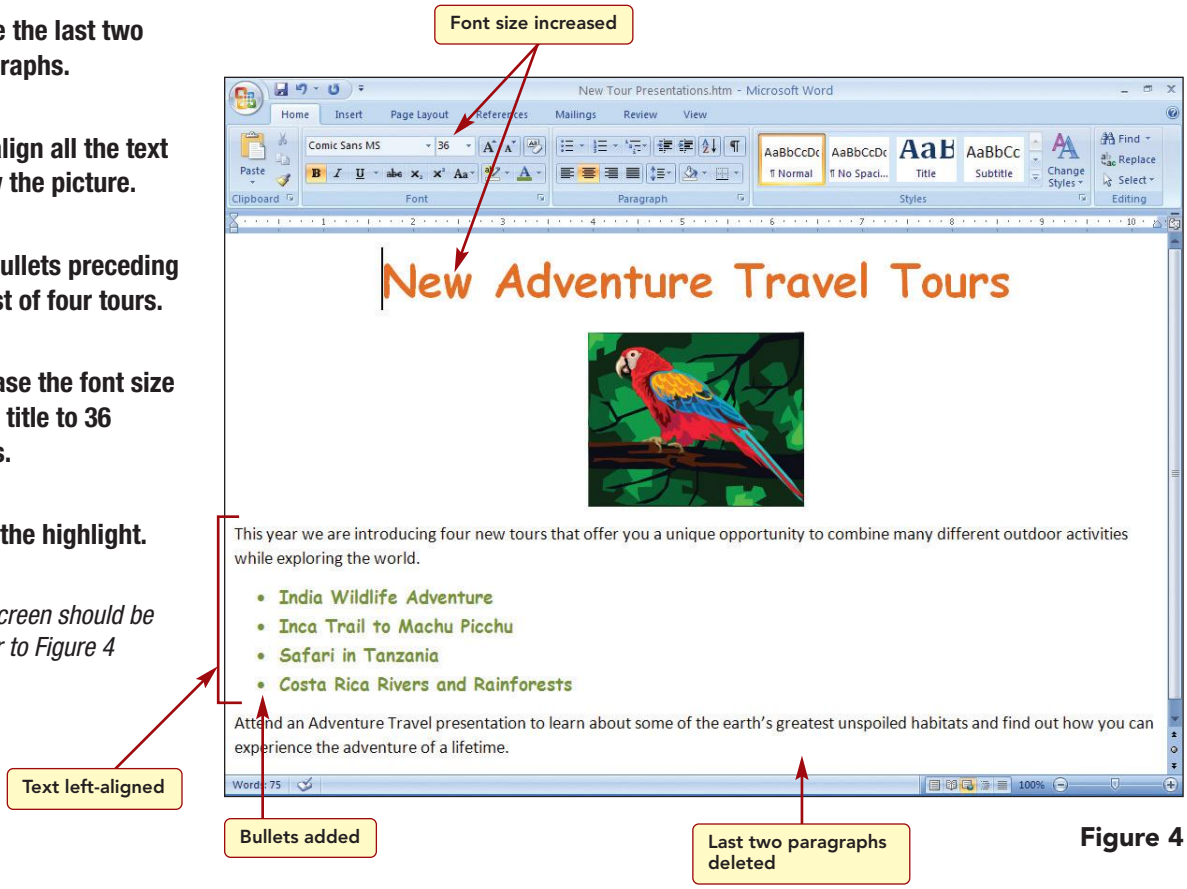


Figure 4

Now, all the information is visible within the window.

Changing the Picture Layout

Additional Information
When graphic files are added to a Web page, they are copied to the same folder location as the Web page. The graphic files must always reside in the same location as the HTML document file in which they are used.

Next, you want to move the picture to the left edge of the window and wrap the text to the right around it. Unlike a normal Word document, a Web page document does not have pictures and other graphic elements embedded in it. In an HTML file, each graphic object is stored as a separate file that is accessed and loaded by the browser when the page is loaded. Word creates a link to the object's file in the HTML file. The link is a **tag** that includes the location and file name of the graphic file.

Additionally, graphics are inserted into a Web page document as inline objects. You can change the wrapping style and move, size, and format graphic objects in a Web page just like embedded objects in a Word document.

1. **Click on the picture to select it.**
2. **Drag the picture to the "T" in "This" at the beginning of the first paragraph.**
3. **From the Picture Tools Format tab, click** Text Wrapping **and choose Square.**

Your screen should be similar to Figure 5

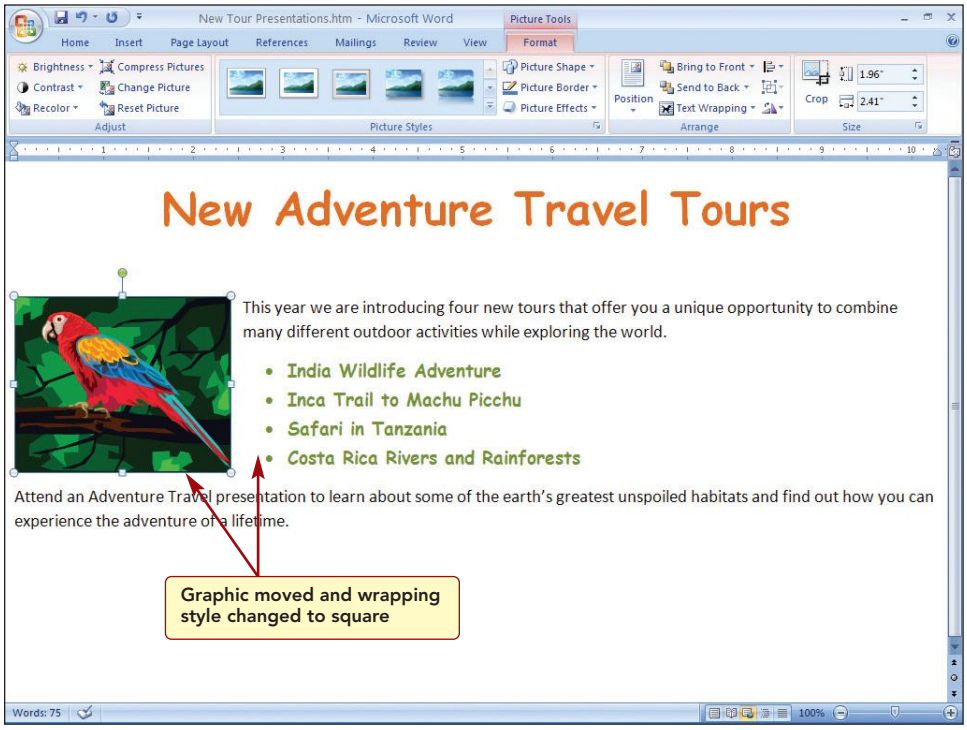


Figure 5

Next, you will make a few other adjustments to improve the appearance.

Applying Page Color

Because color and design are important elements of Web pages, you can add a background color to the Web page. You think a light blue may look good.

1. **Deselect the graphic.**
2. **Open the Page Layout tab.**
3. **Click Page Color in the Page Background group.**
4. **Point to several different shades of blue to see how they look in Live Preview.**

Additional Information
The gallery of colors associated with the default Office theme is displayed.

Your screen should be similar to Figure 6

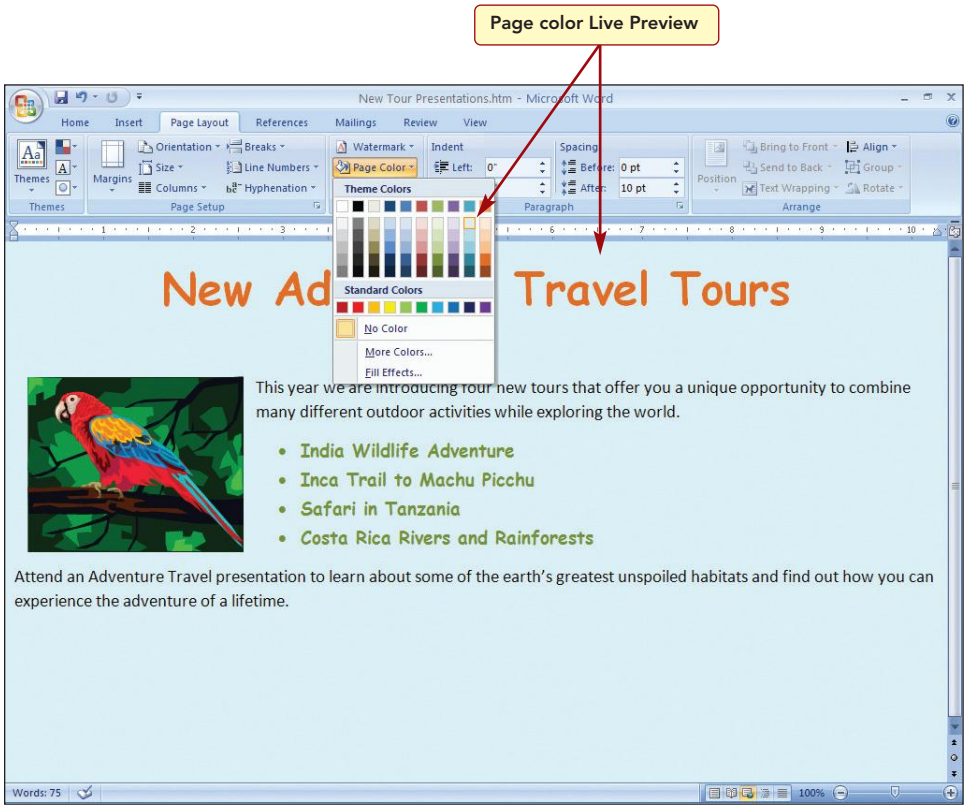


Figure 6

You do not really like how any of these colors look and decide to try a fill effect instead. Fill effects include gradient color, texture, patterns, or pictures. These effects should be used in moderation—you want them to enhance, not detract from, the content. You will try a blue gradient effect first.

2. **Choose Fill Effects.**
   - **Choose One color.**
   - **From the Color1 drop-down list, select Blue, Accent 1, Lighter 40%**
   - **Drag the shade slider closer to the Light side (see Figure 7).**
   - **If necessary, select Horizontal in the Shading styles options.**
   - **Select the top to bottom variant (upper-right square).**

Your screen should be similar to Figure 7

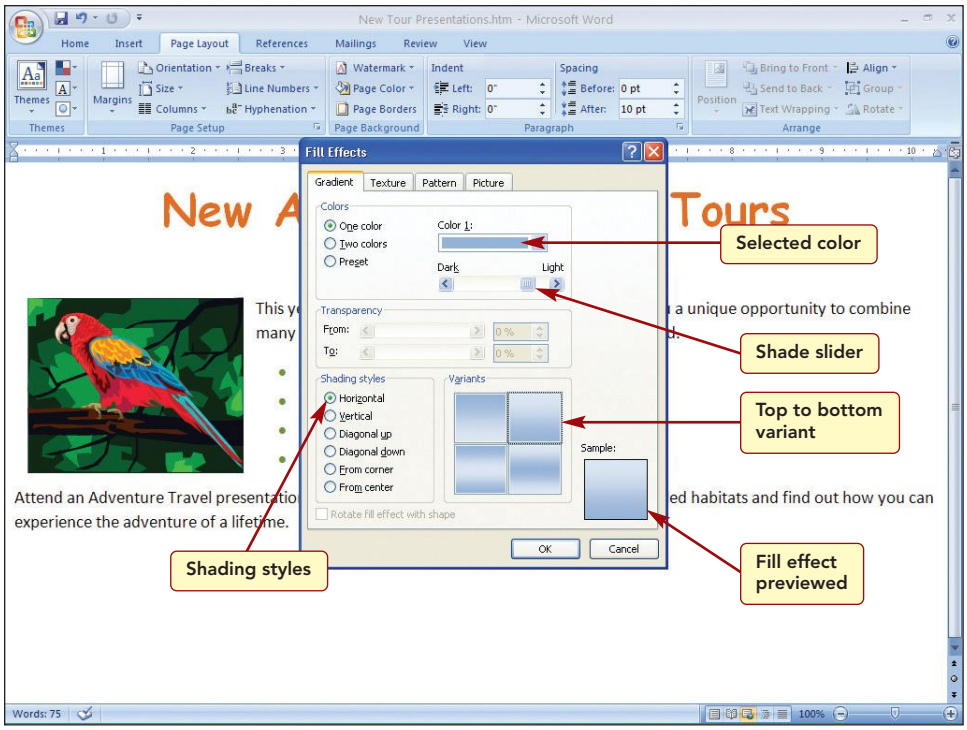


Figure 7

The Sample area shows how your color selections will appear. Now you are ready to apply these settings to the page.

3. **Click** OK **.**

Your screen should be similar to Figure 8

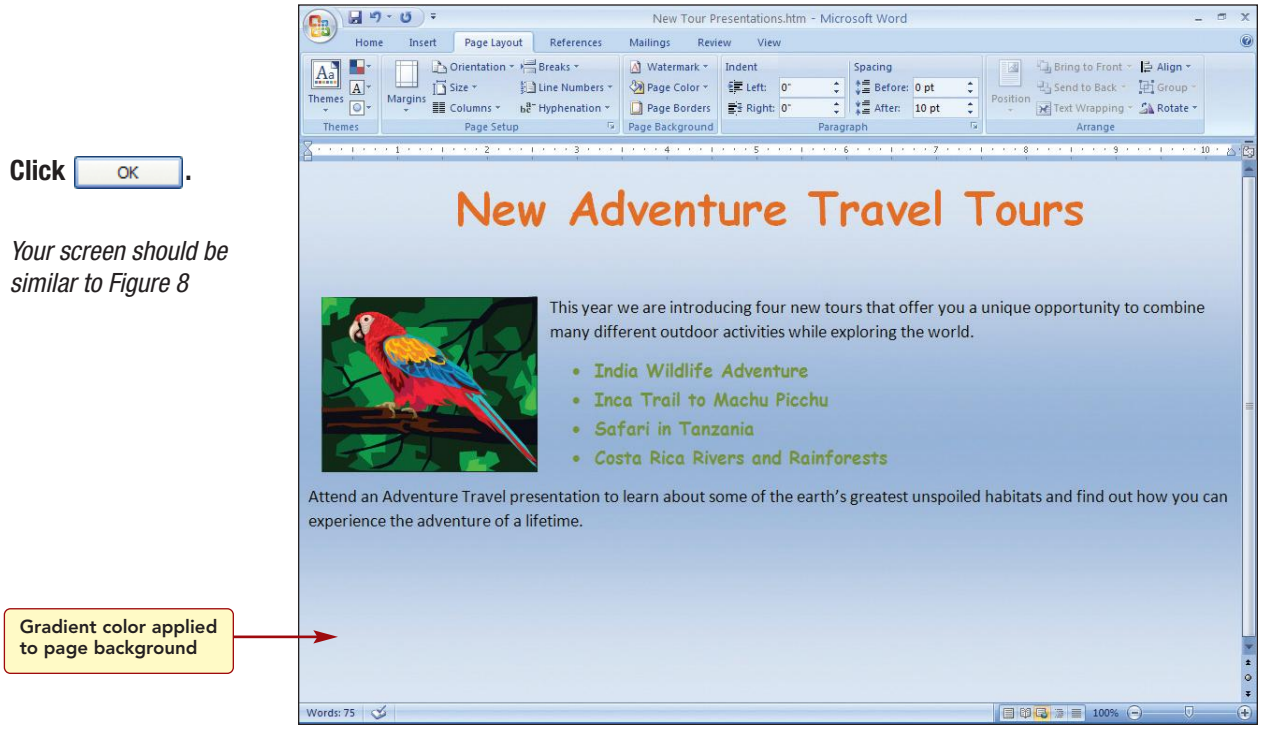


Figure 8

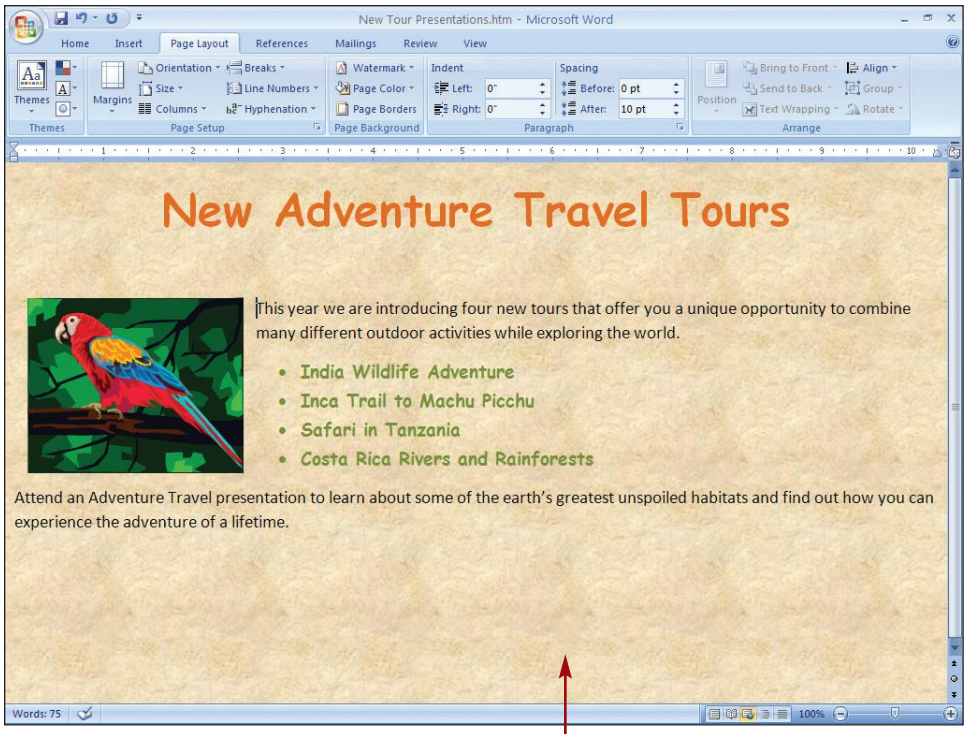
Although adding gradient color shading looks nice, you still are not satisfied. You will try a texture instead.

4. Click Page Color.
   - Choose Fill Effects.
   - Open the Texture tab.
   - Select the Stationery texture (fourth row, fourth column).

Having Trouble?
When you click on a texture, the texture name appears below the list box.

   - Click OK.

Your screen should be similar to Figure 9



Texture fill effect applied to page background

Figure 9

You like the more natural effect of this background.

Changing Bullet Styles

The last enhancement you want to make is to change the bullet style.

1. **Select the four bulleted items.**
2. **Open the Home tab.**
3. **Open the Bullets drop-down gallery.**
4. **Choose from the Bullet Library.**
5. **Clear the selection.**
6. **Save the changes you have made to the Web page.**

Your screen should be similar to Figure 10

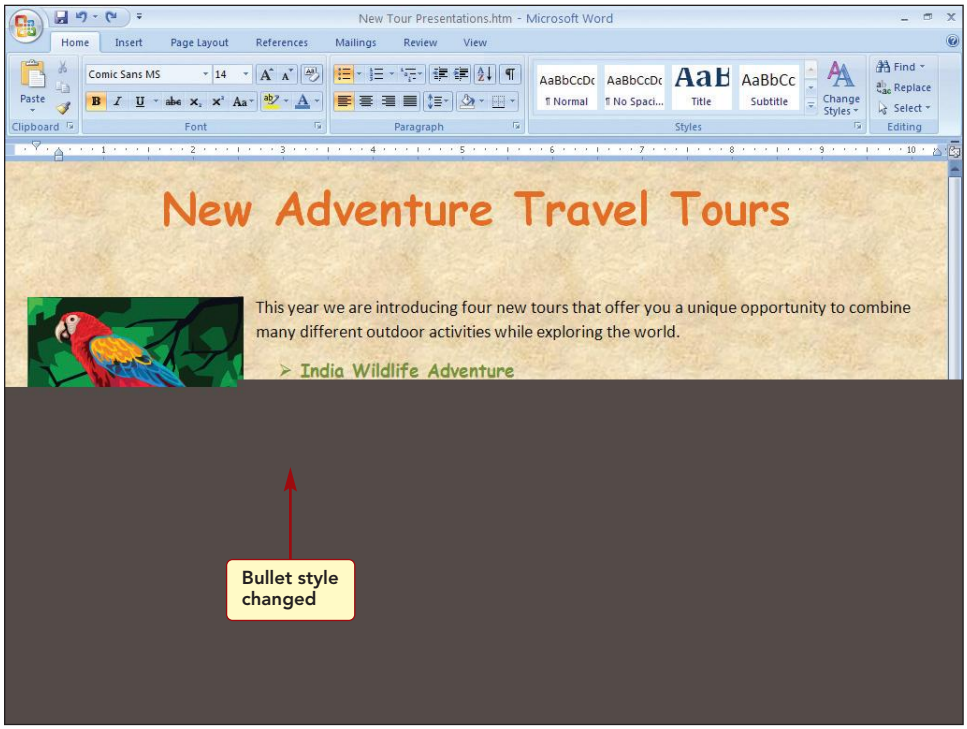


Figure 10

Additional Information

Many more graphic bullets are available in the Web Elements folder of the Clip Organizer.

Creating a Hyperlink

Next, you want to create another Web page that will contain a list of presentation locations. You will then add a hyperlink to this information from the New Tour Presentations page. As you have learned, a hyperlink provides a quick way to jump to other documents, objects, or Web pages. Hyperlinks are the real power of the WWW. You can jump to sites on your own system and network as well as to sites on the Internet and WWW.

The list of tour locations has already been entered as a Word document and saved as a file.

1. **Open the file** wdwt_Locations.
2. **Save the document as a Web page to the ATT Web Page folder with the file name Tour Locations and a page title of Tour Presentation Locations.**
3. **Apply the same bullet style to this page.**
4. **Apply the Stationery texture background page color.**
5. **Save the page again.**

Your screen should be similar to Figure 11

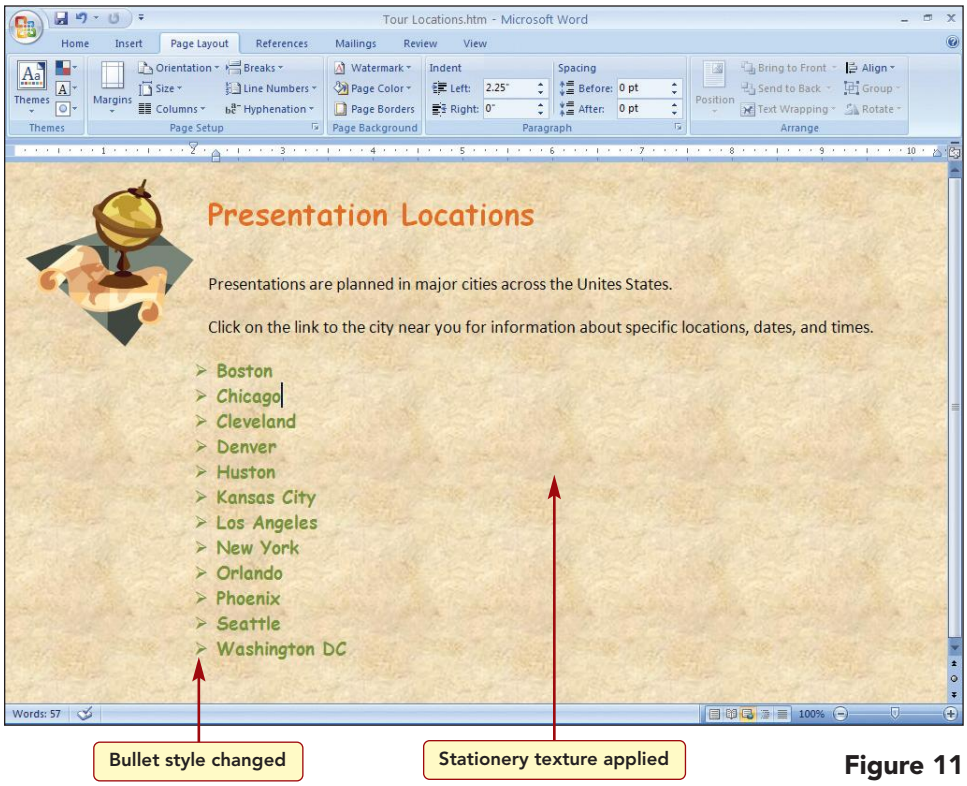


Figure 11

Now you are ready to create the hyperlink from the New Tour Presentations page to the Tour Locations page.

2. **Switch to the New Tour Presentations window.**

- **Add the following text to the end of the last paragraph: Find out about presentation locations, dates, and times.**
- **Select the text "locations, dates, and times."**
- **Open the Insert tab.**
- **Select** Hyperlink **from the Links group.**

Another Method
The keyboard shortcut is Ctrl + K.

Your screen should be similar to Figure 12

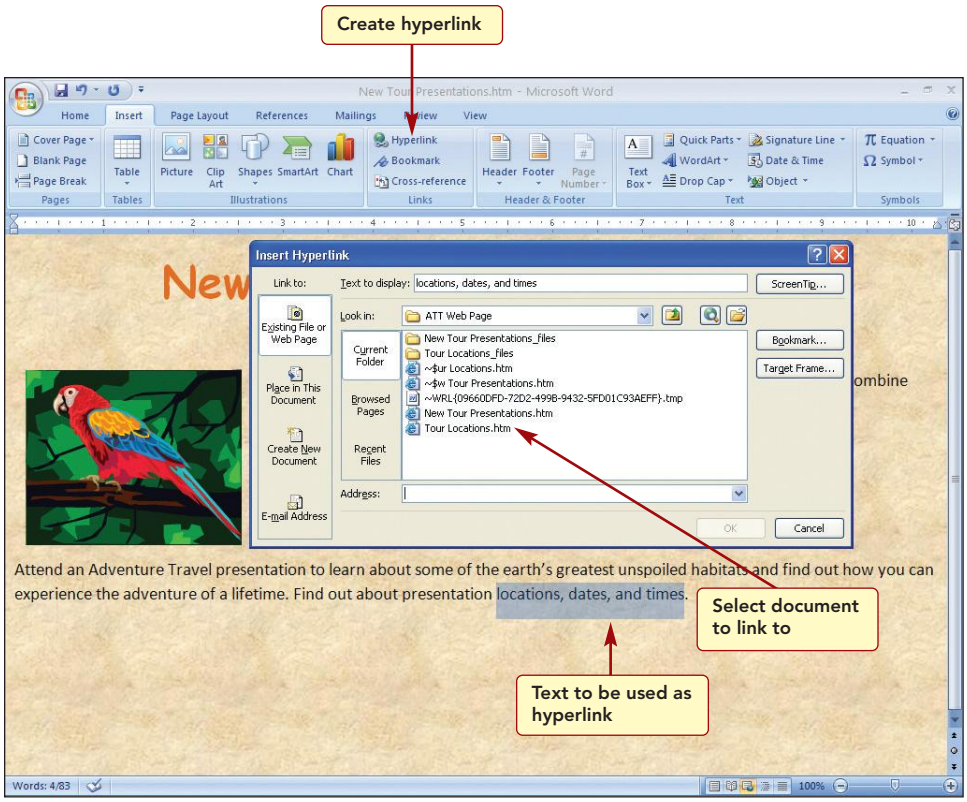


Figure 12

From the Insert Hyperlink dialog box, you need to specify the name of the document you want the link to connect to.

3. **Select** Tour Locations.htm **from the file list.**

- **Click** OK.
- **Save the document.**

Your screen should be similar to Figure 13

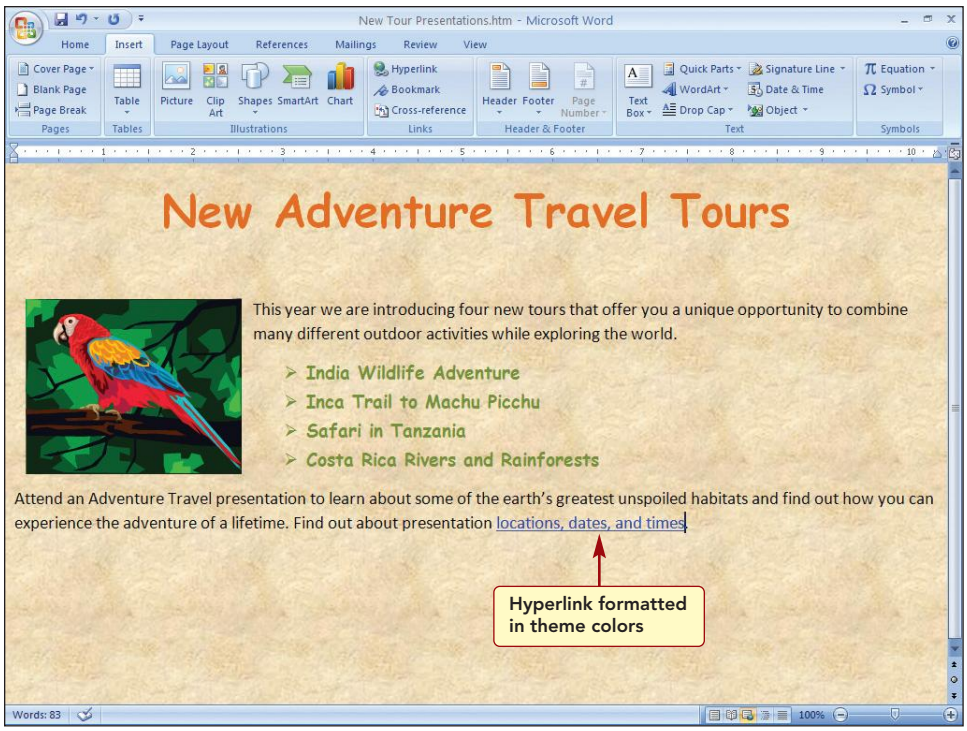


Figure 13

The selected text appears as a hyperlink in the design colors specified by the theme.

Next, you will use the hyperlink to display the Presentation Locations document.

4 **Hold down Ctrl and click the hyperlink.**

Your screen should be similar to Figure 14

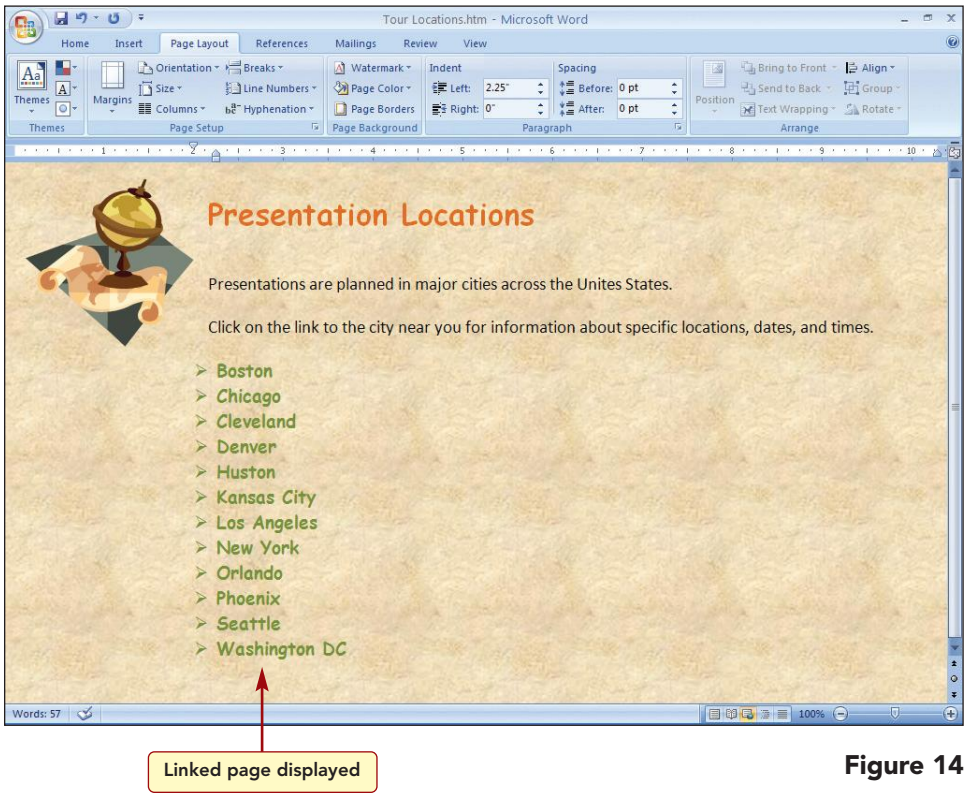


Figure 14

Because the Locations document is already open in a window, clicking the hyperlink simply switches to the open Word window and displays the page. You plan to add hyperlinks from each location to information about specific location dates and times at a later time.

Previewing the Page

To see how your Web page will actually look when displayed by your browser, you can preview it.

Note: The following figures will display Internet Explorer 7, If you are using a different browser or a different version of Internet Explorer, your screens will look different. Additionally, you will need to substitute the equivalent procedures for your browser in the following steps.

1. **Open your Web browser.**
2. **If necessary, maximize the browser window.**
3. **Open the Location drop-down menu and change to the location containing the ATT Web Page folder.**
4. **Choose** New Tour Presentations.htm **from the ATT Web page folder.**

Your screen should be similar to Figure 15

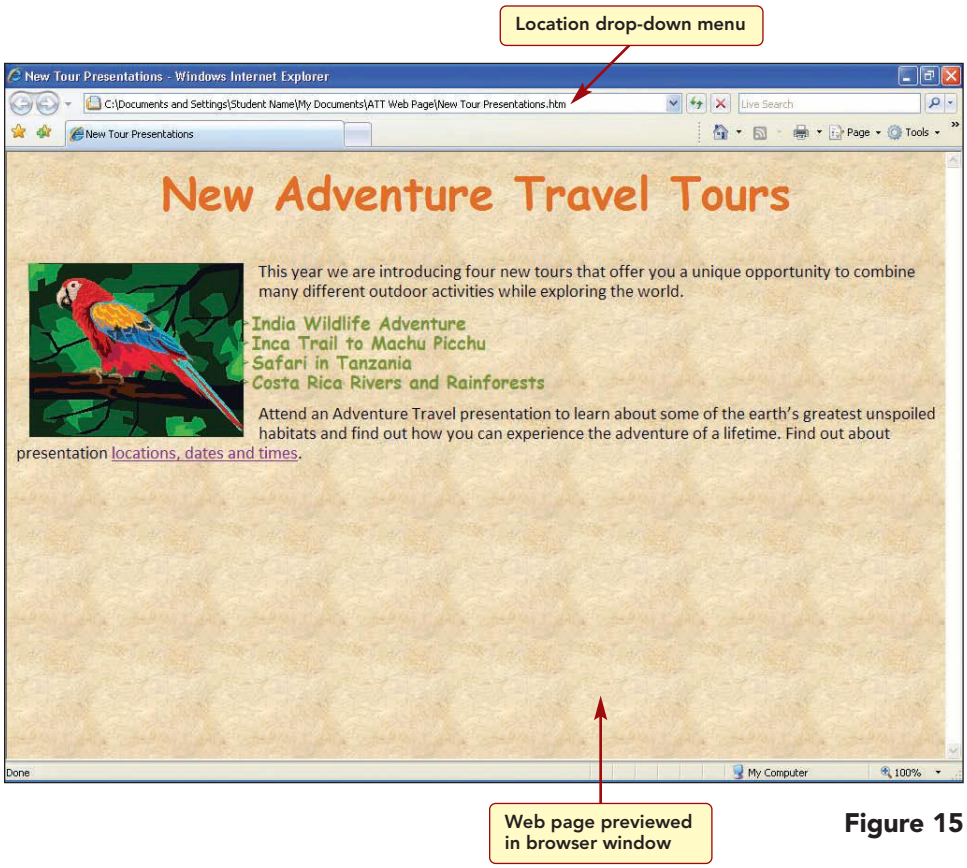


Figure 15

The Web page you created is displayed in the browser window. Sometimes the browser may display a page slightly differently from the way it appears in Web Page view. In this case, the bulleted list overlaps the picture and the last paragraph wraps to the side of the picture. To stop this from happening, you will insert a special text wrapping break that is used in Web pages to separate text around objects.

2. **Switch to the New Tour Presentation document in the Word 2007 application window.**

- **Select the bulleted list of tours and drag the left indent marker to the 3.25-inch position on the ruler.**
- **Move to the beginning of the last paragraph, before the word Attend.**
- **Click Breaks in the Page Setup group of the Page Layout tab.**
- **Choose Text Wrapping.**
- **Save the document.**
- **Turn on the display of formatting marks.**

Your screen should be similar to Figure 16

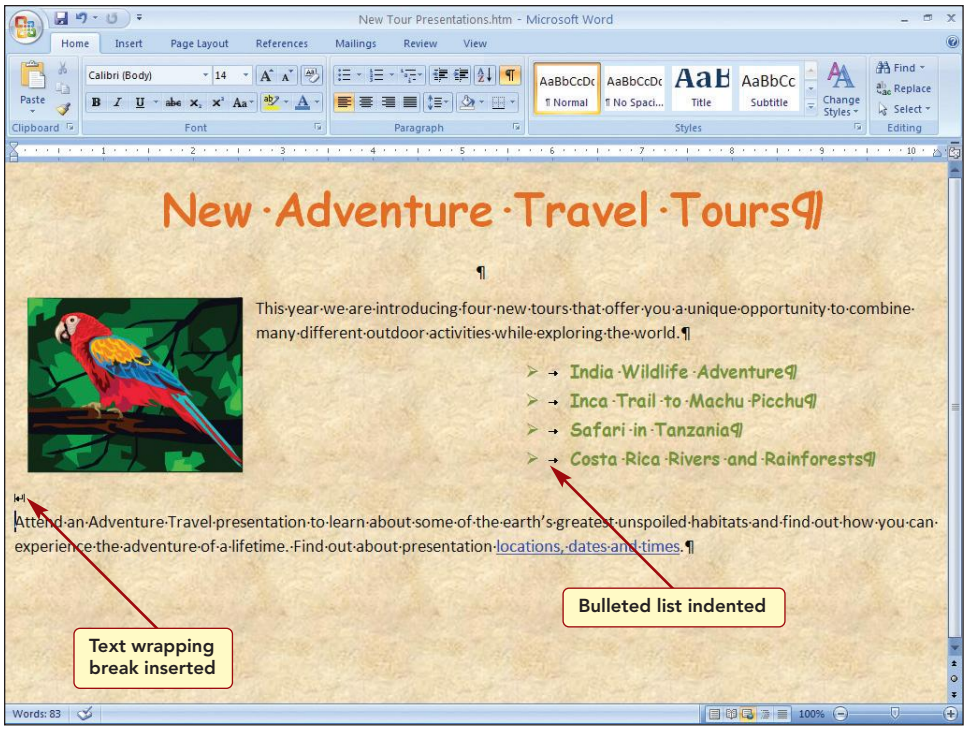


Figure 16

Although the bulleted list does not display as you want it in the Word document, the list wll indent appropriately when viewed in the browser. The text wrapping break that was inserted before the paragraph stopped the text following the break from wrapping around the object. The text wrapping break character ↵ is not visible unless you display formatting marks.

3 **Switch to the browser window and click the Refresh button to see the revised version of the Web page.**

Additional Information

In Internet Explorer 7, the Refresh button is .

Your screen should be similar to Figure 17

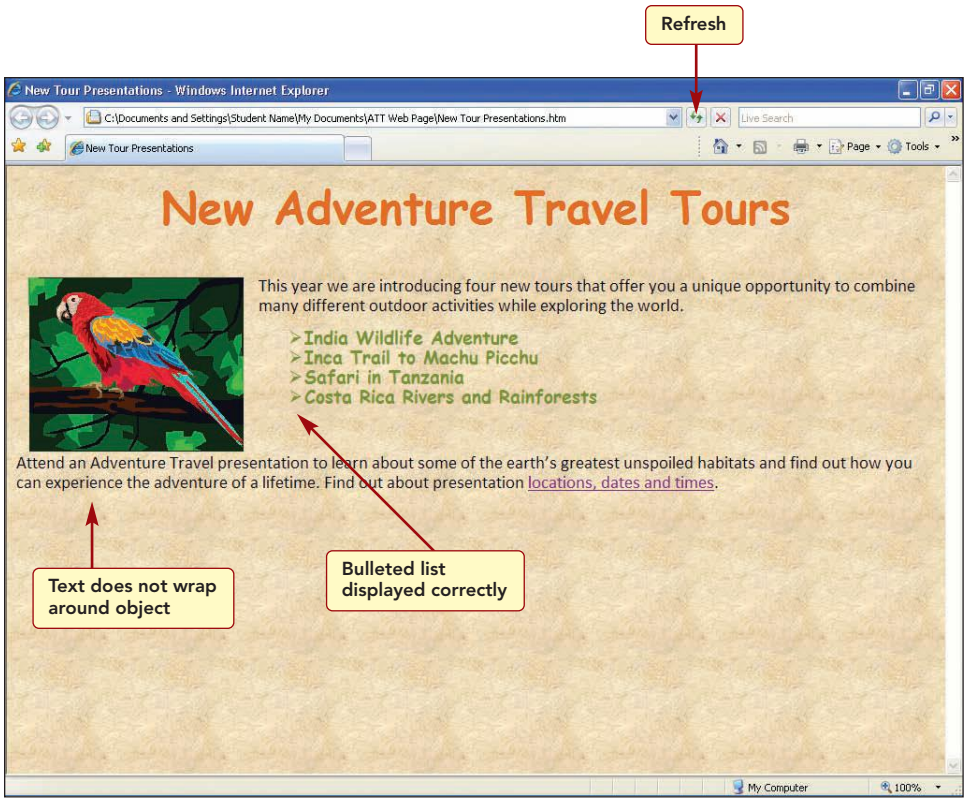


Figure 17

Inserting the text wrapping break stopped the text in the last paragraph from wrapping around the object. Next, you will use the hyperlink to open the Presentation Locations Web page in the browser.

4. **Click on the hyperlink.**

If necessary, open the Tour Presentation Locations tab.

Your screen should be similar to Figure 18

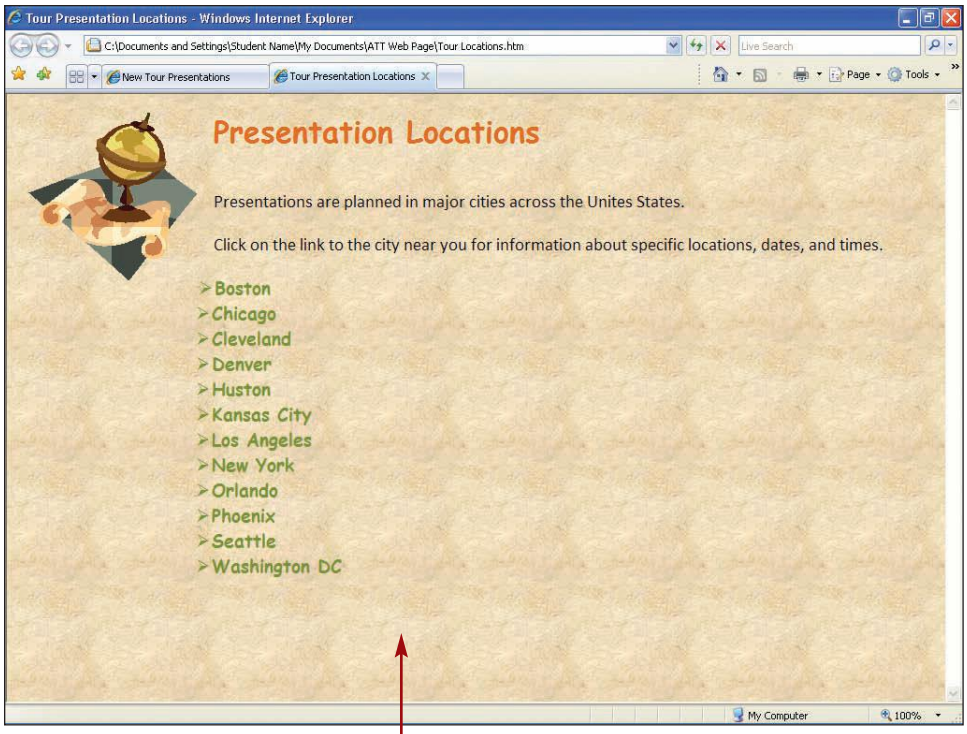


Figure 18

This page looks fine and does not need any additional formatting.

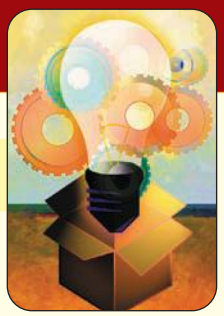
5. **Click in the title bar to exit the browser program.**

Close both documents and exit Word 2007.

Making a Web Page Public

Now that you have created Web pages, you need to make them available on the Internet for others to see them. The steps that you take to make your pages public depend on how you want to share them. There are two main avenues: on your local network or intranet for limited access by people within an organization or on the Internet for access by anyone using the WWW. To make pages available to other people on your network, save your Web pages and related files, such as pictures, to a network location. To make your Web pages available on the WWW, you need to install Web server software on your computer or to locate an Internet service provider that allocates space for Web pages.

Lab Review



WORKING TOGETHER 1

Word 2007 and Your Web Browser

key terms

author WDWT1.2
browser WDWT1.3
HTML (HyperText Markup Language) WDWT1.2
tag WDWT1.6
Web page WDWT1.2

MCAS skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2 MCAS Certification Guide for a complete list of the skills that were covered in this lab.

command summary

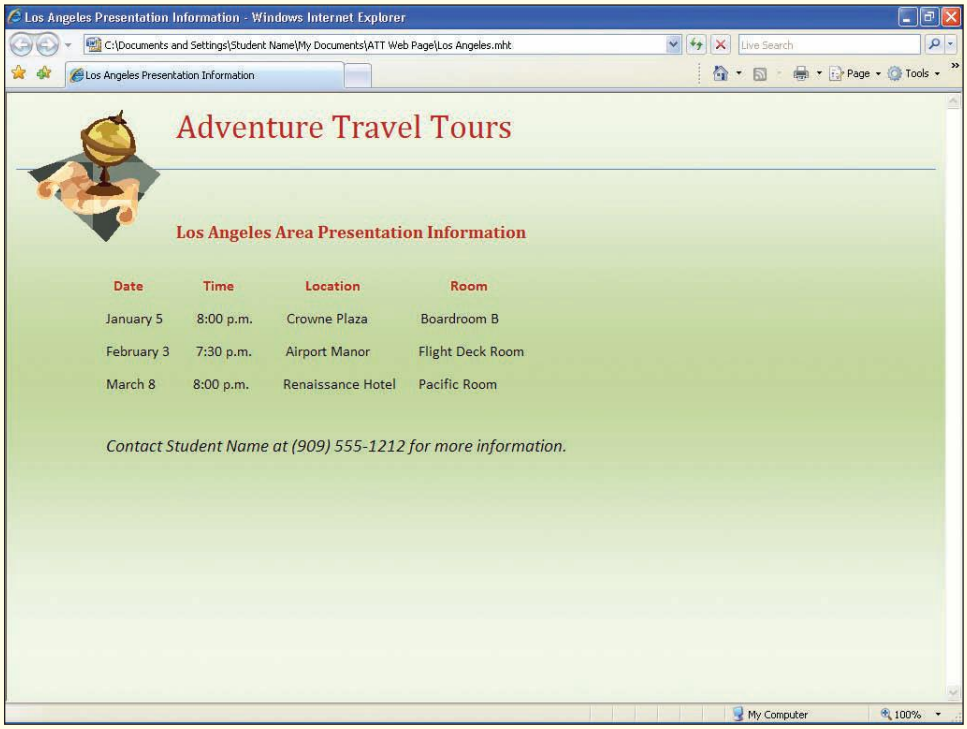
Command	Shortcut	Action
Office Button		
Save/Save as Type/Web Page		Saves file as a Web page document
Insert tab		
Links group		
Hyperlink	Ctrl + K	Inserts hyperlink
Page Layout tab		
Page Setup group		
Breaks/Text Wrapping		Stops text from wrapping around objects in a Web page
Page Background group		
Page Color		Adds selected color to page background
Page Color/Fill Effects		Adds selected color effect to page background

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Adding a New Web Page ★

1. You want to continue working on the Web pages about the new tour presentations for the Adventure Travel Web site. Your next step is to create links from each location on the Presentation Locations Web page to information about each location's presentation date and times. Your completed Web page for the Los Angeles area should be similar to the one shown here.



   a. In Word, open the Web page file Tour Locations you created in this lab.

   b. Open the document wdwt_Los Angeles. Save the document as a Web page to the ATT Web Page folder with the file name Los Angeles and a page title of **Los Angeles Presentation Information**.

   c. Change the page color to a gradient fill effect of your choice. Change the first title line to the Title style and the second title line to a Heading 1 style. Change the title lines to a color of your choice.

   d. Increase the font size of the table to 12 points. Add color to the table headings. Enhance the Web page with any features you feel are appropriate.

   e. Two lines below the table, add the text **Contact [your name] at (909) 555-1212 for more information.** Apply the Emphasis style to this line and increase the font size to 14 points.

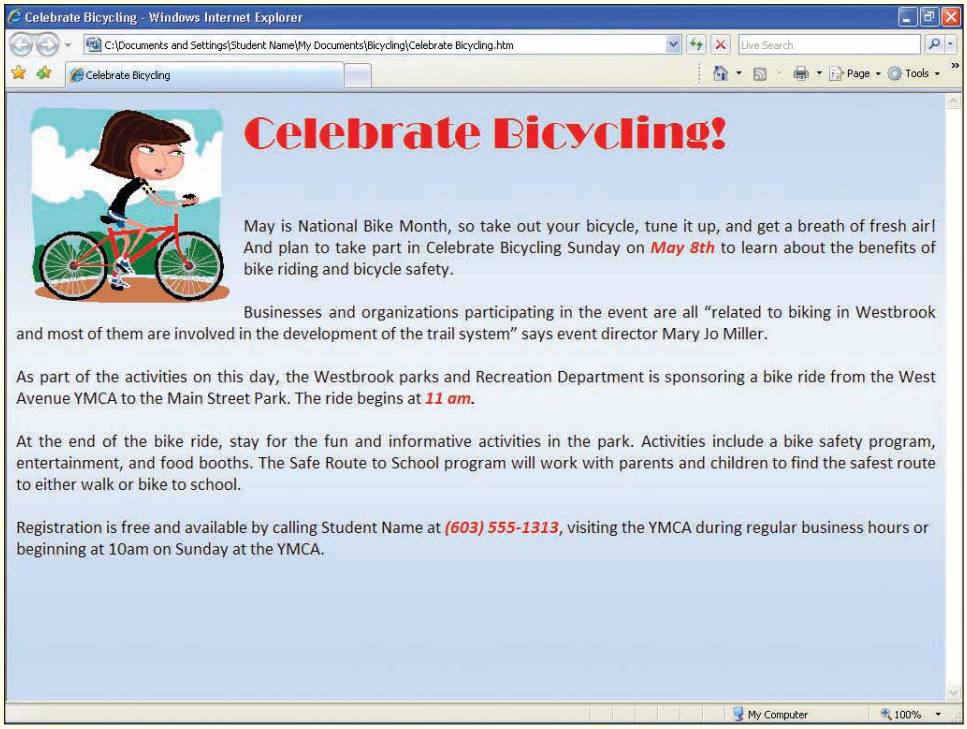
   f. On the Tour Locations page, create a link from the Los Angeles text to the Los Angeles page. Test the link.

   g. Resave both Web pages and preview them in your browser. Print the Los Angeles Web page.

   h. Exit the browser and Word.

Converting a Flyer to a Web Page ★★

2. The Westbrook Parks and Recreation Department has asked you to modify the Celebrate Bikes article you created and convert it into a Web page to add to the Web site. Your completed Web page should be similar to the one shown here.



a. Open the file Bike Event you created in Step-by-Step Exercise 2 in Lab 1.

b. Convert the article to a Web page and save it as Celebrate Bicycling in a new folder. Include an appropriate page title.

c. Apply a page background color effect of your choice.

d. Change the text wrapping style of the graphic to square. Move the graphic to the left of the title. Left-align the title and increase the size of the title to 36 points. Size and position the graphic appropriately.

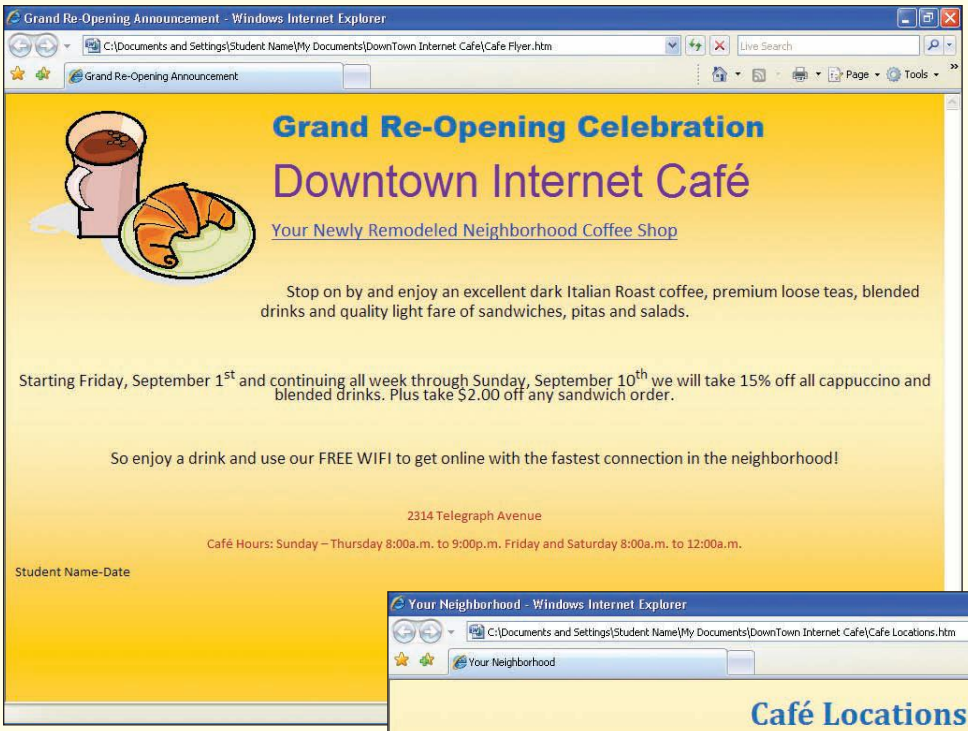
e. Delete your name and the date from the document. Add **[Your name] at** before the phone number in the last line.

f. Save the Web page. Preview the page in your browser. Adjust the layout as needed. Close your browser. Resave the Web page.

g. Print the Web page.

Advertising on the Web ★★★

3. You would like to advertise the grand re-opening of the Internet Café on the Web. You plan to use the information in the advertisement flyer you created as the basis for the Web pages. Your completed Web pages should be similar to those shown here.





a. Open the file Grand Re-Opening you created in Step-by-Step Exercise 3 in Lab 1. Convert the document to a Web page, add a title of **Grand Re-Opening Announcement**, and save it as Café Flyer in a new folder.

b. Delete the graphic. Insert the image wdwt_Coffee. Change the picture text wrapping style to square. Move the picture to the left of the three title lines, as shown above, and size it appropriately. Left-align the three title lines.

c. Save the changes.

d. Open the file wdwt_Café Locations. Save the document as a Web page to your Web Page folder with the file name Café Locations and a page title of **Your Neighborhood**.

e. Create a link from the text **Your Newly Remodeled Neighborhood Coffee Shop** in the Café Flyer page to the Café Locations page. Test the link.

f. Enhance the pages with any features you feel are appropriate.

g. Resave the Web pages and preview them in your browser.

h. Print the pages.

Overview of Microsoft Office Excel 2007

What Is an Electronic Spreadsheet?

The electronic spreadsheet, or worksheet, is an automated version of the accountant's ledger. Like the accountant's ledger, it consists of rows and columns of numerical data. Unlike the accountant's ledger, which is created on paper using a pencil and a calculator, the electronic spreadsheet is created by a computer system running spreadsheet application software.

In contrast to word processing software that manipulates text, spreadsheet programs manipulate numerical data. The first spreadsheet program, VisiCalc, was introduced in 1979. Since then, spreadsheets have evolved into a powerful business tool that has revolutionized the business world.

The electronic spreadsheet eliminates the paper, pencil, and eraser. With a few keystrokes, the user can quickly change, correct, and update the data. Even more impressive is the spreadsheet's ability to perform calculations from very simple sums to the most complex financial and mathematical formulas. The calculator is replaced by the electronic spreadsheet. Analysis of data in the spreadsheet has become a routine business procedure. Once requiring hours of labor and/or costly accountants' fees, data analysis is now available almost instantly using electronic spreadsheets.

Nearly any job that uses rows and columns of numbers can be performed using an electronic spreadsheet. Typical uses include the creation of budgets and financial planning for both business and personal situations.

Excel 2007 Features

Spreadsheet applications help you create well-designed spreadsheets that produce accurate results. These programs not only make it faster to create spreadsheets, they also produce professional-appearing results. Their advantages include the ability to quickly edit and format data, perform calculations, create charts, and print the spreadsheet. Using Excel 2007, you can quickly analyze and manage data and communicate your findings to others.

The Microsoft Office Excel 2007 spreadsheet program uses a workbook file that contains one or more worksheets. Each worksheet can be used to organize different types of related information. Numeric or text data is entered into the worksheet in a location called a cell. These entries can then be erased, moved, copied, or edited. Formulas can be entered that

perform calculations using data contained in specified cells. The results of the calculations are displayed in the cell containing the formula. Columns and rows can be inserted and deleted. The cell width can be changed to accommodate entries of varying lengths.

The design and appearance of the worksheet can be enhanced in many ways. There are many commands that control the format or display of a cell. For instance, numeric entries can be displayed with dollar signs or with a set number of decimal places. Text or label entries can be displayed centered, left-, or right-aligned to improve the spreadsheet's appearance. You can further enhance the appearance of the worksheet by changing the font style and size and by adding special effects such as bold, italic, borders, boxes, drop shadows, and shading to selected cells. You also can use cell styles to quickly apply predefined combinations of these formats to selections. Additionally, you can select from different document themes, predefined combinations of colors, fonts, and effects, to give your workbooks a consistent, professional appearance.

You can change the values in selected cells and observe their effect on related cells in the worksheet. This is called what-if or sensitivity analysis. Questions that once were too expensive to ask or took too long to answer can now be answered almost instantly and with little cost. Planning that was once partially based on instinct has been replaced to a great extent with facts. However, any financial planning resulting from the data in a worksheet is only as accurate as that data and the logic behind the calculations. Once your data is set, you can add conditional formatting to ranges of cells to emphasize data based on a set of criteria you establish and to highlight trends.

You also can produce a visual display of data in the form of graphs or charts. As the values in the worksheet change, charts referencing those values automatically adjust to reflect the changes. You also can enhance the appearance of a graph by using different type styles and sizes, adding three-dimensional effects, and including text and objects such as lines and arrows.

Finally, Excel 2007 offers many ways to share data and communicate information to others. The most common ways to share are by sending workbooks through e-mail, by faxing workbooks, and by printing and distributing copies of workbooks. You can set up workbooks to allow multiple users to edit and modify the workbook simultaneously. Alternatively, you can distribute multiple copies of workbooks and then merge the changes from several of the copies. You can review the changes and accept or reject them as needed.

Case Study for Office Excel 2007 Labs

The Downtown Internet Café is a new concept in coffeehouses, combining the delicious aromas of a genuine coffeehouse with the fun of using the Internet. You are the new manager for the coffeehouse and are working with the owner, Evan, to develop a financial plan for the next year.

Lab 1: Your first project is to develop a forecast for the Café showing the estimated sales and expenses for the first quarter. You will learn to enter numbers, perform calculations, copy data, label rows and columns, and format entries in a spreadsheet using Office Excel 2007.

Lab 2: After creating the first-quarter forecast, you decide to chart the sales data to make it easier to see the trends and growth patterns. You also want to see what effect a strong advertising promotion of the new Café features will have on the forecasted sales data.

Lab 3: You have been asked to revise the workbook to include forecasts for the second, third, and fourth quarters. Additionally, the owner wants you to create a composite worksheet that shows the entire year's forecast and to change the data to achieve a 15 percent profit margin in the second quarter.

Working Together 1: Your analysis of sales data for the first quarter has shown a steady increase in total sales. Evan, the Café owner, has asked you for a copy of the forecast that shows the growth in sales if a strong sales promotion is mounted. You will include the worksheet and chart data in a Word memo to the owner.

Before You Begin

To the Student

The following assumptions have been made:

- Microsoft Office Excel 2007 has been properly installed on your computer system.
- You have the data files needed to complete the series of Excel 2007 labs and practice exercises. These may be supplied by your instructor and are also available at the online learning center Web site found at www.mhhe.com/oleary.
- You are already familiar with how to use Microsoft Windows XP or Vista and a mouse.

To the Instructor

A complete installation of Microsoft Office Excel 2007 is required in which all components are available to students while completing the labs. In several labs, an online connection to the Web is needed to fully access a feature.

Please be aware that the following settings are assumed to be in effect for the Office Excel 2007 program. These assumptions are necessary so that the screens and directions in the labs are accurate. These settings are made using Office Button/Excel Options in the categories shown below.

Popular

- The Mini Toolbar feature is active.
- The Live Preview feature is enabled.
- ClearType is on.
- The color scheme setting is blue.
- Show feature descriptions in ScreenTips is selected.
- Body Font is the selected font for a new workbook in a font size of 11 points.
- New sheets are displayed in Normal view.

- Three sheets are included in a new workbook file.
- Language is set to English (US).

Formulas

- Workbook calculation is set to Automatic.
- Formula AutoComplete is on.
- Use table names in formulas is on.
- Use GetPivotData functions for PivotTable references is on.
- Background error checking is on and errors are indicated using green.
- All error checking rules are on except Formulas referring to empty cells.

Proofing

- All AutoCorrect options are on.
- All AutoFormat options are on.
- SmartTags is off.
- Ignore words in Uppercase is on.
- Ignore words that contain numbers is on.
- Ignore Internet and file addresses is on.
- Flag repeated words is on.

Advanced/Editing Options

- All editing options are on except Automatically insert a decimal point and Zoom on roll with IntelliMouse.
- The selection moves Down after pressing Enter.

Advanced/Cut, Copy, and Paste

- All options are on.

Advanced/Display

- All options are on with the following settings:
  - Show 17 Recent Documents.
  - Ruler units is set to Default Units.
  - Cell comments show comments and indicators.

Advanced/Display options for this workbook: Book 1

- All options are on.

Advanced/Display options for this worksheet: Sheet 1

- All options are on except:
  - Show formulas in cells instead of their calculated results.
  - Show page breaks.
- Gridline color is set to black.

Advanced/Formulas

- All options are on.

Advanced/When calculating this workbook: Book 1

- Update links to other documents is on.
- Save external link values is on.

Advanced/General

- Ask to update automatic links is on.
- Scale content for A4 or 8.5 × 11" paper sizes is on.

Customize

- The Quick Access toolbar displays the Save, Undo, and Redo buttons.

Finally, the feature to access Online Help is on. (From the Help window, open the Connection Status menu and choose Show Content from Office Online.)

All figures in the text reflect the use of a display monitor set at 1024 by 768 and the Windows XP operating system. If other monitor display settings are used, there may be more or fewer lines of information displayed in the windows than in the figures. If the Windows Vista operating system is used, some features may look slightly different.

Instructional Conventions

Hands-on instructions you are to perform appear as a sequence of numbered steps. Within each step, a series of bullets identifies the specific actions that must be performed. Step numbering begins over within each topic heading throughout the lab. Four types of margin notes appear throughout the labs. Another Method notes provide alternate ways of performing the same command. Having Trouble? notes provide advice or cautions for steps that may cause problems. Additional Information notes provide more information about a topic. More About notes refer you to the More About Excel 2007 appendix for additional information about related features.

Commands

Commands that are initiated using a command button and the mouse appear following the word "Click." The icon (and the icon name if the icon does not include text) is displayed following "Click." If there is another way to perform the same action, it appears in an Another Method margin note when the action is first introduced, as shown in Example A.

As you become more familiar with the application, commands will appear as shown in Example B.

Example A

1. **Select cells A1 through B5.**
   - **Open the Home tab.**
   - **Click**  **Bold in the Font group.**

Another Method
The keyboard shortcut is Ctrl + B.

Example B

1. **Select cells A1:B5.**
   Click B Bold in the Font group of the Home tab.

OR

1. **Bold cells A1:B5.**

File Names and Information to Type

Plain blue text identifies file names you need to select or enter. Information you are asked to type appears in blue and bold. (See Example C.)

Example C

1. **Open the workbook** ex01_Cafe Sales.xlsx**.**
   Type Downtown Internet Café in cell B2.

Office Button

Clicking on the Microsoft Office button will open the File menu of commands. Commands that are to be selected follow the word "Select" and appear in black text. You can select an item by pointing to it using the mouse or by moving to it using the directional keys. When an option is selected, it appears highlighted. Commands that you are to choose to perform the associated action appear following the word "Choose." You can choose a command by clicking on it using the mouse or by pressing the ↵Enter key once it is selected. Initially these commands will appear as in Example A. As you become more familiar with the application, commands will appear as shown in Example B.

Example A

1. Click Office Button.
2. Select Print.
3. Choose Print Preview.

Example B

1. Click Office Button, select Print, and choose Print Preview.

OR

1. Preview the worksheet.

Creating and Editing a Worksheet

LAB 1

Objectives

After completing this lab, you will know how to:

1. Enter, edit, and clear cell entries.
2. Adjust column widths.
3. Save, close, and open workbooks.
4. Spell-check a worksheet.
5. Use the thesaurus.
6. Copy and move cell entries.
7. Specify ranges.
8. Enter formulas and functions.
9. Insert and delete rows and columns.
10. Change cell alignment.
11. Format cells.
12. Enter and format a date.
13. Preview and print a worksheet.

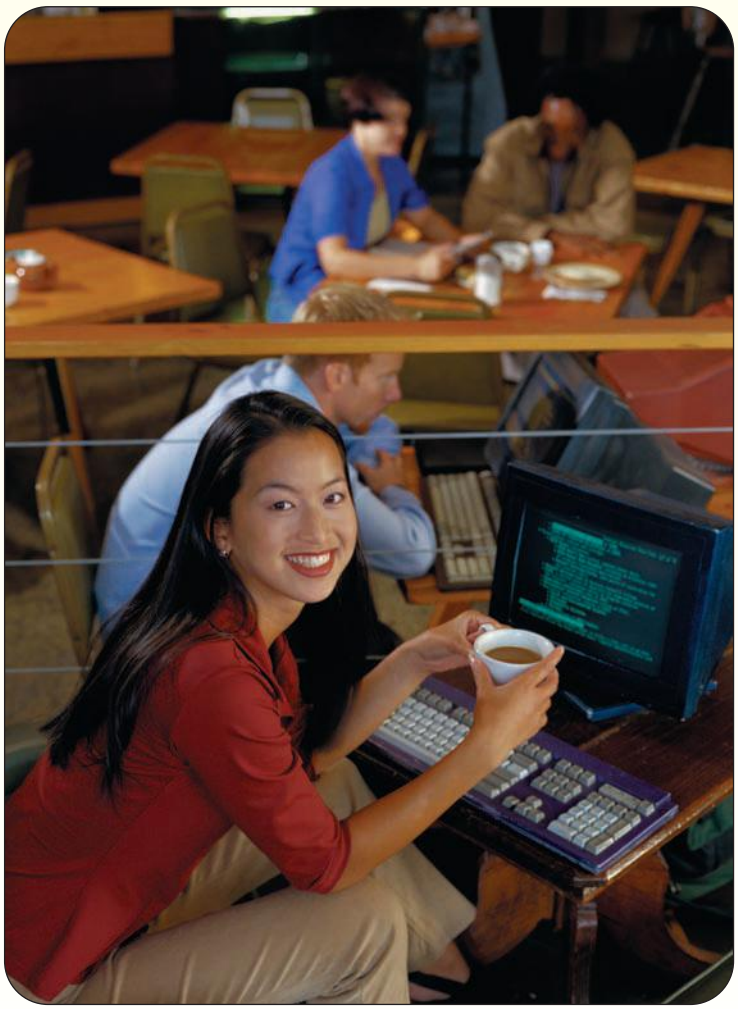
Case Study

Downtown Internet Café

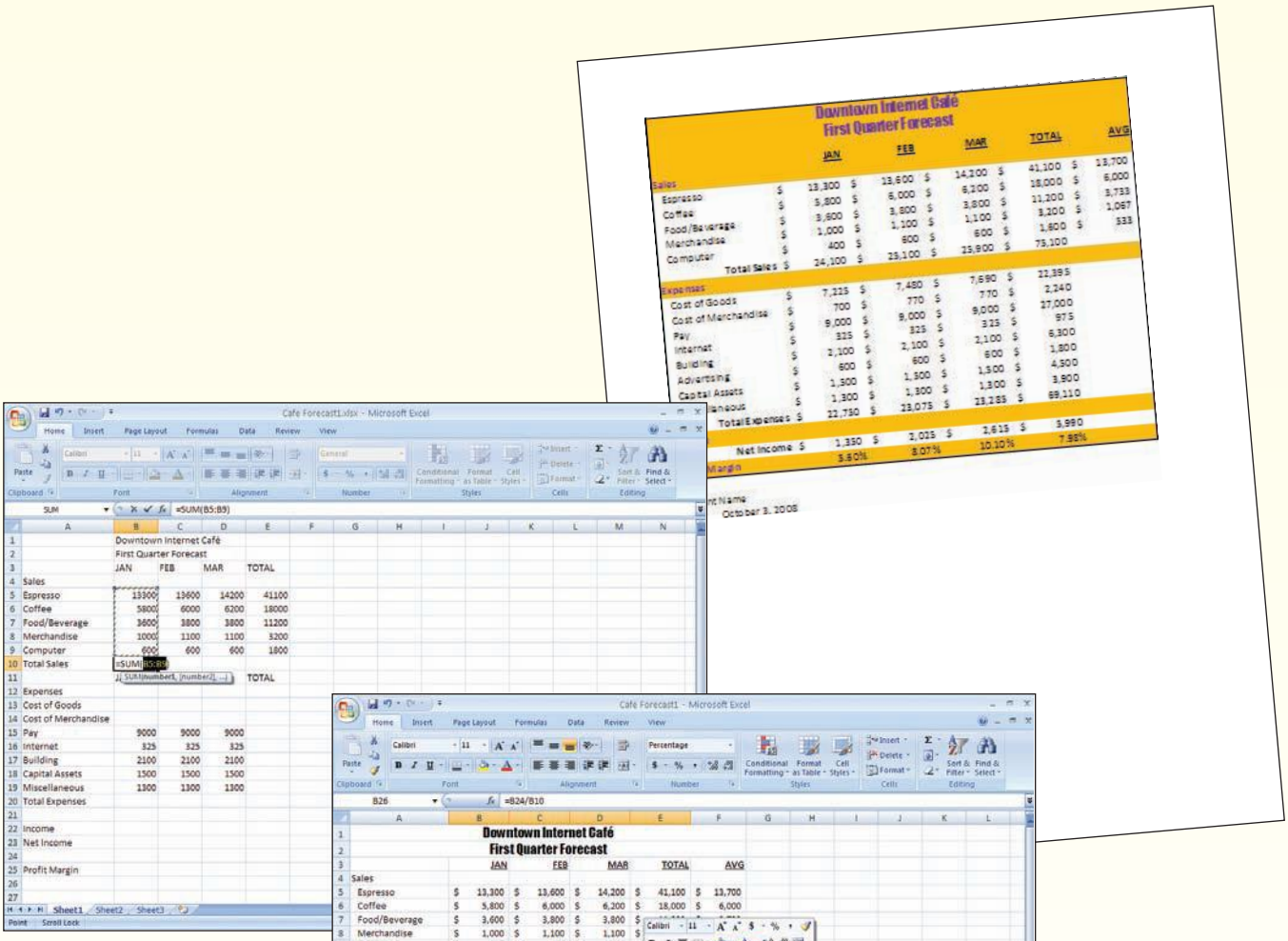
You are excited about your new position as manager and financial planner for a local coffeehouse. Evan, the owner, has hired you as part of a larger effort to increase business at the former Downtown Café. Evan began this effort by completely renovating his coffeehouse and installing a wireless network. He plans to offer free Wi-Fi service for customers to use with their own laptop computers. In addition, he has set up several computer kiosks for customers to use who do not have laptops and has provided a printer and copier for all customers to use. He also has decided to rent an MP3 download kiosk for customers who may want to update the music on their iPods or PDAs. Finally, to reflect the new emphasis of the café, he has changed its name to the Downtown Internet Café.

You and Evan expect to increase sales by attracting techno-savvy café-goers, who you hope will use the Downtown Internet Café as a place to meet, study, work, or download music for their iPods and PDAs. You also believe the rental computers will be a draw for vacationers who want to check e-mail during their travels.

Evan wants to create a forecast estimating sales and expenses for the first quarter. As part of a good business plan, you and Evan need a realistic set of financial estimates and goals.



In this lab, you will help with the first quarter forecast by using Microsoft Office Excel 2007, a spreadsheet application that can store, manipulate, and display numeric data. You will learn to enter numbers, perform calculations, copy data, and label rows and columns as you create the basic structure of a worksheet for the Downtown Internet Café. You will then learn how to enhance the worksheet using formatting features and by adding color as shown here.



Enter labels, numbers, and formulas to create the basic structure of a worksheet.

Basic formatting, such as alignment, indents, and numeric styles quickly improve the appearance of the worksheet.

Adding color text and background fill further enhances the appearance of the worksheet.

Concept Preview

The following concepts will be introduced in this lab:

1	**Data Entries** The basic information or data you enter in a cell can be text or numbers.
2	**AutoCorrect** The AutoCorrect feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.
3	**Column Width** The size or width of a column controls the amount of information that can be displayed in a cell.
4	**Spelling Checker** The spelling checker locates misspelled words, duplicate words, and capitalization irregularities in the active worksheet and proposes the correct spelling.
5	**Thesaurus** The thesaurus is a reference tool that provides synonyms, antonyms, and related words for a selected word or phrase.
6	**Copy and Move** The contents of worksheet cells can be duplicated (copied) or moved to other locations in the worksheet or between worksheets, saving you time by not having to retype the same information.
7	**Range** A selection consisting of two or more cells on a worksheet is a range.
8	**Formula** A formula is an equation that performs a calculation on data contained in a worksheet.
9	**Relative Reference** A relative reference is a cell or range reference in a formula whose location is interpreted in relation to the position of the cell that contains the formula.
10	**Function** A function is a prewritten formula that performs certain types of calculations automatically.
11	**Recalculation** When a number in a referenced cell in a formula changes, Excel automatically recalculates all formulas that are dependent upon the changed value.
12	**Alignment** Alignment settings allow you to change the horizontal and vertical placement and the orientation of an entry in a cell.
13	**Font and Font Size** A font, also commonly referred to as a typeface, is a set of characters with a specific design.
14	**Number Formats** Number formats change the appearance of numbers onscreen and when printed, without changing the way the number is stored or used in calculations.

Introducing Office Excel 2007

As part of the renovation of the Downtown Internet Café, Evan upgraded the office computer with the latest version of the Microsoft Office System suite of applications, Office 2007. You are very excited to see how this new and powerful application can help you create professional budgets and financial forecasts for the Café.

Starting Excel 2007

You will use the spreadsheet application Excel 2007 included in the Microsoft Office 2007 System suite to create the first-quarter forecast for the Café.

1. **Start Office Excel 2007.**
2. **If necessary, maximize the Excel application window.**

Having Trouble?
See "Common 2007 Office Features" page I.10, for information on how to start the application and for a discussion of features common to all 2007 Microsoft Office applications.

Your screen should be similar to Figure 1.1

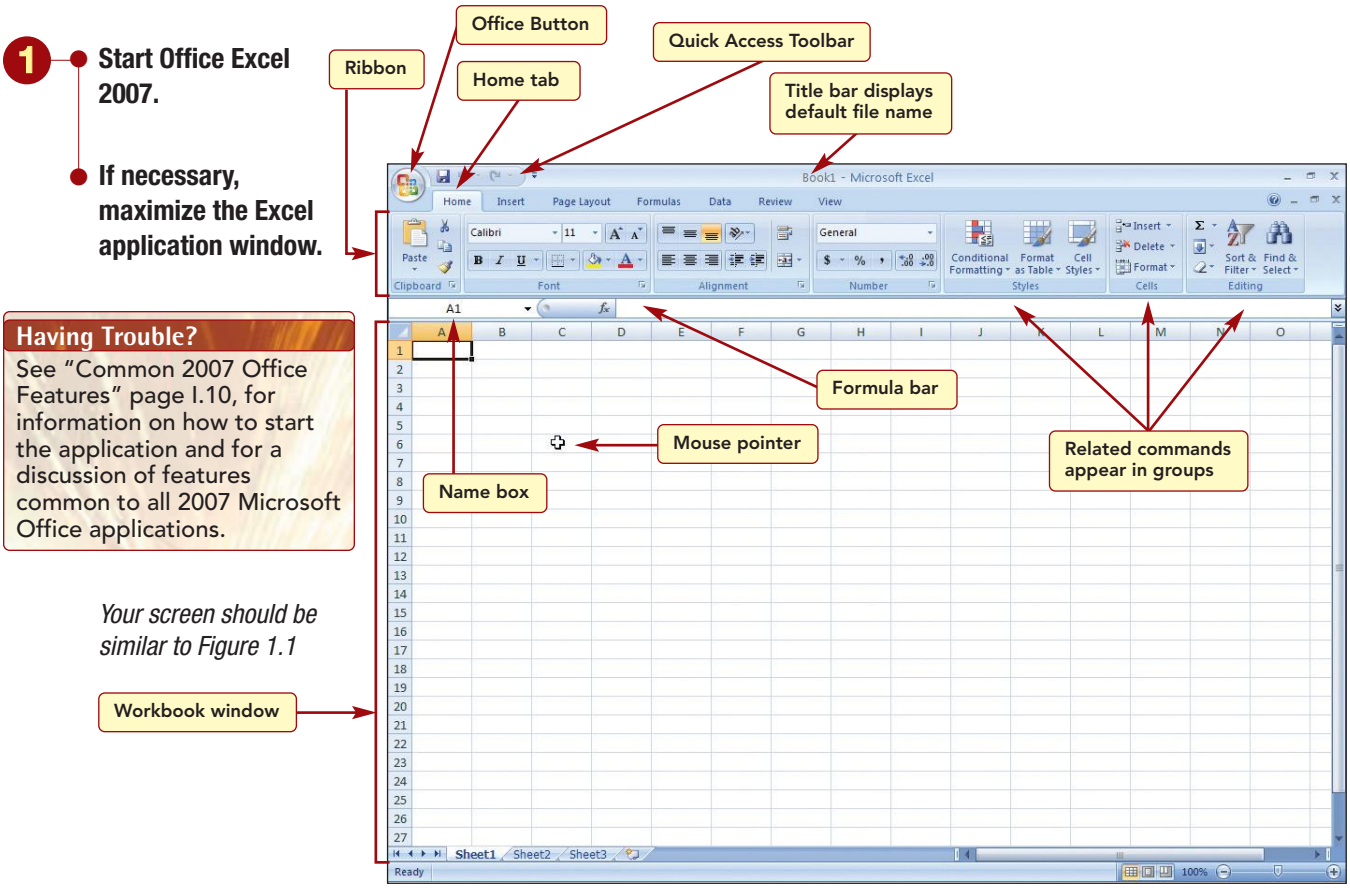


Figure 1.1

After a few moments, the Excel application window is displayed. Because Excel remembers many settings that were in use when the program was last closed, your screen might look slightly different.

Additional Information
Because the Ribbon can adapt to the screen resolution and orientation, your Ribbon may look slightly different. It also may display additional tabs if other application add-ins associated with Office 2007 are on.

Exploring the Excel Window

The Excel application window title bar displays the default file name, Book1, and program name. It also displays the Office Button and the Quick Access Toolbar, two features that are common to all Office 2007 applications. The Ribbon below the title bar consists of seven tabs that provide access to the commands and features you will use to create and modify a worksheet. Each tab is divided into groups that contain related items. The related items include commands that consist of command buttons, a box to enter information, or a drop-down gallery of options from which you select.

Additional Information
You will learn all about using these features throughout these labs.

Below the Ribbon is the formula bar. The **formula bar** displays entries as they are made and edited in the workbook window. The **Name box**, located at the left end of the formula bar, provides information about the selected item.

Having Trouble?
If the workbook is floating in the workbook window, the title bar displays the file name and the Minimize, Maximize, and Close buttons. Click to maximize the workbook window.

The large center area of the program window is the **workbook window**. A **workbook** is an Excel file that stores the information you enter using the program. You will learn more about the different parts of the workbook window shortly.

The mouse pointer can appear as many different shapes. The mouse pointer changes shape depending upon the task you are performing or where the pointer is located on the window. Most commonly it appears as a or . When it appears as a , it is used to move to different locations in the workbook window and when it appears as a , it is used to choose items, such as commands from the Ribbon.

1. **Move the mouse pointer into the center of the workbook window to see it appear as .**
2. **Move the mouse pointer to the Ribbon to see it appear as .**

Your screen should be similar to Figure 1.2

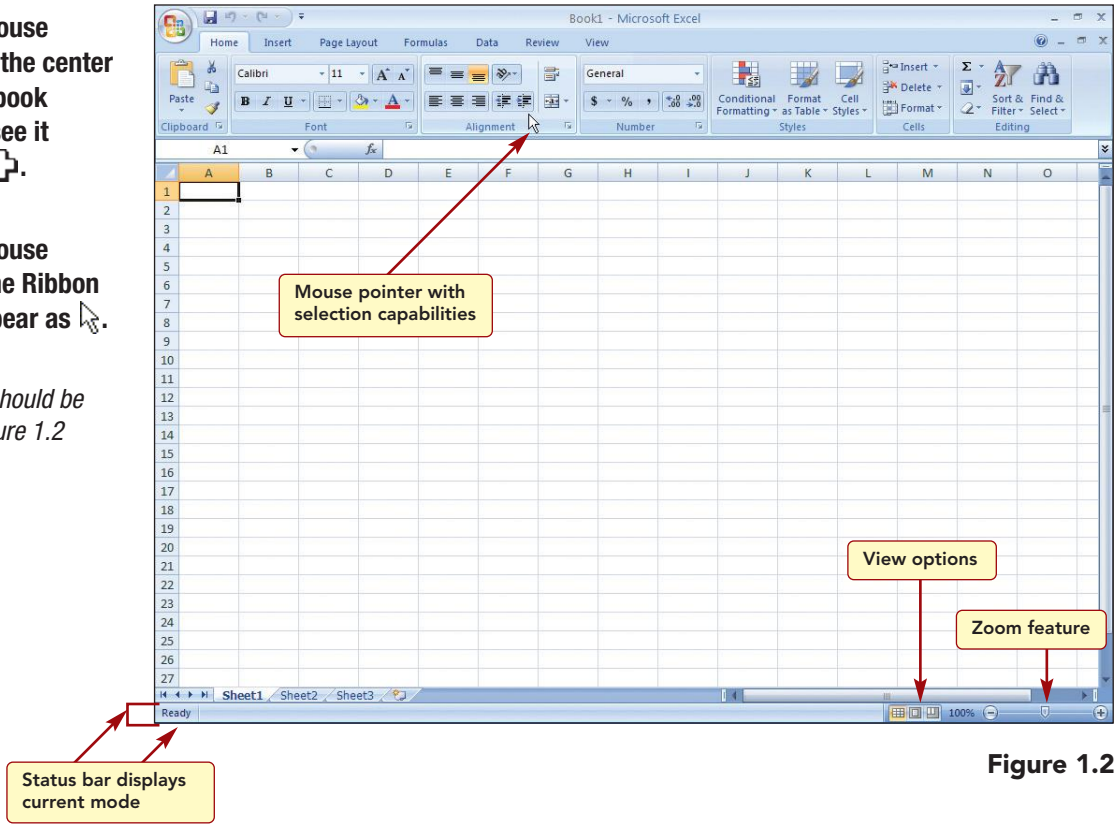


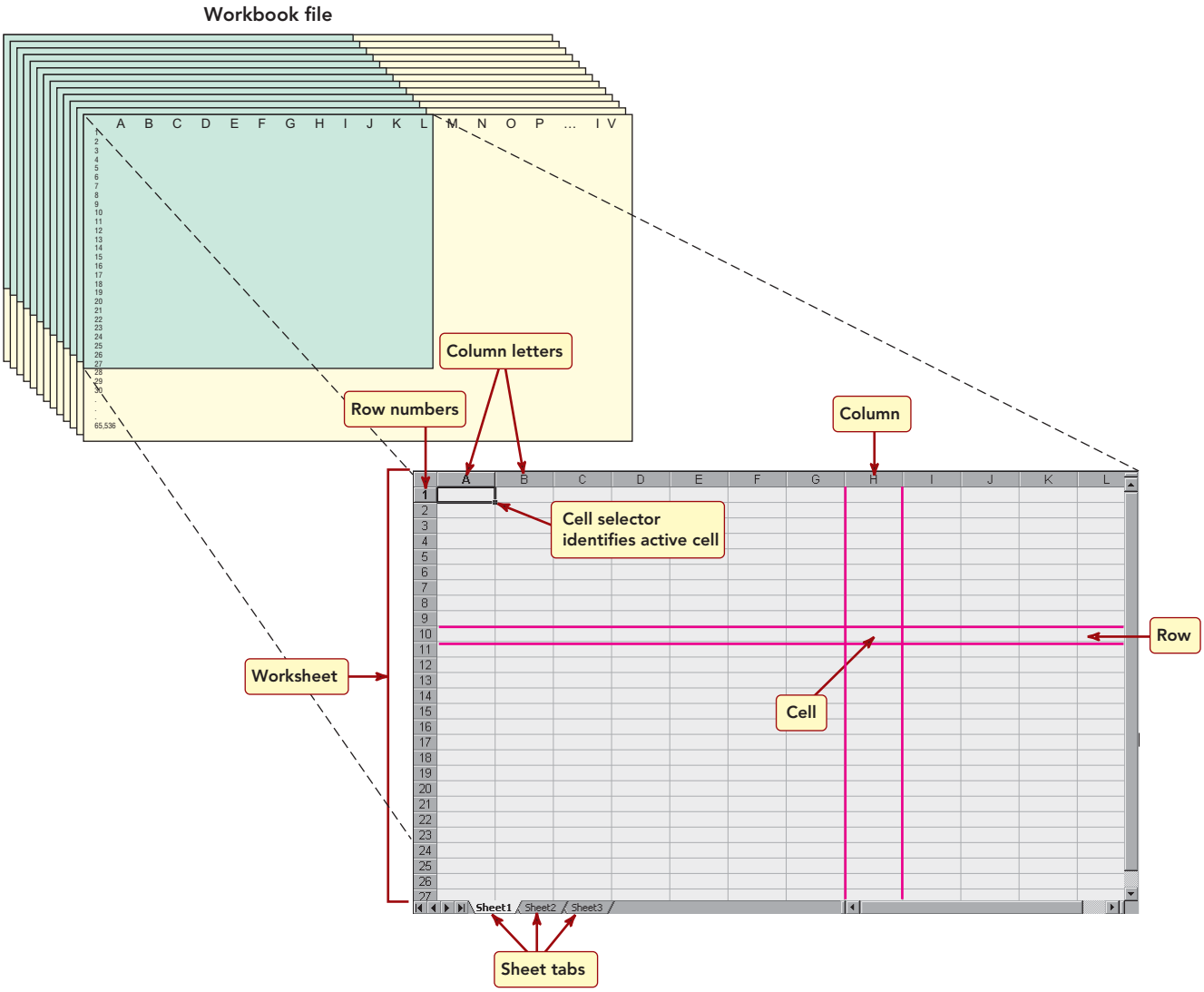
Figure 1.2

The status bar at the bottom of the Excel window displays information about various Excel settings. The left side of the status bar displays the current mode or state of operation of the program, in this case, Ready. When Ready is displayed, you can move around the workbook, enter data, use the function keys, or choose a command. As you use the program, the status bar displays the current mode. The right side of the status bar contains buttons to change the view and a zoom feature.

Exploring the Workbook Window

When you first start Excel 2007, the workbook window displays a new blank workbook that has many predefined settings. These settings, called **default** settings, are stored in the default workbook template file named Book.xlt. A **template** is a file that contains settings that are used as the basis for a new file you are creating.

The default workbook file includes three blank sheets. A **sheet** is used to display different types of information, such as financial data or charts. Whenever you open a new workbook, it displays a worksheet. A **worksheet**, also commonly referred to as a **spreadsheet**, is a rectangular grid of **rows** and **columns** used to enter data. It is always part of a workbook and is the primary type of sheet you will use in Excel. The worksheet is much larger than the part you are viewing in the window. The worksheet actually extends 16,384 columns to the right and 1,048,576 rows down.



Additional Information

Columns are labeled A through Z, AA through ZZ, and so forth through the last column, XFD. There are 17,179,869,184 cells in a worksheet.

The **row numbers** along the left side and the **column letters** across the top of the workbook window identify each worksheet row and column. The intersection of a row and column creates a **cell**. Notice the black border, called the **cell selector**. surrounding the cell located at the intersection of column A and row 1. This identifies the **active cell**, which is the cell your next entry or procedure affects. Additionally, the Name box in the formula bar displays the **cell reference**, consisting of the column letter and row number of the active cell. The reference of the active cell is A1.

Each sheet in a workbook is named. Initially, the sheets are named Sheet1, Sheet2, and so on, displayed on **sheet tabs** at the bottom of the workbook window. The name of the **active sheet**, which is the sheet you can work in, appears bold. The currently displayed worksheet in the workbook window, Sheet1, is the active sheet.

1 **Click the Sheet2 tab.**

Another Method

You also can press Ctrl + Page Down to move to the next sheet and Ctrl + Page Up to move to the previous sheet.

Your screen should be similar to Figure 1.3

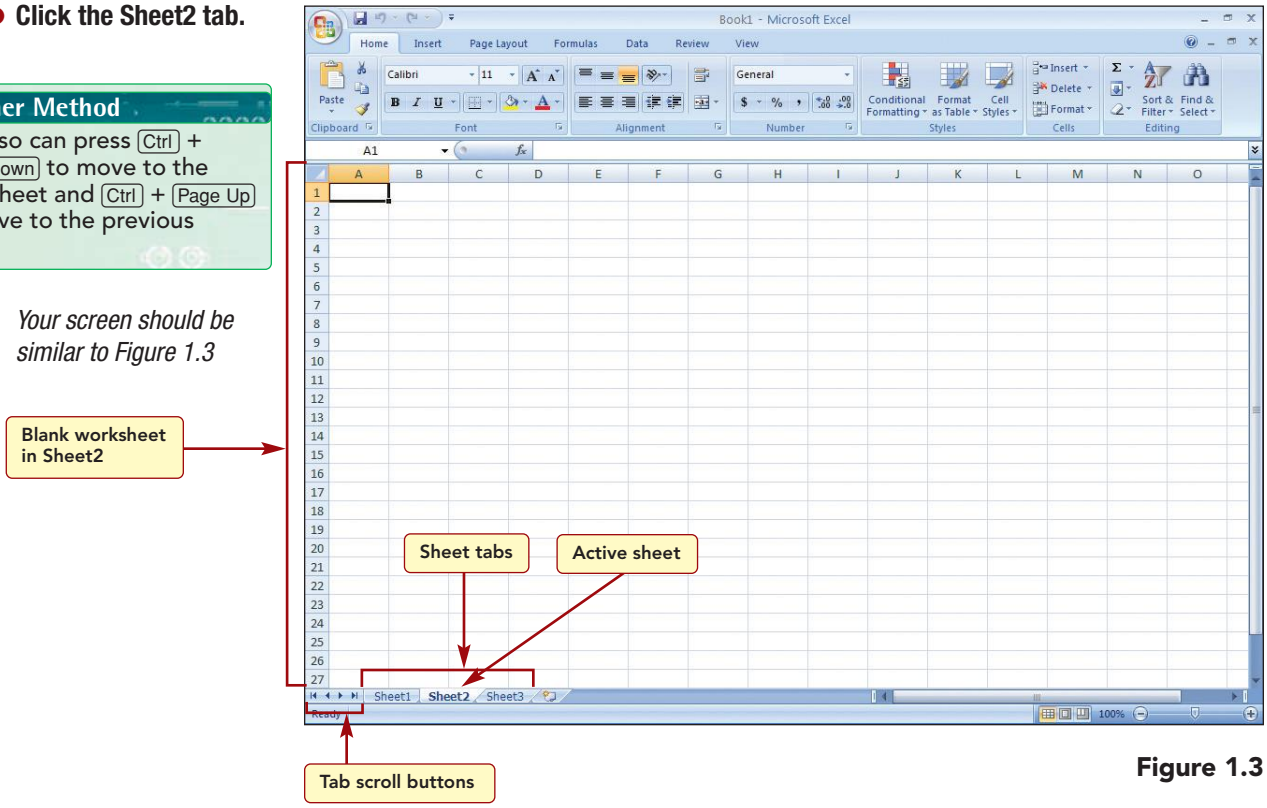


Figure 1.3

Additional Information

Do not be concerned if your workbook window displays more or fewer column letters and row numbers than shown here. This is a function of your computer monitor settings.

An identical blank worksheet is displayed in the window. The Sheet2 tab letters are bold, the background is highlighted, and it appears in front of the other sheet tabs to show it is the active sheet.

The sheet tab area also contains **tab scroll buttons**, which are used to scroll tabs right or left when there are more sheet tabs than can be seen. You will learn about these features throughout the labs.

Moving around the Worksheet

Additional Information

You can use the directional keys in the numeric keypad (with NumLock off) or, if you have an extended keyboard, you can use the separate directional keypad area.

The mouse or keyboard commands can be used to move from one cell to another in the worksheet. To move using a mouse, simply point to the cell you want to move to and click the mouse button. Depending upon what you are doing, using the mouse to move may not be as convenient as using the keyboard, in which case the directional keys can be used. You will make Sheet1 active again and use the mouse, then the keyboard to move in the worksheet.

1. **Click the Sheet1 tab to make it the active sheet again.**
2. **Click cell B3.**
3. **Press → (3 times).**
4. **Press ↓ (4 times).**

Your screen should be similar to Figure 1.4

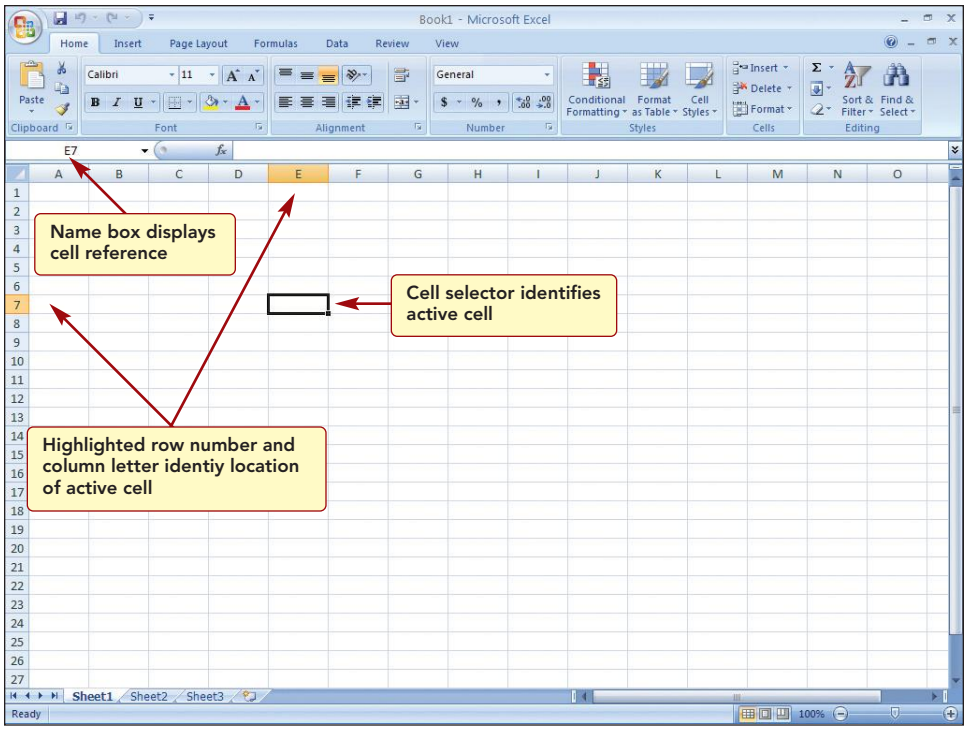


Figure 1.4

Cell E7 is outlined in black, indicating this cell is the active cell. The Name box displays the cell reference. In addition, the row number and column letter are gold to further identify the location of the active cell.

As you have learned, the worksheet is much larger than the part you are viewing in the window. To see an area of the worksheet that is not currently in view, you need to scroll the window. Either the keyboard or the mouse can be used to quickly scroll a worksheet. Again, both methods are useful depending upon what you are doing. The keyboard and mouse procedures shown in the tables that follow can be used to move around the worksheet.

Additional Information

Keys joined with a + indicate that you need to hold down the first key while pressing the second.

Keyboard	Action
Page Down	Moves down one full window
Page Up	Moves up one full window
Alt + Page Down	Moves right one full window
Alt + Page Up	Moves left one full window
Home	Moves to beginning of row
Ctrl + Home	Moves to upper-left corner cell of worksheet
Ctrl + End	Moves to last used cell of worksheet
End →	Moves to last-used cell in row
End ↓	Moves to last-used cell in column

Mouse	Action
Click scroll arrow	Scrolls worksheet one row/column in direction of arrow
Click above/below scroll box	Scrolls worksheet one full window up/down
Click right/left of scroll box	Scrolls worksheet one full window right/left
Drag scroll box	Scrolls worksheet multiple windows up/down or right/left
Hold down ⇧Shift and drag scroll box	Scrolls quickly through multiple rows/columns

In addition, if you hold down the arrow keys, the Alt + Page Up or Alt + Page Down keys, or the Page Up or Page Down keys, you can quickly scroll through the worksheet. When you use the scroll bar, however, the active cell does not change until you click on a cell that is visible in the window.

You will scroll the worksheet to see the rows below row 25 and the columns to the right of column L.

2 **Press Page Down (3 times).**

Press Alt + Page Down (3 times).

Having Trouble?
Do not use the numeric keypad Page Up and Page Down keys, as this may enter a character in the cell.

Your screen should be similar to Figure 1.5

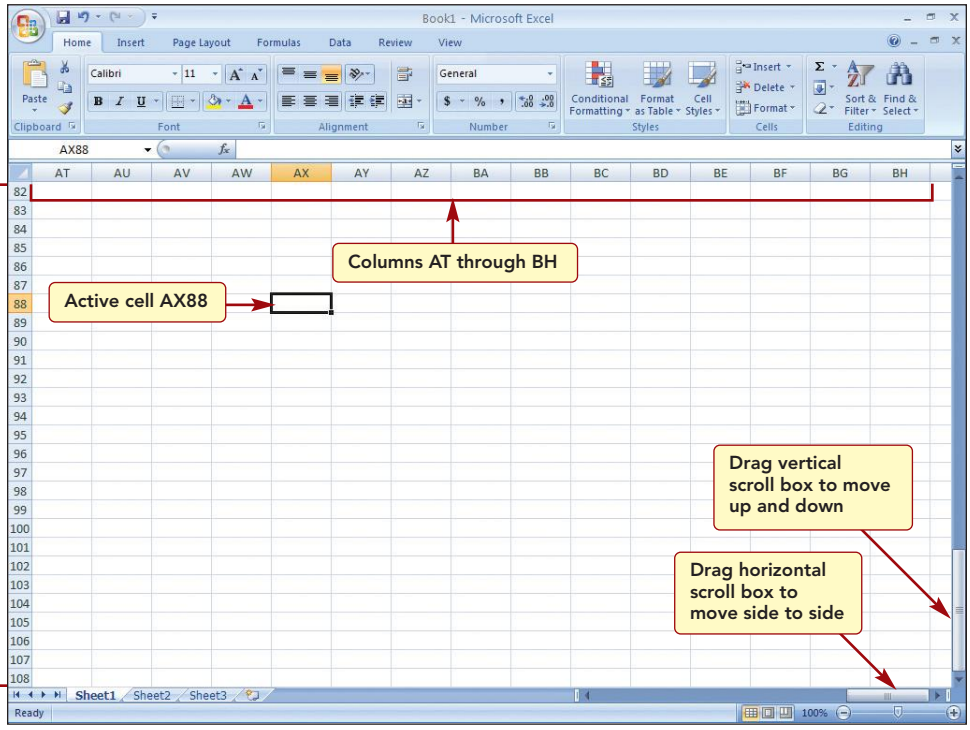


Figure 1.5

Having Trouble?
Your screen may display more or fewer rows and columns and the active cell may be a different cell. This is a function of your screen and system settings.

Additional Information
If you have a mouse with a scroll wheel, rotating the wheel forward or back scrolls up or down a few rows at a time.

The worksheet scrolled downward and left three full windows, and the window displays rows 82 through 108 and columns AT through BH of the worksheet. The active cell is cell AX88. As you scroll the worksheet using the keyboard, the active cell also changes.

It is even more efficient to use the scroll bar to move long distances.

3. **Slowly drag the vertical scroll box up the scroll bar until row 1 is displayed.**

- **Slowly drag the horizontal scroll box left along the scroll bar until column A is displayed.**

Additional Information

As you scroll, the scroll bar identifies the current row position at the top of the window or column position at the left side of the window in a ScreenTip.

Your screen should be similar to Figure 1.6

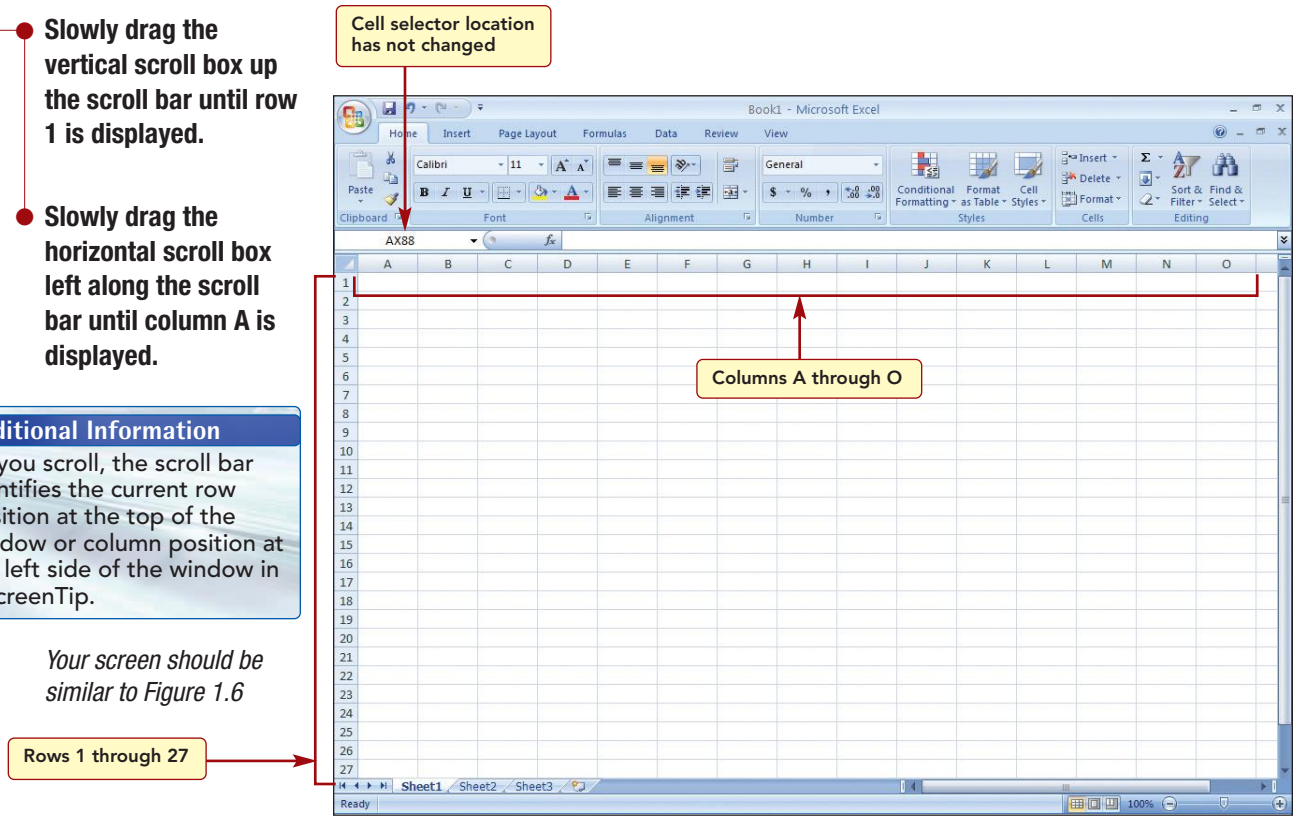


Figure 1.6

Another Method

You also can type a cell address in the Name box and press Enter to move to that location.

Notice that the Name box displays the active cell location as AX88. When you use the scroll bar to scroll the worksheet, the active cell does not change.

4. **Practice moving around the worksheet using the keys presented in the table on page EX1.9.**

- **Press Ctrl + Home to move to cell A1.**

Additional Information

Some of the keys presented in the table will not change the worksheet location until the worksheet contains data.

You can use the mouse or the keyboard with most of the exercises in these labs. As you use both the mouse and the keyboard, you will find that it is more efficient to use one or the other in specific situations.

Creating New Worksheets

Now that you are familiar with the parts of the workbook and with moving around the worksheet, you are ready to create a worksheet showing the forecast for the first three months of operation for the Downtown Internet Café.

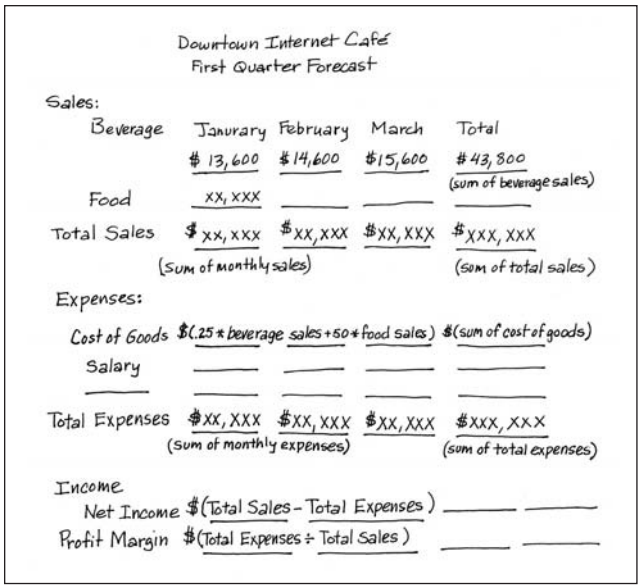
Developing a Worksheet

Worksheet development consists of four steps: planning, entering and editing, testing, and formatting. The objective is to create well-designed worksheets that produce accurate results and are clearly understood, adaptable, and efficient.

Step	Description
1. Plan	Specify the purpose of the worksheet and how it should be organized. This means clearly identifying the data that will be input, the calculations that are needed to achieve the results, and the output that is desired. As part of the planning step, it is helpful to sketch out a design of the worksheet to organize the worksheet's structure. The design should include the worksheet title and row and column headings that identify the input and output. Additionally, sample data can be used to help determine the formulas needed to produce the output.
2. Enter and edit	Create the structure of the worksheet using Excel by entering the worksheet labels, data, and formulas. As you enter information, you are likely to make errors that need to be corrected or edited, or you will need to revise the content of what you have entered to clarify it or to add or delete information.
3. Test	Test the worksheet for errors. Use several sets of real or sample data as the input, and verify the resulting output. The input data should include a full range of possible values for each data item to ensure the worksheet can function successfully under all possible conditions.
4. Format	Enhance the appearance of the worksheet to make it more readable or attractive. This step is usually performed when the worksheet is near completion. It includes many features such as boldface text, italic, and color.

As the complexity of the worksheet increases, the importance of following the design process increases. Even for simple worksheets like the one you will create in this lab, the design process is important. You will find that you will generally follow these steps in the order listed above for your first draft of a worksheet. However, you will probably retrace steps such as editing and formatting as the final worksheet is developed.

During the planning phase, you have spoken with the Café manager, Evan, regarding the purpose of the worksheet and the content in general. The primary purpose is to develop a forecast for sales and expenses for the next year. First, Evan wants you to develop a worksheet for the first-quarter forecast and then extend it by quarters for the year. After reviewing past budgets and consulting with Evan, you have designed the basic layout for the first-quarter forecast for the Café, as shown on the next page.



Entering and Editing Data

Now that you understand the purpose of the worksheet and have a general idea of the content, you are ready to begin entering the data. When you first start Office Excel 2007, a new blank Excel workbook file is opened containing three blank worksheets. Each worksheet is like a blank piece of paper that already has many predefined settings. These settings, called **default** settings, are generally the most commonly used settings.

You will use the blank worksheet with the default settings to create the worksheet for the Café.

As you can see, the budget you designed above contains both descriptive text entries and numeric data. These are two types of data you can enter in a worksheet.

Concept 1

Data Entries

1 The basic information or data you enter in a cell can be text or numbers. **Text** entries can contain any combination of letters, numbers, spaces, and any other special characters. **Number** entries can include only the digits 0 to 9 and any of the special characters, + – ( ) , . / $ % ? =. Number entries can be used in calculations.

Text and number entries generally appear in the cell exactly as they are entered. However, some entries such as **formulas** direct Excel to perform a calculation on values in the worksheet. In these cases, the result of the formula appears in the cell, not the formula itself. You will learn about formulas later in the lab.

Entering Text

You enter data into a worksheet by moving to the cell where you want the data displayed and typing the entry using the keyboard. First, you will enter the worksheet headings. Row and column **headings** are entries that are used to create the structure of the worksheet and describe other worksheet entries. Generally, headings are text entries. The column headings in this worksheet consist of the three months (January through March) and a total (sum of entries over three months) located in columns B through E. To enter data in a worksheet, you must first select the cell where you want the entry displayed. The column heading for January will be entered in cell B2.

1 **Click on cell B2 to move to it.**

Type January.

Having Trouble?

Do not be concerned if you make a typing error. You will learn how to correct it shortly.

Your screen should be similar to Figure 1.7

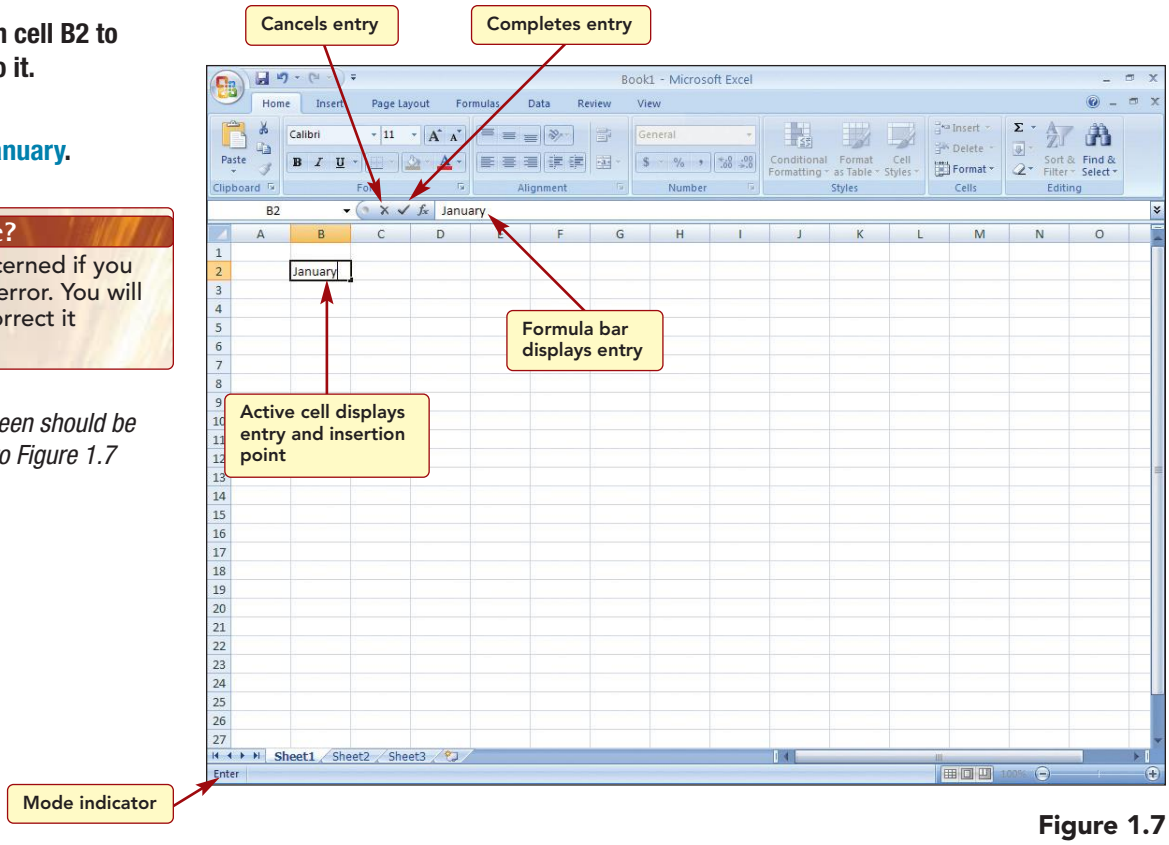


Figure 1.7

Several changes have occurred in the window. As you type, the entry is displayed both in the active cell and in the formula bar. An insertion point appears in the active cell and marks your location in the entry. Two new buttons, ✗ and ✓, appear in the formula bar. They can be used with a mouse to cancel your entry or complete it.

Notice also that the mode displayed in the status bar has changed from Ready to Enter. This notifies you that the current mode of operation in the worksheet is entering data.

Although the entry is displayed in both the active cell and the formula bar, you need to press the ↵Enter key or click ✓ to complete your entry. If you press Esc or click ✗, the entry is cleared and nothing appears in the cell. Since your hands are already on the keyboard, it is quicker to press ↵Enter than it is to use the mouse to click ✓.

2 **Press ↵Enter.**

Your screen should be similar to Figure 1.8

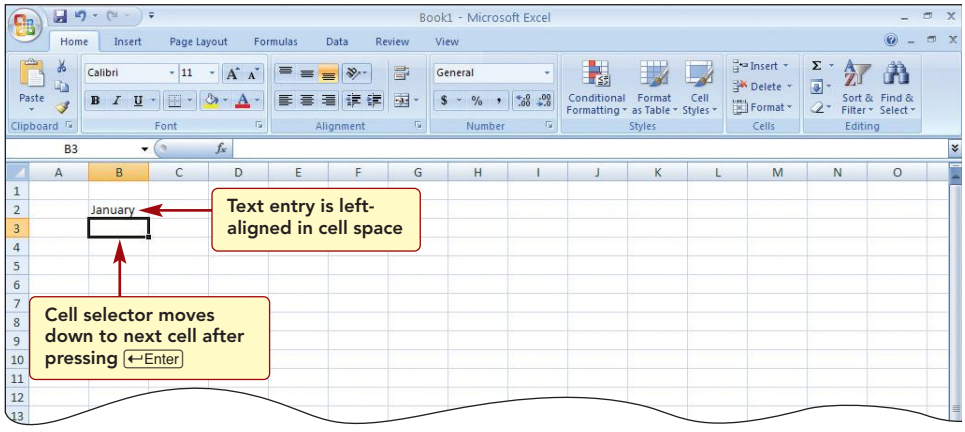


Figure 1.8

Additional Information

Pressing Shift + Enter to complete an entry moves up a cell, and Ctrl + Enter completes the entry without moving to another cell.

The entry January is displayed in cell B2, and the mode has returned to Ready. In addition, the active cell is cell B3. Whenever you use the Enter key to complete an entry, the selection moves down one cell.

Notice that the entry is positioned to the left side of the cell space. This is one of the worksheet default settings.

Clearing an Entry

After looking at the entry, you decide you want the column headings to be in row 3 rather than in row 2. This will leave more space above the column headings for a worksheet title. The Delete key can be used to clear the contents from a cell. You will remove the entry from cell B2 and enter it in cell B3.

1. **Move to B2.**
2. **Press Delete.**

Another Method

You also can use Clear/Clear Contents in the Editing group of the Home tab.

3. **Move to B3.**
4. **Type January.**
5. **Click Enter.**

Your screen should be similar to Figure 1.9

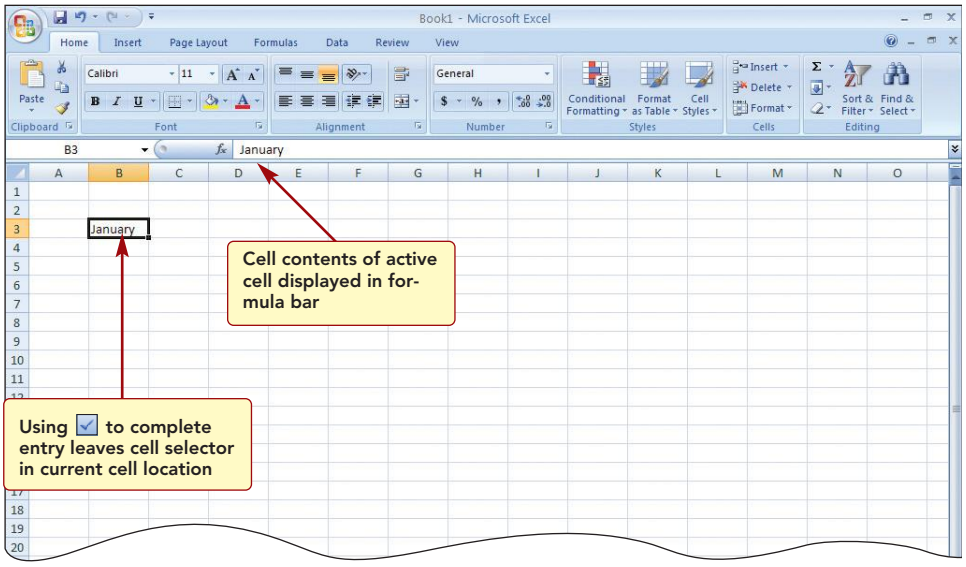


Figure 1.9

The active cell does not change when you use Enter to complete an entry. Because the active cell contains an entry, the cell content is displayed in the formula bar.

Editing an Entry

Next, you decide to change the heading from January to JAN. An entry in a cell can be entirely changed in the Ready mode or partially changed or edited in the Edit mode. To use the Ready mode, you move to the cell you want to change and retype the entry the way you want it to appear. As soon as a new character is entered, the existing entry is cleared.

Generally, however, if you need to change only part of an entry, using the Edit mode is quicker. To change to Edit mode, double-click on the cell whose contents you want to edit.

1 Double-click B3.

Having Trouble?

The mouse pointer must be ✚ when you double-click on the cell.

Another Method

Pressing the F2 key also will change to Edit mode. The insertion point is positioned at the end of the entry.

Your screen should be similar to Figure 1.10

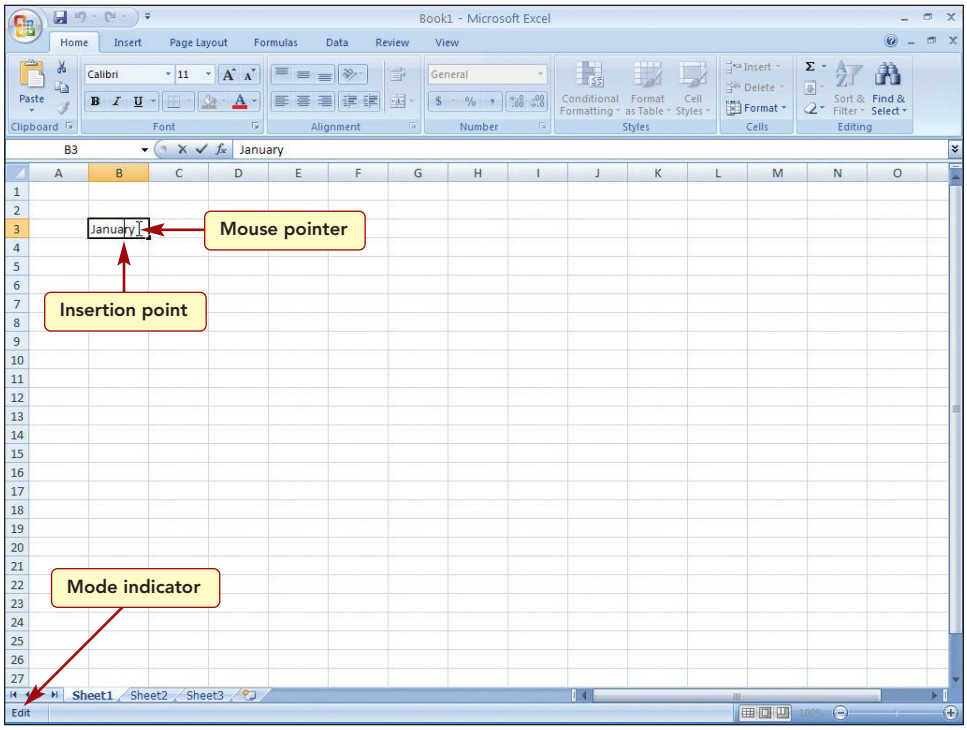


Figure 1.10

The status bar shows that the new mode of operation is Edit. The insertion point appears at the location you clicked in the entry, and the mouse pointer changes to an I-beam when positioned on the cell.

The mouse pointer can now be used to move the insertion point in the entry by positioning the I-beam and clicking. You also can use the arrow keys located on the numeric keypad or the directional keypad to move the insertion point. The keyboard directional keys used to move within text are described in the following table.

Key	Movement
→	One character to right
←	One character to left
↑	One line up
↓	One line down
Ctrl + →	One word to right
Ctrl + ←	One word to left
Home	Left end of line
End	Right end of line

Holding down a directional key or key combination moves quickly in the direction indicated, saving multiple presses of the key. Many of the insertion point movement keys can be held down to execute multiple moves.

After the insertion point is appropriately positioned, you can edit the entry by removing the incorrect characters and typing the correct characters. The Delete key erases characters to the right of the insertion point, and the Backspace key erases characters to the left of the insertion point. You will change this entry to JAN.

Additional Information
You also can use Ctrl + Delete to delete everything to the right of the insertion point.

2 **If necessary, move the insertion point to after the "y" in January.**

- **Press Backspace (4 times).**
- **Press Home.**
- **Press →.**
- **Press Caps Lock.**
- **Press Insert.**
- **Type AN.**
- **Press ↵Enter.**

Your screen should be similar to Figure 1.11

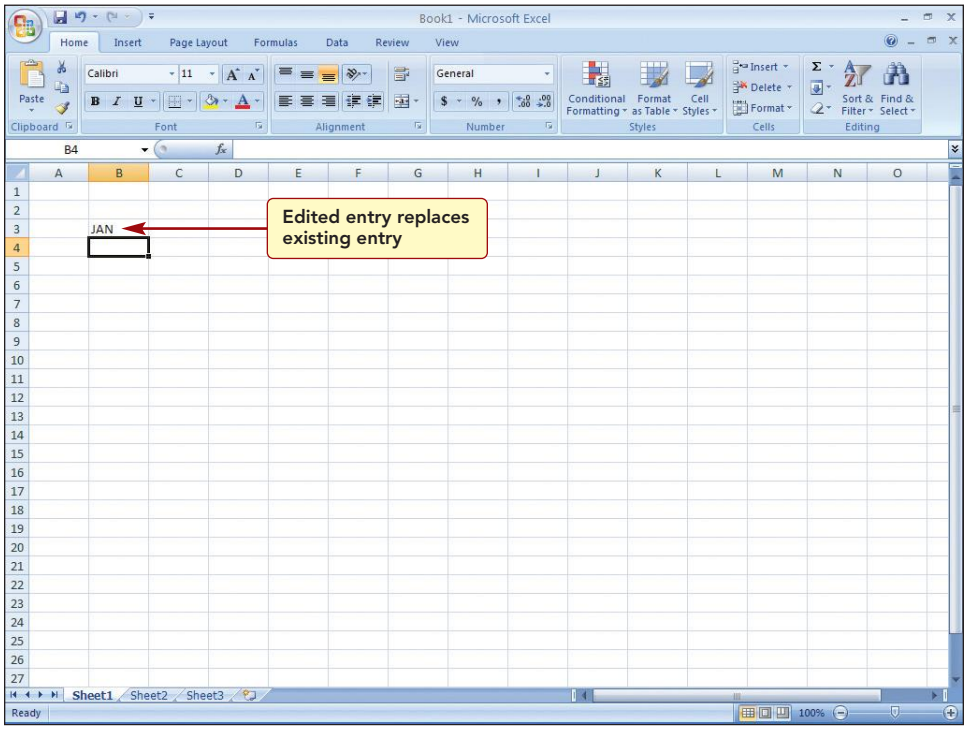


Figure 1.11

Additional Information
The Caps Lock indicator light on your keyboard is lit when this feature is on.

Additional Information
Overwrite is automatically turned off when you leave Edit mode or if you press Insert again.

The four characters at the end of the entry were deleted using Backspace. Turning on the Caps Lock feature produced the uppercase letters AN without having to hold down ⇧Shift. Finally, by pressing Insert, the program switched from inserting text to overwriting text as you typed. The insertion point changed to a highlight to show that the character will be replaced.

The new heading JAN is entered into cell B3, replacing January. As you can see, editing will be particularly useful with long or complicated entries.

Next, you will enter the remaining three headings in row 3. You also can complete an entry by moving to any other worksheet cell.

3 Click on cell C3.

- Type **feb**.
- Press → or Tab ⇆ or click D3.
- Complete the column headings by entering **MAR** in cell D3 and **TOTAL** in cell E3.

Having Trouble?

Remember to press ↵Enter, Tab ⇆, or an arrow key or click in another cell to complete each entry.

- Press Caps Lock to turn off this feature.

Your screen should be similar to Figure 1.12

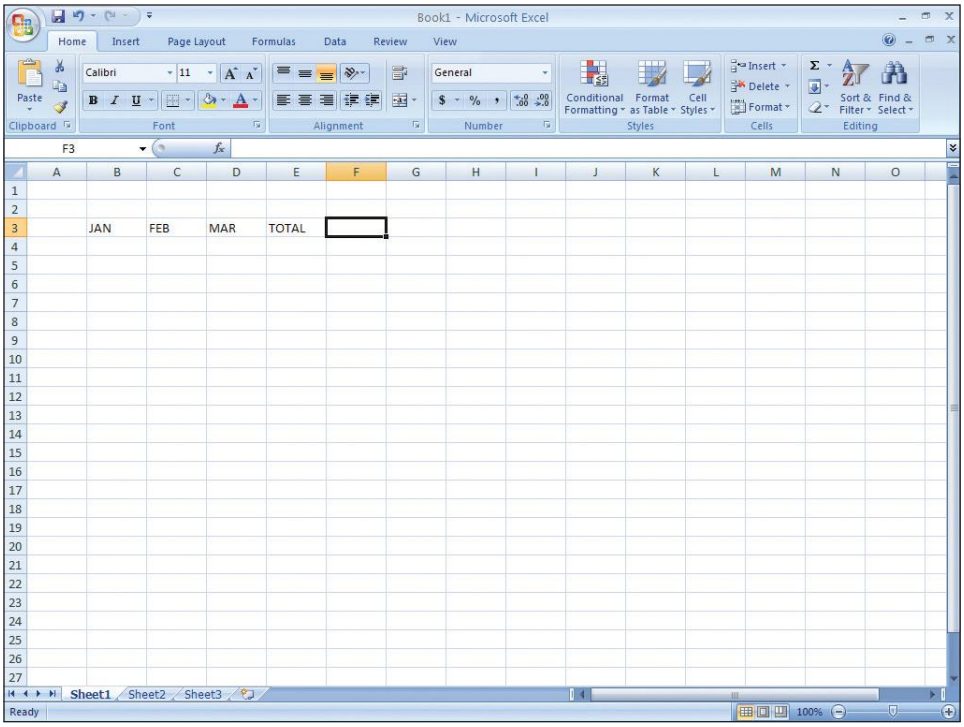


Figure 1.12

The column headings are now complete for the first quarter. Above the column headings, you want to enter a title for the worksheet. The first title line will be the café name, Downtown Internet Café.

4 Move to B1.

- Type **Downtown Cafe**.
- Click ✓ Enter.
- Double-click on cell B1 to change to Edit mode.
- Move the insertion point to the beginning of the word Café.
- Type **Internet** followed by a space.
- Press Ctrl + ↵Enter.

Your screen should be similar to Figure 1.13

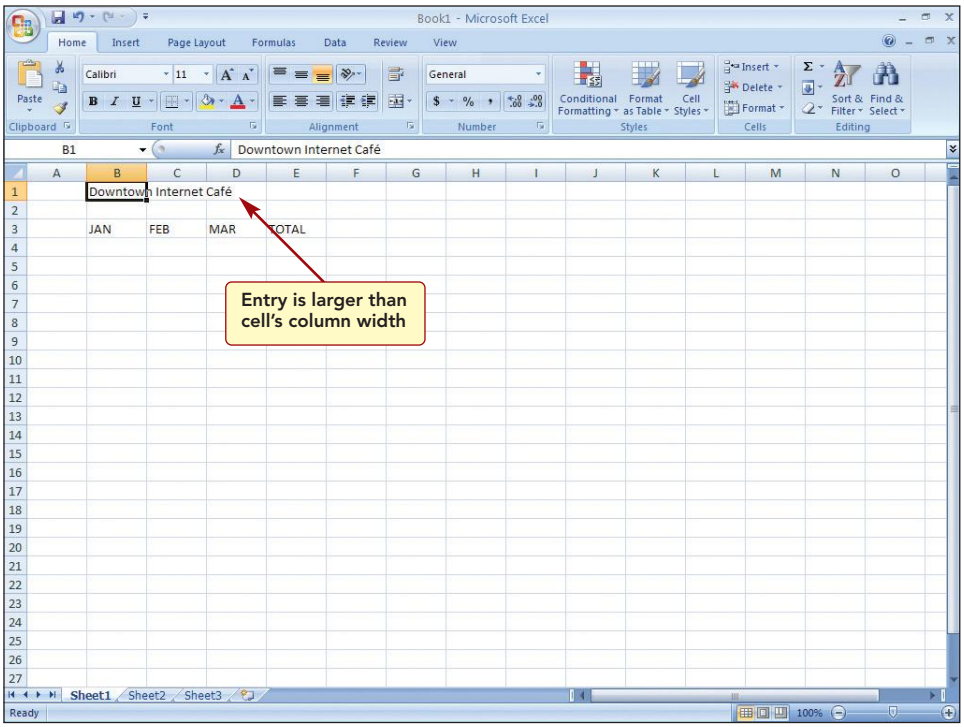


Figure 1.13

Additional Information
Excel automatically adds an accent over the e in Café if the feature to recognize French words is enabled.

Because you did not change to Overtype mode, the new text was inserted between the existing text in the entry. Also notice that the entry is longer than the cell's column width and overlaps into the cell to the right. As long as the cell to the right is empty, the whole entry will be displayed. If the cell to the right contains an entry, the overlapping part of the entry is not displayed.

Using AutoCorrect

Next, you will enter the second title line, First Quarter Report. When you complete an entry in a cell, Excel checks the entry for accuracy. This is part of the automatic correcting feature of Excel.

Concept 2

AutoCorrect

2 The **AutoCorrect** feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry. The AutoCorrect feature automatically inserts proper capitalization at the beginning of sentences and in the names of days of the week. It also will change to lowercase letters any words that were incorrectly capitalized because of the accidental use of the Caps Lock key. In addition, it also corrects many common typing and spelling errors automatically.

One way the program automatically makes corrections is by looking for certain types of errors. For example, if two capital letters appear at the beginning of a word, the second capital letter is changed to a lowercase letter. If a lowercase letter appears at the beginning of a sentence, the first letter of the first word is capitalized. If the name of a day begins with a lowercase letter, the first letter is capitalized.

Another way the program makes corrections is by checking all entries against a built-in list of words that are commonly spelled incorrectly or typed incorrectly. If it finds the entry on the list, the program automatically replaces the error with the correction. For example, the typing error "aboutthe" is automatically changed to "about the" because the error is on the AutoCorrect list. You also can add words that you want to be automatically corrected to the AutoCorrect list. Words you add are added to the list on the computer you are using and will be available to anyone who uses the machine later.

As you enter the second title line, you will intentionally misspell two words to demonstrate how the AutoCorrect feature works.

1. **Move to B2.**
2. **Type Firts Quater Forecast.**
3. **Press ↵Enter.**

Your screen should be similar to Figure 1.14

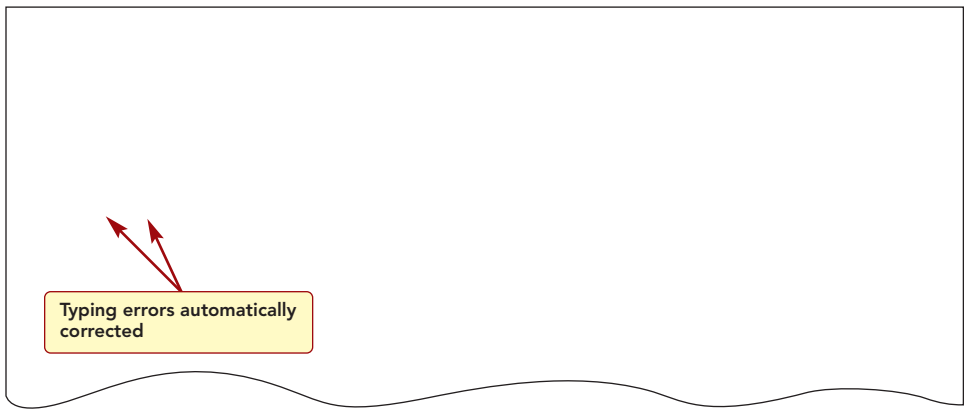


Figure 1.14

The two typing errors were automatically corrected as soon as you completed a word by pressing space.

Next, the row headings need to be entered into column A of the worksheet. The row headings and what they represent are shown in the following table.

Heading	Description
Sales	
Espresso	Income from sales of espresso-based drinks
Coffee	Income from drip coffee sales
Food/Beverage	Income from sales of baked goods, sandwiches, and salads and other beverages
Merchandise	Income from sales of mugs, books, magazines, candy, etc.
Computer	Income from computer rental usage, printing, copier use, and MP3 downloads
Total Sales	Sum of all sales
Expenses	
Cost of Goods	Cost of espresso, coffee, and food items sold
Cost of Merchandise	Cost of merchandise other than food and beverage
Wages	Manager and labor costs
Internet	Wi-Fi access, MP3 kiosk rental, etc.
Building	Lease, insurance, electricity, water, etc.
Capital Assets	Equipment leases, interest, depreciation
Miscellaneous	Maintenance, phone, office supplies, outside services, taxes, etc.
Income	
Net Income	Total sales minus total expenses
Profit Margin	Net income divided by total sales

2 **Complete the row headings for the Sales portion of the worksheet by entering the following headings in the indicated cells.**

Cell	Heading
A4	Sales
A5	Espresso
A6	Coffee
A7	Food/Beverage
A8	Merchandise
A9	Computer
A10	Total Sales

Your screen should be similar to Figure 1.15

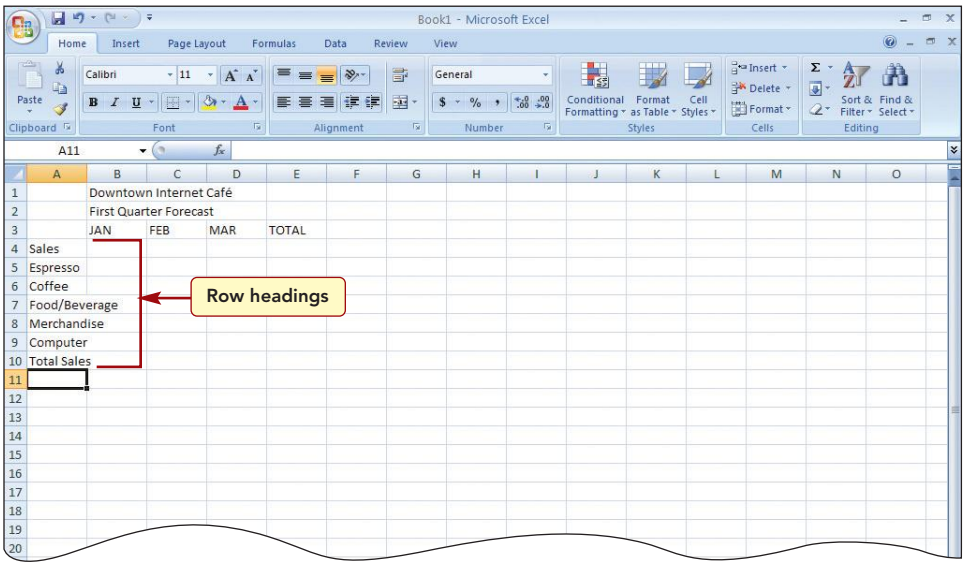


Figure 1.15

Entering Numbers

Next, you will enter the expected Espresso sales numbers for January through March into cells B5 through D5. As you learned earlier, number entries can include the digits 0 to 9 and any of these special characters: + − ( ), . / $ % ? =. When entering numbers, it is not necessary to type the comma to separate thousands or the currency ($) symbol. You will learn about adding these symbols shortly.

You will enter the expected espresso sales for January first. Unlike text entries, Excel displays number entries right-aligned in the cell space by default.

1. **Move to B5.**
2. **Type 13300 and press ↵Enter.**
3. **In the same manner, enter the January sales numbers for the remaining items using the values shown below.**

Cell	Number
B6	5800
B7	3600
B8	1000
B9	600

Additional Information

You can use the number keys above the alphabetic keys or the numeric keypad area to enter numbers. If you use the numeric keypad, the Num Lock key must be on.

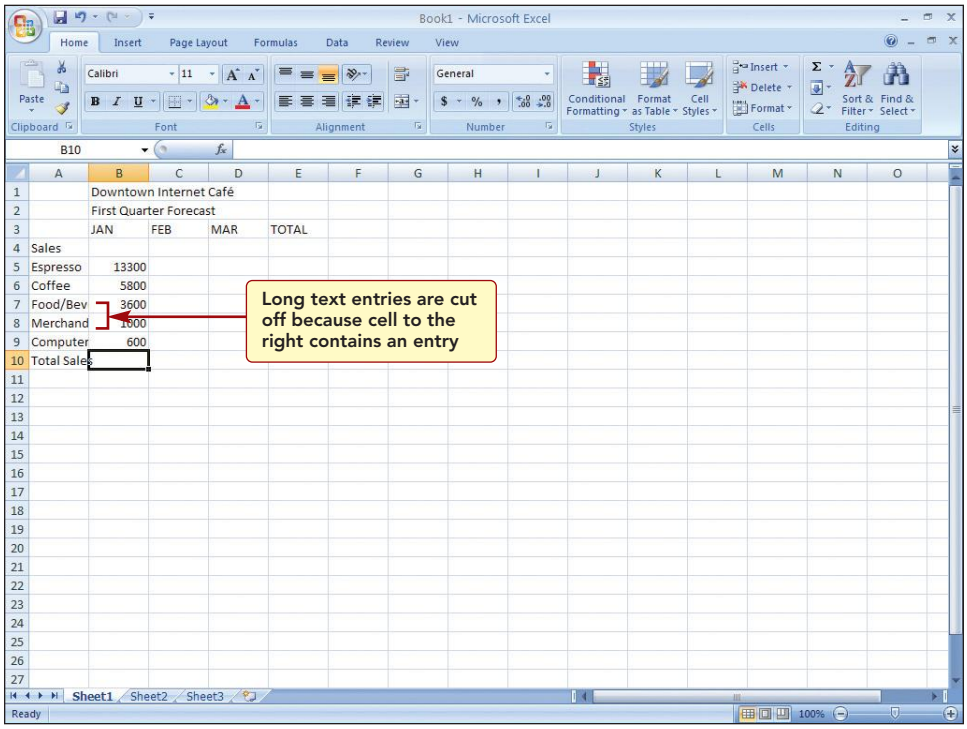


Figure 1.16

Your screen should be similar to Figure 1.16

After entering the numbers for January in column B, any long headings in column A are cut off or interrupted. Notice that the entries in cells A7 and A8 are no longer completely displayed. They contain long text entries and because the cells to the right now contain an entry, the overlapping part of the entry is shortened. However, the entire entry is fully displayed in the formula bar. Only the display of the entry in the cell has been shortened.

Changing Column Widths

To allow the long text entries in column A to be fully displayed, you can increase the column's width.

Concept 3

Column Width

3 The size or width of a column controls the amount of information that can be displayed in a cell. A text entry that is larger than the column width will be fully displayed only if the cells to the right are blank. If the cells to the right contain data, the text is interrupted. On the other hand, when numbers are entered in a cell, the column width is automatically increased to fully display the entry.

The default column width setting is 8.43. The number represents the average number of digits that can be displayed in a cell using the standard type style. The column width can be any number from 0 to 255. If it is set to 0, the column is hidden.

When the worksheet is printed, it appears as it does currently on the screen. Therefore, you want to increase the column width to display the largest entry. Likewise, you can decrease the column width when the entries in a column are short.

There are several ways to change the column width. Using the mouse, you can change the width by dragging the boundary of the column heading. You also can set the column width to an exact value or to automatically fit the contents of the column.

Dragging the Column Boundary

The column width can be quickly adjusted by dragging the boundary line located to the right of the column letter. Dragging it to the left decreases the column width, while dragging it to the right increases the width. As you drag, a temporary column reference line shows where the new column will appear and a ScreenTip displays the width of the column.

1 **Point to the boundary line to the right of the column letter A and when the mouse pointer changes to ✢, click and drag the mouse pointer to the right.**

When the ScreenTip displays 18.00, release the mouse button.

Your screen should be similar to Figure 1.17

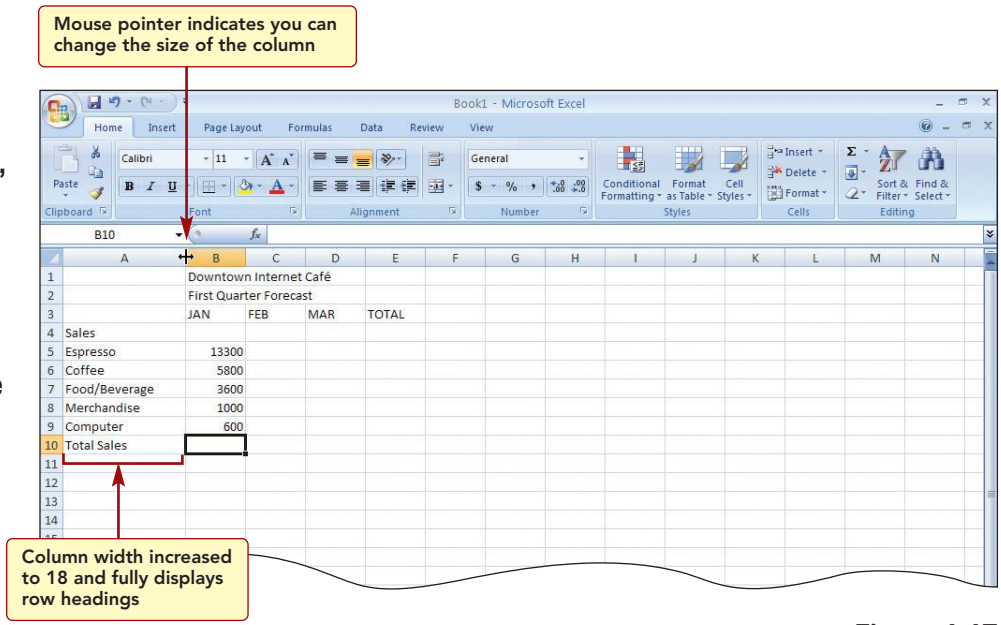


Figure 1.17

Now column A is more than wide enough to fully display all the row headings.

Setting Column Width to a Specified Value

Next, you will reduce the width of column A to 15.

1. **Move to any cell in column A.**
2. **Click Format in the Cells group and choose Column Width.**
3. **Type 15 in the Column width text box and click OK.**

Your screen should be similar to Figure 1.18

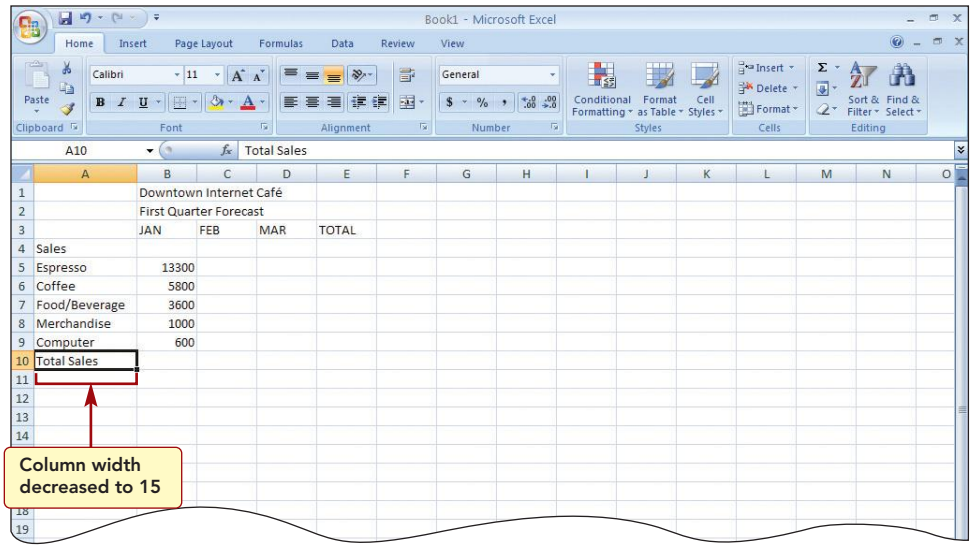


Figure 1.18

Additional Information
You can quickly return the column width to the default width setting using Format /Default Width.

Although this is close, you would like to refine it a little more.

Using AutoFit

Another way to change the column width is to use the **AutoFit** feature to automatically adjust the width to fit the column contents. When using AutoFit, double-click the boundary to the right of the column heading of the column you want to fit to contents.

1. **Double-click the right boundary line of column A.**

Having Trouble?
Make sure the mouse pointer changes to ✢ before you double-click on the column boundary line.

Your screen should be similar to Figure 1.19

Another Method
You also can use Format /AutoFit Column Width.

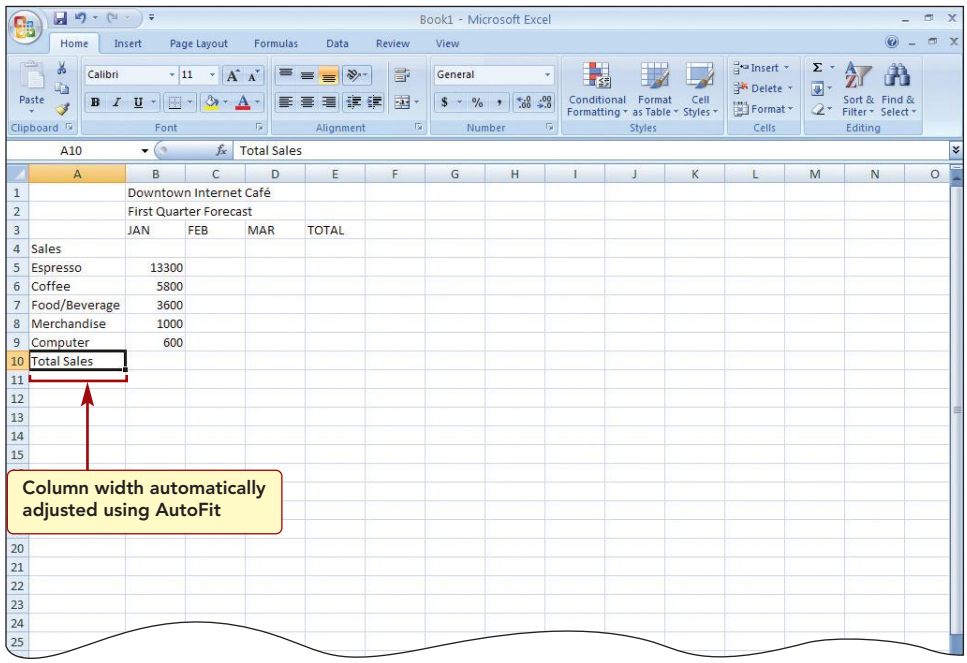


Figure 1.19

Additional Information
You can adjust the size of any row by dragging the row divider line, by using Format /Height, or by using Format /AutoFit Row Height.

The column width is sized to just slightly larger than the longest cell contents. You also can adjust the height of a row using the same procedures you used to adjust the column width.

Saving, Closing, and Opening Workbooks

You have a meeting you need to attend shortly, so you want to save your work to a file and then close the file. As you enter and edit data to create a new workbook, the changes you make are immediately displayed onscreen and are stored in your computer's memory. However, they are not permanently stored until you save your work to a file on a disk. After a workbook is saved as a file, it can be closed and opened again at a later time to be further edited.

As a backup against the accidental loss of work because of power failure or other mishap, Office 2007 applications include an **AutoRecover** feature. When this feature is on, as you work you may see a pulsing disk icon briefly appear in the status bar. This icon indicates that the program is saving your work to a temporary recovery file. The time interval between automatic saving can be set to any period you specify; the default is every 10 minutes. When you start up again, the recovery file is automatically opened containing all changes you made up to the last time it was saved by AutoRecover. You then need to save the recovery file. If you do not save it, it is deleted when closed. While AutoRecover is a great feature for recovering lost work, it should not be used in place of regularly saving your work.

Saving a New Workbook

You will save the work you have completed so far on the workbook. The Save and Save As commands on the File menu are used to save files. The Save command or the  Save button will save the active file using the same file name by replacing the contents of the existing file with the document as it appears on your screen. The Save As command is used to save a file with a new file name or to a new location. This action leaves the original file unchanged.

When a workbook is saved for the first time, either command can be used. It is especially important to save a new file very soon after you create it as the AutoRecover feature is not functional until a file name has been specified.

1. **Click Office Button.**
2. **Choose Save As.**

Your screen should be similar to Figure 1.20

Having Trouble?

In Windows Vista, the dialog box layout will be different; however, the same information will be displayed.

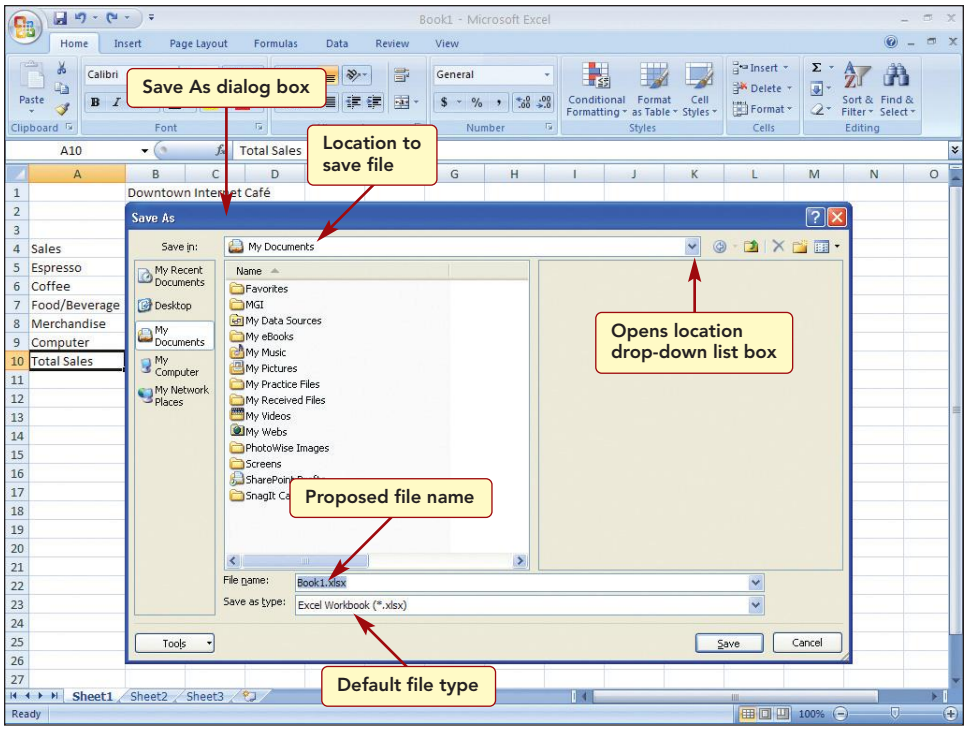


Figure 1.20

Additional Information

Do not be concerned if your dialog box displays a different Save In location and additional file information, such as the size, type, and date modified. These features are determined by the Folder and dialog box Views settings on your computer.

This Save As dialog box is used to specify the location to save the file and the file name. The Save In drop-down list box displays the default folder as the location where the file will be saved, and the File Name text box displays the proposed file name. The file list box displays the names of any Excel workbook files in the default location. Only Excel workbook files are listed, because the selected file type in the Save As Type list box is Excel Workbook. First you need to change the location where the file will be saved.

2. **Open the Save In drop-down list box.**
3. **Select the appropriate location to save the file.**

Your screen should be similar to Figure 1.21

Having Trouble?

If you are saving to a storage device/disk and an error message is displayed, check that it is properly inserted in the drive and click OK.

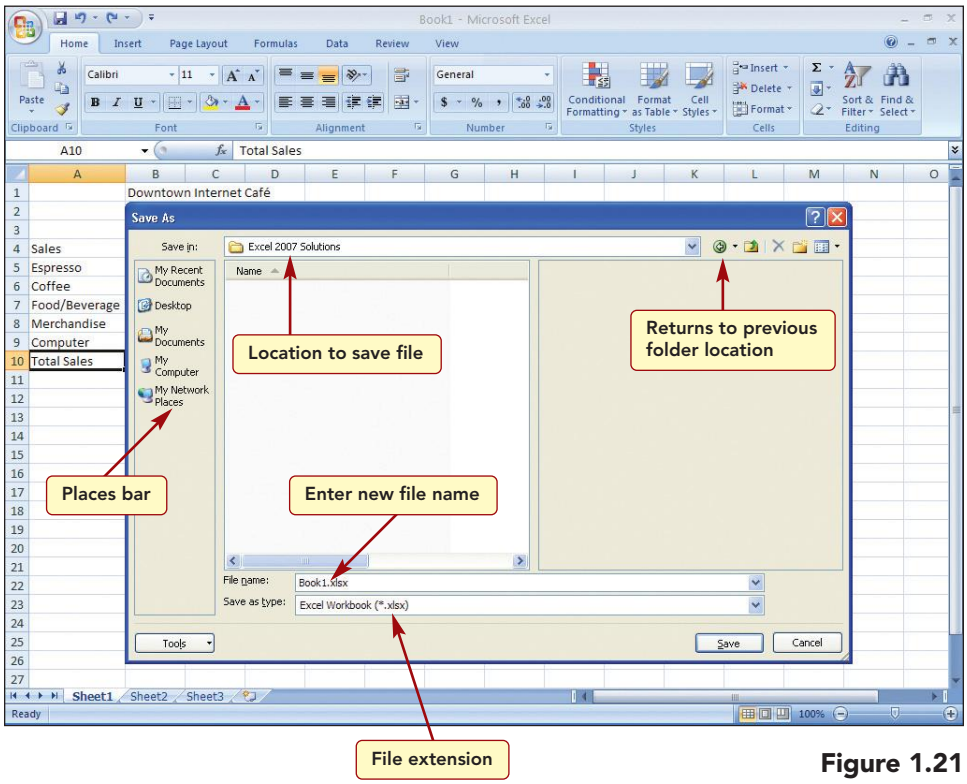


Figure 1.21

If the location you are saving to does not contain other Excel files, your file list will be empty, as shown here. Otherwise, your file list may display Excel file names. You also can select the location to save your file from the Places bar along the left side of the dialog box. The icons bring up a list of recently accessed files and folders, the contents of the My Documents and Favorites folder, the Windows desktop, and folders that reside on a network or Web through My Network Places. Selecting a folder from one of these lists changes to that location. You also can click the button in the toolbar to return to folders that were previously opened.

Next, you need to enter a file name and specify the file type. The Save as Type box displays Excel Workbook as the default format in which the file will be saved. The File Name box displays Book1.xlsx, the file name of the default workbook. The file extension .xlsx identifies the file as an Excel 2007 workbook. The default file type saves the workbook file in XML (Extensible Markup Language) format.

Previous versions of Excel used the .xls file extension. If you plan to share a file with someone using Excel 2003 or earlier, you can save the file using the .xls file type; however, some features may be lost. Otherwise, if you save it as an .xlsx file type, the recipient may not be able to view all the features.

In addition to the .xlsx file type, Excel workbooks also can be saved in several different file formats that have different file extensions. The file type you select determines the file extension that will be automatically added to the file name when the file is saved.

You will change the file name to Forecast and use the default file type setting.

Additional Information
Your Save As dialog box may or may not display file extensions depending upon your Windows Folder setup.

MORE ABOUT
See 5.4 Save Workbooks in the More About appendix to learn how to identify document features that are not supported by previous versions using the Compatibility Checker.

MORE ABOUT
To learn about XML and other Excel file types, see 5.4 Save Workbooks in the More About appendix.

3 **Triple-click on the file name in the File Name text box to highlight the file name.**

Type Cafe Forecast.

Click Save or press Enter.

Additional Information
The file name can be entered in either uppercase or lowercase letters and will appear exactly as you type it. Windows documents can have up to 256 characters in the file name. Names can contain letters, numbers, and spaces; the symbols /, ?, :, *, ", <, and > cannot be used.

Your screen should be similar to Figure 1.22

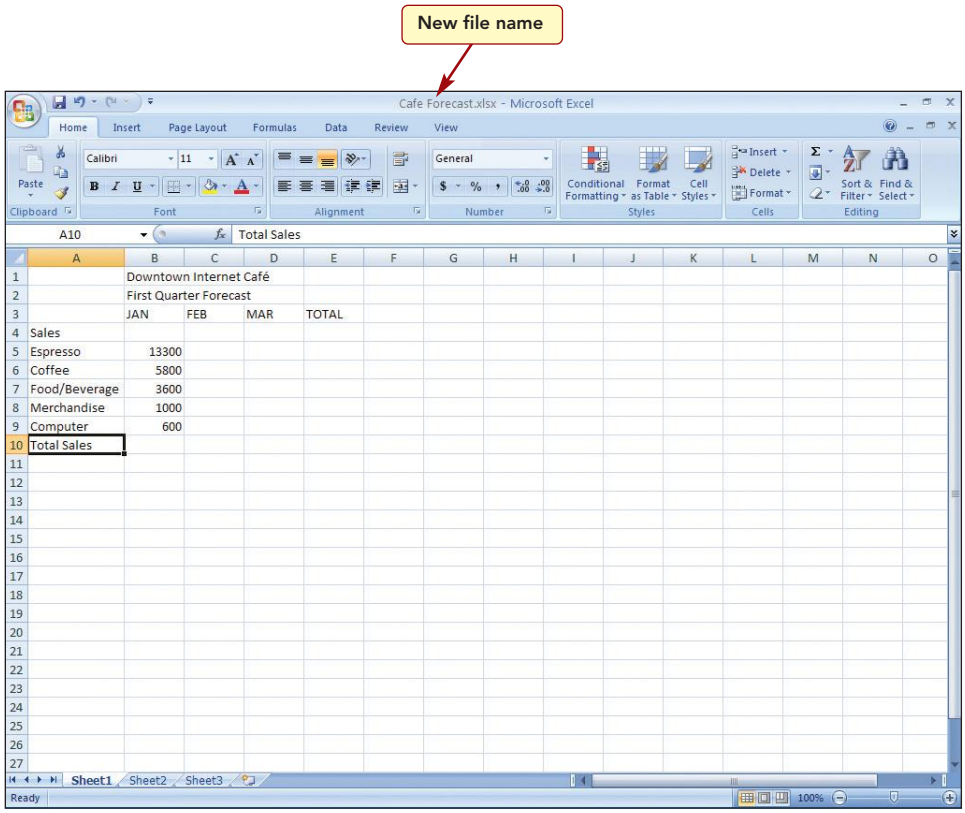


Figure 1.22

Additional Information
The file name in the title bar may display the workbook file extension, .xlsx, depending on your Windows Folder settings.

The new file name is displayed in the application window title bar. The worksheet data that was on your screen and in the computer's memory is now saved at the location you specified in a new file called Forecast.

Closing a Workbook

You are now ready to close the workbook file.

1. **Click Office Button and choose Close.**

Because you did not make any changes to the document since saving it, the document window is closed immediately and the Excel window displays an empty workbook window. If you had made additional changes, Excel would ask if you wanted to save the file before closing it. This question prevents the accidental closing of a file that has not been saved first.

Additional Information
Clicking Office Button and choosing New opens a dialog box that allows you to open a new blank workbook file or use a template. You also can quickly open a recently used file by selecting it from the list of file names displayed under Recent Documents on the File menu.

Opening an Existing Workbook

After attending your meeting, you continued working on the Café forecast. To see what has been done so far, you will open the workbook file named ex01_CafeForecast1. When you open a file, the Open dialog box is displayed. It has many of the same features as in the Save As dialog box. You will select the location and name of the file you want to open from the Look In drop-down menu.

1. **Click Office Button and choose Open.**

Another Method
The keyboard shortcut is Ctrl + O.

- **Select the location containing your data files from the Look In drop-down list box.**
- **Select ex01_Cafe Forecast1.**

Your screen should be similar to Figure 1.23

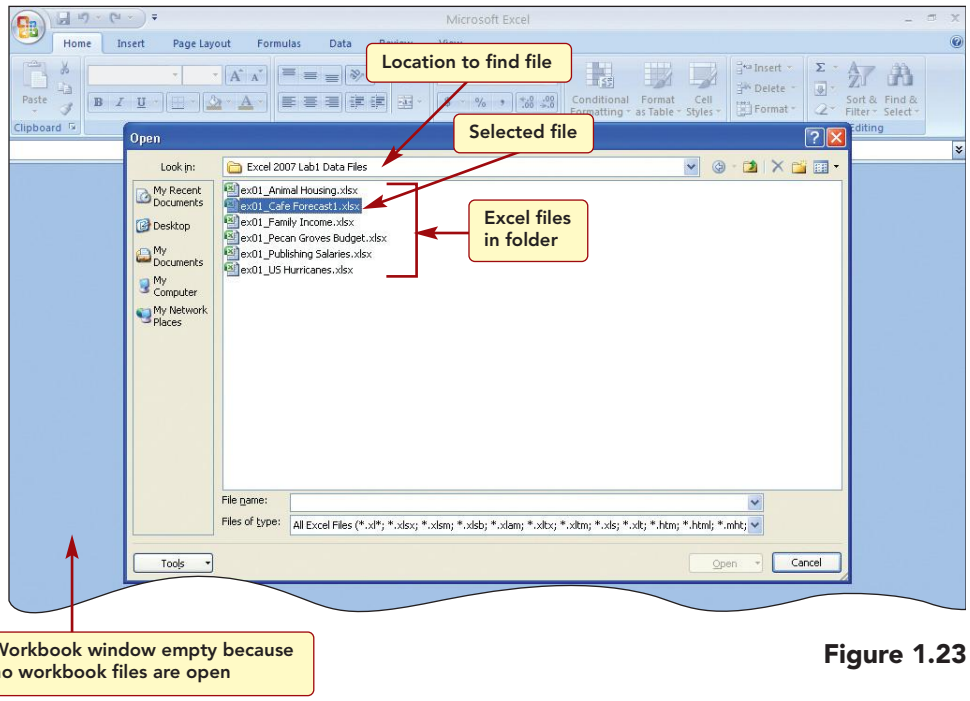


Figure 1.23

Additional Information
You can change the dialog box view using Views.

A list of the Excel 2007 files located in your selected folder location is displayed. Your list may display more information, such as file details, depending on the dialog box view settings.

2 Click Open.

Another Method
You also could double-click the file name to both select it and choose Open.

- **If necessary, maximize the workbook window.**

Your screen should be similar to Figure 1.24

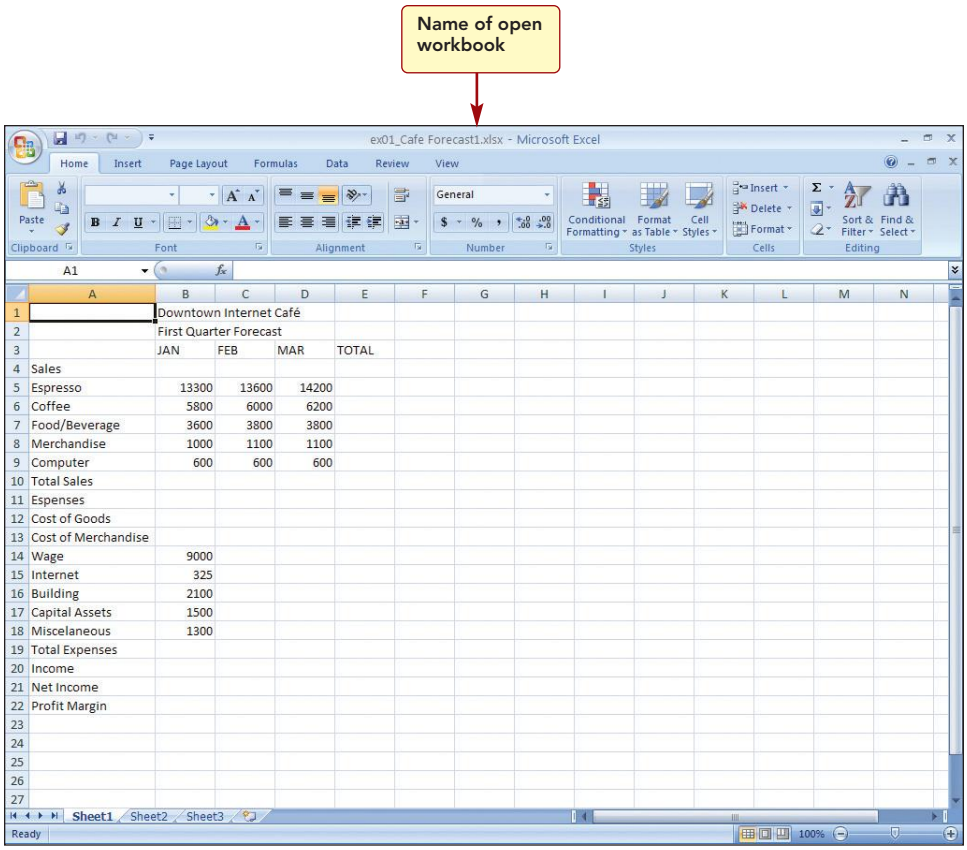


Figure 1.24

The workbook is opened and displayed in the workbook window. The workbook contains the additional sales values for February and March, the expense row headings, and several of the expense values for the month of January.

Using Proofing Tools

When entering information into a worksheet, you are likely to make spelling and typing errors. To help locate and correct these errors, the spelling checker feature can be used. Additionally, you may find that the descriptive headings you have entered may not be exactly the word you want. The thesaurus can suggest better words to clarify the meaning of the worksheet.

Checking Spelling

In your rush to get the row headings entered you realize you misspelled a few words. For example, the Expenses label is spelled "Espenses." Just to make sure there are no other spelling errors, you will check the spelling of all text entries in this worksheet.

Concept 4

Spelling Checker

4 The **spelling checker** locates misspelled words, duplicate words, and capitalization irregularities in the active worksheet and proposes the correct spelling. This feature works by comparing each word to a dictionary of words, called the **main dictionary**, that is supplied with the program. You also can create a **custom dictionary** to hold words you commonly use but that are not included in the main dictionary. If the word does not appear in the main dictionary or in a custom dictionary, it is identified as misspelled.

When you check spelling, the contents of all cell entries in the entire active sheet are checked. If you are in Edit mode when you check spelling, only the contents of the text in the cell are checked. The Spell Checker does not check spelling in formulas or in text that result from formulas.

Excel begins checking all worksheet entries from the active cell forward.

1. **If necessary, move to A1.**
2. **Open the Review tab.**
3. **Click Spelling in the Proofing group.**

Another Method

The keyboard shortcut is F7.

Your screen should be similar to Figure 1.25

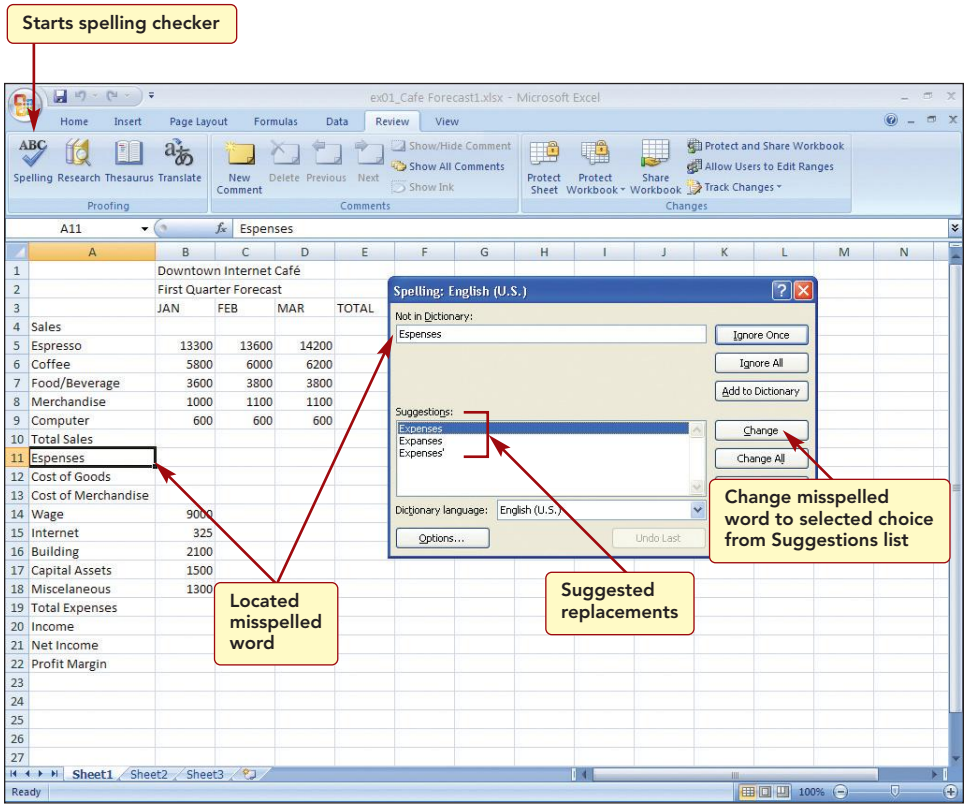


Figure 1.25

Additional Information

Spell checking operates the same way in all Office 2007 programs. The dictionaries are shared between Office applications.

The spelling checker immediately begins checking the worksheet for words that it cannot locate in its main dictionary. The first cell containing a misspelled word, in this case Espences, is now the active cell and the Spelling dialog box is displayed. The word it cannot locate in the dictionary is displayed in the Not in Dictionary text box. The Suggestions text box displays a list of possible replacements. If the selected replacement is not correct, you can select another choice from the suggestions list or type the correct word in the Not in Dictionary text box.

The option buttons shown in the table below have the following effects:

Option	Effect
Ignore Once	Leaves selected word unchanged
Ignore All	Leaves this word and all identical words in worksheet unchanged
Add to Dictionary	Adds selected word to a custom dictionary so Excel will not question this word during subsequent spell checks
Change	Changes selected word to word highlighted in Suggestions box
Change All	Changes this word and all identical words in worksheet to word highlighted in Suggestions box
AutoCorrect	Adds a word to the AutoCorrect list so the word will be corrected as you type

You want to accept the suggested replacement, Expenses.

2 **Click** Change.

Your screen should be similar to Figure 1.26

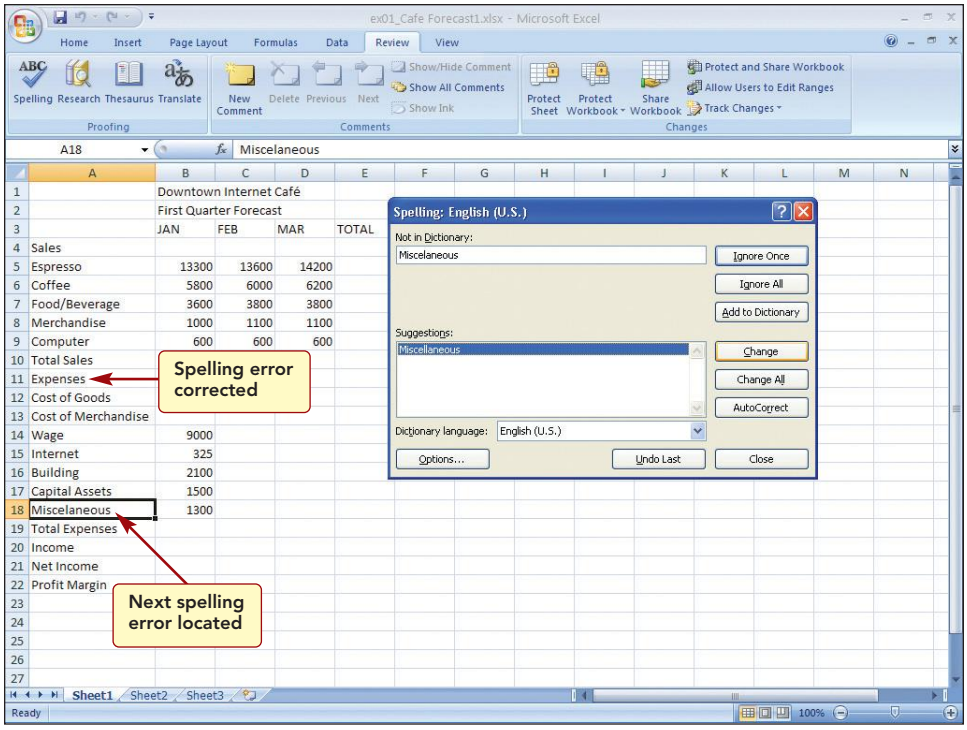


Figure 1.26

The correction is made in the worksheet, and the program continues checking the worksheet and locates another error, Miscelaneous. You will make this correction. When no other errors are located, a dialog box is displayed, informing you that the entire worksheet has been checked.

3. **Change this word to Miscellaneous.**

   Click OK **to end spell checking.**

The worksheet is now free of spelling errors.

Using the Thesaurus

The next text change you want to make is to find a better word for "Wage" in cell A14. To help find a similar word, you will use the thesaurus tool.

Concept 5

Thesaurus

5 The **thesaurus** is a reference tool that provides synonyms, antonyms, and related words for a selected word or phrase. **Synonyms** are words with a similar meaning, such as "cheerful" and "happy." **Antonyms** are words with an opposite meaning, such as "cheerful" and "sad." Related words are words that are variations of the same word, such as "cheerful" and "cheer." The thesaurus can help to liven up your documents by adding interest and variety to your text.

To use the thesaurus, first move to the cell containing the word you want to change. If a cell contains multiple words, you need to select the individual word in the cell.

1. **Move to A14.**

   Click Thesaurus **in the Proofing group.**

Another Method

You also can hold down Alt while clicking on the cell containing the word you want looked up to access the Thesaurus in the Research task pane.

Your screen should be similar to Figure 1.27

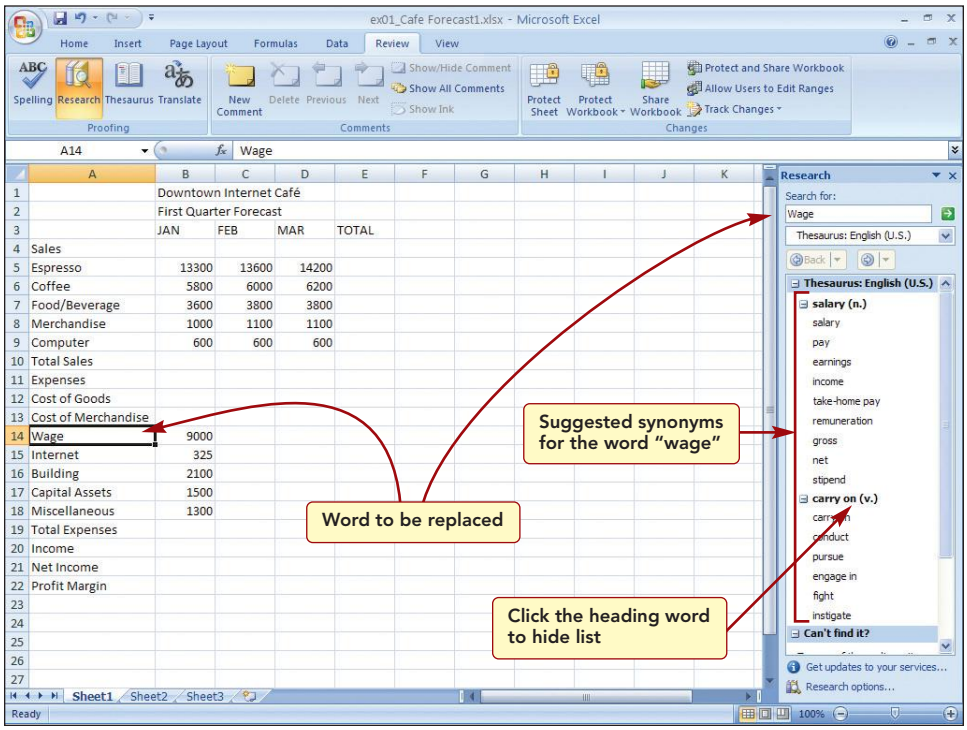


Figure 1.27

The Research task pane opens and the word in the active cell, Wage, is entered in the Search for text box and the list box displays words in the Thesaurus that have similar meanings for this word. The list contains synonyms for "wage" used as a noun or as a verb. The first word at the top of each group is the group heading and is closest in meaning. It is preceded with a ⊟ symbol and the word is bold. The ⊟ indicates the list of synonyms is displayed. Clicking the heading word will hide the list of synonyms. Because you want to find a synonym for "wage" used as a noun, you will hide those for "wage" used as a verb.

2 **Click the heading "carry on."**

Your screen should be similar to Figure 1.28

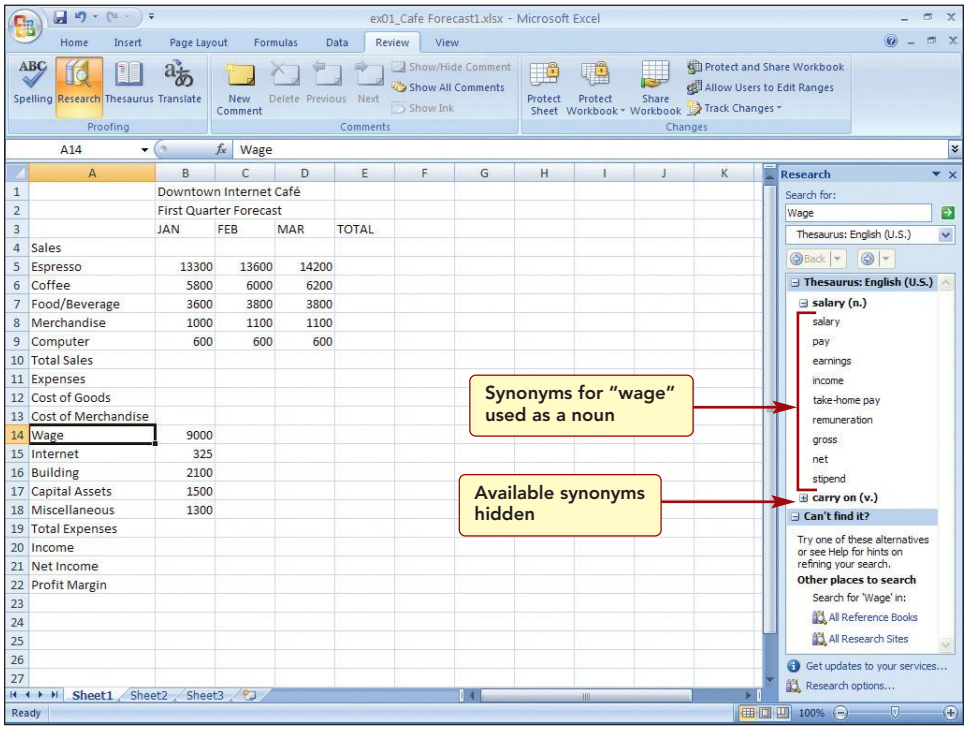


Figure 1.28

Now a ⊞ symbol appears before the group heading, indicating all available words are hidden. Only the synonyms for the word used as a noun are displayed.

When you point to a word in the list, a drop-down list of three menu options, Insert, Copy, and Lookup, become available. The Insert option inserts the word into the active cell. The Copy option is used to copy and then paste the word into any worksheet cell. The Lookup option displays additional related words for the current word. You decide to use the word "pay" and will insert the word into cell A14 in place of "Wage."

Additional Information
Clicking on the word is the same as using the Lookup menu option.

3. Point to "pay" and click to display the menu.

- Choose Insert.
- Click × in the title bar of the Research task pane to close it.

Your screen should be similar to Figure 1.29

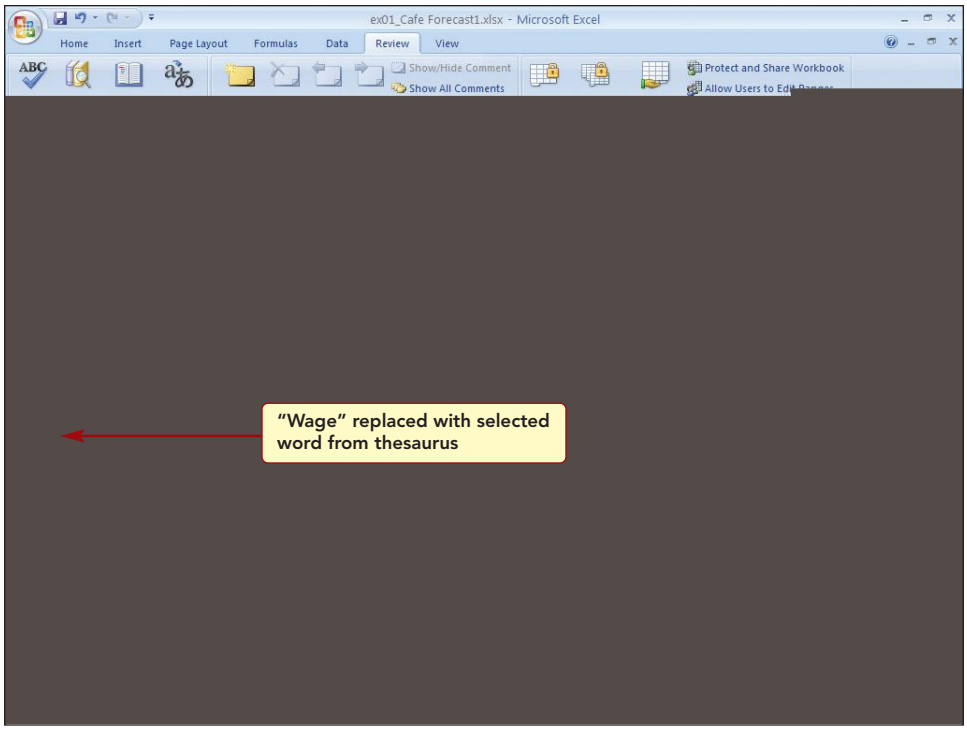


Figure 1.29

The word "Wage" is replaced with the selected word from the thesaurus. Notice the replacement word is capitalized correctly. This is because the replacement text follows the same capitalization as the word it replaces.

Duplicating Cell Contents

Next, you want to enter the estimated expenses for salary, computers, lease, and miscellaneous for February and March. They are the same as the January expense numbers. Because these values are the same, instead of entering the same number repeatedly into each cell you can quickly copy the contents of one cell to another. You also want to move information from one location in the worksheet to another.

Concept 6

Copy and Move

6 The contents of worksheet cells can be duplicated (copied) or moved to other locations in the worksheet or between worksheets, saving you time by not having to retype the same information. An entry that is copied leaves the original, called the **source** or **copy area**, and inserts a duplicate at a new location, called the **destination** or **paste area**. A selection that is moved is removed or cut from the original location in the source and inserted at the destination.

When a selection is cut or copied, the selection is stored in the system Clipboard, a temporary Windows storage area in memory. The system Clipboard contents are then inserted at the new location specified by the location of the insertion point. The system Clipboard can hold only one copied item at a time. The Office 2007 applications also include an Office Clipboard that can store up to 24 items. This allows you to insert multiple items from various Office files and paste all or part of the collection of items into another file.

Using Copy and Paste

When copying and pasting entries, you first use the Copy command to copy the cell contents to the system Clipboard. Then you move to the new location where you want the contents copied and use the Paste command to insert the system Clipboard contents into the selected cells. Be careful when pasting to the new location because any existing entries are replaced.

To use the Copy command, you first must select the cell or cells in the source containing the data to be copied. You will copy the Pay value in cell B14 into cells C14 and D14.

Additional Information

The Paste button is a split button. Clicking the upper part of the button pastes using the default settings. Clicking the lower part displays a menu of options.

1. **Move to B14.**
2. **Open the Home tab.**
3. **Click Copy in the Clipboard group.**

Another Method

The shortcut key is Ctrl + C. Copy is also available on the context menu.

Your screen should be similar to Figure 1.30

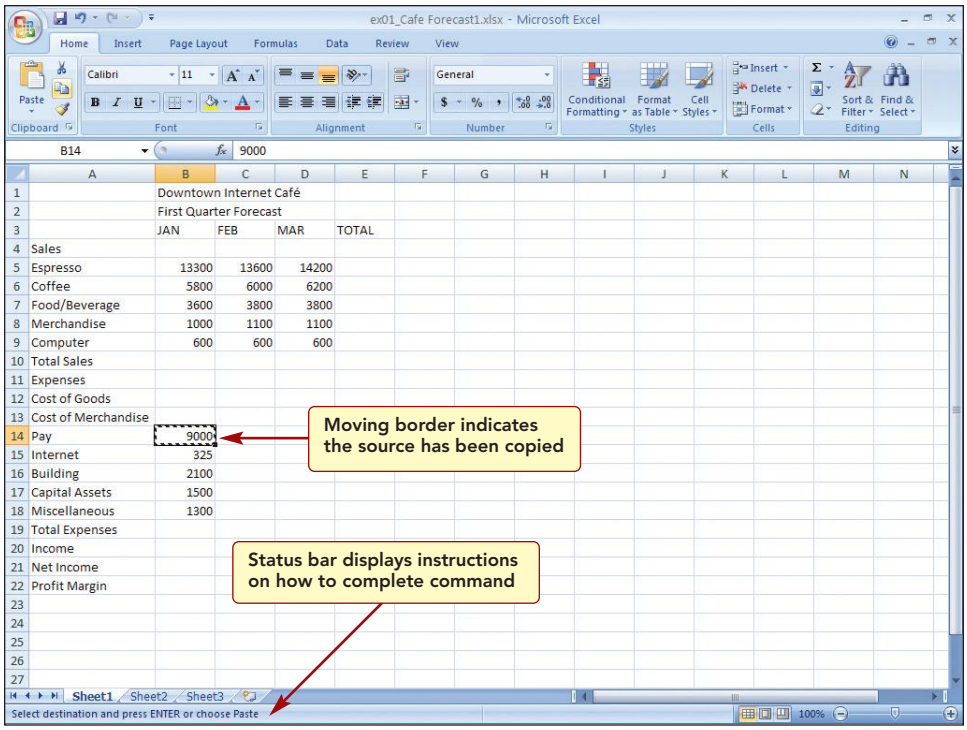


Figure 1.30

A moving border identifies the source and indicates that the contents have been copied to the system Clipboard. The instructions displayed in the status bar tell you to select the destination where you want the contents copied. You will copy it to cell C14.

2 **Move to C14.**

Click the upper part of the Paste button.

Another Method

The shortcut key is Ctrl + V. Paste is also available on the context menu and on the button's drop-down menu.

Your screen should be similar to Figure 1.31

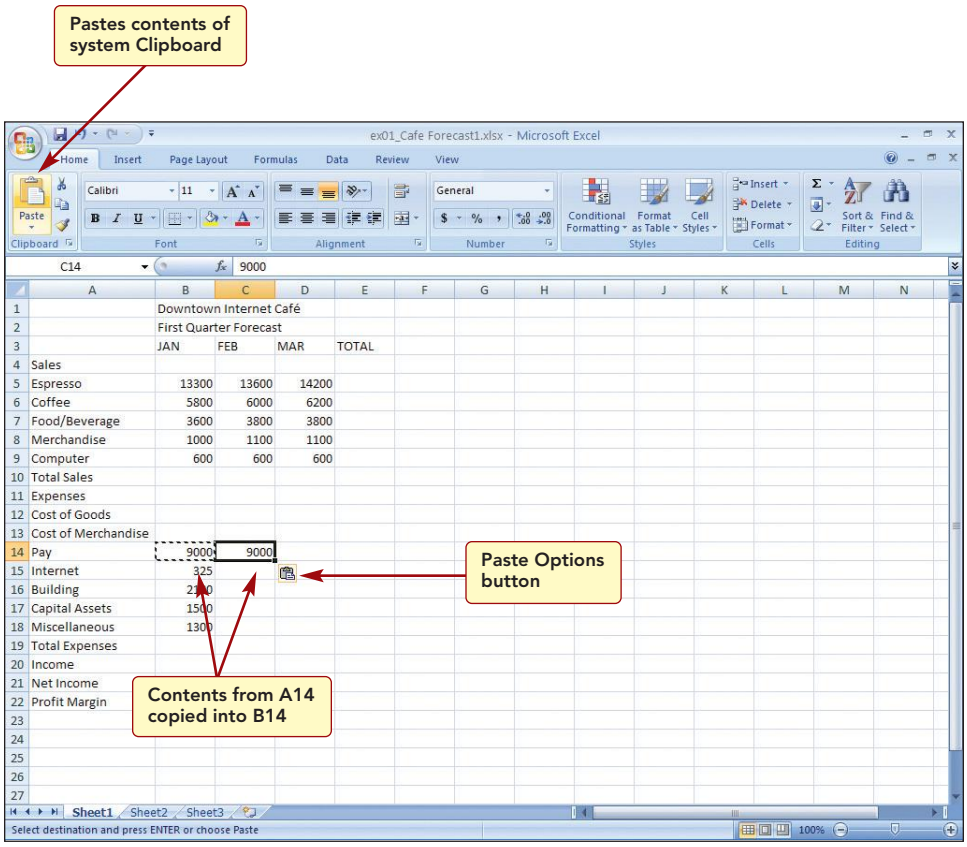


Figure 1.31

Additional Information

You will learn about the different paste options in later labs.

The contents of the system Clipboard are inserted at the specified destination location. Each time the paste command is used, the Paste Options button is available. Clicking on the button opens the Paste Options menu that allows you to control how the information you are pasting is inserted.

The moving border is still displayed, indicating the system Clipboard still contains the copied entry. Now you can complete the data for the Pay row by pasting the value again from the system Clipboard into cell D14. While the moving border is still displayed, you also can simply press ↵Enter to paste. However, as this method clears the contents of the system Clipboard immediately, it can only be used once.

3 **Move to D14.**

Press ↵Enter.

Your screen should be similar to Figure 1.32

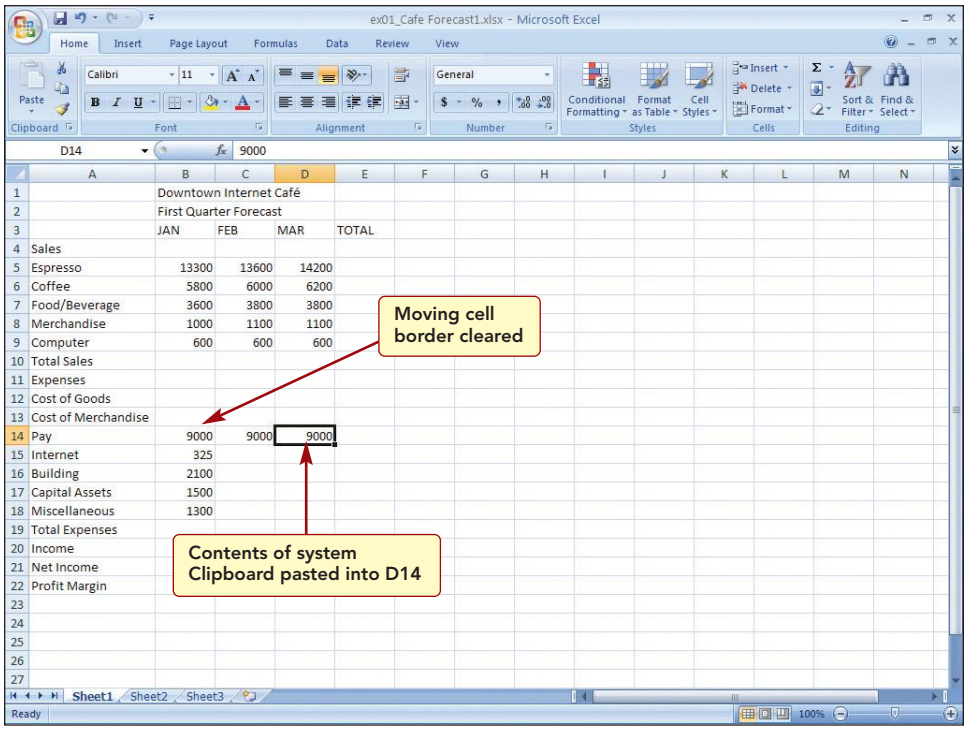


Figure 1.32

Additional Information

You also can cancel a moving border and clear the system Clipboard contents by pressing Esc.

The contents of the system Clipboard are inserted at the specified destination location and the moving border is cleared, indicating the system Clipboard is empty.

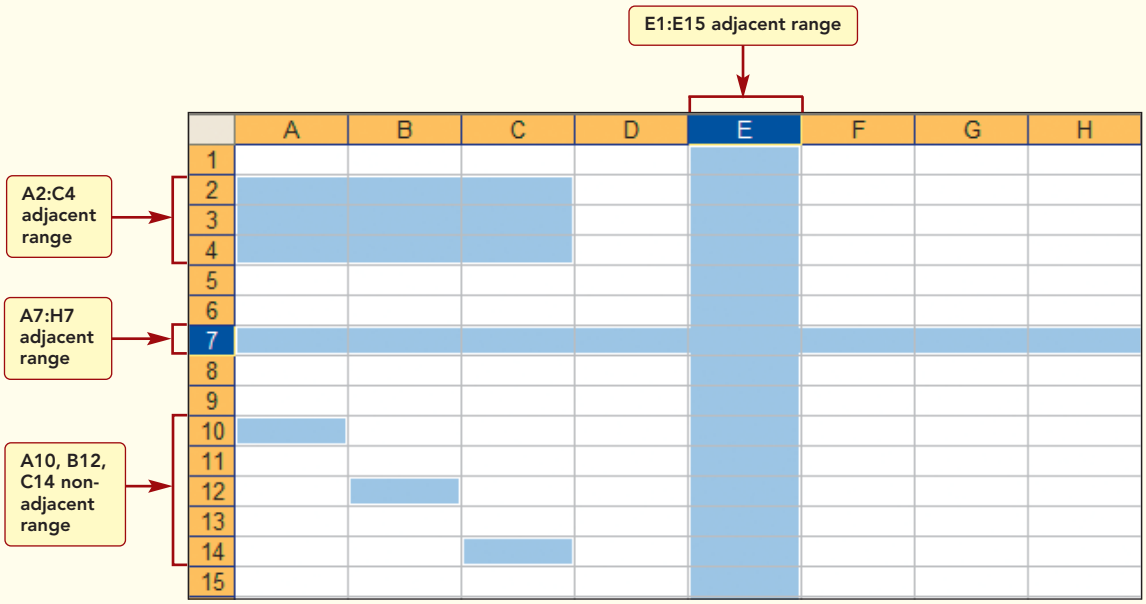
Selecting a Range

Now you need to copy the Internet value in cell B15 to February and March. You could copy and paste the contents individually into each cell as you did with the Pay values. A quicker method, however, is to select a range and paste the contents to all cells in the range at once.

Concept 7

Range

7 A selection consisting of two or more cells on a worksheet is a **range**. The cells in a range can be adjacent or nonadjacent. An **adjacent range** is a rectangular block of adjoining cells. A **nonadjacent range** consists of two or more selected cells or ranges that are not adjoining. In the example shown below, the shaded areas show valid adjacent and nonadjacent ranges. A **range reference** identifies the cells in a range. A colon is used to separate the first and last cells of an adjacent range reference. For example, A2:C4 indicates the range consists of cells A2 through C4. Commas separate the cell references of a nonadjacent range. For example, A10,B12,C14 indicates the range consists of cells A10, B12, and C14 of a nonadjacent range.



You can select a range using the mouse procedures shown in the following table. You also can select using the keyboard by moving to the first cell of the range, holding down Shift or pressing F8 and using the navigational keys to expand the highlight. Using the F8 key turns on and off Extend mode. When this mode is on, Extend Selection appears in the status bar.

To Select	Mouse
A range	Click first cell of range and drag to the last cell.
A large range	Click first cell of range, hold down Shift, and click last cell of range.
All cells on worksheet	Click the All button located at the intersection of the row and column headings.
Nonadjacent cells or ranges	Select first cell or range, hold down Ctrl while selecting the other cell or range.
Entire row or column	Click the row number or column letter heading.
Adjacent rows or columns	Drag across the row number or column letter headings.
Nonadjacent rows or columns	Select first row or column, hold down Ctrl, and select the other rows or columns

To complete the data for the Internet row, you want to copy the value in cell B15 to the system Clipboard and then copy the system Clipboard contents to the adjacent range of cells C15 through D15.

1. **Move to B15.**
2. **Click** Copy.
3. **Drag to select the range of cells C15 through D15.**
4. **Click** Paste.

Your screen should be similar to Figure 1.33

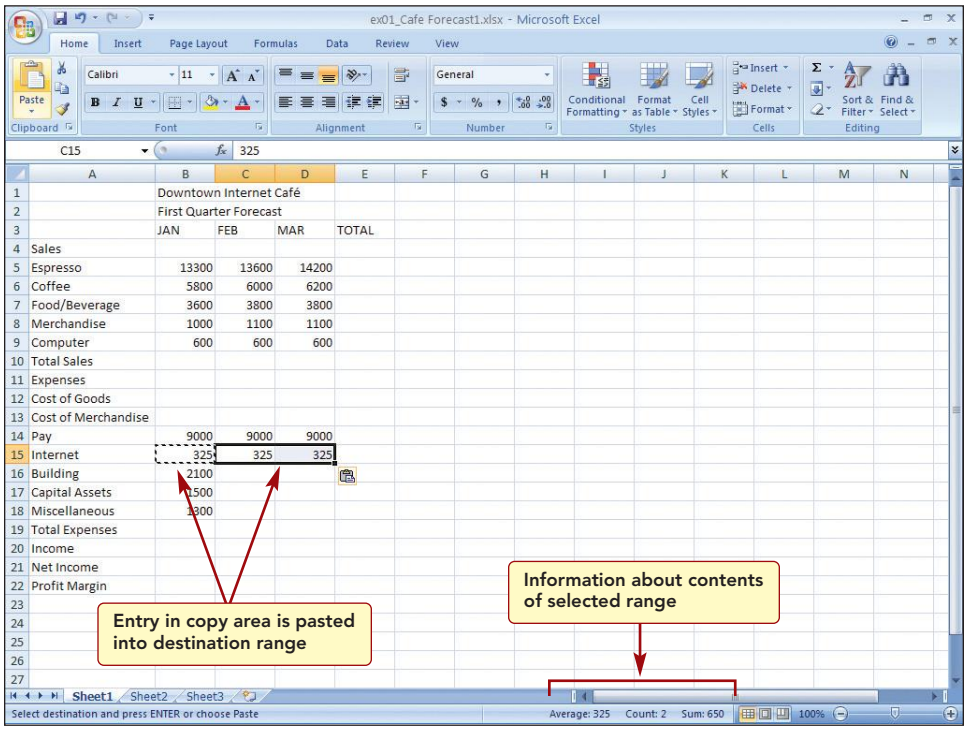


Figure 1.33

Additional Information
The paste area does not have to be adjacent to the copy area.

The destination range is highlighted and identified by a dark border surrounding the selected cells. The entry copied from cell B15 was pasted into the selected destination range. Also notice the status bar now displays the average, count, and sum of values in the selected range.

Using the Fill Handle

Next, you will copy the January Building expenses to cells C16 through D16, the Capital Assets expenses to cells C17 through D17, and the Miscellaneous expenses to cells C18 through D18. You can copy all values at the same time across the row by first specifying a range as the source. Another way to copy is to drag the **fill handle**, the black box in the lower-right corner of a selection.

1. **Drag to select cells B16:B18.**

2. **Point to the fill handle and when the mouse pointer is a +, drag the mouse to extend the selection to cells D16:D18.**



3. **Release the mouse button.**

Another Method

You also can select the range B16:D18, click Fill in the Editing group and choose Right. The shortcut key is Ctrl + R.

Your screen should be similar to Figure 1.34

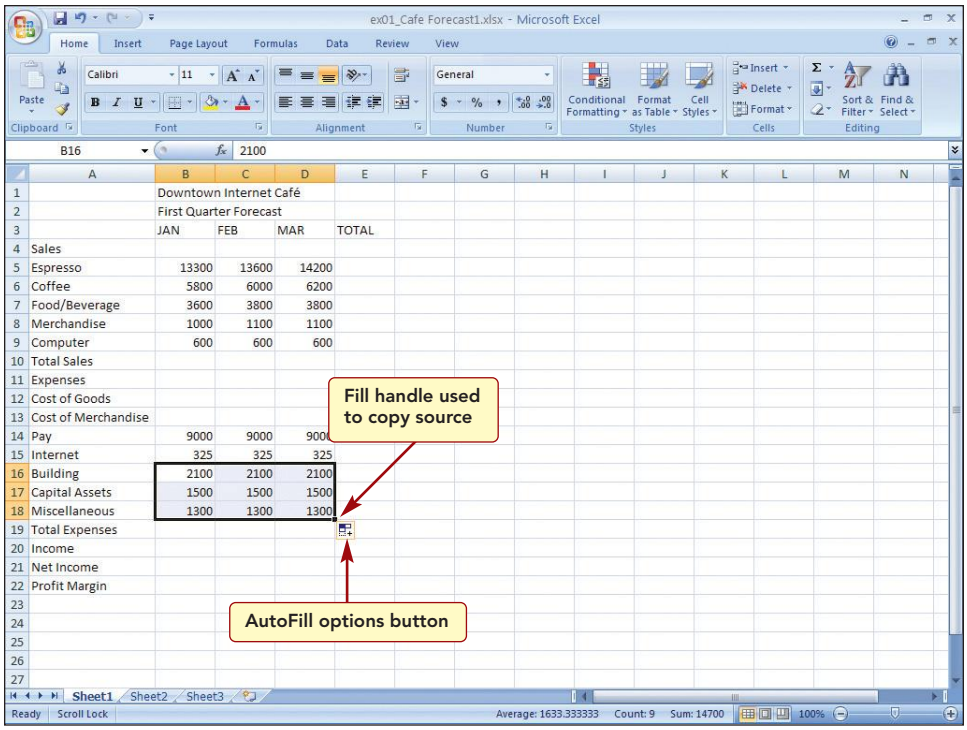


Figure 1.34

Additional Information

You will learn more about the AutoFill feature in later labs.

The range of cells to the right of the source is filled with the same values as in the source range. The Fill Series command does not copy the source to the system Clipboard and therefore you cannot paste the source multiple times. When you copy by dragging the fill handle, the AutoFill Options button appears. Its menu commands are used to modify how the fill operation was performed. It will disappear as soon as you make an entry in the worksheet.

Inserting Copied Cells

You also decide to include another row of month headings above the expenses to make the worksheet data easier to read. To do this quickly, you can insert copied data between existing data. To indicate where to place the copied content, you move the cell selector to the upper-left cell of the area where you want the selection inserted.

The column headings you want to copy are in cells B3 through E3. You will also copy the blank cell, A3, so that a blank cell is inserted in column A when you paste the contents.

1. **Copy the contents of cells A3 through E3.**
2. **Move to A11.**
3. **Click Insert in the Cells group.**

Your screen should be similar to Figure 1.35

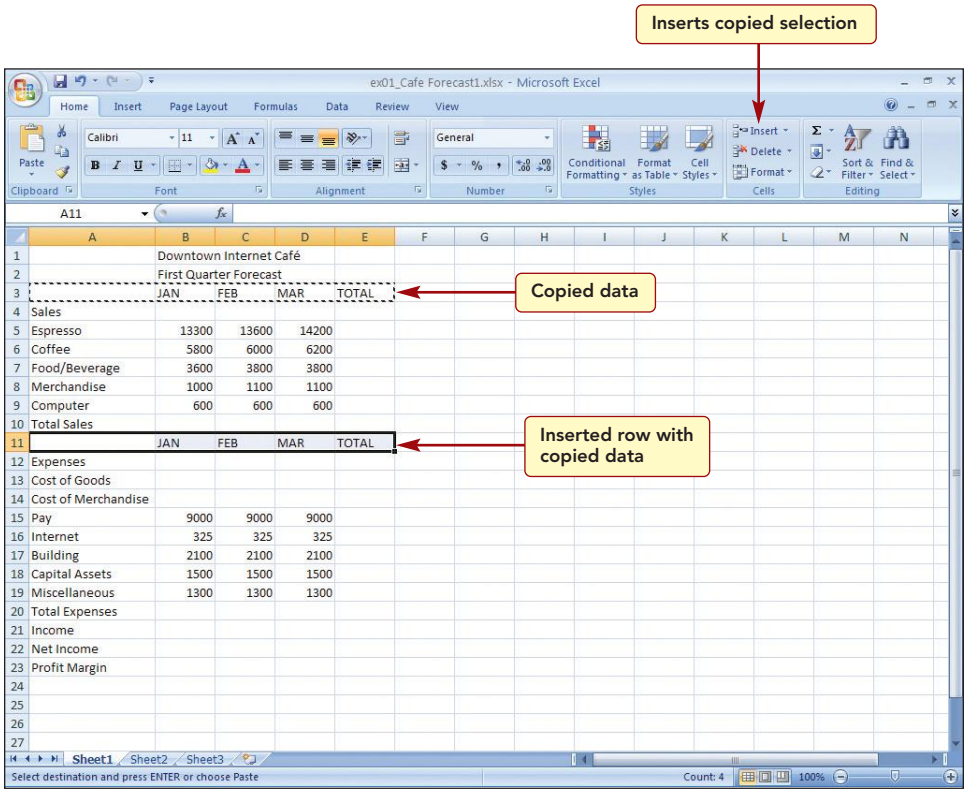


Figure 1.35

Additional Information
You also can insert cut selections between existing cells by choosing Insert Cut Cells from the Insert drop-down menu.

The copied data is inserted into the existing row (11) and all entries below are moved down one row.

Cutting and Moving Entries

Next, you decide the Income, Net Income, and Profit Margin rows of data would stand out more if a blank row separated them from the expenses. Also, the Profit Margin row of data would be better separated from the Net Income row by a blank row. You will first remove the cell contents of the three cells using Cut and then paste the contents from the system Clipboard into the new location. You will use the keyboard shortcuts for these commands to complete this process.

1. **Press Esc to clear the moving border.**
2. **Select cells A21 through A23.**
3. **Press Ctrl + X.**
4. **Move to cell A22.**
5. **Press Ctrl + V.**

Another Method

You also can click Cut followed by Paste in the Clipboard group. These commands are also available on the shortcut menu.

Your screen should be similar to Figure 1.36

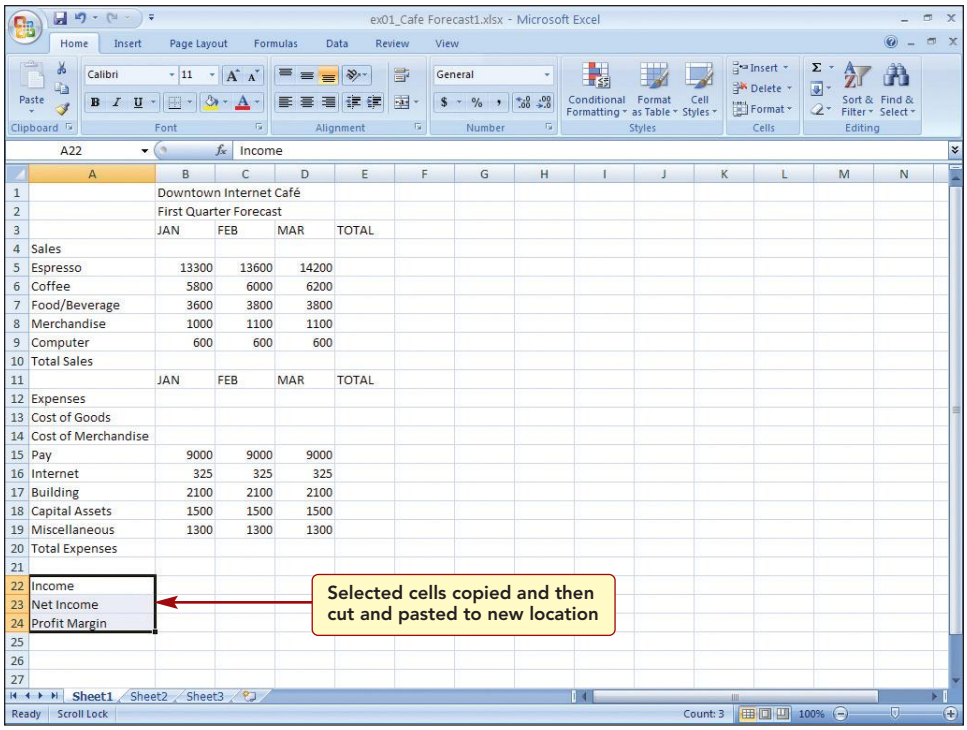


Figure 1.36

The contents of the three selected cells are copied to the system Clipboard. Then, when you paste, the cell contents are removed and inserted at the new location, copying over any existing content.

Another way you can cut and paste is to use drag and drop editing to move the cell contents. This method is quickest and most useful when the distance between cells is short and they are visible within the window, whereas cut and paste is best for long-distance moves. You will use this method to move the Profit Margin entry down one cell.

2. **Move to cell A24.**

- **Point to the border of the selection and when the mouse pointer shape is ↖, drag the selection down one row to cell A25 and release the mouse button.**

Additional Information
As you drag, an outline of the cell selection appears and the mouse pointer displays the cell reference to show its new location in the worksheet.

- **Click Office Button and choose Save As.**
- **Save the changes you have made to the workbook as Café Forecast1 to your solution file location.**

Your screen should be similar to Figure 1.37

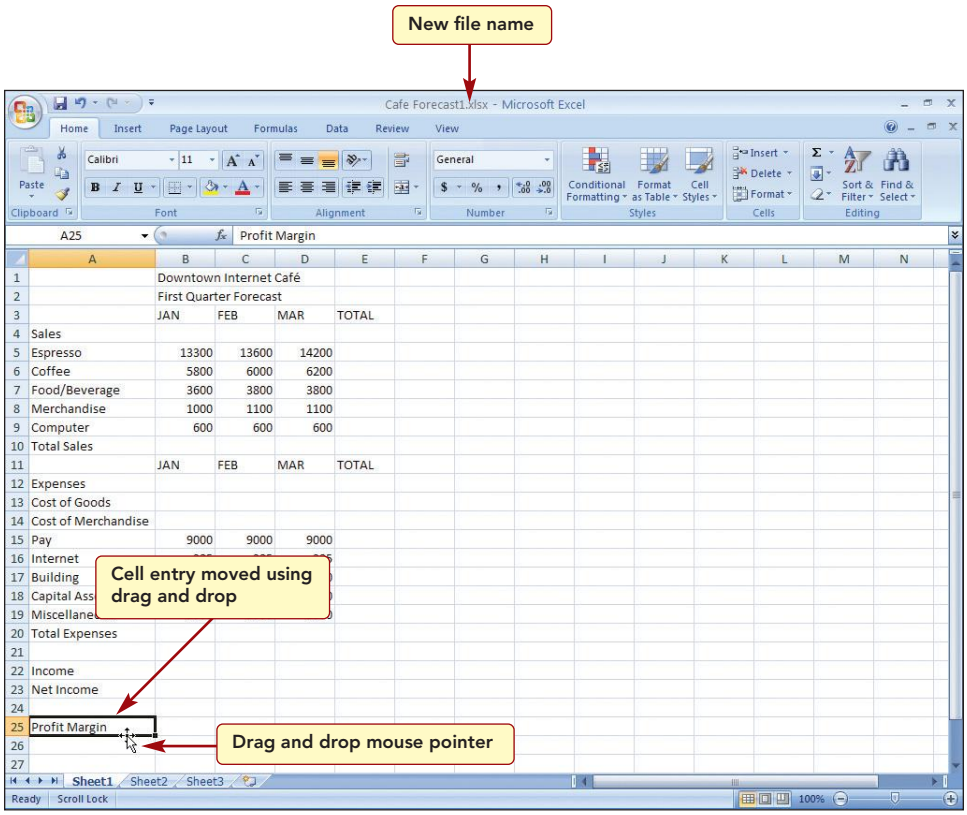


Figure 1.37

Additional Information
You also can hold down Ctrl and drag a selection to copy it to a new location. The mouse pointer appears as ↖+ as you drag when copying.

The cell contents were moved into cell A25 and cleared from the original cell.

Note: If you are running short on lab time, this is an appropriate place to end your session.

Review of Copying and Moving Methods

To review, you have learned three methods to copy or move an entry:

1. Use the Copy, Cut, and Paste commands: Copy (Ctrl + C), Cut (Ctrl + X), and Paste (Ctrl + V), or choose Copy, Cut, and Paste from the selection's context menu.
2. Use the Fill command: Right, Left, Up, or Down or drag the fill handle.
3. Drag the cell border of the selection to move. Hold down Ctrl while dragging the cell border of a selection to copy.

When you use the Copy and Cut commands, the contents are copied to the system Clipboard and can be copied to any location in the worksheet, another workbook, or a document in another application multiple times. When you use Fill or drag the fill handle, the destination must be in the same row or column as the source, and the source is not copied to the system Clipboard. Dragging the cell border to move or copy also does not copy the source to the system Clipboard.

Working with Formulas

The remaining entries that need to be made in the worksheet are formula entries.

Concept 8

Formula

8

A **formula** is an equation that performs a calculation on data contained in a worksheet. A formula always begins with an equal sign (=) and uses arithmetic operators. An **operator** is a symbol that specifies the type of numeric operation to perform. Excel includes the following operators: + (addition), – (subtraction), / (division), * (multiplication), % (percent), and ^ (exponentiation). The calculated result from formulas is a **variable** value because it can change if the data it depends on changes. In contrast, a number entry is a **constant** value. It does not begin with an equal sign and does not change unless you change it directly by typing in another entry.

In a formula that contains more than one operator, Excel calculates the formula from left to right and performs the calculation in the following order: percent, exponentiation, multiplication and division, and addition and subtraction (see Example A). This is called the **order of precedence**. If a formula contains operators with the same precedence (for example, addition and subtraction), they are again evaluated from left to right. The order of precedence can be overridden by enclosing the operation you want performed first in parentheses (see Example B). When there are multiple sets of parentheses, Excel evaluates them working from the innermost set of parentheses out.

Example A: =5*4–3 Result is 17 (5 times 4 to get 20, and then subtract 3 for a total of 17)
Example B: =5*(4–3) Result is 5 (4 minus 3 to get 1, and then 1 times 5 for a total of 5)

The values on which a numeric formula performs a calculation are called **operands**. Numbers or cell references can be operands in a formula. Usually cell references are used, and when the numeric entries in the referenced cell(s) change, the result of the formula is automatically recalculated.

Entering Formulas

The first formula you will enter will calculate the total Espresso sales for January through March (cell E5) by summing the numbers in cells B5 through D5. You will use cell references in the formula as the operands and the + arithmetic operator to specify addition. A formula is entered in the cell where you want the calculated value to be displayed. As you enter the formula, Excel helps you keep track of the cell references by identifying the referenced cell with a colored border and using the same color for the cell reference in the formula.

1 **Move to E5.**

Type =b.

Your screen should be similar to Figure 1.38

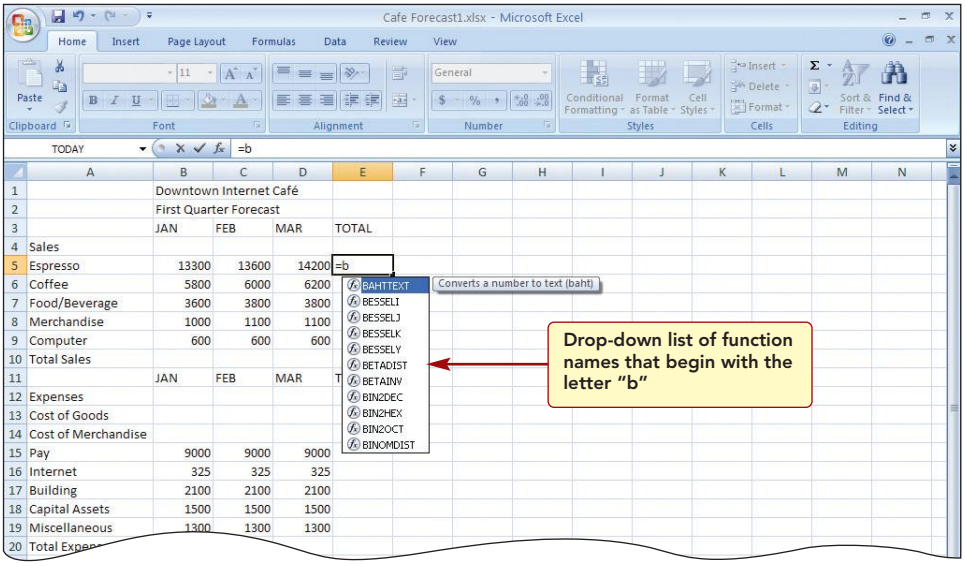


Figure 1.38

A drop-down list of function names that begin with the letter "b" are displayed. Functions are a type of formula entry that you will learn about shortly.

2 **Type 5+c5+d5.**

Additional Information

Cell references can be typed in either uppercase or lowercase letters. Spaces between parts of the formula are optional.

Your screen should be similar to Figure 1.39

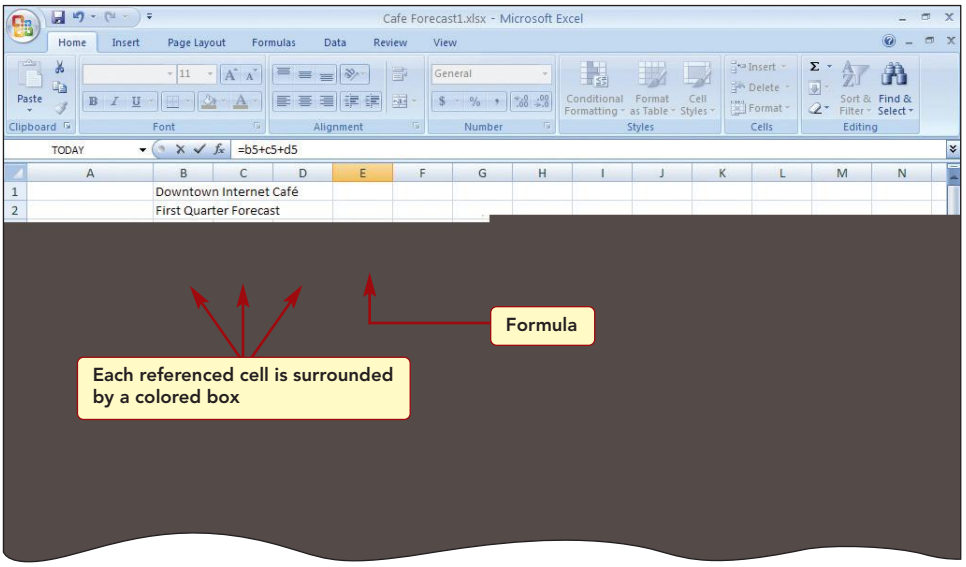


Figure 1.39

As you enter the formula, each cell that is referenced in the formula is surrounded by a colored box that matches the color of the cell reference in the formula.

3. **Press Ctrl + ↵Enter or click Enter in the Formula bar.**

Your screen should be similar to Figure 1.40

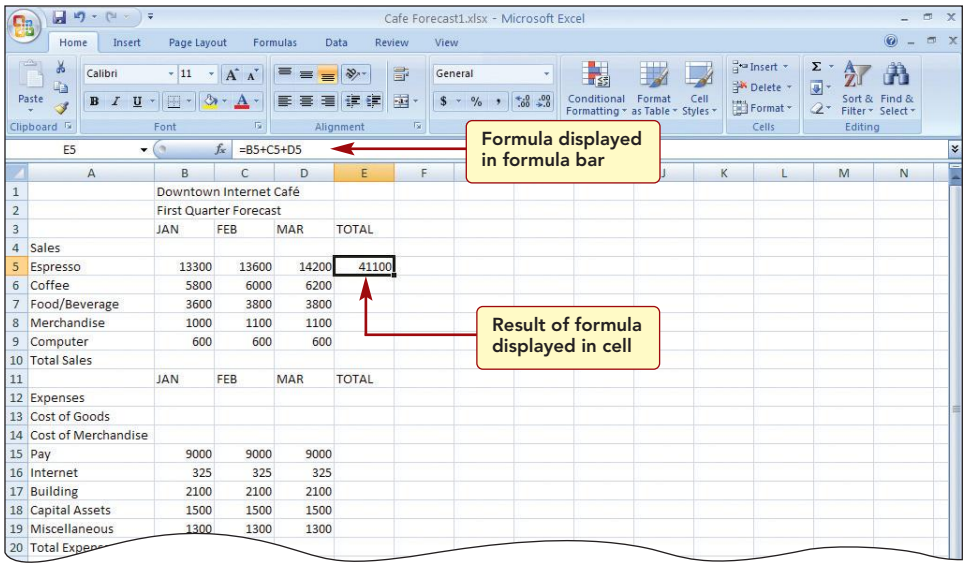


Figure 1.40

The number 41100 is displayed in cell E5, and the formula that calculates this value is displayed in the formula bar.

Copying Formulas

The formulas to calculate the total sales for rows 6 through 9 can be entered next. Just as you can with text and numeric entries, you can copy formulas from one cell to another.

1. **Copy the formula in cell E5 to cells E6 through E9 using any of the copying methods.**
   - **Move to E6.**
   - **If necessary, press Esc to clear the moving border.**

Your screen should be similar to Figure 1.41

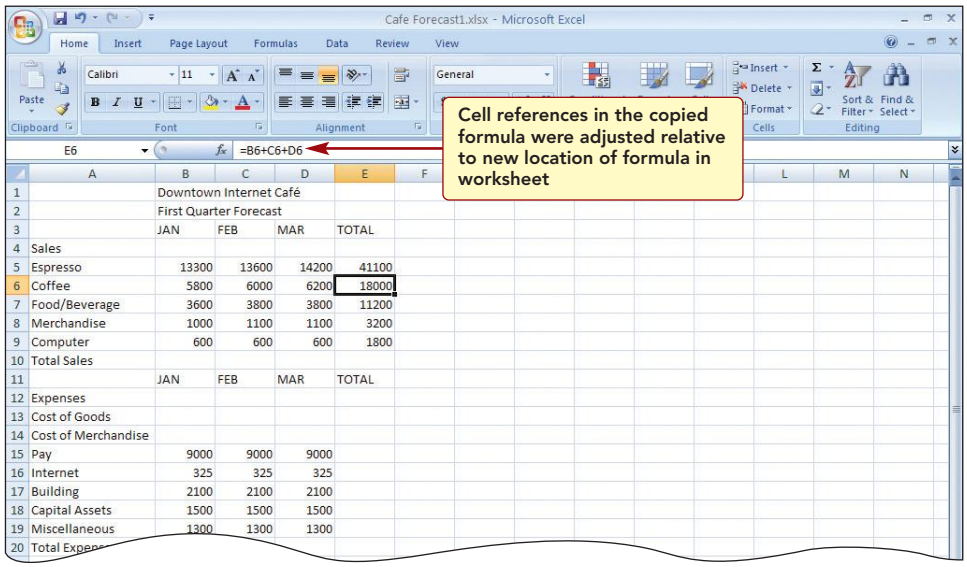


Figure 1.41

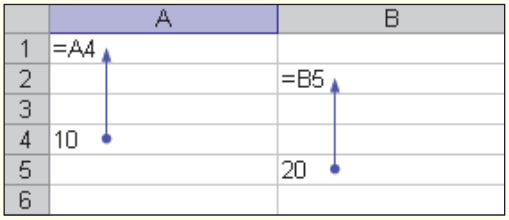
The calculated result, 18000, is displayed in the cell. The formula displayed in the formula bar is =B6+C6+D6. The formula to calculate the Coffee total sales is not an exact duplicate of the formula used to calculate the Espresso total sales (=B5+C5+D5). Instead, the cells referenced in the formula have been changed to reflect the new location of the formula in row 6. This is because the references in the formula are relative references.

Concept 9

Relative Reference

9 A **relative reference** is a cell or range reference in a formula whose location is interpreted by Excel in relation to the position of the cell that contains the formula. When a formula is copied, the referenced cells in the formula automatically adjust to reflect the new worksheet location. The relative relationship between the referenced cell and the new location is maintained. Because relative references automatically adjust for the new location, the relative references in a copied formula refer to different cells than the references in the original formula. The relationship between cells in both the copied and the pasted formulas is the same although the cell references are different.

For example, in the figure here, cell A1 references the value in cell A4 (in this case, 10). If the formula in A1 is copied to B2, the reference for B2 is adjusted to the value in cell B5 (in this case, 20).



2 **Move to cell E7, E8, and then to cell E9.**

Your screen should be similar to Figure 1.42

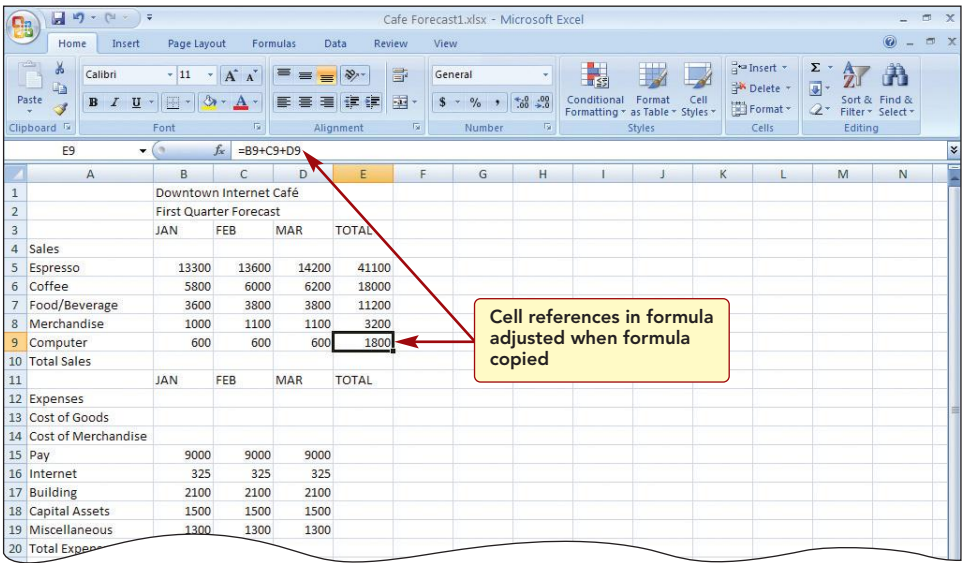


Figure 1.42

The formulas in these cells also have changed to reflect the new row location and to appropriately calculate the total based on the sales.

Entering Functions

Next, you will calculate the monthly total sales. The formula to calculate the total sales for January needs to be entered in cell B10 and copied across the row. You could use a formula similar to the formula used to calculate the category sales in column E. The formula would be =B5+B6+B7+B8+B9. However, it is faster and more accurate to use a function.

Concept 10

Function

10 A **function** is a prewritten formula that performs certain types of calculations automatically. The **syntax** or rules of structure for entering all functions is

=Function name (argument1, argument2, . . .)

The function name identifies the type of calculation to be performed. Most functions require that you enter one or more arguments following the function name. An **argument** is the data the function uses to perform the calculation. The type of data the function requires depends upon the type of calculation being performed. Most commonly, the argument consists of numbers or references to cells that contain numbers. The argument is enclosed in parentheses, and commas separate multiple arguments. The beginning and ending cells of a range are separated with a colon.

Some functions, such as several of the date and time functions, do not require an argument. However, you still need to enter the opening and closing parentheses; for example, =NOW(). If a function starts the formula, enter an equal sign before the function name; for example, =SUM(D5:F5)/25.

Additional Information
Use Help for detailed explanations of every function.

Excel includes several hundred functions divided into 11 categories. Some common functions from each category and the results they calculate are shown in the following table.

Category	Function	Calculates
Financial	PMT	Calculates the payment for a loan based on constant payments and a constant interest rate
	PV	Returns the present value of an investment—the total amount that a series of future payments is worth now
	FV	Returns the future value of an investment—the total amount that a series of payments will be worth
Date & Time	TODAY	Returns the serial number that represents today's date
	DATE	Returns the serial number of a particular date
	NOW	Returns the serial number of the current date and time
Math & Trig	SUM	Adds all the numbers in a range of cells
	ABS	Returns the absolute value of a number (a number without its sign)
Statistical	AVERAGE	Returns the average (arithmetic mean) of its arguments
	MAX	Returns the largest value in a set of values; ignores logical values and text
	MIN	Returns the smallest value in a set of values; ignores logical values and text
	COUNT	Counts the number of cells in a range that contain numbers
	COUNTA	Counts the number of cells in a range that are not empty
	COLUMNS	Returns the number of columns in an array or reference

Category	Function	Calculates
Lookup & Reference	HLOOKUP	Looks for a value in the top row of a table and returns the value in the same column from a row you specify
	VLOOKUP	Looks for a value in the leftmost column of a table and returns the value in the same row from a column you specify
Database	DSUM	Adds the numbers in the field (column) or records in the database that match the conditions you specify
	DAVERAGE	Averages the values in a column in a list or database that match conditions you specify
Text	PROPER	Converts text to proper case in which the first letter of each word is capitalized
	UPPER	Converts text to uppercase
	LOWER	Converts text to lowercase
	SUBSTITUTE	Replaces existing text with new text in a text string
Logical	IF	Returns one value if a condition you specify evaluates to TRUE and another value if it evaluates to FALSE
	AND	Returns TRUE if all its arguments are TRUE; returns FALSE if any arguments are FALSE
	OR	Returns TRUE if any arguments are TRUE; returns FALSE if all arguments are FALSE
	NOT	Changes FALSE to TRUE or TRUE to FALSE
	IFERROR	Returns value-if-error if expression is an error and the value of the expression itself otherwise
Information	ISLOGICAL	Returns TRUE if value is a logical value, either TRUE or FALSE
	ISREF	Returns TRUE if value is a reference
Engineering	BIN2DEC	Converts a binary number to decimal
	CONVERT	Converts a number from one measurement system to another
Cube	CUBESETCOUNT	Returns the number of items in a set

You will use the SUM function to calculate the total sales for January. Because the SUM function is the most commonly used function, it has its own command button.

1 **Move to B10.**

Click Σ Sum in the Editing group.

Another Method

Pressing Alt + = is the keyboard shortcut for Sum. This function is also available on the Formulas tab.

Your screen should be similar to Figure 1.43

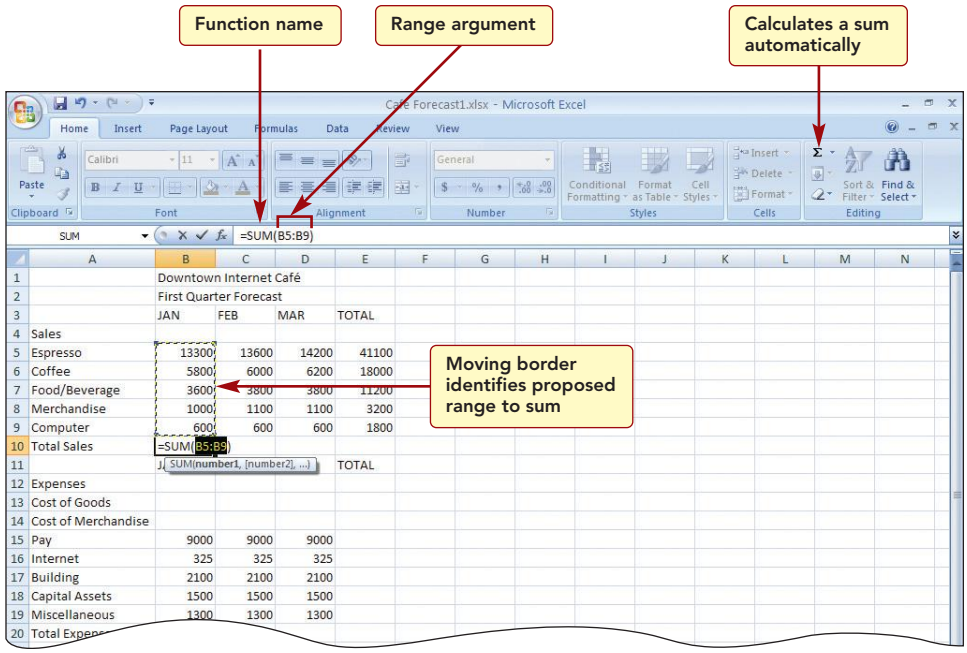


Figure 1.43

Additional Information

The Σ Sum button also can calculate a grand total if the worksheet contains subtotals. Select a cell below or to the right of a cell that contains a subtotal and then click Σ Sum.

Excel automatically proposes a range based upon the data above or to the left of the active cell. The formula bar displays the name of the function followed by the range argument enclosed in parentheses. You will accept the proposed range and enter the function.

2 **Click Enter.**

Your screen should be similar to Figure 1.44

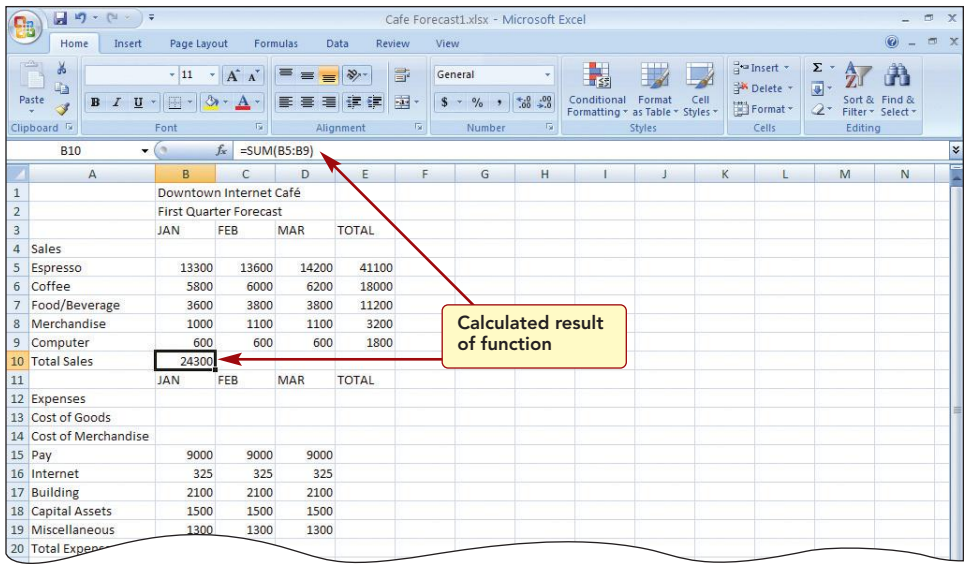


Figure 1.44

The result, 24300, calculated by the SUM function is displayed in cell B10. Next you need to calculate the total sales for February and March and the Total column.

3 **Copy the function from cell B10 to cells C10 through E10.**

Move to C10.

Your screen should be similar to Figure 1.45

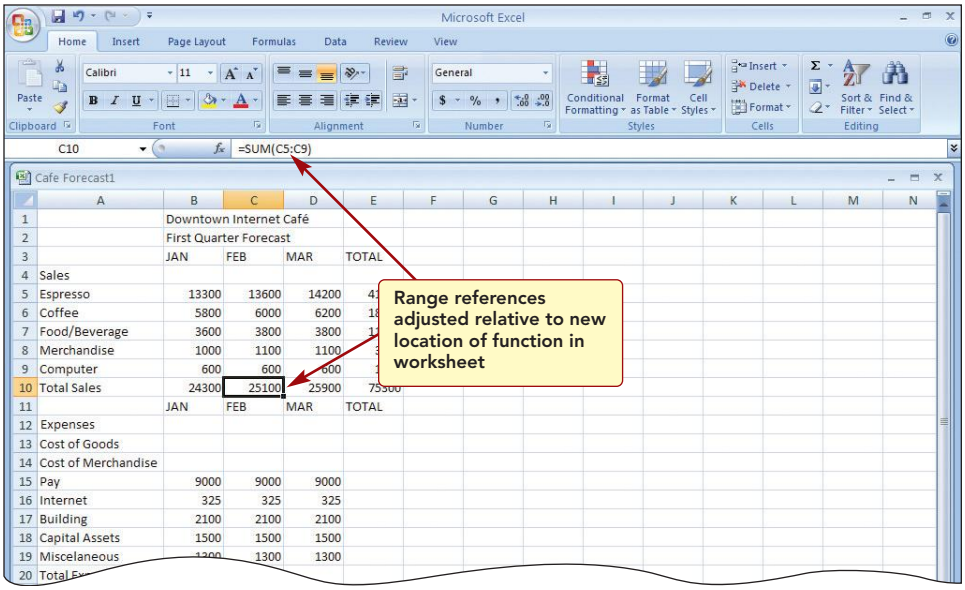


Figure 1.45

The result calculated by the function, 25100, is displayed in cell C10 and the copied function is displayed in the formula bar. The range reference in the function is adjusted relative to its new cell location because it is a relative reference.

You also decide to calculate the minimum, maximum, and average sales for each sales category. You will add appropriate column headings and enter the functions in columns F, G, and H. The Σ Sum button also includes a drop-down menu from which you can select several other common functions. As you enter these functions, the proposed range will include the Total cell. Simply select another range to replace the proposed range.

4 **Enter MIN in cell F3, MAX in cell G3, and AVG in cell H3.**

Move to F5.

Open the Σ Sum drop-down menu and choose Min.

Having Trouble?

Click ▾ to the right of the button to open the drop-down menu.

Select the range B5:D5 and click ✓ Enter.

Your screen should be similar to Figure 1.46

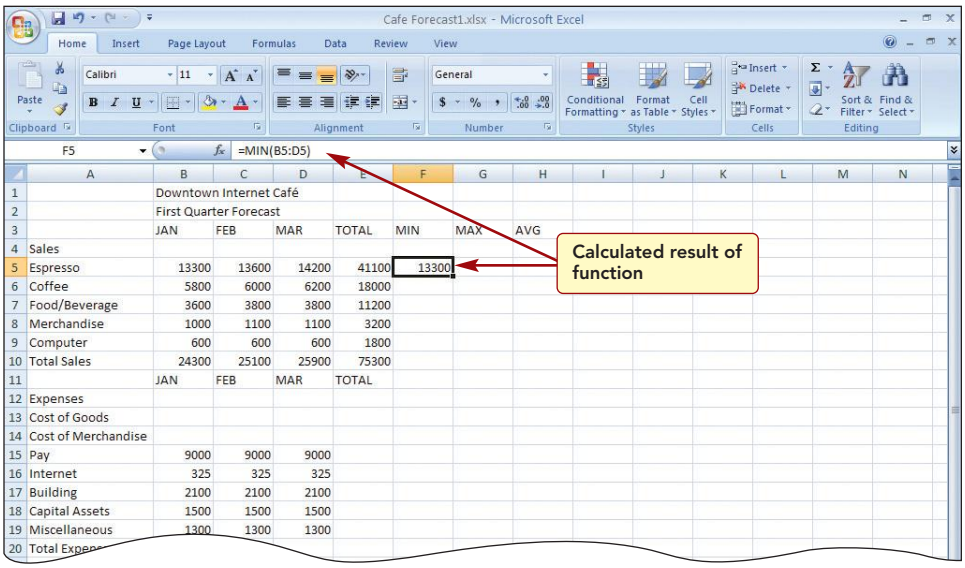


Figure 1.46

The MIN function correctly displays 13300, the smallest value in the range.

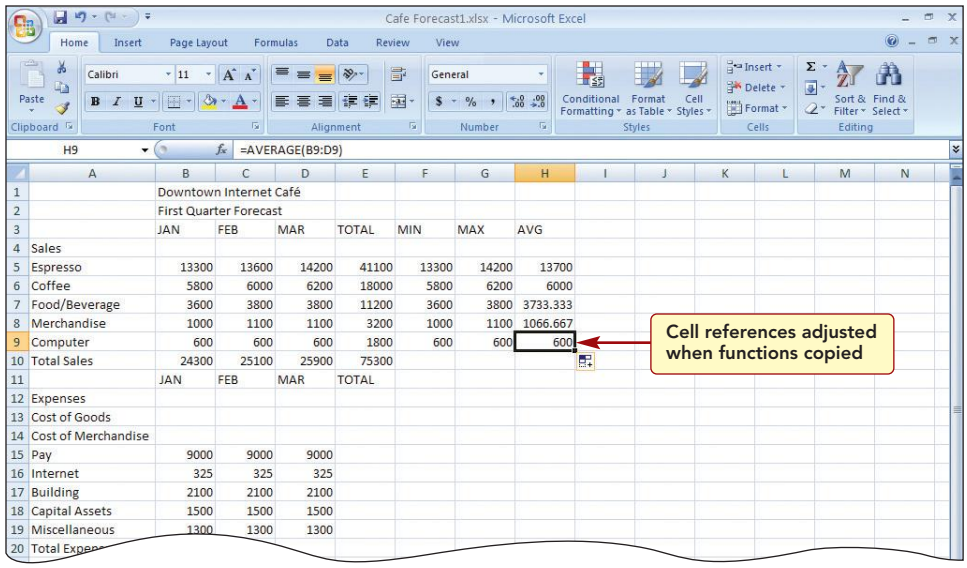
Next you will enter the MAX and AVG values for the Espresso sales. Then you will copy the functions down the column through row 9.

5 **Enter the MAX function in cell G5 and the AVG function in cell H5 to calculate the Espresso sales values.**

Copy the functions in cells F5:H5 to F6 through H9.

Move to H9.

Your screen should be similar to Figure 1.47



	A	B	C	D	E	F	G	H
1		Downtown Internet Café						
2		First Quarter Forecast						
3		JAN	FEB	MAR	TOTAL	MIN	MAX	AVG
4	Sales							
5	Espresso	13300	13600	14200	41100	13300	14200	13700
6	Coffee	5800	6000	6200	18000	5800	6200	6000
7	Food/Beverage	3600	3800	3800	11200	3600	3800	3733.333
8	Merchandise	1000	1100	1100	3200	1000	1100	1066.667
9	Computer	600	600	600	1800	600	600	600
10	Total Sales	24300	25100	25900	75300			
11		JAN	FEB	MAR	TOTAL			
12	Expenses							
13	Cost of Goods							
14	Cost of Merchandise							
15	Pay	9000	9000	9000				
16	Internet	325	325	325				
17	Building	2100	2100	2100				
18	Capital Assets	1500	1500	1500				
19	Miscellaneous	1300	1300	1300				
20	Total Expen							

Figure 1.47

MORE ABOUT

To learn how to use the COUNT and COUNTA functions, see 3.2 Summarize Data Using a Formula in the More About appendix.

The minimum, maximum, and average values for the five sales categories have been calculated.

Using Pointing to Enter a Formula

Next, you will enter the formula to calculate the cost of goods for espresso, coffee, and food and beverages sold. These numbers are estimated by using a formula to calculate the number as a percent of sales. Evan suggested using estimated percents for this worksheet so he could get an idea of what to expect from the first three months after the remodel. He wants you to calculate espresso expenses at 25 percent of espresso sales, coffee expenses at 30 percent of coffee sales, and food and beverage expenses at 60 percent of food sales.

Rather than typing in the cell references for the formula, you will enter them by selecting the worksheet cells. In addition, to simplify the process of entering and copying entries, you can enter data into the first cell of a range and have it copied to all other cells in the range at the same time by using Ctrl + ↵Enter to complete the entry. You will use this feature to enter the formulas to calculate the beverage expenses for January through March. This formula needs to calculate the beverage cost of goods at 25 percent first and add it to the food cost of goods calculated at 50 percent.

1. **Select B13 through D13.**
2. **Type =.**
3. **Click cell B5.**

Additional Information

Even when a range is selected, you can still point to specify cells in the formula. You also can use the direction keys to move to the cell.

Your screen should be similar to Figure 1.48

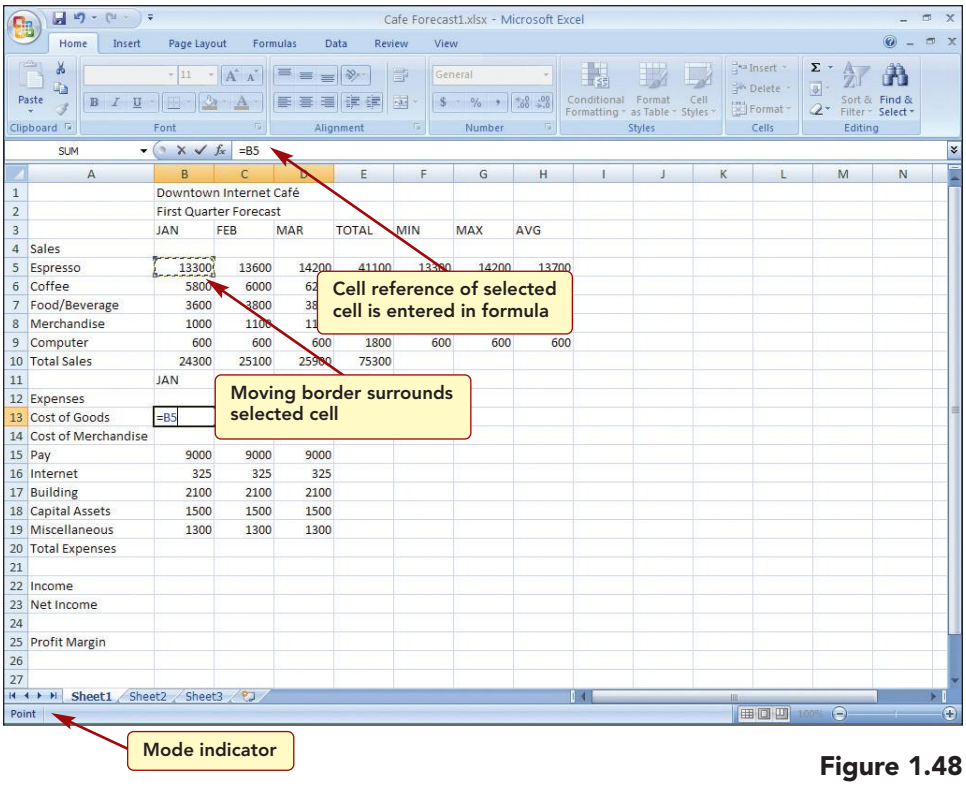


Figure 1.48

Additional Information

While entering the formula in Point mode, if you make an error, edit the entry like any other error and then continue entering the remainder of the formula.

Notice that the status bar displays the current mode as Point. This tells you that the program is allowing you to select cells by highlighting them. The cell reference, B5, is entered following the = sign. You will complete the formula by entering the percentage value to multiply by and adding the Food percentage to the formula.

2. **Type *25%+.**
3. **Click on B6.**
4. **Type *30%+.**
5. **Click on B7.**
6. **Type *60%.**
7. **Press Ctrl + ↵Enter.**

Your screen should be similar to Figure 1.49

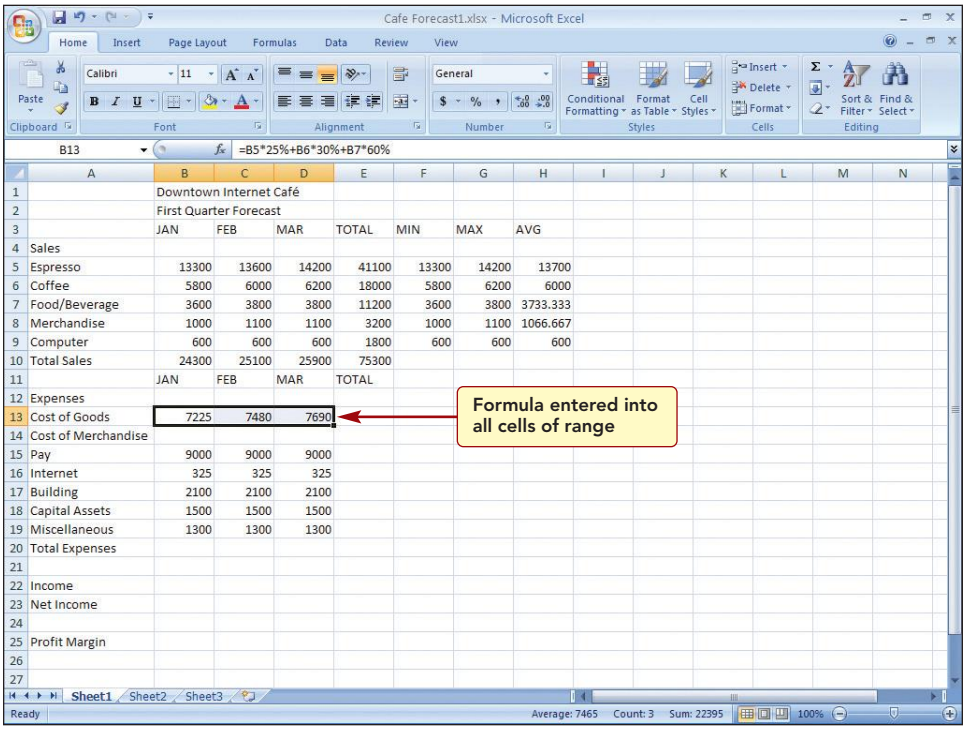


Figure 1.49

Having Trouble?

If you made an error in the formula, edit the entry in the formula bar and then press Ctrl + ↵Enter again to copy it to the selected range.

The formula to calculate the January cost of goods expense was entered in cell B13 and copied to all cells of the selected range.

Now you will enter the cost of merchandise by multiplying the value in B8 by 70%. Then you will calculate the total expenses in row 20 and column E. To do this quickly, you will preselect the range and use the Σ Sum button.

3 **Select cells B14 through D14.**

- **Type =.**
- **Click on B8.**
- **Type *70%.**
- **Press Ctrl + ↵Enter.**
- **Select B13 through E20.**
- **Click Σ Sum.**
- **Select B23 through E23.**
- **Enter the formula =B10-B20.**
- **Press Ctrl + ↵Enter.**

Your screen should be similar to Figure 1.50

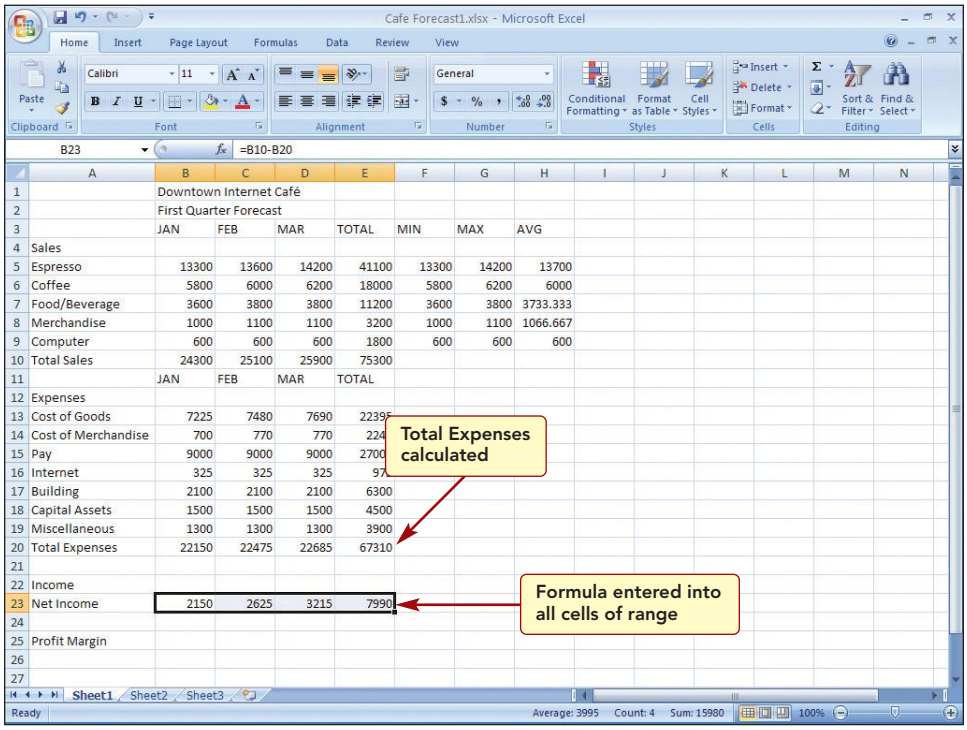


Figure 1.50

The formula is quickly entered into all cells of the range.

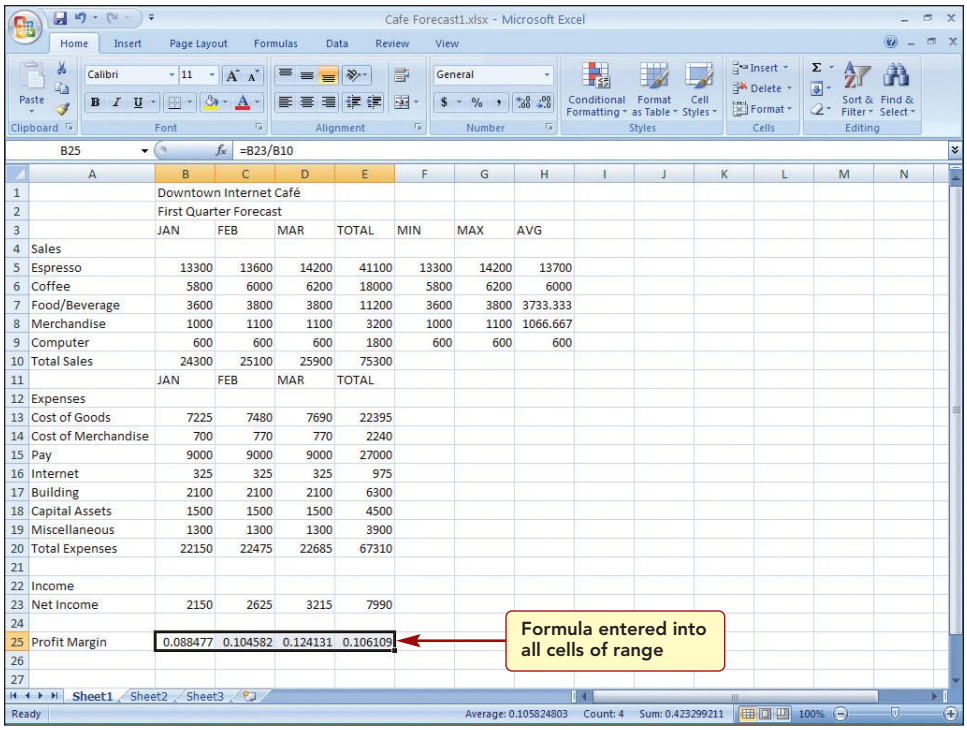
Finally, you will enter the formulas to calculate the net income and profit margin. Net income is calculated by subtracting total expenses from total sales and profit margin is calculated by dividing net income by total sales.

4 **Select B25 through E25.**

Enter the formula =B23/B10.

Press Ctrl + ↵Enter.

Your screen should be similar to Figure 1.51



	A	B	C	D	E	F	G	H
1		Downtown Internet Café						
2		First Quarter Forecast						
3		JAN	FEB	MAR	TOTAL	MIN	MAX	AVG
4	Sales							
5	Espresso	13300	13600	14200	41100	13300	14200	13700
6	Coffee	5800	6000	6200	18000	5800	6200	6000
7	Food/Beverage	3600	3800	3800	11200	3600	3800	3733.333
8	Merchandise	1000	1100	1100	3200	1000	1100	1066.667
9	Computer	600	600	600	1800	600	600	600
10	Total Sales	24300	25100	25900	75300			
11		JAN	FEB	MAR	TOTAL			
12	Expenses							
13	Cost of Goods	7225	7480	7690	22395			
14	Cost of Merchandise	700	770	770	2240			
15	Pay	9000	9000	9000	27000			
16	Internet	325	325	325	975			
17	Building	2100	2100	2100	6300			
18	Capital Assets	1500	1500	1500	4500			
19	Miscellaneous	1300	1300	1300	3900			
20	Total Expenses	22150	22475	22685	67310			
21								
22	Income							
23	Net Income	2150	2625	3215	7990			
24								
25	Profit Margin	0.088477	0.104582	0.124131	0.106109			
26								
27								

Figure 1.51

The net income and profit margins are calculated and displayed in the worksheet.

Recalculating the Worksheet

Now that you have created the worksheet structure and entered some sample data for the forecasted sales for the first quarter, you want to test the formulas to verify that they are operating correctly. A simple way to do this is to use a calculator to verify that the correct result is displayed. You can then further test the worksheet by changing values and verifying that all cells containing formulas that reference the value are appropriately recalculated.

Concept 11

Recalculation

11 When a number in a referenced cell in a formula changes, Excel automatically **recalculates** all formulas that are dependent upon the changed value. Because only those formulas directly affected by a change in the data are recalculated, the time it takes to recalculate the workbook is reduced. Without this feature, in large worksheets it could take several minutes to recalculate all formulas each time a number is changed in the worksheet. Recalculation is one of the most powerful features of electronic worksheets.

After considering the sales estimates for the three months, you decide that the estimated sales generated from Computer usage for January are too high and you want to decrease this number from 600 to 400.

1. **Change the entry in cell B9 to 400 and press Ctrl + ↵Enter to complete the edit.**

Your screen should be similar to Figure 1.52

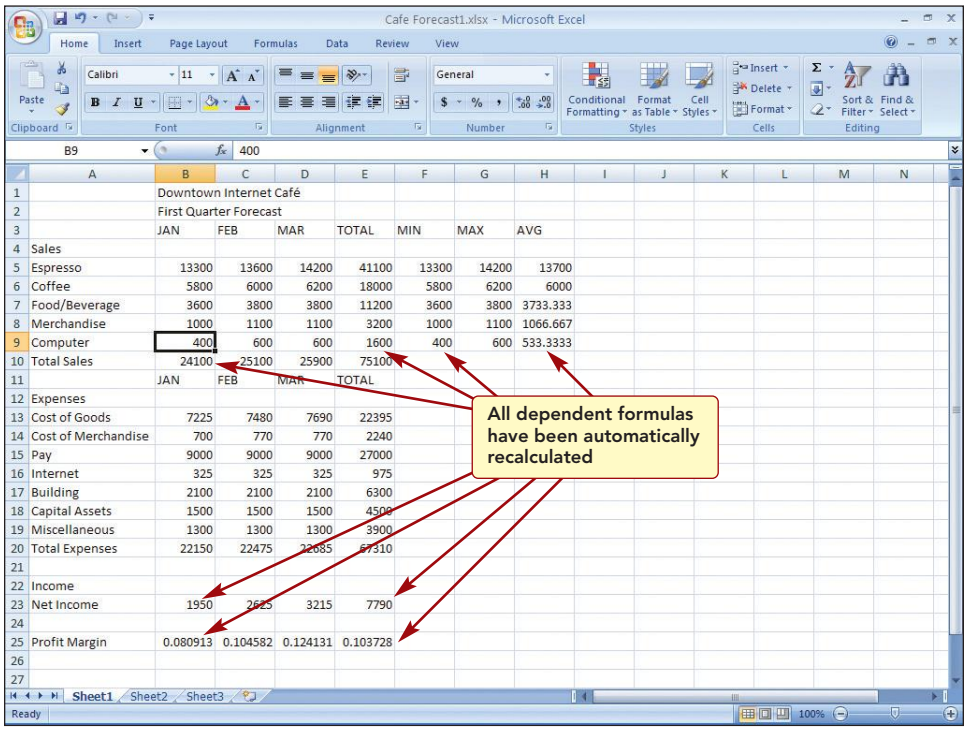


Figure 1.52

The Computer total in cell E9 has been automatically recalculated. The number displayed is now 1600. The MIN and AVG values in cells F9 and H9 have been recalculated to 400 and 533.3333 respectively. Likewise, the January total in cell B10 of 24100 and the grand total in cell E10 of 75100 each decreased by 200 to reflect the change in cell B9. Finally, the Net Income and Profit Margin values also have adjusted appropriately.

The formulas in the worksheet are correctly calculating the desired result. The Sales portion of the worksheet is now complete.

Inserting and Deleting Rows and Columns

As you are developing a worksheet, you may realize you forgot to include information or decide that other information is not needed. To quickly add and remove entire rows and columns of information, you can insert and delete rows and columns. A new blank row is inserted above the active cell location and all rows below it shift down a row. Similarly, you can insert blank cells and columns in a worksheet. Blank cells are inserted above or to the left of the active cell and blank columns are inserted to the left of the active cell. Likewise, you can quickly delete selected cells, rows, and columns and all information in surrounding cells, rows, or columns automatically shifts appropriately to fill in the space.

Additionally, whenever you insert or delete cells, rows, or columns, all formula references to any affected cells adjust accordingly.

MORE ABOUT

You also can insert multiple rows or columns simultaneously. See the More About appendix for information on this procedure.

Inserting Rows

Finally, you realize that you forgot to include a row for the Advertising expenses. To add this data, you will insert a blank row above the Capital Assets row.

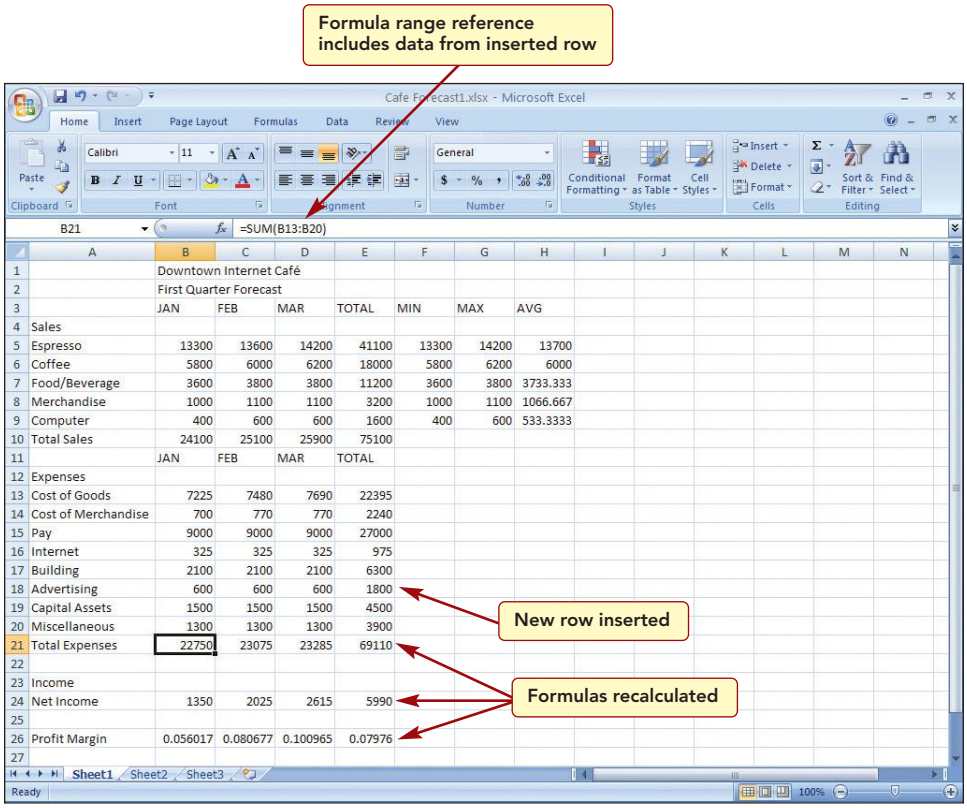
1. **Move to A18.**
2. **Open the Insert drop-down menu in the Cells group and choose Insert Sheet Rows.**

Another Method

You also can choose Insert from the active cell's context menu.

3. **Enter the heading Advertising in cell A18 and the value 600 in cells B18 through D18.**
4. **Copy the function from cell E17 to E18 to calculate the total advertising expense.**
5. **Move to cell B21.**
6. **Click Save to save the worksheet using the same file name.**

Your screen should be similar to Figure 1.53



	A	B	C	D	E	F	G	H
1		Downtown Internet Café						
2		First Quarter Forecast						
3		JAN	FEB	MAR	TOTAL	MIN	MAX	AVG
4	Sales							
5	Espresso	13300	13600	14200	41100	13300	14200	13700
6	Coffee	5800	6000	6200	18000	5800	6200	6000
7	Food/Beverage	3600	3800	3800	11200	3600	3800	3733.333
8	Merchandise	1000	1100	1100	3200	1000	1100	1066.667
9	Computer	400	600	600	1600	400	600	533.3333
10	Total Sales	24100	25100	25900	75100			
11		JAN	FEB	MAR	TOTAL			
12	Expenses							
13	Cost of Goods	7225	7480	7690	22395			
14	Cost of Merchandise	700	770	770	2240			
15	Pay	9000	9000	9000	27000			
16	Internet	325	325	325	975			
17	Building	2100	2100	2100	6300			
18	Advertising	600	600	600	1800			
19	Capital Assets	1500	1500	1500	4500			
20	Miscellaneous	1300	1300	1300	3900			
21	Total Expenses	22750	23075	23285	69110			
22								
23	Income							
24	Net Income	1350	2025	2615	5990			
25								
26	Profit Margin	0.056017	0.080677	0.100965	0.07976			
27								

Figure 1.53

A blank row was inserted in the worksheet and the cell references in all formulas and functions below the inserted row adjusted appropriately. The range in the formula to calculate monthly total expenses in row 21 has been adjusted to include the data in the inserted row and the total expense for the first quarter is 69110. Additionally, the net income in row 24 and the profit margin in row 26 have been recalculated to reflect the change in data.

Additional Information

Click Insert to insert blank cells, shifting existing cells down, and Insert/Sheet Columns to insert blank columns, shifting existing columns right.

Deleting Columns

As you look at the worksheet data, you decide the minimum and maximum values are not very useful since this data is so easy to see in this small worksheet. You will delete these two columns from the worksheet to remove this information. To specify which column to delete, select any cell in the column.

1. **Select cells F21 and G21.**
2. **Open the Delete drop-down menu in the Cells group and choose Delete Sheet Columns.**

Your screen should be similar to Figure 1.54

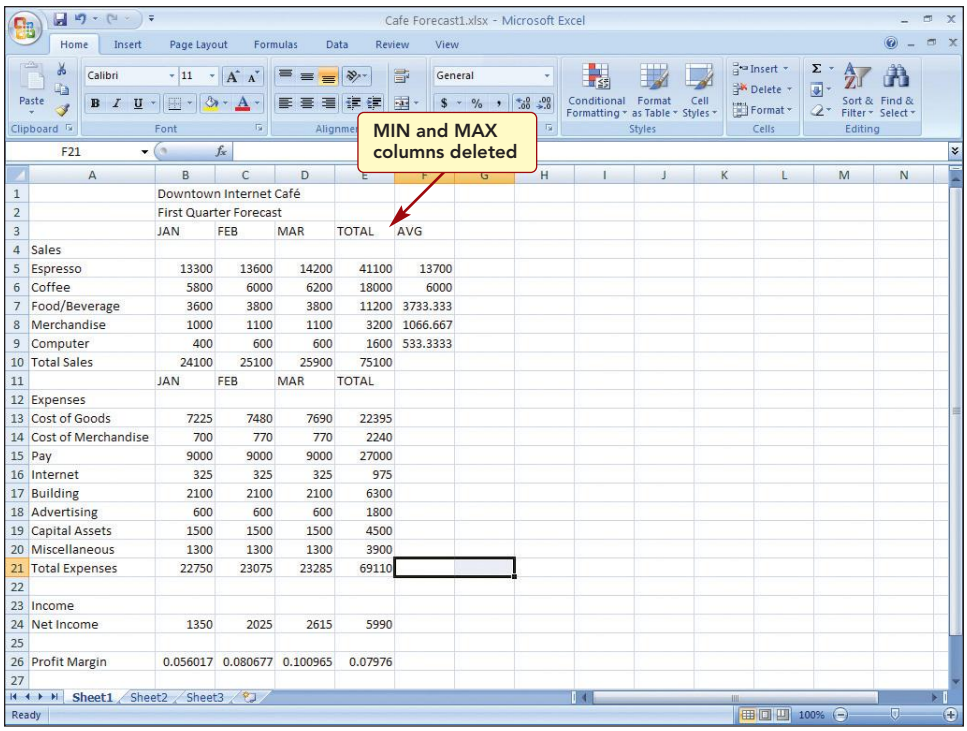


Figure 1.54

Additional Information

Select a cell or row and choose Delete /Delete Cells or Delete Sheet Rows to delete it and shift the other cells or rows up or to the left.

The two columns have been removed and the columns to the right of the deleted columns automatically shifted to the left.

Formatting the Worksheet

Now that the worksheet data is complete, you want to improve the appearance of the worksheet. Applying different formatting to text and numbers can greatly enhance the appearance of the document. **Format** controls how entries are displayed in a cell and includes such features as the position of data in a cell, character font and color, and number formats such as commas and dollar signs.

You want to change the appearance of the row and column headings and apply formatting to the numbers. Applying different formats greatly improves both the appearance and the readability of the data in a worksheet.

Changing Cell Alignment

You decide the column headings would look better if they were right-aligned in their cell spaces, so that they would appear over the numbers in the column. Alignment is a basic format setting that is used in most worksheets.

Concept 12

Alignment

12 **Alignment** settings allow you to change the horizontal and vertical placement and the orientation of an entry in a cell.

Horizontal placement allows you to left-, right-, or center-align text and number entries in the cell space. Entries also can be indented within the cell space, centered across a selection, or justified. You also can fill a cell horizontally with a repeated entry.



Vertical placement allows you to specify whether the cell contents are displayed at the top, the bottom, or the center of the vertical cell space or justified vertically.



You also can change the angle of text in a cell by varying the degrees of rotation.



The default workbook horizontal alignment settings left-align text entries and right-align number entries. The vertical alignment is set to Bottom for both types of entries, and the orientation is set to zero degrees rotation from the horizontal position. You want to change the horizontal alignment of the month headings in rows 3 and 11 to right-aligned.

The Alignment group contains commands to control the horizontal and vertical placement of entries in a cell. You can quickly apply formatting to a range of cells by selecting the range first. A quick way to select a range of filled cells is to hold down Shift and double-click on the edge of the active cell in the direction in which you want the range expanded. For example, to select the range to the right of the active cell, you would double-click the right border. You will use this method to select and right-align these entries.

Additional Information

If you do not hold down Shift while double-clicking on a cell border, the active cell moves to the last-used cell in the direction indicated.

1. **Move to B3.**
- **Hold down Shift and double-click the right cell border of cell B3.**

Having Trouble?
The mouse pointer must be ✥ when you click the cell border.

- **Click Align Text Right from the Alignment group.**
- **Select B11 through E11.**
- **Click Align Text Right.**

Your screen should be similar to Figure 1.55

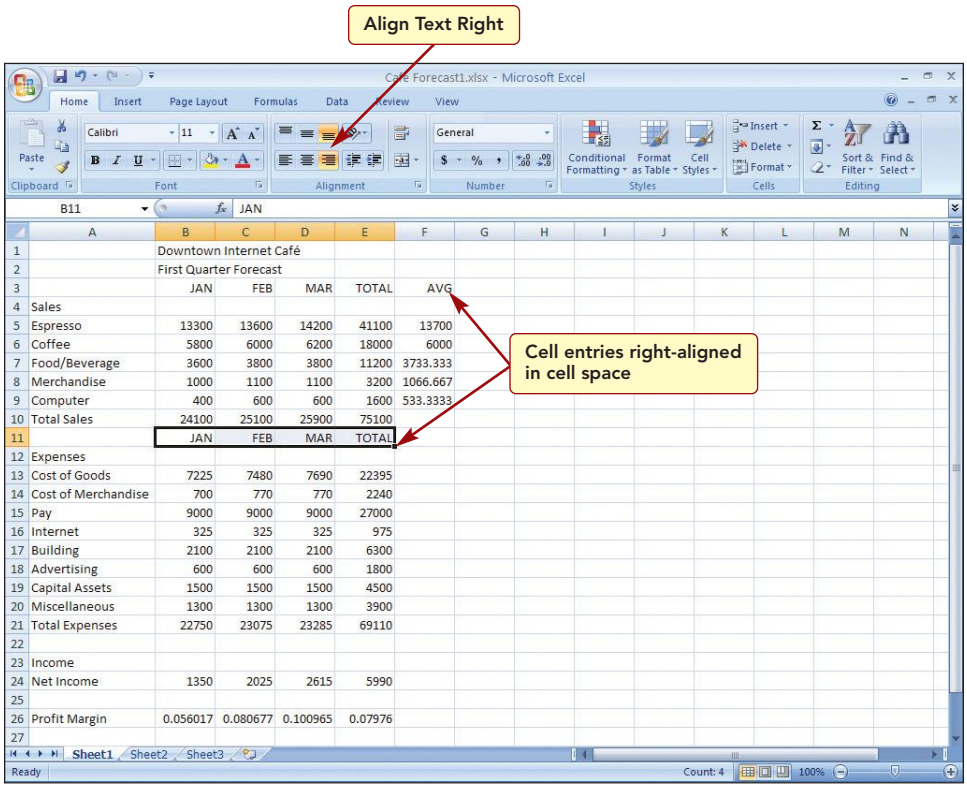


Figure 1.55

The entries in the selected ranges are right-aligned in their cell spaces.

Indenting Entries

Next, you would like to indent the row headings in cells A5 through A9 and A13 through A20 to increase the space between the cell border and the entry. You want to indent the headings in both ranges at the same time. To select nonadjacent cells or cell ranges, after selecting the first cell or range, hold down Ctrl while selecting each additional cell or range. You will select the cells and indent their contents.

Additional Information
You also can select entire nonadjacent rows or columns by holding down Ctrl while selecting the rows or columns.

1. **Select A5 through A9.**
2. **Hold down Ctrl.**
3. **Select A13 through A20.**
4. **Release Ctrl.**
5. **Click Increase Indent in the Alignment group.**
6. **AutoFit the width of column A.**

Your screen should be similar to Figure 1.56

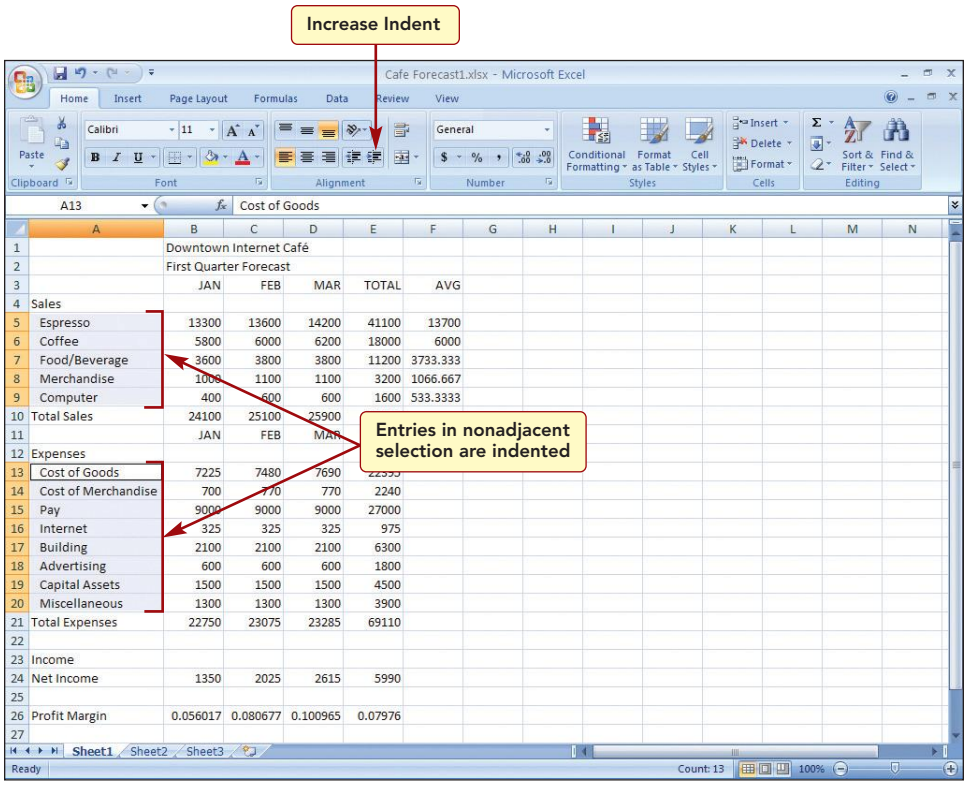


Figure 1.56

Additional Information

Clicking Increase Indent multiple times indents the selection in two-space increments. Clicking Decrease Indent reduces the margin between the border and the text in the cell.

Each entry in the selected range is indented two spaces from the left edge of the cell. Finally, you want to right-align the Total Sales, Total Expenses, and Net Income headings.

2. **Select A10, A21, and A24.**
3. **Click Align Text Right.**

Your screen should be similar to Figure 1.57

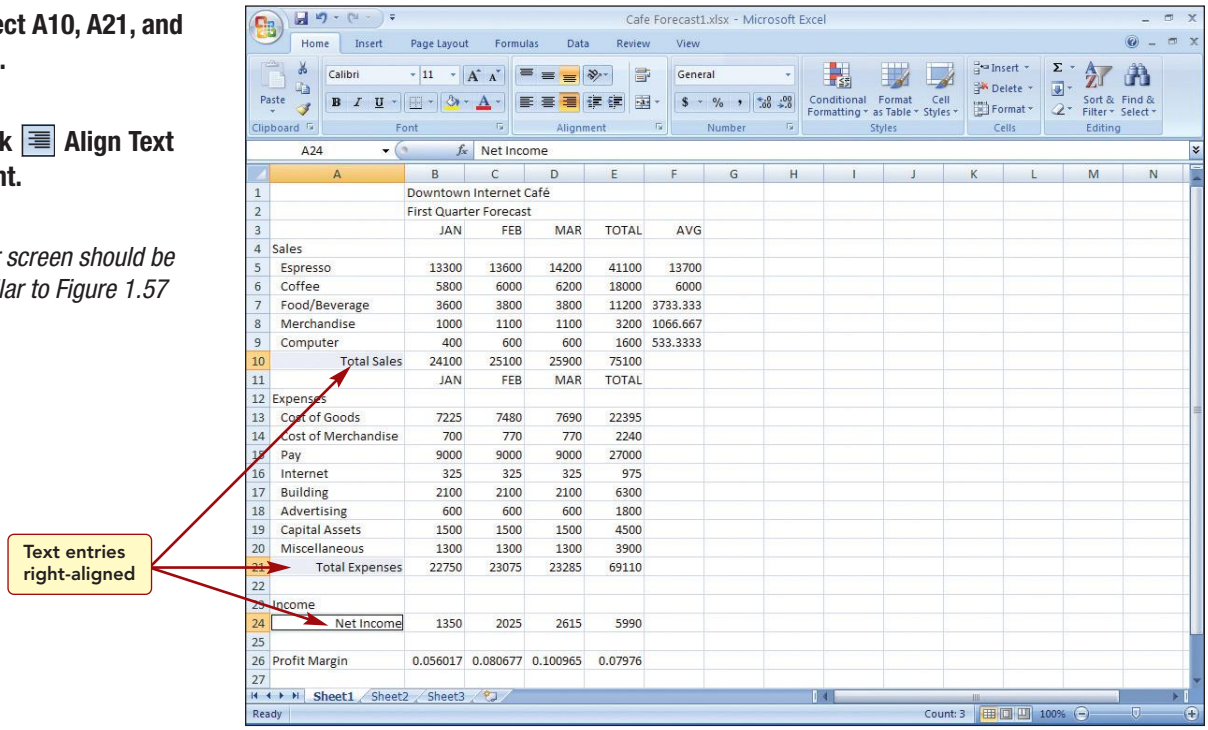


Figure 1.57

Centering across a Selection

Next, you want to center the worksheet titles across columns A through E so they are centered over the worksheet data. To do this, you will merge or combine the cells in the range over the worksheet data (A1 through E1) into a single large **merged cell** and then center the contents of the range in the merged cell. This process is easily completed in one simple step using the Merge and Center command.

1 **Select A1 through F1.**

Click Merge and Center in the Alignment group.

Another Method

The Format Cells dialog box also can be used to center across a selection: Format/ Cells/Alignment/Horizontal/ Center Across Selection/ Merge cells.

Your screen should be similar to Figure 1.58

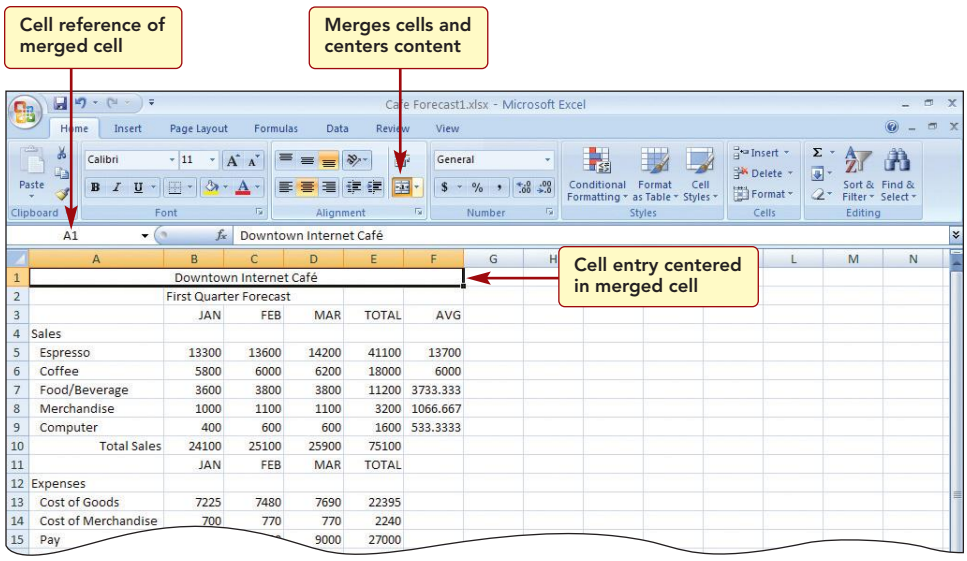


Figure 1.58

The six cells in the selection have been combined into a single large cell and the entry that was in cell B1 is centered within the merged cell space. Only the contents of the first cell containing an entry in the upper-leftmost section of the selected range are centered in the merged cell. If other cells to the right of that cell contain data, it would be deleted. The cell reference for a merged cell is the upper-left cell in the original selected range, in this case A1.

2 **Merge and center the second title line across columns A through F.**

Your screen should be similar to Figure 1.59

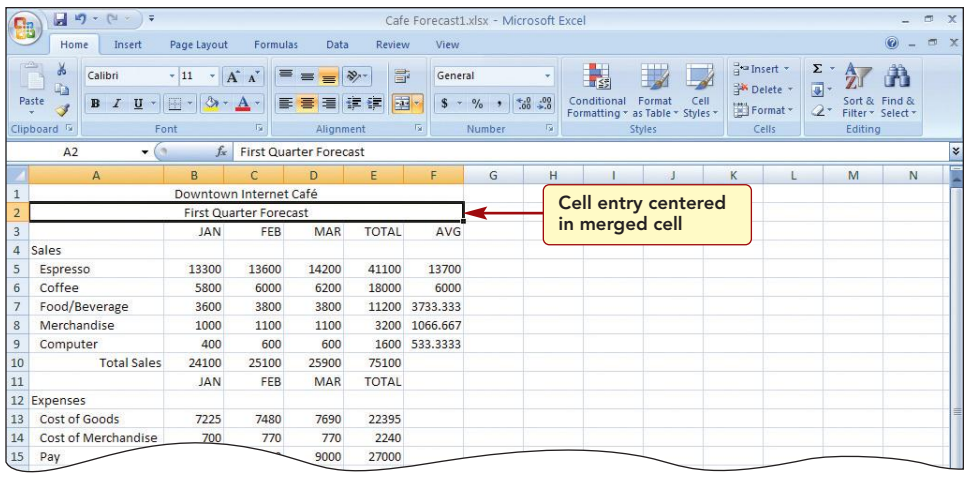


Figure 1.59

You also can use the commands in the Merge and Center drop-down menu shown in the following table to control a merge. You can merge cells horizontally and vertically.

Merge Menu	Action
Merge and Center	Merges cells and centers entry
Merge Across	Merges cells horizontally
Merge Cells	Merges cells horizontally and vertically
UnMerge Cells	Splits cells that have been merged back into individual cells

Additional Information
The Font settings are common to all Office 2007 programs.

Changing Fonts and Font Sizes

Finally, you want to improve the worksheet appearance by enhancing the appearance of the title. One way to do this is to change the font and font size used in the title.

Concept 13

Font and Font Size

13 A **font**, also commonly referred to as a **typeface**, is a set of characters with a specific design. The designs have names such as Times New Roman and Courier. Using fonts as a design element can add interest to your document and give readers visual cues to help them find information quickly.

There are two basic types of fonts: serif and sans serif. **Serif** fonts have a flair at the base of each letter that visually leads the reader to the next letter. Two common serif fonts are Roman and Times New Roman. Serif fonts generally are used in paragraphs. **Sans serif** fonts do not have a flair at the base of each letter. Arial and Helvetica are two common sans serif fonts. Because sans serif fonts have a clean look, they are often used for headings in documents. It is good practice to use only two types of fonts in a worksheet, one for text and one for headings. Too many styles can make your document look cluttered and unprofessional.

Each font has one or more sizes. **Size** is the height and width of the character and is commonly measured in **points**, abbreviated pt. One point equals about 1/72 inch, and text in most worksheets is 10 pt or 12 pt.

Here are several examples of the same text in various fonts and sizes.

Typeface	Font Size (12 pt/18 pt)
Calibri (Sans Serif)	This is 12 pt. This is 18 pt
Times New Roman (Serif)	This is 12 pt. This is 18 pt.
Book Antigua (Serif)	This is 12 pt. This is 18 pt.

First you will try a different font for the title and a larger font size.

1. **Select A1 and A2.**
2. **Open the Font drop-down list box in the Font group.**

Your screen should be similar to Figure 1.60

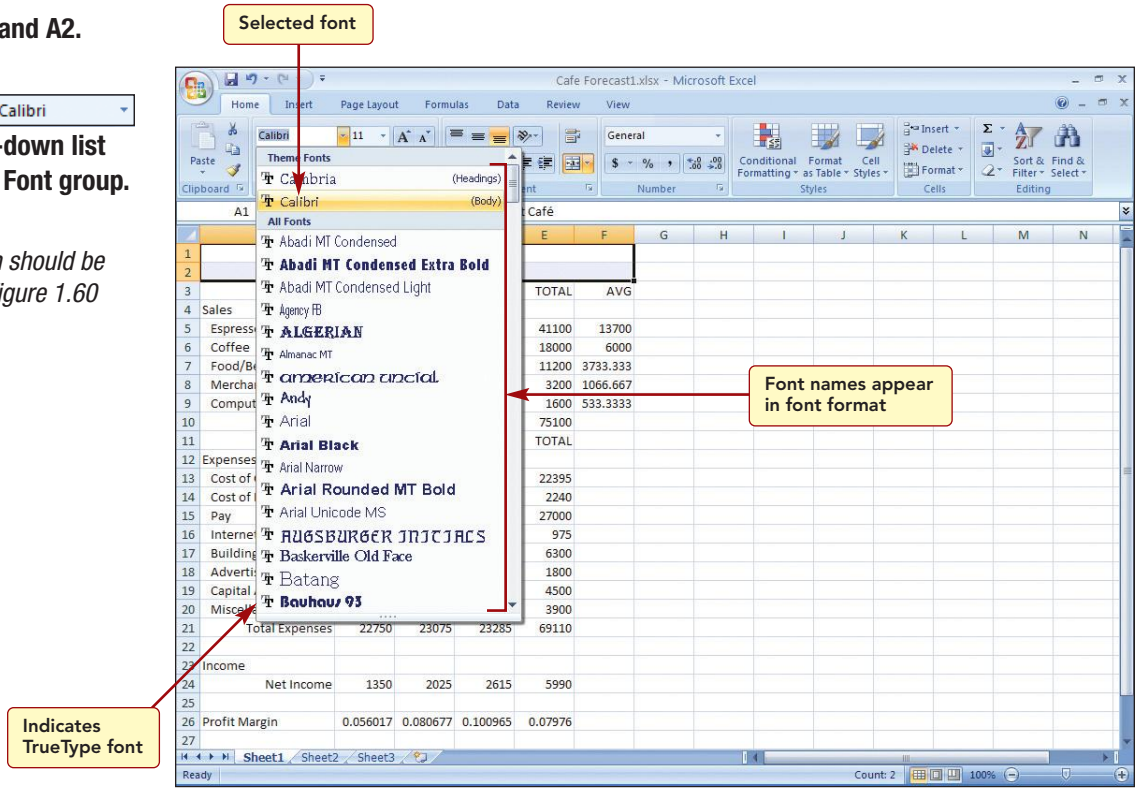


Figure 1.60

The Font drop-down list displays examples of the available fonts on your system in alphabetical order. The default worksheet font, Calibri, is highlighted. Notice the TT preceding the font name. This indicates the font is a TrueType font. TrueType fonts appear onscreen as they will appear when printed. They are installed when Windows is installed. Fonts that are preceded with a blank space are printer fonts. These fonts are supported by your printer and are displayed as closely as possible to how they will appear onscreen but may not match exactly when printed. You will change the font and increase the font size to 14. As you point to the font options, the selected text in the worksheet displays how it will appear if chosen. This is the **Live Preview** feature of Excel.

2. **Scroll the list and choose Impact.**

Having Trouble?
You will not be able to see the Fonts Live Preview because the drop-down menu covers the selection to be formatted.

- **Open the 11 Font Size drop-down list box.**
- **Point to several different font sizes in the list to see the Live Preview.**
- **Choose 14.**

Your screen should be similar to Figure 1.61

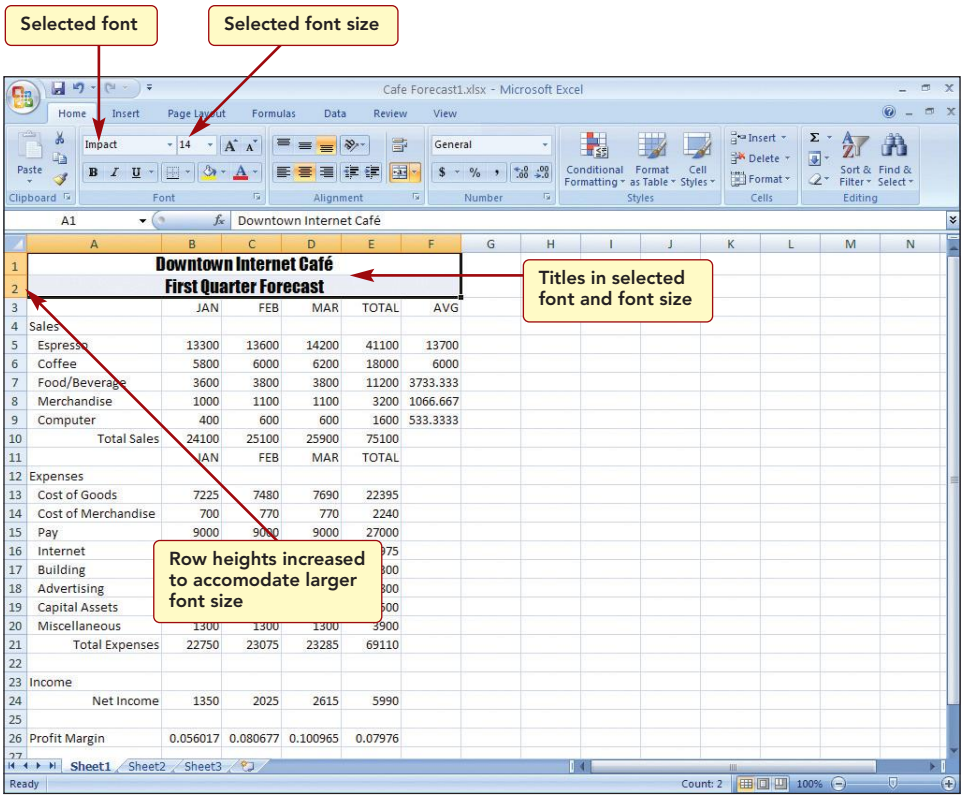


Figure 1.61

Another Method
The Font and Font Size commands are also available on the Mini toolbar; however, they do not display a Live Preview.

The title appears in the selected typeface and size and the Font and Size buttons display the name of the font and the size used in the active cell. Notice that the height of the row has increased to accommodate the larger font size of the heading.

Applying Character Effects

In addition to changing font and font size, you can apply different **character effects** to enhance the appearance of text. The table below describes some of the effects and their uses.

Format	Example	Use
Bold	**Bold**	Adds emphasis
Italic	*Italic*	Adds emphasis
Underline	Underline	Adds emphasis
Strikethrough	~~Strikethrough~~	Indicates words to be deleted
Superscript	"To be or not to be."[1]	Used in footnotes and formulas
Subscript	H_2O	Used in formulas
Color	Color Color Color	Adds interest

You want to add bold, italic, and underlines to several worksheet entries.

1. **Select B3 through F3.**
2. **Click B Bold.**
3. **Click U Underline.**

Your screen should be similar to Figure 1.62

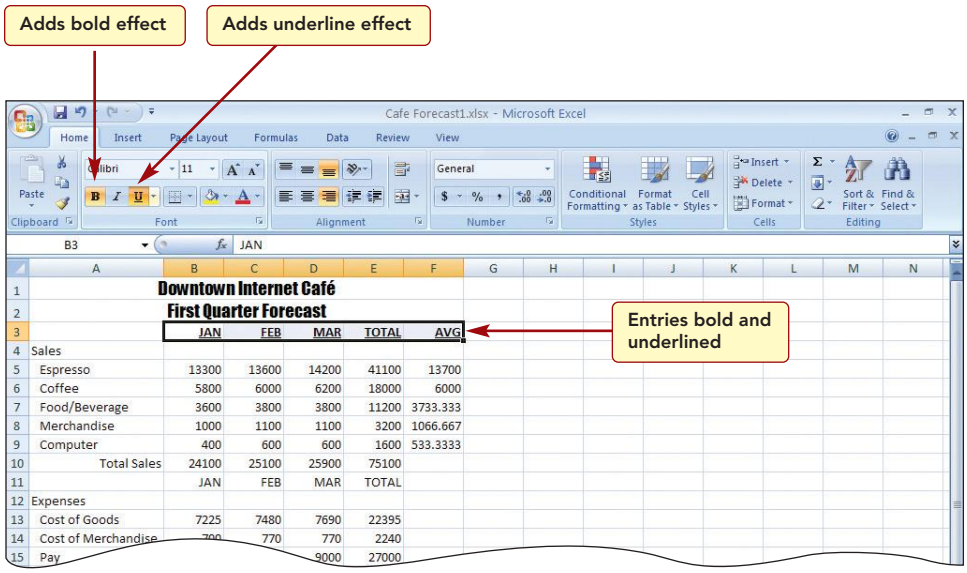


Figure 1.62

Many of the formatting commands are also available on the Mini toolbar that appears when you display the shortcut menu. To use the Mini toolbar, choose command buttons just as you would from the Ribbon.

2. **Select A5 through A9.**
3. **Right-click on the selection to display the Mini toolbar.**
4. **Click B Bold.**
5. **Click I Italic.**

Another Method

The keyboard shortcut for bold is Ctrl + B; for italic, it is Ctrl + I; and for underline, it is Ctrl + U.

Your screen should be similar to Figure 1.63

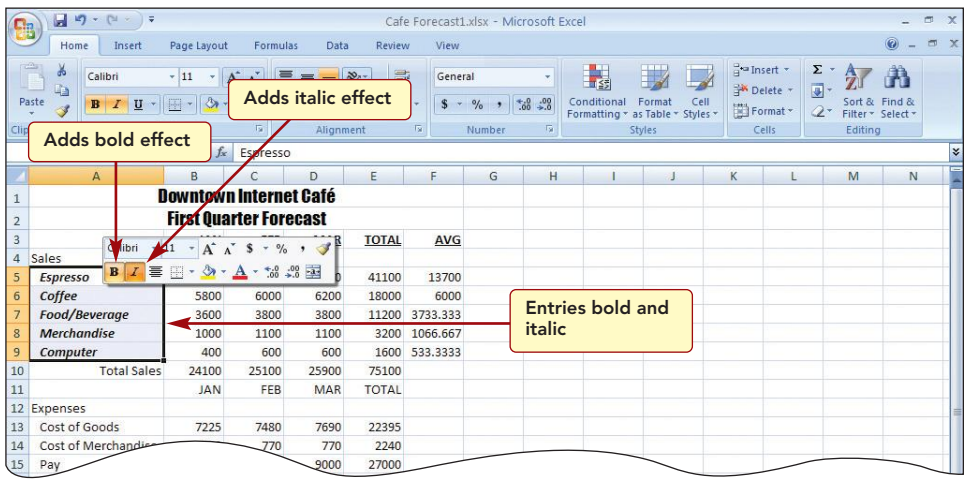


Figure 1.63

Using Undo

Sometimes formatting changes you make do not have the expected result. In this case, you feel that the sales category names would look better without the formatting. One way to remove the format from the cells is to use Clear in the Editing group and choose Clear Formats. Because you just performed these actions, you can quickly clear the formats by undoing the last two actions you performed.

1. Open the Undo drop-down list in the Quick Access Toolbar.
2. Move the mouse pointer down the list to highlight the Italic and Bold actions.
3. Click on the highlighted selection.

Another Method

The keyboard shortcut for Undo is Ctrl + Z. You also can click Undo repeatedly to undo the actions in the list one by one.

Your screen should be similar to Figure 1.64

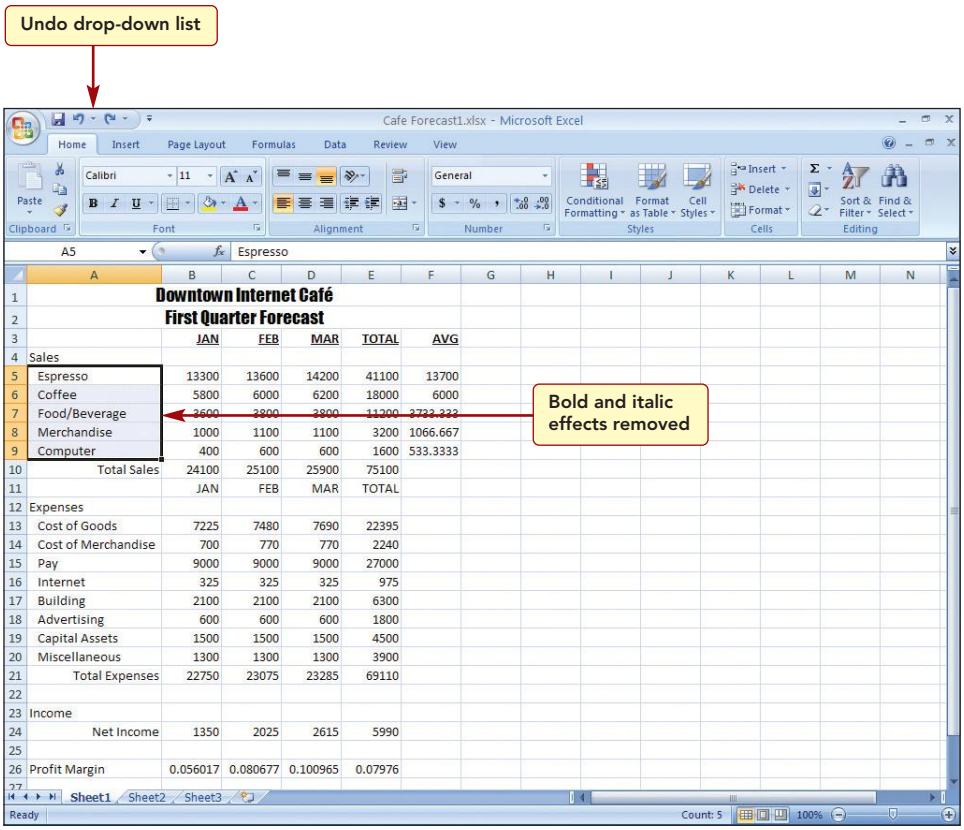


Figure 1.64

Additional Information

The keyboard shortcut for Redo is Ctrl + Y. You also can click Redo repeatedly to undo the actions in the list one by one.

Additional Information

You can remove both formatting and content using Clear/Clear All.

The two actions you selected are undone. Undo reverses the selected actions regardless of the current cell pointer location. If you change your mind after you Undo an action, the Redo button is available so that you can restore the action you just undid. Undo is convenient if the actions you want to reverse were recently performed; however, if you have performed several other actions since performing the ones you want to undo, those actions also will be reversed. In that case, it would be better to remove the formats using Clear/Clear Formats.

Using Format Painter

You do think, however, that the Total Sales, Total Expenses, and Net Income headings would look good in bold. You will bold the entry in cell A10 and then copy the format from A10 to the other cells using **Format Painter**. This feature applies the formats associated with the current selection to new selections. To turn on the feature, move the insertion point to the cell whose formats you want to copy and click the Format Painter button. Then you select the cell to which you want the formats applied. The formats are automatically applied to the entire cell contents simply by clicking on the cell. If you double-click the Format Painter button, you can apply the formats multiple times. You also will format the headings in row 11.

1. **Apply bold to cell A10.**

- **With cell A10 selected, double-click Format Painter in the Clipboard group.**

Additional Information

When Format Painter is on, the mouse pointer appears as and the cell whose format will be copied appears with a moving border.

- **Click A21.**
- **Click A24.**
- **Click Format Painter to turn it off.**

Another Method

You also can press Esc to turn off Format Painter.

- **Move to B3.**
- **Single-click on Format Painter and copy the format to cells B11 through E11.**

Your screen should be similar to Figure 1.65

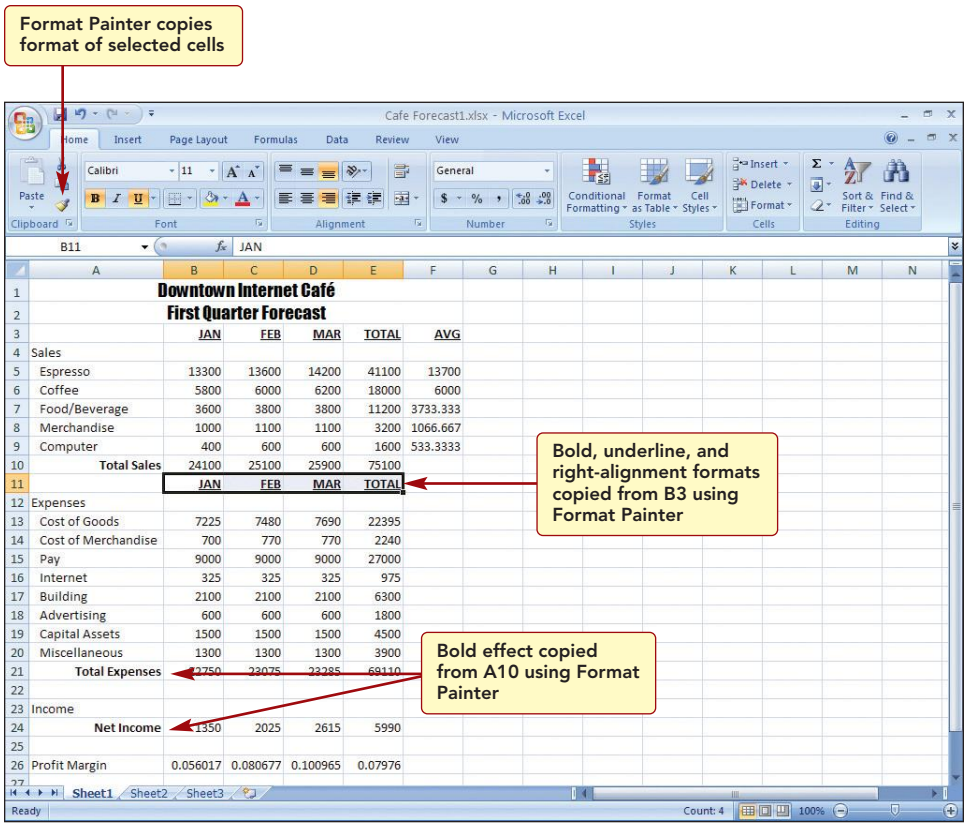


Figure 1.65

The formatting was quickly added to each cell or range as it was selected.

Formatting Numbers

You also want to improve the appearance of the numbers in the worksheet by changing their format.

Concept 14

Number Format

14 **Number formats** change the appearance of numbers onscreen and when printed, without changing the way the number is stored or used in calculations. When a number is formatted, the formatting appears in the cell while the value without the formatting is displayed in the formula bar.

The default number format setting in a worksheet is General. General format, in most cases, displays numbers just as you enter them, unformatted. Unformatted numbers are displayed without a thousands separator such as a comma, with negative values preceded by a − (minus sign), and with as many decimal place settings as cell space allows. If a number is too long to be fully displayed in the cell, the General format will round numbers with decimals and use scientific notation for large numbers.

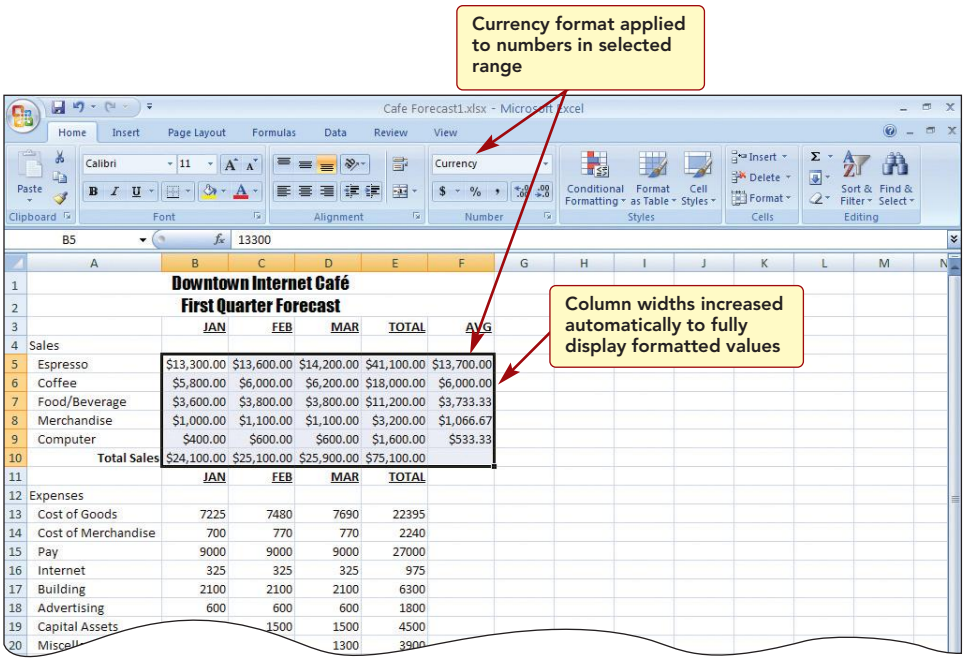
First, you will change the number format of cells B5 through F10 to display as currency with dollar signs, commas, and decimal places.

1 **Select cells B5 through F10.**

Open the General **Number format drop-down list in the Number group.**

Choose Currency.

Your screen should be similar to Figure 1.66



	A	B	C	D	E	F
1		Downtown Internet Café				
2		First Quarter Forecast				
3		JAN	FEB	MAR	TOTAL	AVG
4	Sales					
5	Espresso	$13,300.00	$13,600.00	$14,200.00	$41,100.00	$13,700.00
6	Coffee	$5,800.00	$6,000.00	$6,200.00	$18,000.00	$6,000.00
7	Food/Beverage	$3,600.00	$3,800.00	$3,800.00	$11,200.00	$3,733.33
8	Merchandise	$1,000.00	$1,100.00	$1,100.00	$3,200.00	$1,066.67
9	Computer	$400.00	$600.00	$600.00	$1,600.00	$533.33
10	Total Sales	$24,100.00	$25,100.00	$25,900.00	$75,100.00	
11		JAN	FEB	MAR	TOTAL	
12	Expenses					
13	Cost of Goods	7225	7480	7690	22395	
14	Cost of Merchandise	700	770	770	2240	
15	Pay	9000	9000	9000	27000	
16	Internet	325	325	325	975	
17	Building	2100	2100	2100	6300	
18	Advertising	600	600	600	1800	
19	Capital Assets		1500	1500	4500	
20	Miscell			1300	3900	

Figure 1.66

Another Method

Excel will also automatically apply a format to a cell based on the symbols you use when entering the number. For example, entering 10,000 in a cell formats the cell to Comma format, and entering $102.20 formats the cell to Currency with two decimal places.

The number entries in the selected range appear with a currency symbol, comma, and two decimal places. The column widths increased automatically to fully display the formatted values.

A second format category that displays numbers as currency is Accounting. You will try this format next on the same range. Additionally, you will specify zero as the number of decimal places because most of the values are whole values. To specify settings that are different than the default setting for a format, you need to use the Format Cells dialog box.

2. **Click the Number group launcher in the Number group to open the Format Cells Number dialog box.**

Another Method

The keyboard shortcut to open the Format Cells dialog box is Ctrl + 1.

- **From the Category list box, choose Accounting.**
- **Reduce the decimal places to 0.**
- **Click OK.**

Your screen should be similar to Figure 1.67

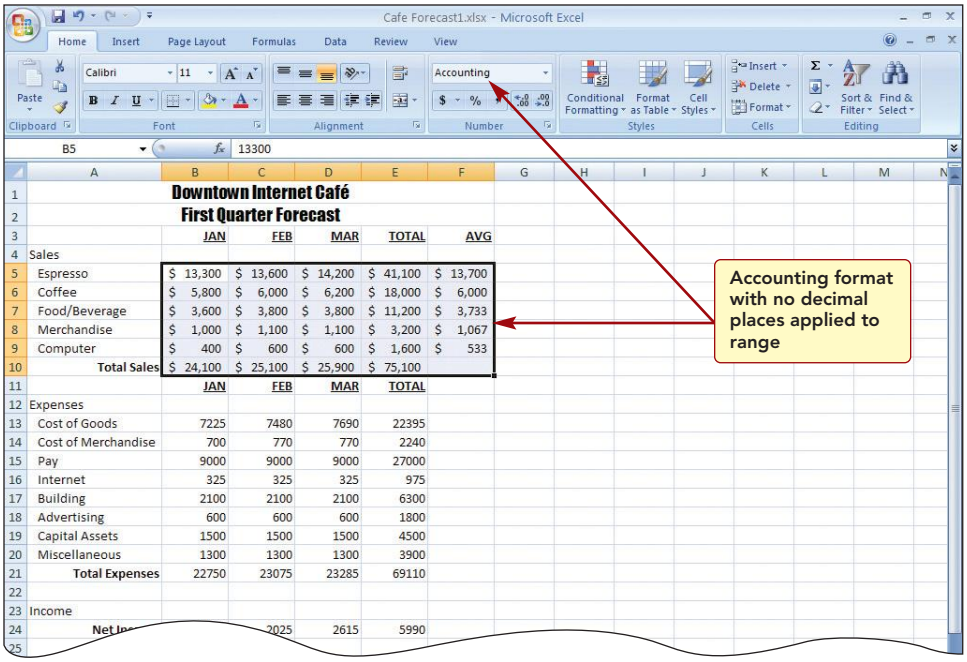


Figure 1.67

The numbers now appear in Accounting format. The primary difference between the Accounting and the Currency formats is that the Accounting format aligns numbers at the decimal place and places the dollar sign in a column at the left edge of the cell space. In addition, it does not allow you to select different ways of displaying negative numbers but displays them in black in parentheses.

You decide the Accounting format will make it easier to read the numbers in a column and you will use this format for the rest of the worksheet. An easier way to apply the Accounting format with 0 decimals is to use the commands in the Number group.

3. **Select the range B13 through E21.**
- **Click the Accounting Number Format button in the Number group.**
- **Click the Decrease Decimal button twice.**

Your screen should be similar to Figure 1.68

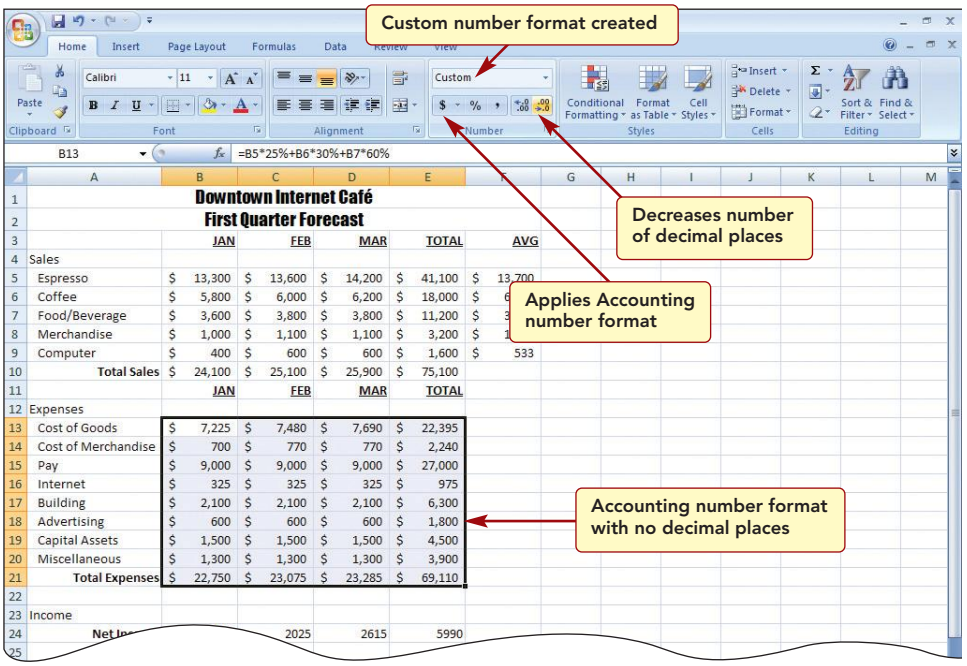


Figure 1.68

Notice the Number Format box displays Custom because you modified a copy of the existing Accounting number format code. The custom number format is added to the list of number format codes. Between 200 and 250 custom formats can be added depending on the language version of Excel you are using. You can then reapply the custom format by selecting it from the Custom category of the Format Cells Number dialog box. This is useful for complicated formats, but not for formats that are easy to recreate.

Finally, you will format the Net Income as Accounting with zero decimal places and the Profit Margin values to percentages with two decimal places. You will do this using the Mini toolbar. This feature is particularly helpful when working at the bottom of the worksheet window.

MORE ABOUT

For more information about creating custom number formats, see 2.3 Format Cells and Cell Content in the More About appendix.

4 **Select B24 through E24.**

Click $ Accounting Number Format on the Mini toolbar.

Having Trouble
Right-click on the selection to display the Mini toolbar.

Click .00 Decrease Decimal twice on the Mini toolbar.

Select B26 through E26.

Click % Percent Style on the Mini toolbar.

Click .0 Increase Decimal twice on the Mini toolbar.

Your screen should be similar to Figure 1.69

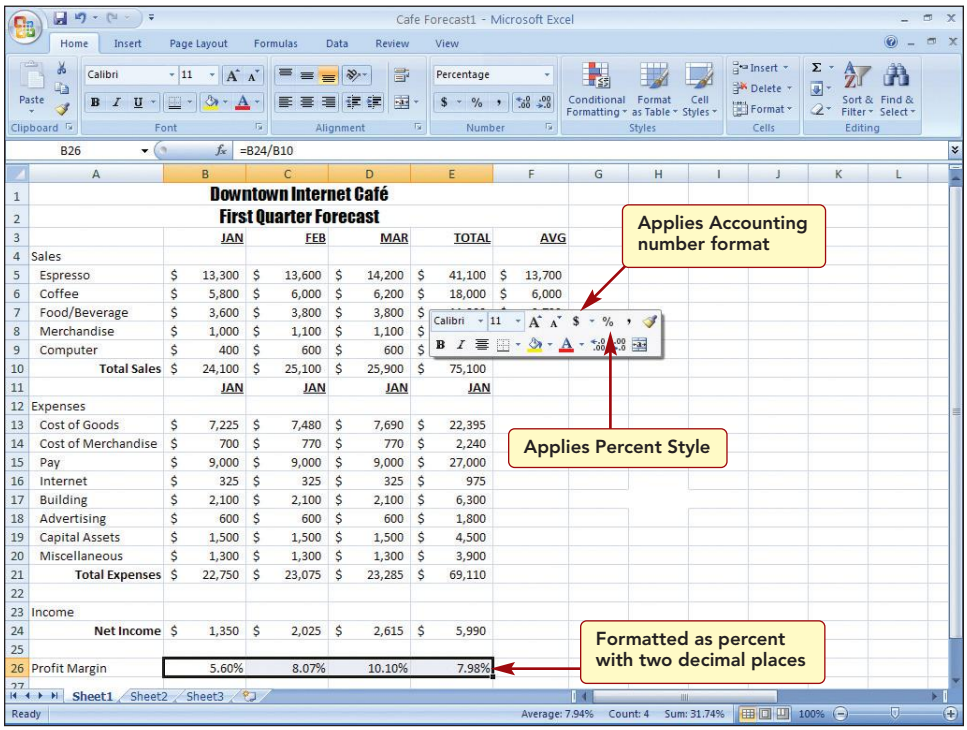


Figure 1.69

Adding Font Color

The last formatting change you would like to make to the worksheet is to add color to the text of selected cells. Font color can be applied to all the text in a selected cell or range or to selected words or characters in a cell.

1 **Select A1 through A2.**

Open the Font Color drop-down menu in the Font group.

Another Method

Font Color is also available on the Mini toolbar.

Your screen should be similar to Figure 1.70

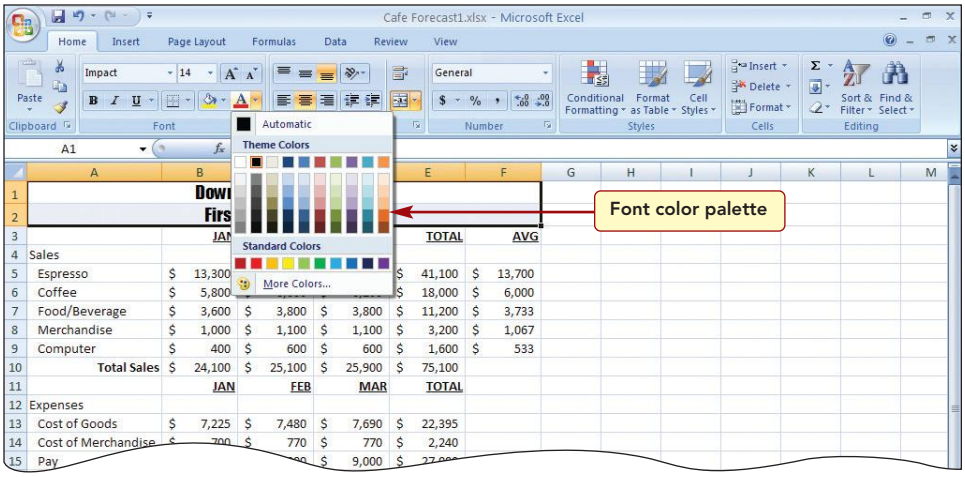


Figure 1.70

A palette of colors is displayed. Automatic is the default text color setting. This setting automatically determines when to use black or white text. Black text is used on a light background and white text on a dark background. The center area of the palette displays the Theme colors. Theme colors are a set of colors that are associated with a document theme, a predefined set of fonts, colors, and effects that can be applied to an entire worksheet. If you change the theme, the theme colors change. The Standard Colors bar displays 10 colors that are always the same.

As you point to a color, the entry in the selected cell changes color so you can preview how the selection would look. A ScreenTip displays the name of the standard color or the description of the theme color as you point to it.

Additional Information

You will learn about using Document Themes in Lab 2.

2 **Choose purple from the Standard Colors bar.**

Your screen should be similar to Figure 1.71

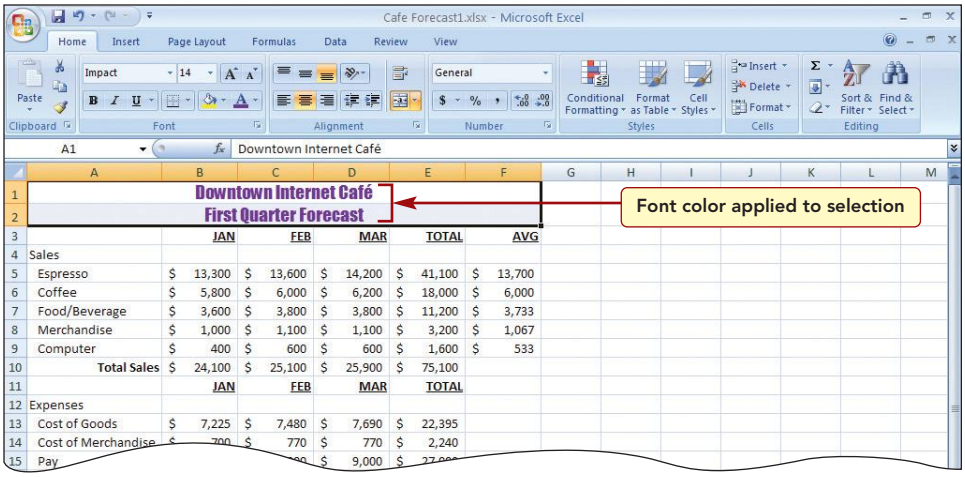


Figure 1.71

The font color of all the text in cells A1 and A2 has changed to the selected color. The selected color appears in the button and can be applied again simply by clicking the button.

Adding Fill Color

Next, you will change the cell background color, also called the fill color, behind the titles and in several other areas of the worksheet. Generally, when adding color to a worksheet, use a dark font color with a light fill color or a light font color with a dark fill color.

1. **Select cells A1 through F4.**
- **Open the Fill Color drop-down color palette.**
- **Point to several colors to see a Live Preview.**
- **Select the orange color from the Standard Colors bar.**
- **Select cells A11 through F12 and click Fill Color to apply the last selected fill color.**
- **Apply the same fill color to A23:F23 and A26:F26.**

Your screen should be similar to Figure 1.72

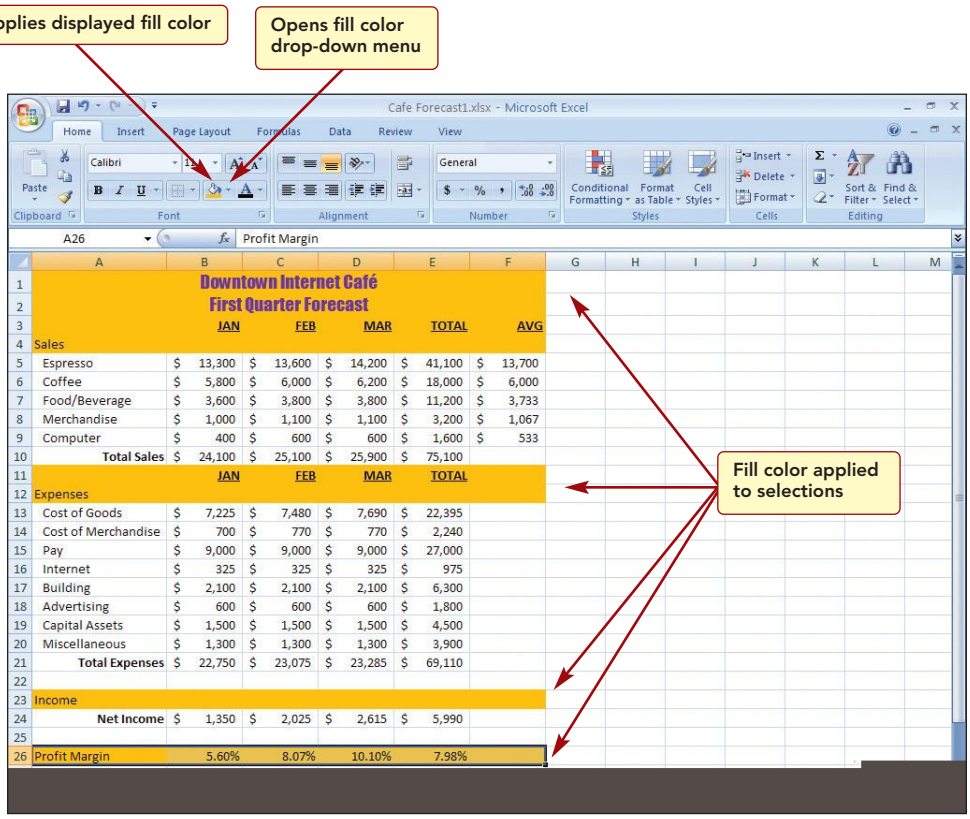


Figure 1.72

The color highlight helps distinguish the different areas of the worksheet.

Adding and Removing Cell Borders

Finally, you decide to add a border around the entire worksheet area. Excel includes many predefined border styles that can be added to a single cell or to a range of cells. Then you will make several additional formatting changes to improve the appearance and readability of the worksheet.

1. **Select the range A1 through F26.**

- **Open the Borders drop-down menu in the Font group and choose the Thick Box Border style.**

- **Click outside the range to see the border.**

Your screen should be similar to Figure 1.73

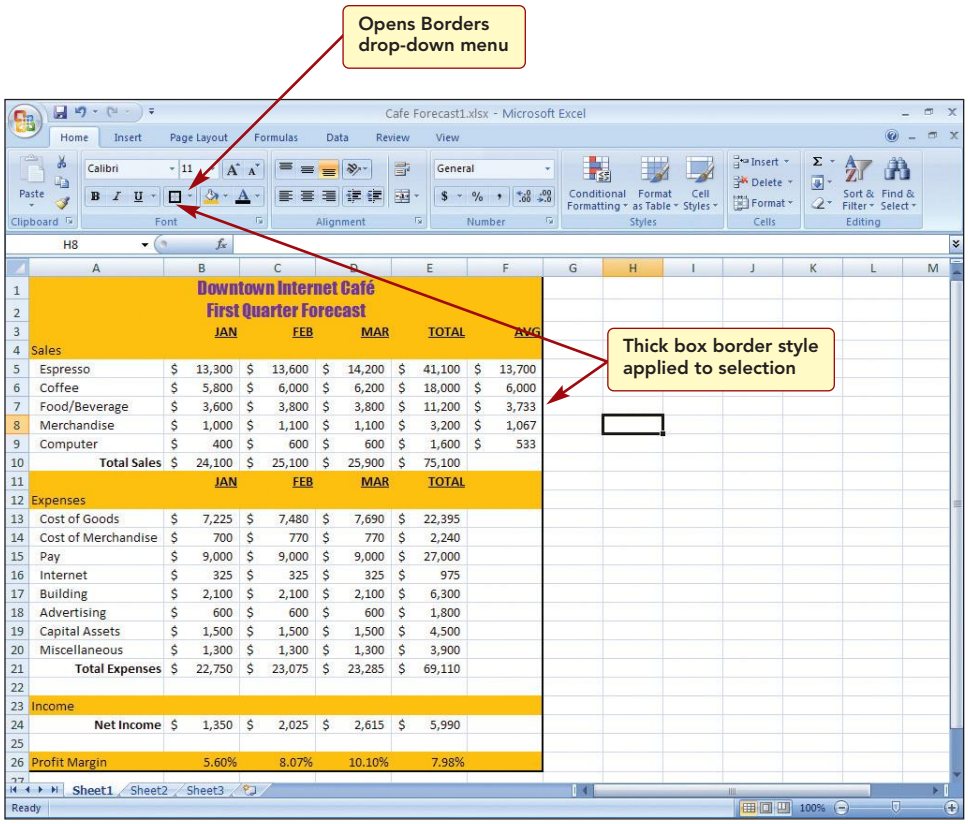


Figure 1.73

The range is considered a single block of cells and the box border surrounds the entire worksheet selection.

When adding borders, the border also is applied to adjacent cells that share a bordered cell boundary. In this case, cells G1 through G26 acquired a left border and cells A27 through F27 acquired a top border. When pasting a cell that includes a cell border, the border is included unless you specify that the paste does not include the border. To see how this works, you will first copy a cell and its border, and then you will copy it again without the border.

2 Copy cell A1 and paste it in cell G2.

- Move to G4, open the Paste drop-down menu and choose No Borders.
- Move to G6.

Your screen should be similar to Figure 1.74

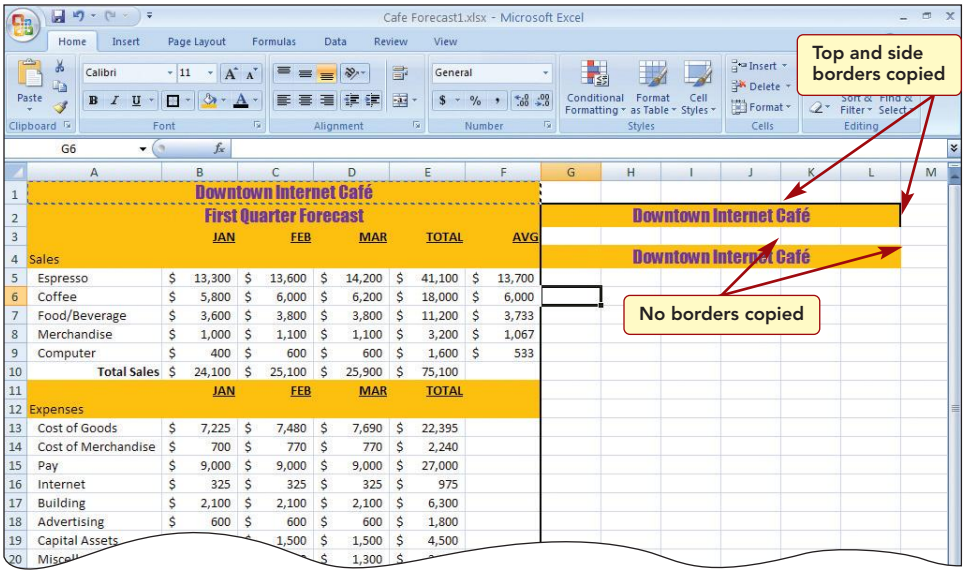


Figure 1.74

If you want to add additional borders or replace an existing border with another, select the range and then add the border. However, if you want to remove a border style from one area of a selection and add a border to another area, you need to remove all borders first and then apply the new border styles. You will try these features next on the entry in cell G2.

3 Move to G2 and choose No Border from the Borders drop-down menu.

- Apply a Bottom Double Border to the selection.
- Move to G6 to see the changes.

Your screen should be similar to Figure 1.75

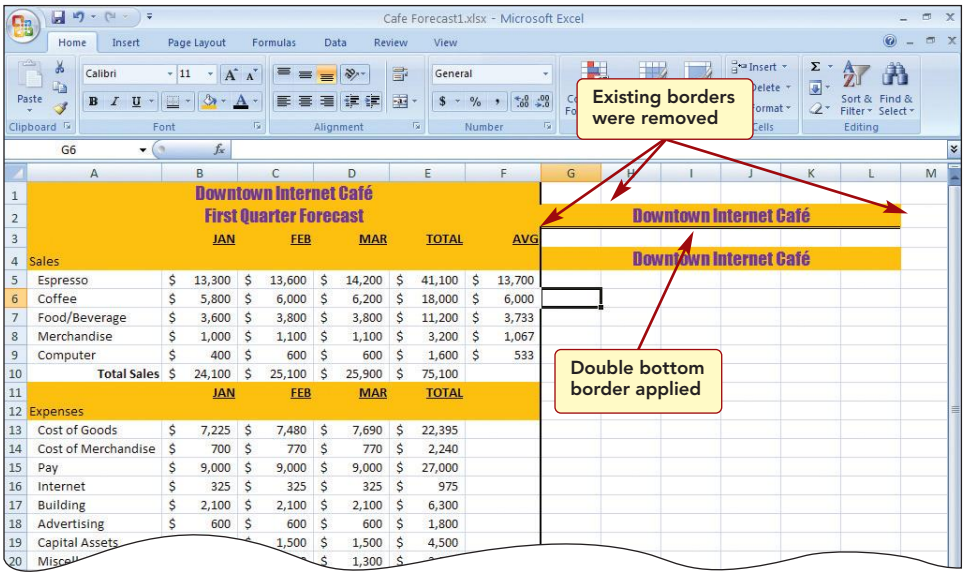


Figure 1.75

All existing borders were removed, including those that share a cell boundary, and the new double bottom border is applied to the selection. You will restore the worksheet to how it was prior to copying the title using Undo and then make some final adjustments to the worksheet.

4. **Undo your last four actions.**

- **Drag the row 3 bottom boundary line down to increase the row height to 22.50.**
- **Move to any cell in row 11 and choose Delete Sheet Rows from the Delete drop-down menu in the Cells group.**
- **In the same manner, delete rows 21 and 23.**
- **Add bold and purple font color to cells A4, A11, A21, and A23.**
- **Click Save to save the worksheet changes.**

Your screen should be similar to Figure 1.76

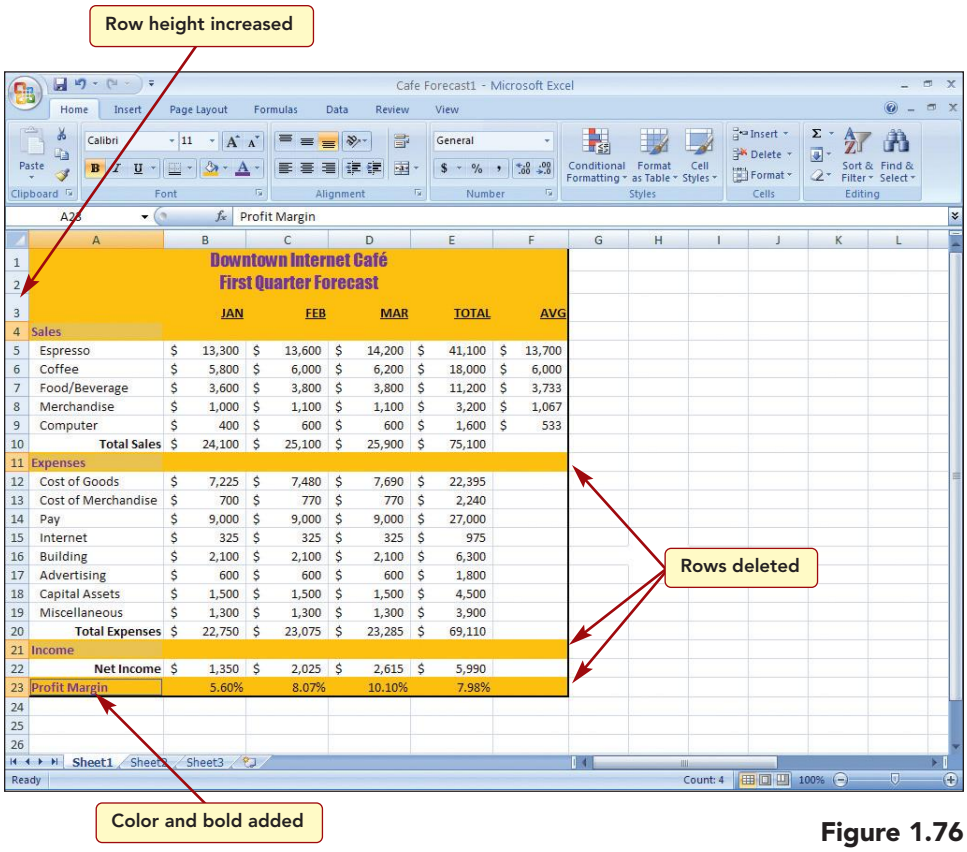


Figure 1.76

Entering the Date

Now that the worksheet is complete, you want to include your name and the date in the worksheet as documentation. There are many ways to enter the date. For example, you could type the date using the format mm/dd/yy or as month dd, yyyy. When a date is entered as text, Excel converts the entry to a numeric entry that allows dates to be used in calculations. Excel stores all dates as **serial values** with each day numbered from the beginning of the 20th century. The date serial values are consecutively assigned beginning with 1, which corresponds to the date January 1, 1900, and ending with 2958465, which is December 31, 9999.

1. **Enter your first and last name in cell A25.**
2. **Enter the current date as mm/dd/yy in cell A26.**

Another Method

You also could use the Today function, =Today(), to display the current date in the default date format or the keyboard shortcut Ctrl + ;.

Your screen should be similar to Figure 1.77

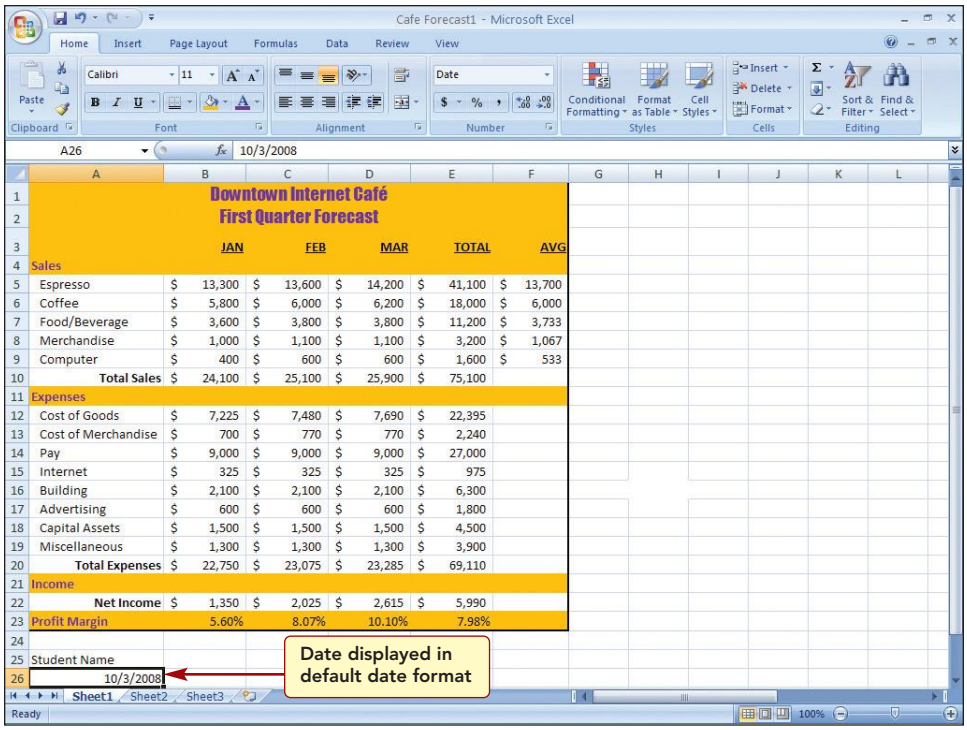


Figure 1.77

The date is displayed using the default date format, which is based on the settings in Windows. It is right-aligned in the cell because it is a numeric entry. You can change the date format in the worksheet without changing the Windows settings using the Format Cells Number dialog box.

2. **If necessary, move to cell A26.**
3. **Click the Number group dialog box launcher to open the Format Cells dialog box.**
4. **Choose the month xx, xxxx (March 14, 2001) date format from the Type list.**

Your screen should be similar to Figure 1.78

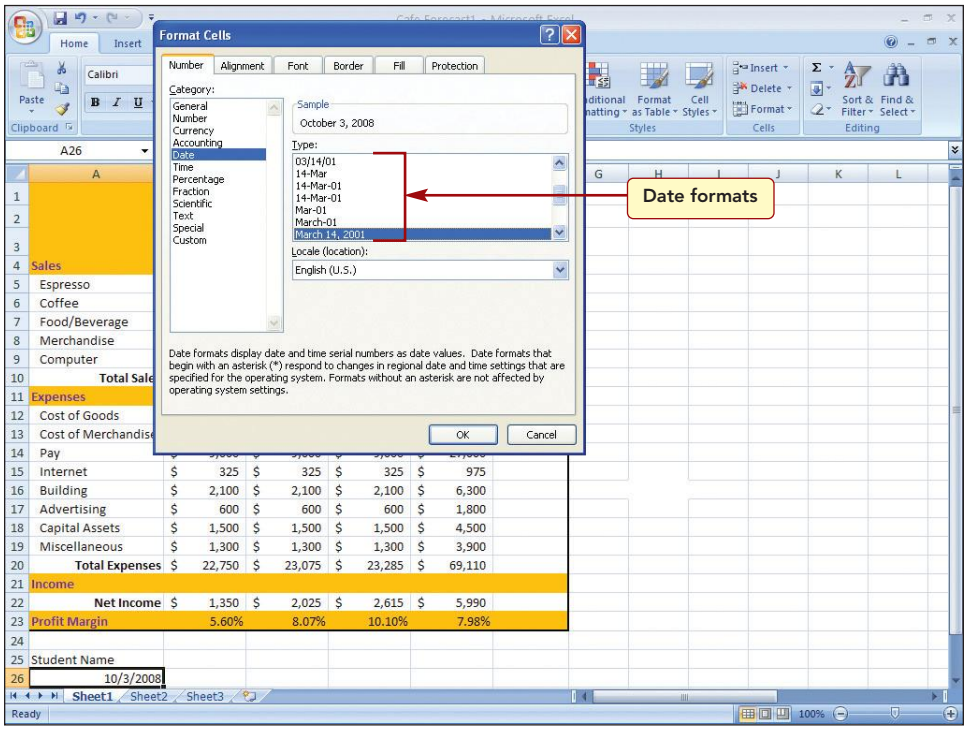


Figure 1.78

5. **Click OK.**

The date appears in the specified format.

Previewing and Printing a Worksheet

Although you still plan to make more changes to the worksheet, you want to print a copy of the estimated first-quarter forecast for the owner to get feedback regarding the content and layout. While creating this worksheet, you have been using Normal view, which is designed for onscreen viewing and working. Another view, Print Preview, shows you how the worksheet will appear on the printed page. To save time and unnecessary printing and paper waste, it is always a good idea to first preview onscreen how your worksheet will appear when printed.

Previewing the Worksheet

Previewing a worksheet allows you to look over each page and make necessary adjustments before printing it.

1. **Click Office Button.**
2. **Select Print and choose Print Preview from the Print submenu.**

Your screen should be similar to Figure 1.79

Additional Information
If you have a monochrome printer, the preview appears in shades of gray, as it will appear when printed.

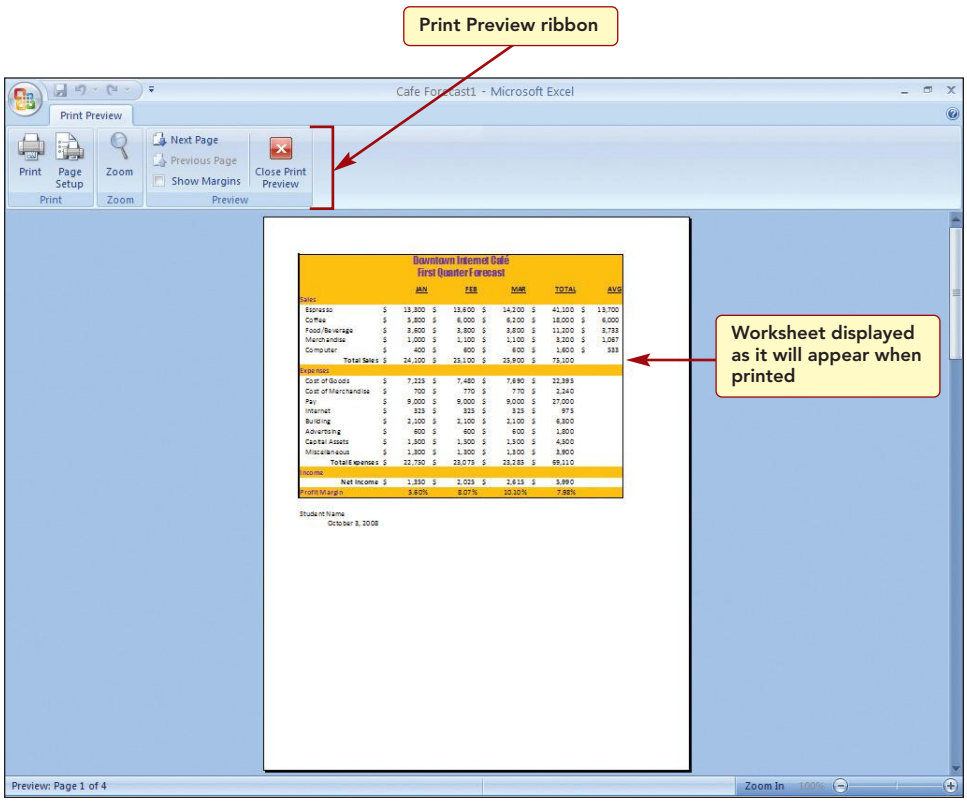


Figure 1.79

The print preview window displays the worksheet as it will appear on the printed page. Notice that the row and column gridlines are not displayed and will not print. This is one of the default print settings. Your worksheet may appear slightly different from that shown in Figure 1.79. This is because the way pages appear in the preview window depends on the available fonts, the resolution of the printer, and the available colors.

The preview window also includes its own Ribbon. While previewing, you can change from full-page view to a magnified view using Zoom or by clicking on the preview page.

2 **Click the worksheet title.**

Your screen should be similar to Figure 1.80

Additional Information
The area you click on is the area that will display in the preview window.

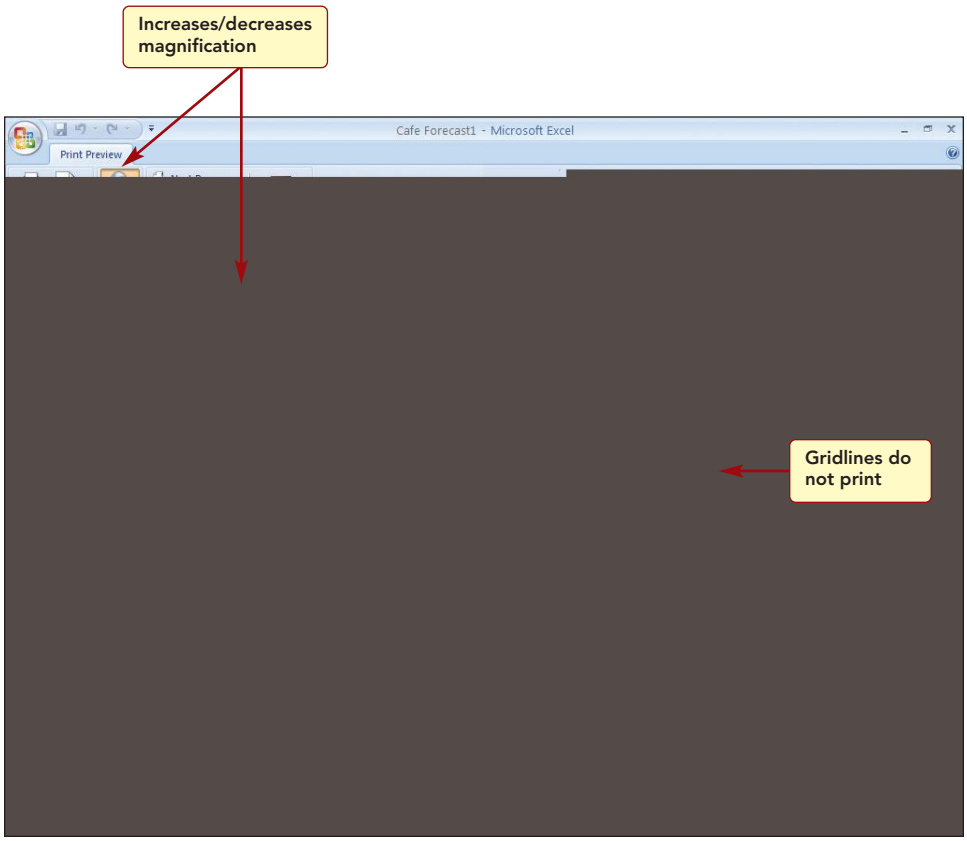


Figure 1.80

The worksheet is displayed in the actual size it will appear when printed.

Printing the Worksheet

The worksheet looks good and does not appear to need any further modifications immediately. Now you are ready to print the worksheet.

1. **Click on the worksheet again to return to full-page view.**

- **Click** Print.

Your screen should be similar to Figure 1.81

Another Method

You also can use the keyboard shortcut Ctrl + P from the worksheet window to open the Print dialog box.

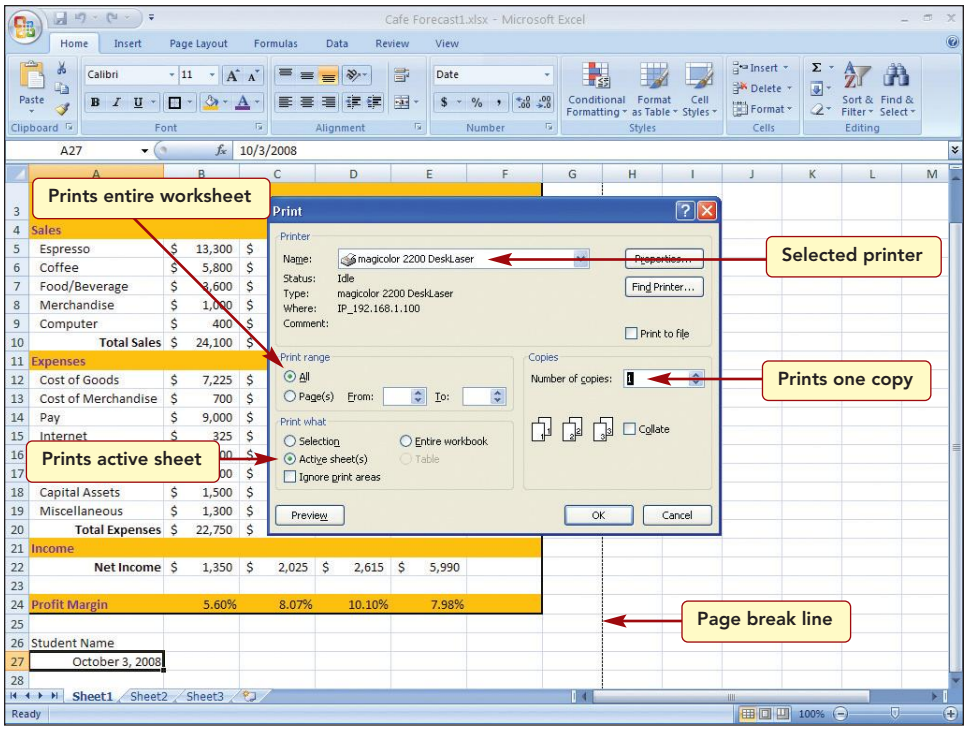


Figure 1.81

Note: Please consult your instructor for printing procedures that may differ from the following directions.

From the Print dialog box, you need to specify the printer you will be using and the document settings. The printer that is currently selected is displayed in the Name drop-down list box in the Printer section of the dialog box.

The Print Range area lets you specify how much of the worksheet you want printed. The range options are described in the following table:

Option	Action
All	Prints the entire worksheet
Pages	Prints pages you specify by typing page numbers in the text box
Selection	Prints selected range only
Active Sheet	Prints the active worksheet
Entire Workbook	Prints all worksheets in the workbook

The default settings of All and Active sheet(s) are correct. In the Copies section, the default setting of one copy of the worksheet is acceptable.

2 If necessary, make sure your printer is on and ready to print.

If you need to change the selected printer to another printer, open the Name drop-down list box and select the appropriate printer.

Click OK.

Additional Information
If you do not have a color printer, the colors appear as shades of gray.

The printed copy should be similar to the document shown in the Case Study at the beginning of the lab. Notice the dotted line that appears between columns G and H. This is the automatic page break line that shows where one printed page ends and the next begins.

Displaying and Printing Formulas

Often, when verifying the accuracy of the data in a worksheet, it is helpful to display all the formulas in a worksheet rather than the resulting values. This way you can quickly verify that the formulas are referencing the correct cells and ranges.

1 Open the Formulas tab.

Click Show Formulas in the Formula Auditing group.

Another Method
You also can use Ctrl + ` (accent grave is located to the left of the number 1 key) to toggle between values and formulas.

Move to B10.

Your screen should be similar to Figure 1.82

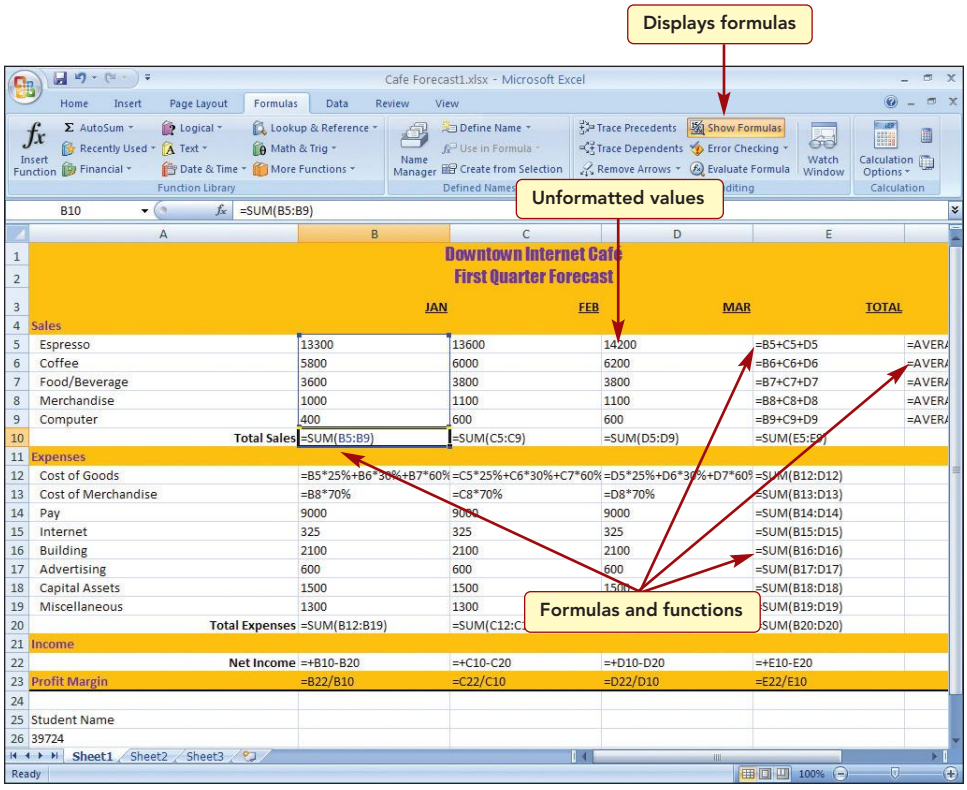


Figure 1.82

The display of the worksheet has changed to display unformatted values and the formulas and functions. It has automatically increased the column widths so the formulas and text do not overflow into the adjacent cells.

Changing Page Orientation and Scaling

Next, you will print the worksheet with formulas. Because the worksheet is so much wider, you will need to change the **orientation** or the direction the output is printed on a page. The default orientation is **portrait**. This setting prints across the width of the paper. You will change the orientation to **landscape,** which prints across the length of the paper. Then you will reduce the scale of the worksheet so it fits on one page. The scaling feature will reduce or enlarge the worksheet contents by a percentage or to fit it to a specific number of pages by height and width. You want to scale the worksheet to fit on one page.

1. Click Office Button.
2. Point to Print and choose Print Preview.
3. Click Page Setup and choose Landscape.
4. Choose Fit to.
5. Click OK.

Your screen should be similar to Figure 1.83

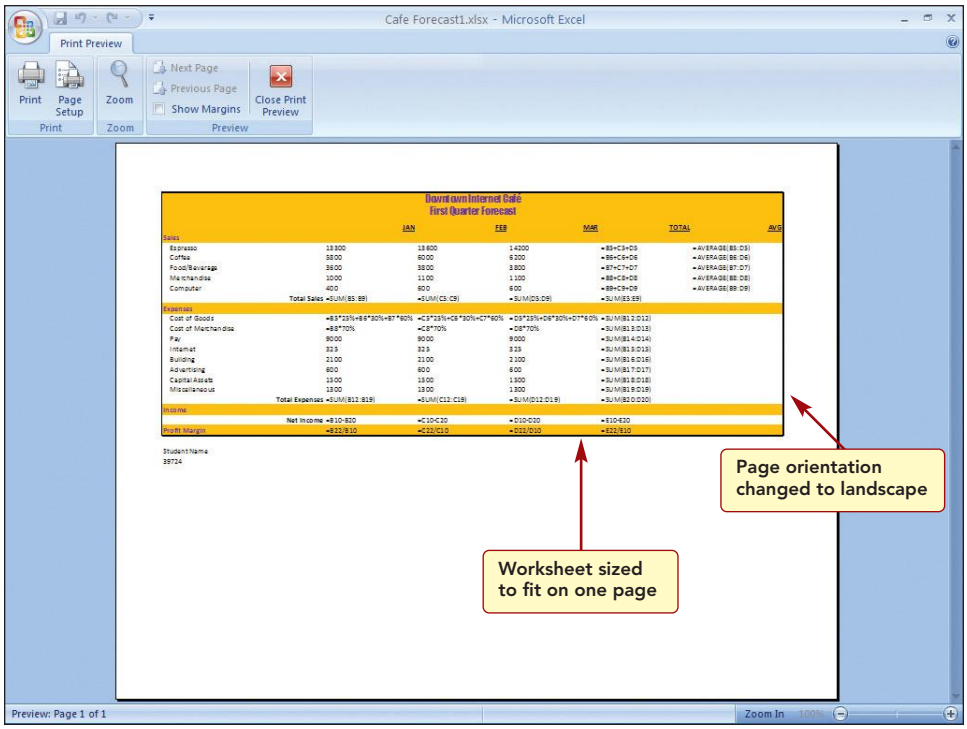


Figure 1.83

Another Method

You also can scale the worksheet using Scale: in the Scale to Fit group of the Page Layout tab and setting the scale percentage.

The size of the worksheet has been reduced so that it now fits on a single page.

The entire worksheet will easily print across the length of the page when printed using landscape orientation and scaled to fit a single page.

2. Print the worksheet.
3. Press Ctrl + ` to return the display to values.

Exiting Excel 2007

The Exit command in the File menu is used to quit the Excel program. Alternatively, you can click the Close button in the application window title bar. If you attempt to close the application without first saving the workbook, Excel displays a warning asking whether you want to save your work. If you do not save your work and you exit the application, all changes you made from the last time you saved are lost.

1. **Move to cell A1.**
2. **Click Close (in the application window title bar).**
3. **Click Yes to resave the worksheet.**

Additional Information
Excel saves the file with the cell selector in the same cell location it is in at the time it is saved.

Because you added the date since last saving the worksheet, you were prompted to save it again before closing it.



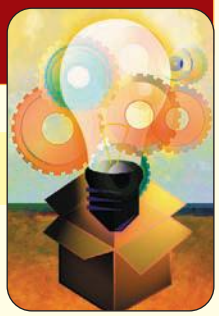
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Fan Coordinator

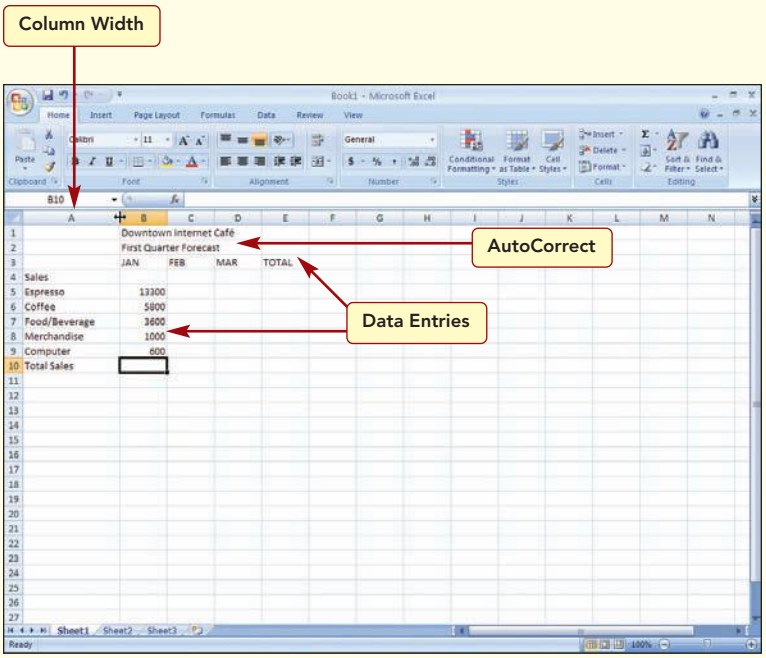
Did you know that 40 percent of the advertised positions in sports are for marketing and promotion? A marketing graduate hired as a basketball fan coordinator would use Excel to keep track of the income and expenses for coordinated half-time activities at professional sporting events. These worksheets would provide valuable information for promoting sponsors' products and services at games. A fan coordinator might start out as an unpaid intern, but after graduation could expect to earn from $25,000 to $32,000.

Concept Summary



LAB 1

Creating and Editing a Worksheet



Data Entries (EX1.13)

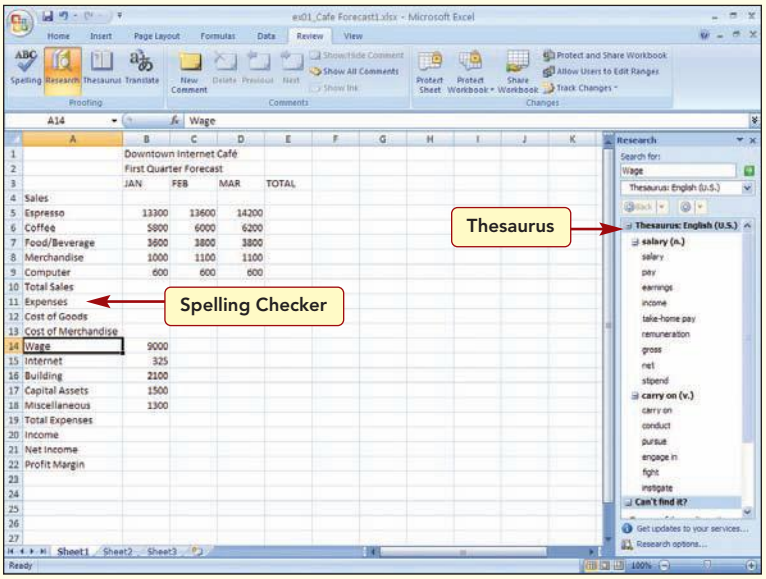
The basic information or data you enter in a cell can be text or numbers.

AutoCorrect (EX1.19)

The AutoCorrect feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.

Column Width (EX1.22)

The size or width of a column controls the amount of information that can be displayed in a cell.



Spelling Checker (EX1.29)

The spelling checker locates misspelled words, duplicate words, and capitalization irregularities in the active worksheet and proposes the correct spelling.

Thesaurus (EX1.31)

The thesaurus is a reference tool that provides synonyms, antonyms, and related words for a selected word or phrase.

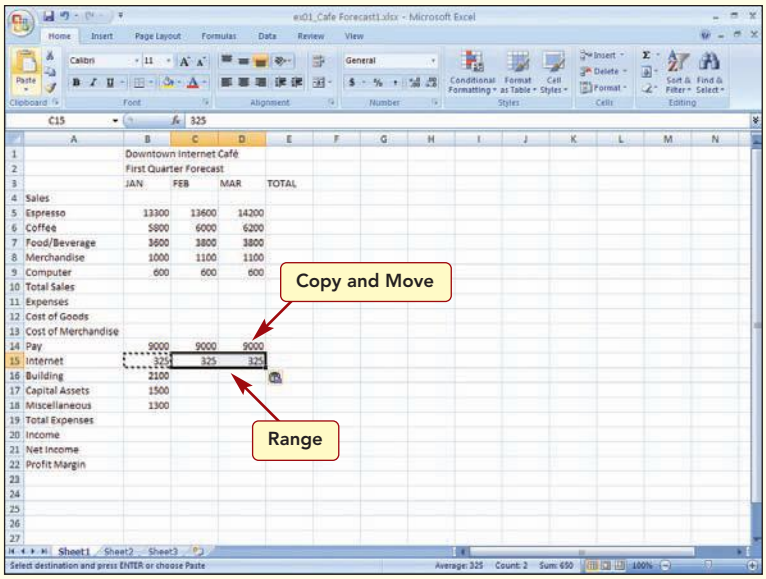
Concept Summary

Copy and Move (EX1.33)

The contents of worksheet cells can be duplicated (copied) or moved to other locations in the worksheet or between worksheets, saving you time by not having to retype the same information.

Range (EX1.37)

A selection consisting of two or more cells on a worksheet is a range.

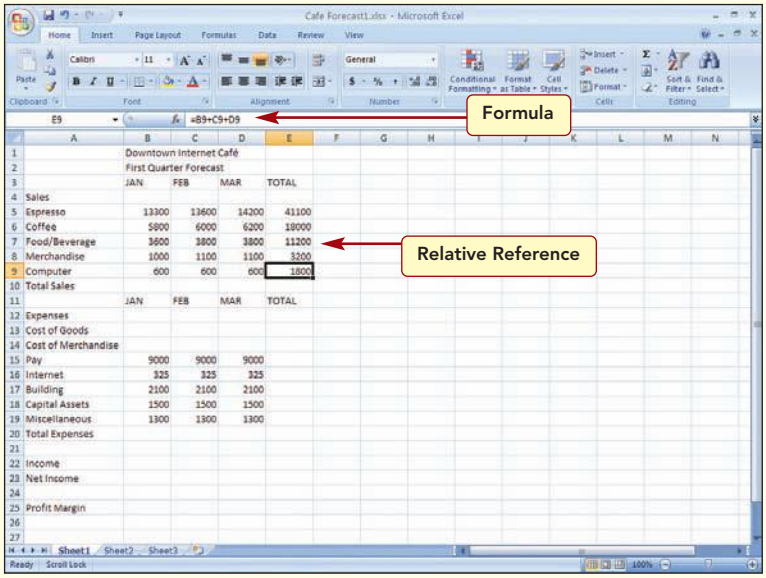


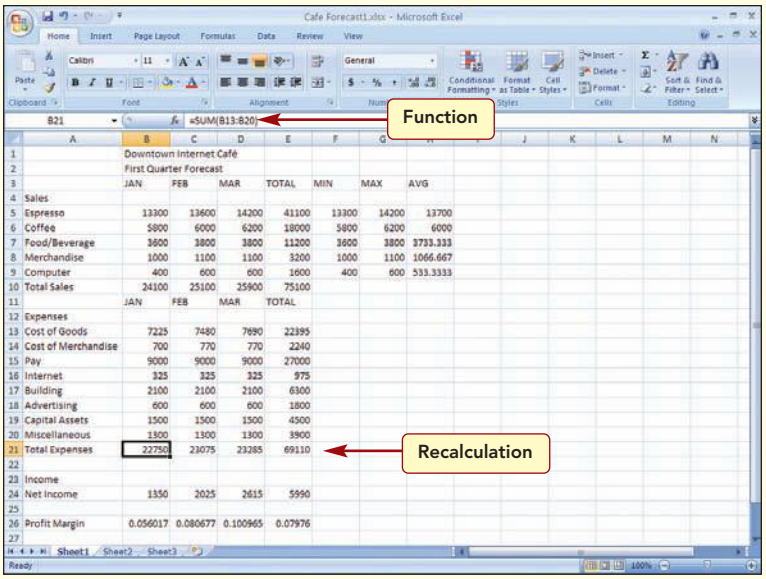
Formula (EX1.43)

A formula is an equation that performs a calculation on data contained in a worksheet.

Relative Reference (EX1.46)

A relative reference is a cell or range reference in a formula whose location is interpreted in relation to the position of the cell that contains the formula.



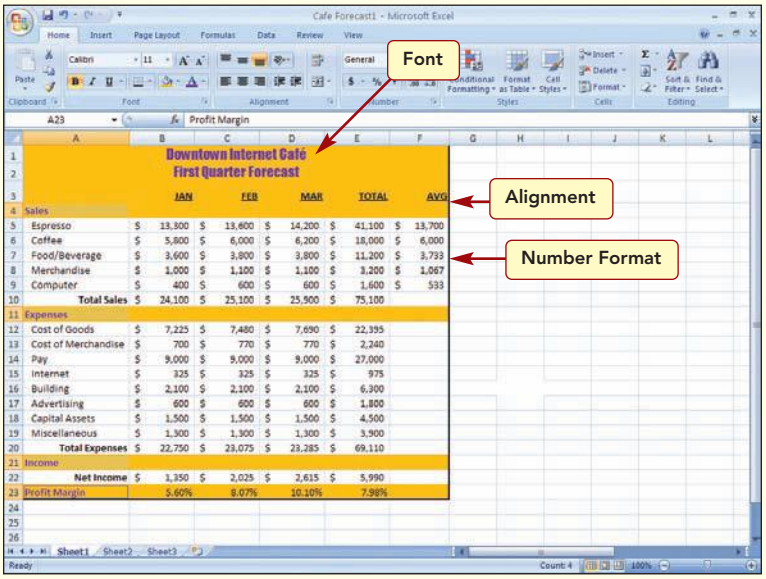


Function (EX1.47)

A function is a prewritten formula that performs certain types of calculations automatically.

Recalculation (EX1.54)

When a number in a referenced cell in a formula changes, Excel automatically recalculates all formulas that are dependent upon the changed value.



Alignment (EX1.58)

Alignment settings allow you to change the horizontal and vertical placement and the orientation of an entry in a cell.

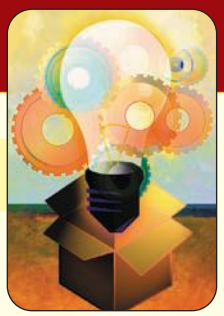
Font and Font Size (EX1.62)

A font, also commonly referred to as a typeface, is a set of characters with a specific design.

Number Format (EX1.68)

Number formats change the appearance of numbers onscreen and when printed, without changing the way the number is stored or used in calculations.

Lab Review



LAB 1

Creating and Editing a Worksheet

key terms

active cell EX1.7
active sheet EX1.8
adjacent range EX1.37
alignment EX1.58
antonym EX1.31
argument EX1.47
AutoCorrect EX1.19
AutoFit EX1.23
AutoRecover EX1.24
cell EX1.7
cell reference EX1.7
cell selector EX1.7
character effect EX1.64
column EX1.7
column letter EX1.7
constant EX1.43
copy area EX1.33
custom dictionary EX1.29
default EX1.6
destination EX1.33
fill handle EX1.38
font EX1.62
format EX1.57
Format Painter EX1.66
formula EX1.43
formula bar EX1.5
function EX1.47
heading EX1.13
landscape EX1.81
Live Preview EX1.63
main dictionary EX1.29
merged cell EX1.61
Name box EX1.5
nonadjacent range EX1.37
number EX1.13
number format EX1.68
operand EX1.43
operator EX1.43
order of precedence EX1.43
orientation EX1.81
paste area EX1.33
point EX1.62
portrait EX1.81
range EX1.37
range reference EX1.37
recalculation EX1.54
relative reference EX1.46
row EX1.7
row number EX1.7
sans serif EX1.62
serial value EX1.75
serif EX1.62
sheet EX1.7
sheet tab EX1.8
size EX1.62
source EX1.33
spelling checker EX1.29
spreadsheet EX1.7
synonym EX1.31
syntax EX1.47
tab scroll buttons EX1.8
template EX1.6
text EX1.13
thesaurus EX1.31
typeface EX1.62
variable EX1.43
workbook EX1.6
workbook window EX1.6
worksheet EX1.7

MCAS Skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2 MCAS Certification Guide for a complete list of the skills that were covered in Lab 1.

command summary

Command	Shortcut	Action
Office Button		
New	Ctrl + N	Opens a new blank workbook
Open	Ctrl + O	Opens an existing workbook file
Save	Ctrl + S	Saves file using same file name
Save As	F12	Saves file using a new file name
Print	Ctrl + P	Prints a worksheet
Print/Print Preview		Displays worksheet as it will appear when printed
Close	Ctrl + F4	Closes open workbook file
Excel Options		Displays and changes program settings
Exit Excel	× or Alt + F4	Exits Excel program
Quick Access Toolbar		
Save	Ctrl + S	Saves document using same file name
Undo	Ctrl + Z	Reverses last editing or formatting change
Redo	Ctrl + Y	Restores changes after using Undo
Home tab		
Clipboard group		
Paste	Ctrl + V	Pastes selections stored in system Clipboard
Cut	Ctrl + X	Cuts selected data from the worksheet
Copy	Ctrl + C	Copies selected data to system Clipboard
Format Painter		Copies formatting from one place and applies it to another
Font group		
Calibri Font		Changes text font
11 Font Size		Changes text size
B Bold	Ctrl + B	Bolds selected text
I Italic	Ctrl + I	Italicizes selected text
U Underline	Ctrl + U	Underlines selected text
Border		Adds border to specified area of cell or range

command summary

Command	Shortcut	Action
Fill Color		Adds color to cell background
Font Color		Adds color to text
Alignment group		
Align Text Left		Left-aligns entry in cell space
Center		Center-aligns entry in cell space
Align Text Right		Right-aligns entry in cell space
Increase Indent		Indents cell entry
Decrease Indent		Reduces the margin between the left cell border and cell entry.
Merge & Center		Combines selected cells into one cell and centers cell contents in new cell
Number group		
General Number Format		Applies selected number formatting to selection
$ Accounting		Applies Accounting number format to selection
% Percent Style		Applies Percent Style format to selection
Increase Decimal		Increases number of decimal places
Decrease Decimal		Decreases number of decimal places
Cells group		
Insert /Insert Cells		Inserts blank cells, shifting existing cells down
Insert /Insert Cut Cells		Inserts cut row of data into new worksheet row, shifting existing rows down
Insert /Insert Copied Cells		Inserts copied row into new worksheet row, shifting existing rows down
Insert /Insert Sheet Rows		Inserts blank rows, shifting existing rows down
Insert /Insert Sheet Columns		Inserts blank columns, shifting existing columns right
Delete /Delete Sheet Rows		Deletes selected rows, shifting existing rows up
Delete /Delete Sheet Columns		Deletes selected columns, shifting existing columns left
Format /Row Height		Changes height of selected row
Format /AutoFit Row Height		Changes row height to match the tallest cell entry
Format /Column Width		Changes width of selected column

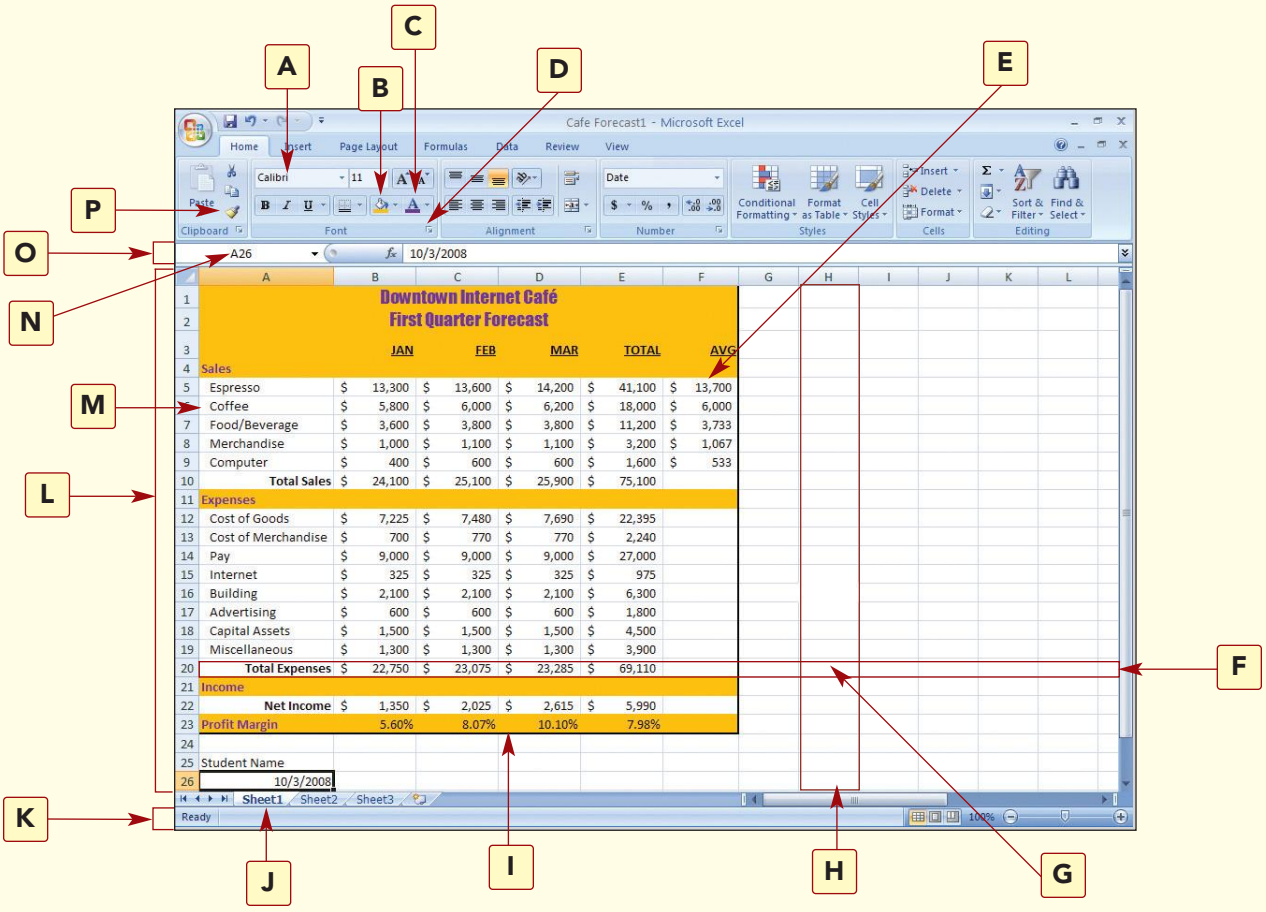
command summary

Command	Shortcut	Action
Format/AutoFit Column Width		Changes column width to match widest cell entry
Format/Default Width		Returns column width to default width
Editing group		
Σ Sum		Calculates the sum of the values in the selected cells
Σ Sum/Average		Calculates the average of the values in the selected range
Σ Sum/Min		Returns the smallest of the values in the selected range
Σ Sum/Max		Returns the largest of the values in the selected range
Fill/Right	Ctrl + R	Continues a pattern to adjacent cells to the right
Clear		Removes both formats and contents from selected cells
Clear/Clear Formats		Clears formats only from selected cells
Clear/Clear Contents	Delete	Clears contents only from selected cells
Formulas tab		
Formula Auditing group		
Show Formulas	Ctrl + `	Displays and hides worksheet formulas
Review tab		
Proofing group		
Spelling	F7	Spell-checks worksheet
Thesaurus		Opens the Thesaurus for the selected word in the Research task pane
Print Preview tab		
Print	Ctrl + P	Opens Print dialog box
Page Setup		Shows the Page tab of the Page Setup dialog box
Page Setup/Landscape		Changes page orientation to landscape
Page Setup/Fit To		Scales the worksheet to fit a specified number of pages
Zoom		Changes the zoom level of the document preview
Close Print Preview		Closes Print Preview and returns to editing document



screen identification

1. In the following Excel 2007 screen, letters identify important elements. Enter the correct term for each screen element in the space provided.



Possible answers for the screen identification are

Column
Status bar
Font color
Numeric entry
Fill color
Font
Range
Formula
Row
Column labels
Workbook window
Cell
Formula bar
Active sheet
Text label
Cell reference
Format painter
Ribbon
View buttons
Zoom feature
Border
Sheet tabs
Office button

A. _____ **I.** _____
B. _____ **J.** _____
C. _____ **K.** _____
D. _____ **L.** _____
E. _____ **M.** _____
F. _____ **N.** _____
G. _____ **O.** _____
H. _____ **P.** _____

matching

Match the lettered item on the right with the numbered item on the left.

1. source	_____	**a.**	an arithmetic operator
2. /	_____	**b.**	a set of characters with a specific design
3. 	_____	**c.**	the cell you copy from
4. font	_____	**d.**	Excel workbook file name extension
5. .xlsx	_____	**e.**	two or more worksheet cells
6. 	_____	**f.**	enters a SUM function
7. =C19*A21	_____	**g.**	adds a cell border
8. 	_____	**h.**	merges cells and centers entry
9. D11	_____	**i.**	a formula multiplying the values in two cells
10. 	_____	**j.**	a cell reference
11. range			

true/false

Circle the correct answer to the following questions.

1.	The spell checker can only find misspelled words if they are entered in the main dictionary.	True	False
2.	The default column width setting is 10.12.	True	False
3.	An adjacent range is two or more selected cells or ranges that are adjoining.	True	False
4.	A function is a prewritten formula that performs a calculation.	True	False
5.	When a selection is cut, it is stored in the system Clipboard.	True	False
6.	When a formula containing relative references is copied, the cell references in the copied formula refer to the same cells that are referenced in the original formula.	True	False
7.	A colon is used to separate cell references in nonadjacent ranges.	True	False
8.	Recalculation is one of the most powerful features of electronic worksheets.	True	False
9.	Cell alignment allows you to change the horizontal and vertical placement and the orientation of an entry in a cell.	True	False
10.	Number formats affect the way that numbers are used in calculations.	True	False

fill-in

Complete the following statements by filling in the blanks with the correct key terms.

1. The _____ displays the cell selector and will be affected by the next entry or procedure.
2. _____ are integers assigned to the days from January 1, 1900, through December 31, 2099, that allow dates to be used in calculations.
3. Cells or ranges that are included in the same selection but are not located next to each other are part of a _____.
4. The _____ is the location that receives the data from the copy area.
5. A(n) _____ window is used to display an open workbook file.
6. The _____ dictionary holds words the user enters that are not included in the main dictionary.
7. A(n) _____ cell is a cell made up of several selected cells combined into one.
8. A(n) _____ is a rectangular grid of rows and columns.
9. A(n) _____ entry is used to perform a calculation.
10. _____ fonts have a flare at the base of each letter to lead the reader to the next character.

multiple choice

Circle the correct response to the questions below.

1. The _____ is the place to which a selection is moved or copied.
   a. destination area
   b. source area
   c. copy area
   d. source
2. _____ consist of typefaces and sizes that can be applied to characters to improve their appearance.
   a. Cells
   b. Headings
   c. Objects
   d. Fonts
3. _____ entries can contain any combination of letters, numbers, spaces, and any other special characters.
   a. Number
   b. Variable
   c. Constant
   d. Text

4. Which of the following is a valid Excel formula?
   a. =(5 + 8)(2 + 1)
   b. 5 + 8*2 + 1
   c. =5 + 8(2 + 1)
   d. =(5 + 8)*(2 + 1)

5. The amount of information that is displayed in a cell is determined by the _____.
   a. column size
   b. row size
   c. column width
   d. row height

6. Whenever a formula containing _____ references is copied, the referenced cells are automatically adjusted.
   a. relative
   b. automatic
   c. fixed
   d. variable

7. The _____ feature in Excel automatically inserts proper capitalization at the beginning of sentences and in the names of days of the week.
   a. AutoName
   b. AutoCorrect
   c. CorrectWords
   d. Word Wrap

8. When a number in a referenced cell is changed, all the formulas that use the cell reference are _____.
   a. recalculated
   b. reformatted
   c. redefined
   d. left unchanged

9. The _____ is a reference tool that provides synonyms and related words for a selected word.
   a. synonym locator
   b. thesaurus
   c. spelling checker
   d. research book

10. The Currency number format can display _____.
    a. dollar signs
    b. commas
    c. decimal places
    d. all of the above

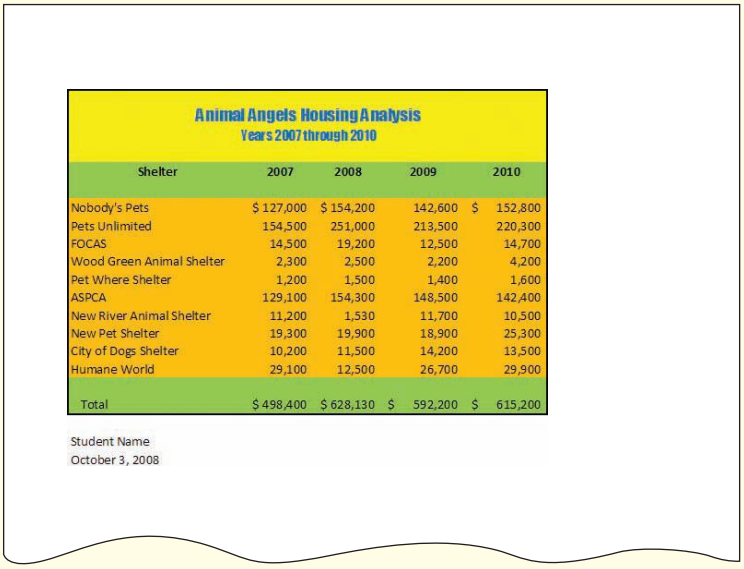
Hands-on Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Animal Rescue Foundation Adoption Analysis ★

1. Edward Corwin works for the Animal Rescue Foundation. One of his responsibilities is to collect and analyze data on the animals that enter the shelters. He has compiled a list of the cost of housing animals by the local shelters for four different years. After following the directions below to complete the worksheet, your solution will be similar to that shown here.



Animal Angels Housing Analysis
Years 2007 through 2010

Shelter	2007	2008	2009	2010
Nobody's Pets	$ 127,000	$ 154,200	142,600	$ 152,800
Pets Unlimited	154,500	251,000	213,500	220,300
FOCAS	14,500	19,200	12,500	14,700
Wood Green Animal Shelter	2,300	2,500	2,200	4,200
Pet Where Shelter	1,200	1,500	1,400	1,600
ASPCA	129,100	154,300	148,500	142,400
New River Animal Shelter	11,200	1,530	11,700	10,500
New Pet Shelter	19,300	19,900	18,900	25,300
City of Dogs Shelter	10,200	11,500	14,200	13,500
Humane World	29,100	12,500	26,700	29,900
Total	$ 498,400	$ 628,130	$ 592,200	$ 615,200

Student Name
October 3, 2008

   a. Open the workbook ex01_Animal Housing. Spell check the worksheet and correct any misspelled words.
   b. Modify the title in cell B2 so the first letter of each word is capitalized. Increase the font size to 14 point. Merge and center both title lines across columns A through E.
   c. Bold and center the headings in row 5. Format cells B5 and C5 to text. Insert a blank row above row 6.
   d. In row 17, enter a function to total the data under the 2007 column and a function to total the data under the 2008 column.
   e. Format the numbers in rows 7 and 17 using the Accounting style with zero decimal places. Format the numbers in rows 8 through 16 using the Comma style with zero decimal places.
   f. Adjust the column widths so all the data is fully displayed. Insert a blank row above row 17.
   g. Edward has just received the information for the last two years. Enter the following data in the cells indicated.

Row	Col D	Col E
5	2009	2010
7	142600	152800
8	213500	220300
9	12500	14700
10	2200	4200
11	1400	1600
12	148500	142400
13	11700	10500
14	18900	25300
15	14200	13500
16	26700	29900

h. Format the column heads to match the style of the corresponding information in columns B and C.

i. Copy the Total function in cell B18 to calculate the total for each of the new years. Increase the indent in cell A18 and add font and fill colors to the worksheet, as you like. Add a thick box border around A1:E18.

j. Enter your name in cell A20 and the current date in cell A21. Format cell A21 to display the month, day, and year (March 14, 2001) date format.

k. Move to cell A1. Save the workbook as Animal Housing Analysis to your solution file location. Preview and print the worksheet.

l. Print the worksheet with formulas using landscape orientation so that it fits on one page.

Hurricane Analysis Worksheet ★

2. Mary Ellen is a manager for an insurance agency. One of her responsibilities is to collect and analyze data on weather conditions in geographical areas. She has compiled a list of hurricanes from the National Weather Service. After following the directions below to complete the worksheet, your solution will be similar to that shown here.

a. Open the workbook ex01_US Hurricanes. Spell check the worksheet and correct any misspelled words.

b. Modify the title in cell A1 so the first letter of each word is capitalized, except "by." Merge and center the two worksheet titles across columns A through I. Increase the font size to 12 point. Bold the titles.

c. Enter the heading **% Major to All** in cell I3 and increase the widths of columns H and I to fully display their headings.

d. Merge and center cells A3 and A4. Merge and center cells I3 and I4.

e. Adjust the width of column A so all the data is fully displayed.

f. Insert new rows above row 1 and below row 3.

g. Bold the titles in rows 5 and 6. Center the titles in B5:H5. Underline and center the titles in cells B6 through H6.

Hurricane Direct Hits by Saffir/Simpson Category 1851-2004

Area	Category Number 1	2	3	4	5	All (1-5)	Major (3-5)	% Major to All
U.S. (Texas to Maine)	109	72	71	18	3	273	92	33.7%
Texas	23	17	12	7	0	59	19	32.2%
(North)	12	6	3	4	0	25	7	28.0%
(Central)	7	5	2	2	0	16	4	25.0%
(South)	9	5	7	1	0	22	8	36.4%
Louisiana	17	14	13	4	1	49	18	36.7%
Mississippi	2	5	7	0	1	15	8	53.3%
Alabama	11	5	6	0	0	22	6	27.3%
Florida	43	32	27	6	2	110	35	31.8%
(Northwest)	27	16	12	0	0	55	12	21.8%
(Northeast)	13	8	1	0	0	22	1	4.5%
(Southwest)	16	8	7	4	1	36	12	33.3%
(Southeast)	13	13	11	3	1	41	15	36.6%
Georgia	12	5	2	1	0	20	3	15.0%
South Carolina	19	6	4	2	0	31	6	19.4%
North Carolina	21	13	11	1	0	46	12	26.1%
Virginia	9	2	1	0	0	12	1	8.3%
Maryland	1	1	0	0	0	2	0	0.0%
Delaware	2	0	0	0	0	2	0	0.0%
New Jersey	2	0	0	0	0	2	0	0.0%
Pennsylvania	1	0	0	0	0	1	0	0.0%
New York	6	1	5	0	0	12	5	41.7%
Connecticut	4	3	3	0	0	10	3	30.0%
Rhode Island	3	2	4	0	0	9	4	44.4%
Massachusetts	5	2	3	0	0	10	3	30.0%
New Hampshire	1	1	0	0	0	2	0	0.0%
Maine	5	1	0	0	0	6	0	0.0%

Student Name
10/03/08

h. Enter the formula **=H7/G7** in cell I7. Copy the formula down column I for the rest of the states. Format the numbers in column I as a percent with one decimal place.

i. Center the data in cells B7 through I33.

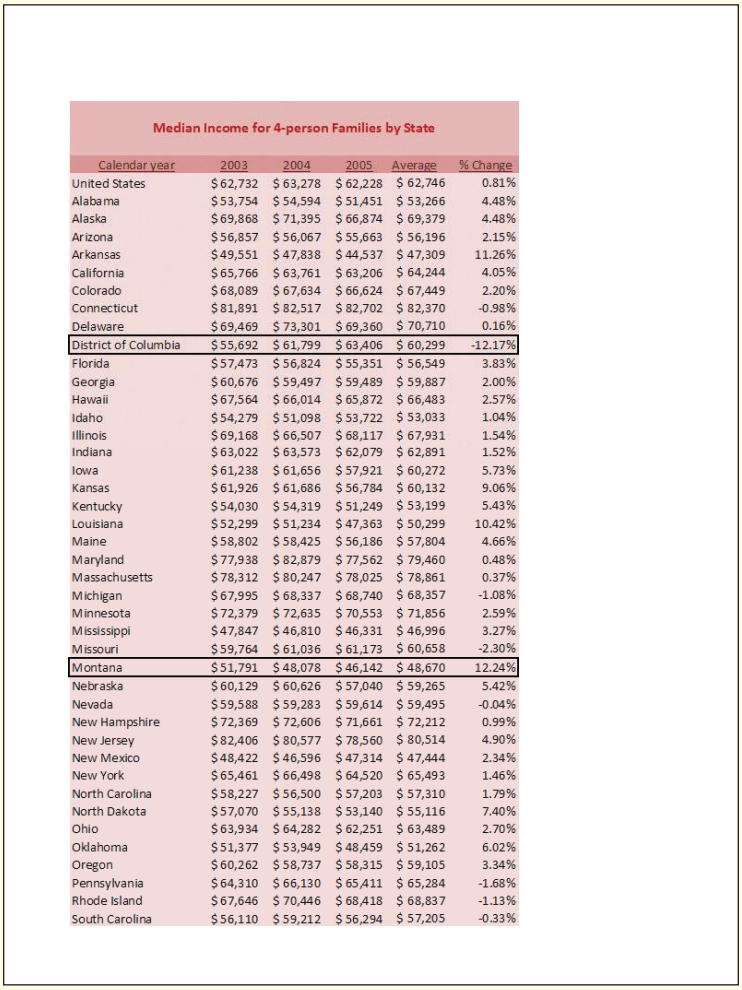
j. Add font and fill colors to the worksheet as you like. Locate the five states with the highest percent of major hurricanes and fill the cells containing the percentages with a different fill color and surround the cells with a thick box border.

k. Enter your name and the current date on separate rows just below the worksheet. Format the date to day/month/year (03/14/01) date format.

l. Move to cell A1. Save the workbook as US Hurricanes Analysis to your solution file location. Preview and print the worksheet.
m. Print the worksheet again with formulas using landscape orientation.

Comparative Median Income for Four-Person Families ★★

3. Terrence Lewis works for an employment agency and needs to provide information about salaries in different states for his clients. He has started a worksheet with data from the years 2003–2005. After following the directions below to complete the worksheet, the first page of your solution will be similar to that shown here.



Median Income for 4-person Families by State

Calendar year	2003	2004	2005	Average	% Change
United States	$ 62,732	$ 63,278	$ 62,228	$ 62,746	0.81%
Alabama	$ 53,754	$ 54,594	$ 51,451	$ 53,266	4.48%
Alaska	$ 69,868	$ 71,395	$ 66,874	$ 69,379	4.48%
Arizona	$ 56,857	$ 56,067	$ 55,663	$ 56,196	2.15%
Arkansas	$ 49,551	$ 47,838	$ 44,537	$ 47,309	11.26%
California	$ 65,766	$ 63,761	$ 63,206	$ 64,244	4.05%
Colorado	$ 68,089	$ 67,634	$ 66,624	$ 67,449	2.20%
Connecticut	$ 81,891	$ 82,517	$ 82,702	$ 82,370	-0.98%
Delaware	$ 69,469	$ 73,301	$ 69,360	$ 70,710	0.16%
District of Columbia	$ 55,692	$ 61,799	$ 63,406	$ 60,299	-12.17%
Florida	$ 57,473	$ 56,824	$ 55,351	$ 56,549	3.83%
Georgia	$ 60,676	$ 59,497	$ 59,489	$ 59,887	2.00%
Hawaii	$ 67,564	$ 66,014	$ 65,872	$ 66,483	2.57%
Idaho	$ 54,279	$ 51,098	$ 53,722	$ 53,033	1.04%
Illinois	$ 69,168	$ 66,507	$ 68,117	$ 67,931	1.54%
Indiana	$ 63,022	$ 63,573	$ 62,079	$ 62,891	1.52%
Iowa	$ 61,238	$ 61,656	$ 57,921	$ 60,272	5.73%
Kansas	$ 61,926	$ 61,686	$ 56,784	$ 60,132	9.06%
Kentucky	$ 54,030	$ 54,319	$ 51,249	$ 53,199	5.43%
Louisiana	$ 52,299	$ 51,234	$ 47,363	$ 50,299	10.42%
Maine	$ 58,802	$ 58,425	$ 56,186	$ 57,804	4.66%
Maryland	$ 77,938	$ 82,879	$ 77,562	$ 79,460	0.48%
Massachusetts	$ 78,312	$ 80,247	$ 78,025	$ 78,861	0.37%
Michigan	$ 67,995	$ 68,337	$ 68,740	$ 68,357	-1.08%
Minnesota	$ 72,379	$ 72,635	$ 70,553	$ 71,856	2.59%
Mississippi	$ 47,847	$ 46,810	$ 46,331	$ 46,996	3.27%
Missouri	$ 59,764	$ 61,036	$ 61,173	$ 60,658	-2.30%
Montana	$ 51,791	$ 48,078	$ 46,142	$ 48,670	12.24%
Nebraska	$ 60,129	$ 60,626	$ 57,040	$ 59,265	5.42%
Nevada	$ 59,588	$ 59,283	$ 59,614	$ 59,495	-0.04%
New Hampshire	$ 72,369	$ 72,606	$ 71,661	$ 72,212	0.99%
New Jersey	$ 82,406	$ 80,577	$ 78,560	$ 80,514	4.90%
New Mexico	$ 48,422	$ 46,596	$ 47,314	$ 47,444	2.34%
New York	$ 65,461	$ 66,498	$ 64,520	$ 65,493	1.46%
North Carolina	$ 58,227	$ 56,500	$ 57,203	$ 57,310	1.79%
North Dakota	$ 57,070	$ 55,138	$ 53,140	$ 55,116	7.40%
Ohio	$ 63,934	$ 64,282	$ 62,251	$ 63,489	2.70%
Oklahoma	$ 51,377	$ 53,949	$ 48,459	$ 51,262	6.02%
Oregon	$ 60,262	$ 58,737	$ 58,315	$ 59,105	3.34%
Pennsylvania	$ 64,310	$ 66,130	$ 65,411	$ 65,284	-1.68%
Rhode Island	$ 67,646	$ 70,446	$ 68,418	$ 68,837	-1.13%
South Carolina	$ 56,110	$ 59,212	$ 56,294	$ 57,205	-0.33%

   a. Open the workbook ex01_Family Income. Spell check the worksheet and correct any misspelled words.
   b. Edit the title in cell A1 by capitalizing the first letter of each word except the words "for" and "by" and by deleting the comma following "Families." Merge and center the title across columns A through F. Increase the font size to 12, and bold and apply a font color of your choice to the title.
   c. Center-align and underline the column headings in row 2. Adjust the width of column A to fully display the labels. Insert blank rows above and below the title.
   d. Right-align cells B5 through D56 and format the cells as Accounting with zero decimal places. Autofit column D.
   e. Enter the heading **Average** in cell E4. Center and underline the heading. Calculate the average income in cell E5 using the function = Average(B5:D5). Copy the formula to cells E6 through E56.
   f. Next, you would like to calculate the percent of change from 2003 to 2005. Enter the heading **% Change** in cell F4. Center and underline the title. Enter the formula **=(B5-D5)/D5** in cell F5. Format the cell as a percentage with two decimal places. Copy the formula to cells F6 through F56.

g. AutoFit columns B through F.

h. Add font and fill colors to the worksheet as you like. Locate the state with the highest positive % change and the state with the highest negative % change. Surround their entire rows with a thick box border.

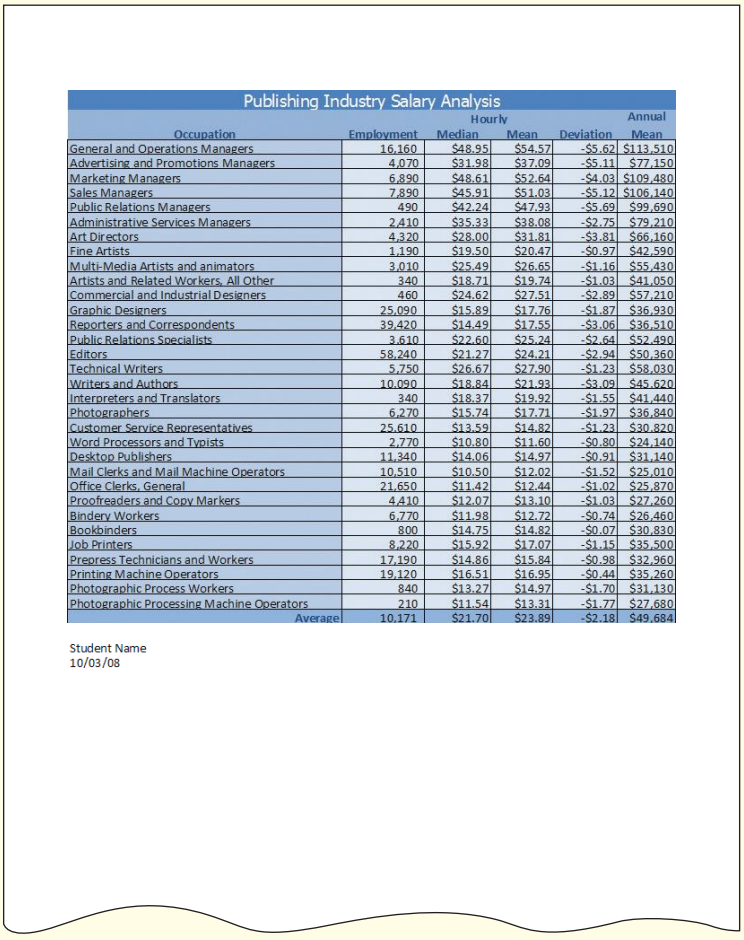
i. Enter your name and the current date on separate rows just below the last lines. Format the date to day, month, year (14-Mar-01) date format.

j. Move to cell A1. Save the workbook as Family Income to your solution file location. Preview and print the worksheet.

k. Print the worksheet again with formulas on one page using landscape orientation.

Publishing Industry Salary Analysis ★★

4. Enrico Torres is researching an article for the school newspaper on jobs in the publishing industry. He has found some data on salaries for jobs in publishing. He has entered this data into a worksheet but still needs to format the data and perform some analysis of the information. After following the directions below to complete the worksheet, your solution will be similar to that shown here.



Publishing Industry Salary Analysis

Occupation	Employment	Hourly Median	Hourly Mean	Hourly Deviation	Annual Mean
General and Operations Managers	16,160	$48.95	$54.57	-$5.62	$113,510
Advertising and Promotions Managers	4,070	$31.98	$37.09	-$5.11	$77,150
Marketing Managers	6,890	$48.61	$52.64	-$4.03	$109,480
Sales Managers	7,890	$45.91	$51.03	-$5.12	$106,140
Public Relations Managers	490	$42.24	$47.93	-$5.69	$99,690
Administrative Services Managers	2,410	$35.33	$38.08	-$2.75	$79,210
Art Directors	4,320	$28.00	$31.81	-$3.81	$66,160
Fine Artists	1,190	$19.50	$20.47	-$0.97	$42,590
Multi-Media Artists and animators	3,010	$25.49	$26.65	-$1.16	$55,430
Artists and Related Workers, All Other	340	$18.71	$19.74	-$1.03	$41,050
Commercial and Industrial Designers	460	$24.62	$27.51	-$2.89	$57,210
Graphic Designers	25,090	$15.89	$17.76	-$1.87	$36,930
Reporters and Correspondents	39,420	$14.49	$17.55	-$3.06	$36,510
Public Relations Specialists	3,610	$22.60	$25.24	-$2.64	$52,490
Editors	58,240	$21.27	$24.21	-$2.94	$50,360
Technical Writers	5,750	$26.67	$27.90	-$1.23	$58,030
Writers and Authors	10,090	$18.84	$21.93	-$3.09	$45,620
Interpreters and Translators	340	$18.37	$19.92	-$1.55	$41,440
Photographers	6,270	$15.74	$17.71	-$1.97	$36,840
Customer Service Representatives	25,610	$13.59	$14.82	-$1.23	$30,820
Word Processors and Typists	2,770	$10.80	$11.60	-$0.80	$24,140
Desktop Publishers	11,340	$14.06	$14.97	-$0.91	$31,140
Mail Clerks and Mail Machine Operators	10,510	$10.50	$12.02	-$1.52	$25,010
Office Clerks, General	21,650	$11.42	$12.44	-$1.02	$25,870
Proofreaders and Copy Markers	4,410	$12.07	$13.10	-$1.03	$27,260
Bindery Workers	6,770	$11.98	$12.72	-$0.74	$26,460
Bookbinders	800	$14.75	$14.82	-$0.07	$30,830
Job Printers	8,220	$15.92	$17.07	-$1.15	$35,500
Prepress Technicians and Workers	17,190	$14.86	$15.84	-$0.98	$32,960
Printing Machine Operators	19,120	$16.51	$16.95	-$0.44	$35,260
Photographic Process Workers	840	$13.27	$14.97	-$1.70	$31,130
Photographic Processing Machine Operators	210	$11.54	$13.31	-$1.77	$27,680
Average	10,171	$21.70	$23.89	-$2.18	$49,684

Student Name
10/03/08

a. Open the workbook ex01_Publishing Salaries. Spell check the worksheet and correct any misspelled words.

b. Insert a row below the title in row 1. Merge and center the title in row 1 over columns A through E. Format the title to Tahoma 14 point and AutoFit the row height. Apply a font color of your choice.

c. Adjust the width of column A to 40.00. Adjust the widths of the other columns so that text in each of the cells in row 3 is fully displayed. Center and bold the column heads.

d. Edit the column titles by removing Hourly from cells C3 and D3 and entering **Hourly** into cell C2. Merge and center C2 over columns C and D. Bold the entry. Move Annual from cell E3 to E2. Bold and center the text in E2. Apply a font color of your choice to the column headings.

e. Format the data in column B using the Comma style and no decimal places. Format the data in columns C through D to Currency with two decimal places. Format the data in column E to Currency with no decimal places. Right-align the data in cells C4 through E35.

f. Insert a new column between D and E. Label the new column **Deviation** in cell E3. Enter a formula in cell E4 to calculate the difference between the Median Hourly rate and the Mean Hourly rate and copy the formula down the column.

g. Enter **Average** in A36. Right-align and format to match the column heads.

h. In cell B36, use a function to calculate the average of the data in column B. Copy this formula to columns C, D, E, and F. Format the cells containing the average values to match the format used for the other numbers in their columns. AutoFit the columns for the data including the column headings.

i. Apply different fill colors to the title, occupation row headings, data, and the average row. Surround cells A4 through F36 with an All Borders border.

j. Enter your name and the current date on separate rows below the worksheet.

k. Move to cell A1. Save the workbook file as Publishing Salaries to your solution file location. Preview and print the worksheet.

l. Print the worksheet again with formulas on one page using landscape orientation.

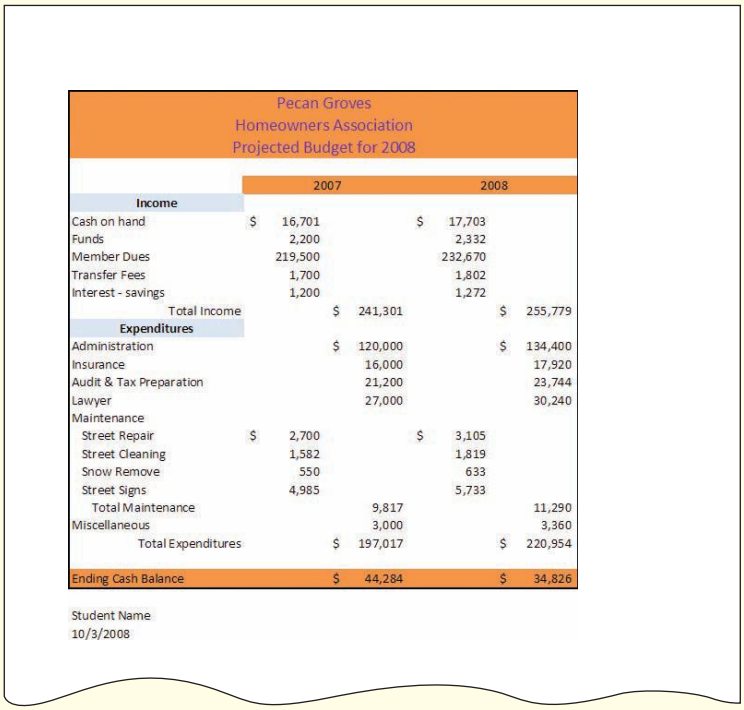
Pecan Groves Homeowners Association ★★★

5. The Pecan Groves Homeowners Association is planning a large building project and wants to project how much there is likely to be in the cash budget after expenses. Using last year's final budget numbers, you will create a projected budget for 2008. After following the directions below to complete the worksheet, your solution will be similar to that shown here.

a. Open the workbook file ex01_Pecan Groves Budget. Spell check the worksheet and correct any misspelled words.

b. Change the font type, size, and color and fill color of the three worksheet title lines to a format of your choice. Merge and center the titles across columns A through E.

c. Set the width of column A to 25. Insert a column between columns B and C. Merge and center cell B5 across columns B and C. Merge and center cell D5 across columns D and E. Set the fill color of cells B5 and D5 to match the fill color in the titles.



Pecan Groves
Homeowners Association
Projected Budget for 2008

	2007	2008
Income		
Cash on hand	$ 16,701	$ 17,703
Funds	2,200	2,332
Member Dues	219,500	232,670
Transfer Fees	1,700	1,802
Interest - savings	1,200	1,272
Total Income	$ 241,301	$ 255,779
Expenditures		
Administration	$ 120,000	$ 134,400
Insurance	16,000	17,920
Audit & Tax Preparation	21,200	23,744
Lawyer	27,000	30,240
Maintenance		
Street Repair	$ 2,700	$ 3,105
Street Cleaning	1,582	1,819
Snow Remove	550	633
Street Signs	4,985	5,733
Total Maintenance	9,817	11,290
Miscellaneous	3,000	3,360
Total Expenditures	$ 197,017	$ 220,954
Ending Cash Balance	$ 44,284	$ 34,826

Student Name
10/3/2008

d. Center the text in cell A6 and change the font color and fill color to a color of your choice. Apply the same formats to cell A13.

e. Right-justify the text in cells A12 and A25. Indent the text in cells A19:A23. Indent the text in cell A23 again. Move the data in cells B14:B17 to C14:C17. Move the data in cell B24 to C24.

f. In cell C12, sum the income data. In cell C23, sum the maintenance expenditure data. In cell C25, sum all the expenditures items. In cell C27, enter a formula to calculate the ending cash balance. (Hint: =C12-C25)

g. Each of the 2008 Income items is projected to increase by 6 percent over the previous year. Enter a formula in cell D7 to calculate the increase in cash on hand. (Hint: =B7*1.06) Copy this formula down column D to the other Income items. Enter the appropriate function into cell E12 to calculate the 2008 total income value.

h. Each of the 2008 expenditure items except for the maintenance expenditures is projected to increase by 12 percent over the previous year. Enter the appropriate formulas in column E to reflect this change. Each maintenance expense is projected to increase 15 percent. Enter the appropriate formulas in column D. Enter the appropriate function in cell E23 to calculate the total maintenance expenses. Use formulas to calculate the value for 2008's total expenditures and ending cash balance.

i. Format cells B7, B19, C12, C14, C25, C27, D7, D19, E12, E14, E25, and E27 as Accounting with zero decimal places. Format all other cells containing numbers except for B5 and D5 to comma with zero decimal places. Set the column widths of columns B through E to 12. Fill the cells A27:E27 with the same fill color used for the titles. Delete column F. Surround the entire worksheet with a thick box border.

j. Enter your name and the current date on separate rows just below the worksheet.

k. Save the workbook file as Pecan Groves Budget to your solution file location. Preview and print the worksheet.

l. Print the worksheet again with formulas using landscape orientation.

on your own

Tracking Your Calories ★

1. A worksheet can be used to track your calories for the day. Design and create a worksheet to record the food you consume and the exercise you do on a daily basis. The worksheet should include your food consumption for all meals and snacks and the activities you performed for a week. Use the Web as a resource to find out the calorie values for the items you consumed, or refer to the calorie information on the product packaging, and to find out the caloric expenditure for the exercises you do. Include an appropriate title, row and column headings, and formulas to

calculate your total calorie intake and expenditure on a daily basis. Include a formula to calculate the percent deviation from your recommended daily calorie intake. Format the worksheet appropriately using features presented in this lab. Enter real or sample data. Include your name and date above the worksheet. Spell check the worksheet. Save the workbook as Calorie Tracking and print the worksheet.

Creating a Personal Budget ★

2. In a blank Excel 2007 workbook, create a personal three-month budget. Enter an appropriate title and use descriptive labels for your monthly expenses (food, rent, car payments, insurance, credit card payments, etc.). Spell check your worksheet. Enter your monthly expenses (or, if you prefer, any reasonable sample data). Use formulas to calculate total expenses for each month and the average monthly expenditures for each expense item. Add a column for projection for the next year showing a 4 percent increase in the cost of living. Enhance the worksheet using features you learned in this lab. Enter your name and the current date on separate rows just below the worksheet. Save the workbook as Personal Budget. Preview and print the worksheet.

Tracking Project Hours ★★

3. Samantha Johnson is the project manager for a small publishing company. She has four part-time employees (Melanie, Bob, Vanessa, and Rudy). Using the steps in the planning process, plan and create a worksheet for Samantha that can be used to record and analyze the hours each employee works per day during the month on two projects: magazine and brochure. Hours-worked data for each employee will be entered into the worksheet. Using that data, the worksheet will calculate the total number of hours for each person per project. Additionally, it will calculate the total weekly hours for each project. Write a short paragraph describing how you used each of the planning steps. Enter sample data in a worksheet. Include your name and the current date on separate rows just below the worksheet. Spell check the worksheet. Save the workbook as Project Hours. Preview and print the worksheet.

Music Analysis ★★★

4. Use the library and/or the Web to locate information on trends in CD sales versus music downloads on the Internet. Create a worksheet to display information relating to the increasing usage by country, age group, or any other trend you locate. Calculate totals or averages based on your data. Enhance the worksheet using features you learned in this lab. Enter your name and the current date on separate rows just below the worksheet. Spell check the worksheet. Save the workbook as Music Analysis. Preview and print the worksheet.

Home Electronics Analysis ★★★

5. A national electronics retailer wants to analyze the trend in home electronics sales and usage for the past three years. Design and create a worksheet to record the number of households (one-person, two-person, and four-person) who have computers, Internet access, televisions, and cable TV access. Include an appropriate title, row and column headings, and formulas to calculate average by category and by year. Include a formula to calculate the percent growth over the three years. Format the worksheet appropriately using features presented in this tutorial. Enter sample data for the three years. Include your name and date above the worksheet. Spell check the worksheet. Save the workbook as Home Electronics Analysis and print the worksheet.

Charting Worksheet Data

LAB 2

Objectives

After completing this lab, you will know how to:

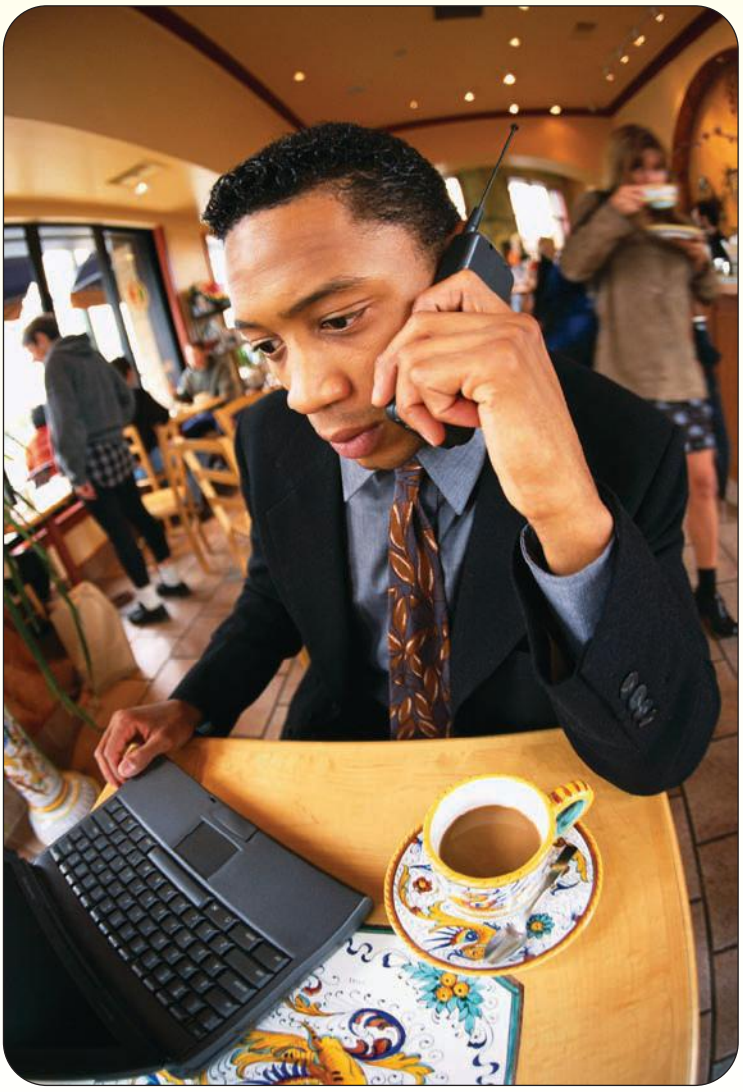
1. Apply and customize themes.
2. Use cell styles.
3. Insert and size a graphic.
4. Create a chart.
5. Move, size, and format a chart.
6. Change the type of chart.
7. Create, explode, and rotate a pie chart.
8. Apply patterns and color to a chart.
9. Document a workbook.
10. Size and align a sheet on a page.
11. Add predefined headers and footers

Case Study

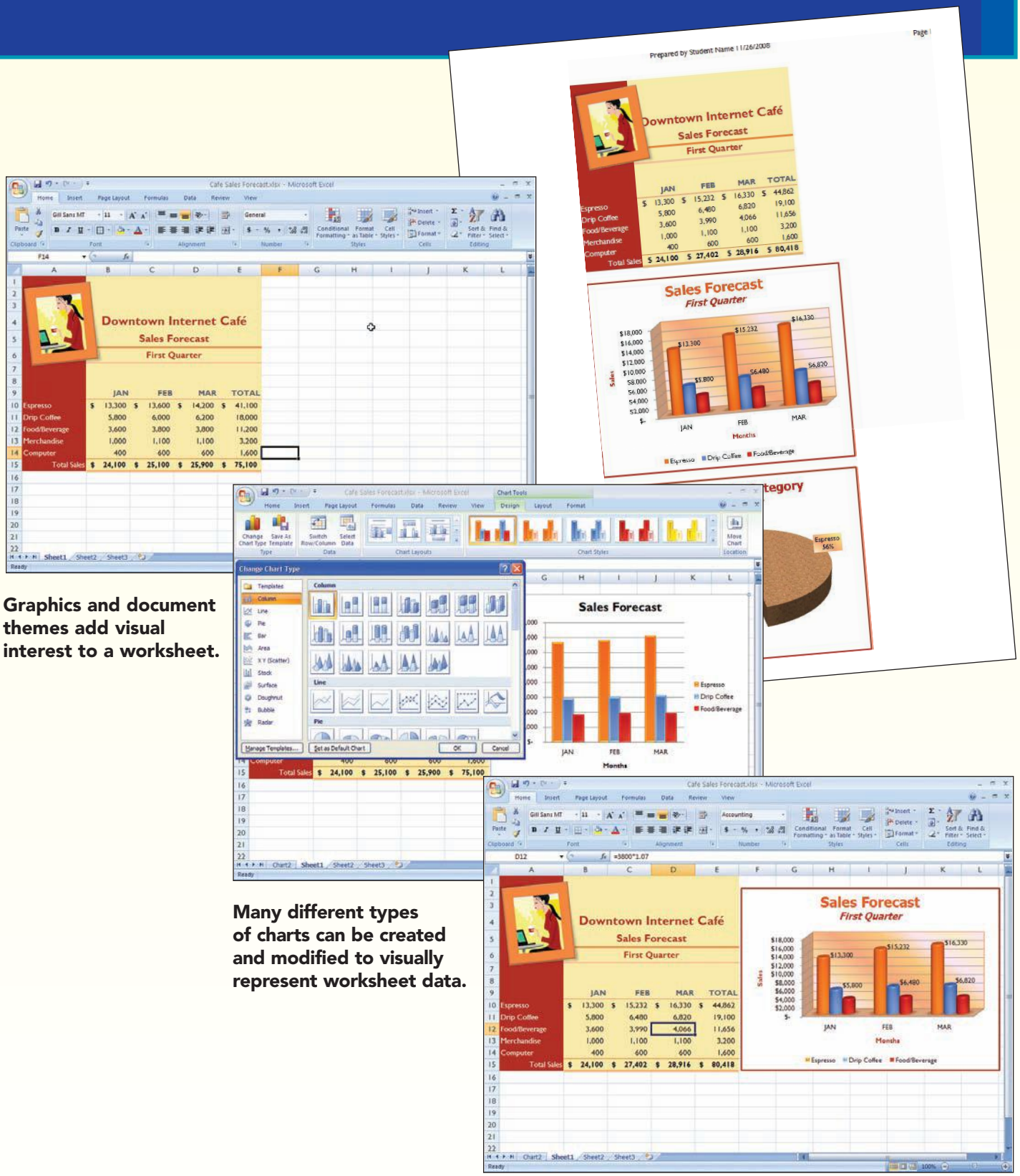
Downtown Internet Café

Evan is impressed with how quickly you were able to create the first-quarter sales forecast for the Downtown Internet Café. He made several suggestions to improve the appearance of the worksheet, including applying different formats and adding a graphic. Evan also expressed concern that the sales values seem a little low and has asked you to contact several other Internet cafés to inquire about their startup experiences.

While speaking with other Internet café managers, you heard many exciting success stories. Internet connections attract more customers, and the typical customer stays longer at an Internet café than at a regular café. As a result, they spend more money.



You would like to launch an aggressive advertising campaign to promote the new Internet aspect of the Café. The new Café features include free Wi-Fi connection, computer rentals, and printing and copying services. You believe that the campaign will lead to an increase in customers and subsequently to an increase in sales. To convince Evan, you need an effective way to illustrate the sales growth you are forecasting. You will use Excel 2007's chart-creating and formatting features to produce several different charts of your sales estimates, as shown on the following page.



Graphics and document themes add visual interest to a worksheet.

Many different types of charts can be created and modified to visually represent worksheet data.

Features such as data labels, fill colors, textures, and shadows add a professional appearance to your charts.

Concept Preview

The following concepts will be introduced in this lab:

1. **Graphics** A graphic is a nontext element or object such as a drawing or picture that can be added to a document.
2. **Theme** A theme is a predefined set of formatting choices that can be applied to an entire worksheet in one simple step.
3. **Cell Style** A cell style is a predefined theme-based combination of formats that have been named and that can be quickly applied to a selection.
4. **Chart** A chart is a visual representation of data that is used to convey information in an easy-to-understand and attractive manner. Different types of charts are used to represent data in different ways.
5. **Chart Elements** A chart consists of a number of elements that are used to graphically display the worksheet data.
6. **Chart Object** A chart object is a graphic object that is created using charting features. A chart object can be inserted into a worksheet or into a special chart sheet.
7. **Chart Layout** A chart layout is a predefined set of chart elements that can be quickly applied to a chart.
8. **Chart Style** A chart style is a predefined set of chart formats that can be quickly applied to a chart.
9. **Group** A group is two or more objects that behave as a single object when moved or sized. A chart consists of many separate objects.
10. **Data Labels** Data labels provide additional information about a data marker. They can consist of the value of the marker, the name of the data series or category, a percent value, or a bubble size.
11. **Headers and Footers** Headers and footers provide information that typically appears at the top and bottom of each page and commonly include information such as the date and page number.

Improving the Appearance of the Worksheet

To focus Evan's attention solely on the sales values for the Downtown Internet Café, you created a new worksheet containing only those values. Although you have added some formatting to the worksheet already, you still want to improve its appearance by adding a graphic, changing the theme, and applying different cell styles. Then you will create the charts to help Evan visualize the sales trends better.

Inserting a Graphic

You saved the sales portion of the worksheet in a new workbook file.

1. **Start Office Excel 2007.**
2. **If necessary, maximize the Excel application window.**
3. **Open the file** ex02_Cafe Sales**.**

Your screen should be similar to Figure 2.1

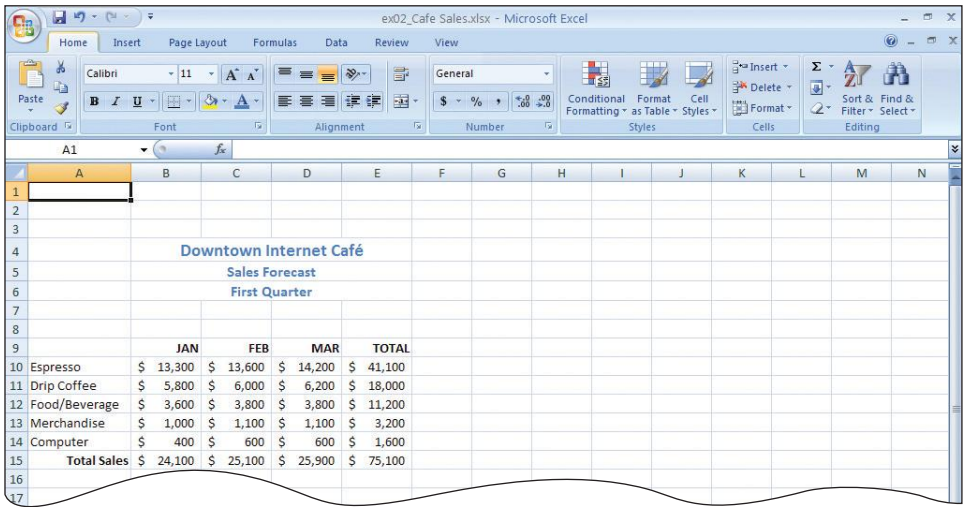


Figure 2.1

First you want to add a graphic next to the worksheet title to add interest.

Concept 1

Graphics

1 A **graphic** is a nontext element or object such as a drawing or **picture** that can be added to a document. An **object** is an item that can be sized, moved, and manipulated. A picture is a file (such as a metafile) that you can ungroup and manipulate as two or more objects or a file that stays as a single object (such as bitmaps) A clip is a single media file, including art, sound, animation, or movies.

A graphic can be a simple drawing object consisting of shapes, such as lines and boxes, that can be created using features on the Drawing toolbar. A **drawing object** is part of the Excel workbook. A picture is an illustration such as a scanned photograph. Pictures are graphics that were created from another program and inserted in the worksheet as embedded objects. An **embedded object** becomes part of the Excel workbook and can be opened and edited using the **source program**, the program in which it was created.



drawing object



graphic illustration



photograph

Add graphics to your worksheets to help the reader understand concepts, to add interest, and to make your worksheet stand out from others.

Graphic files can be obtained from a variety of sources. Many simple drawings called **clip art** are available in the Clip Organizer, a Microsoft Office tool that arranges and catalogs clip art and other media files stored on the computer's hard disk. Additionally, you can access Microsoft's Clip Art and Media Web site for even more graphics. You also can create graphic files using a scanner to convert any printed document, including photographs, to an electronic format. Most images that are scanned are stored as Windows bitmap files (.bmp). All types of graphics, including clip art, photographs, and other types of images, can be found on the Internet. These files are commonly stored as .jpg or .pcx files. Keep in mind that any images you locate on the Internet may be protected by copyright and should be used only with permission. You also can purchase CDs containing graphics for your use.

Additional Information
You also can locate and insert graphics of all types from the ClipArt gallery using Clip Art in the Illustrations group.

You want to insert a picture to the left of the title in the worksheet. You located a picture at Microsoft's Clip Art and Media Web site and saved a copy of the picture on your computer.

2. **Open the Insert tab.**
   - **Click Picture in the Illustrations group.**
   - **Change the Look In location to the location of your data files.**
   - **Select ex02_Internet Cafe.wmf.**
   - **If necessary, click Views and choose Preview from the drop-down menu.**

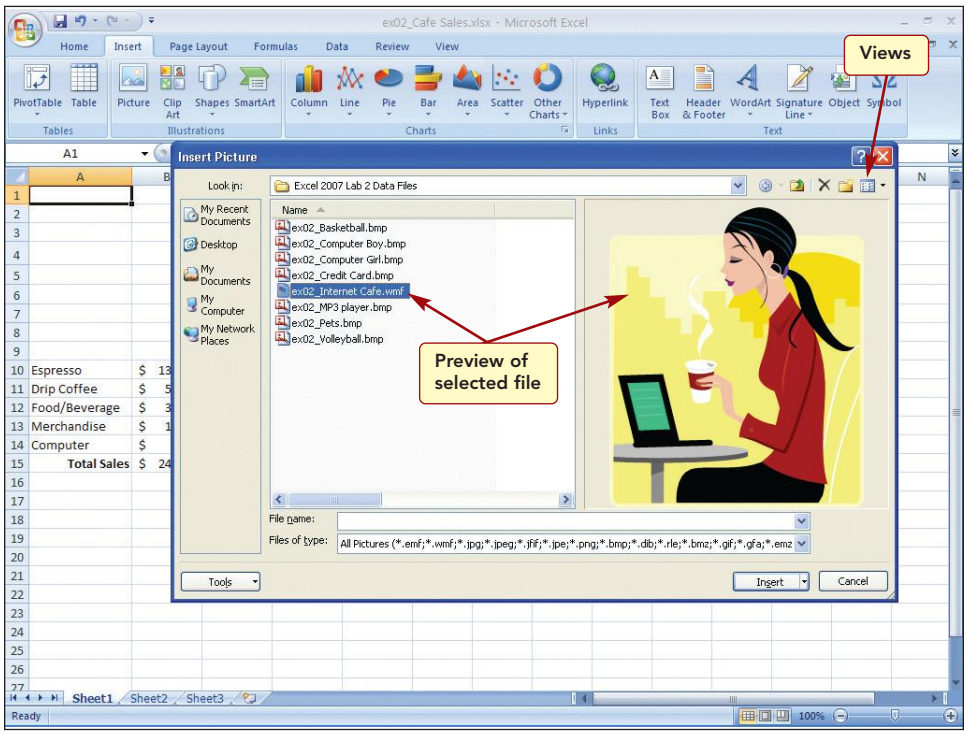


Figure 2.2

Having Trouble?
In Windows Vista, choose Extra Large Icons from the Views menu.

Your screen should be similar to Figure 2.2

A preview of the selected picture is displayed. You think this picture illustrates the concept of a café and that it will look good in the worksheet.

3 Click Insert.

Your screen should be similar to Figure 2.3

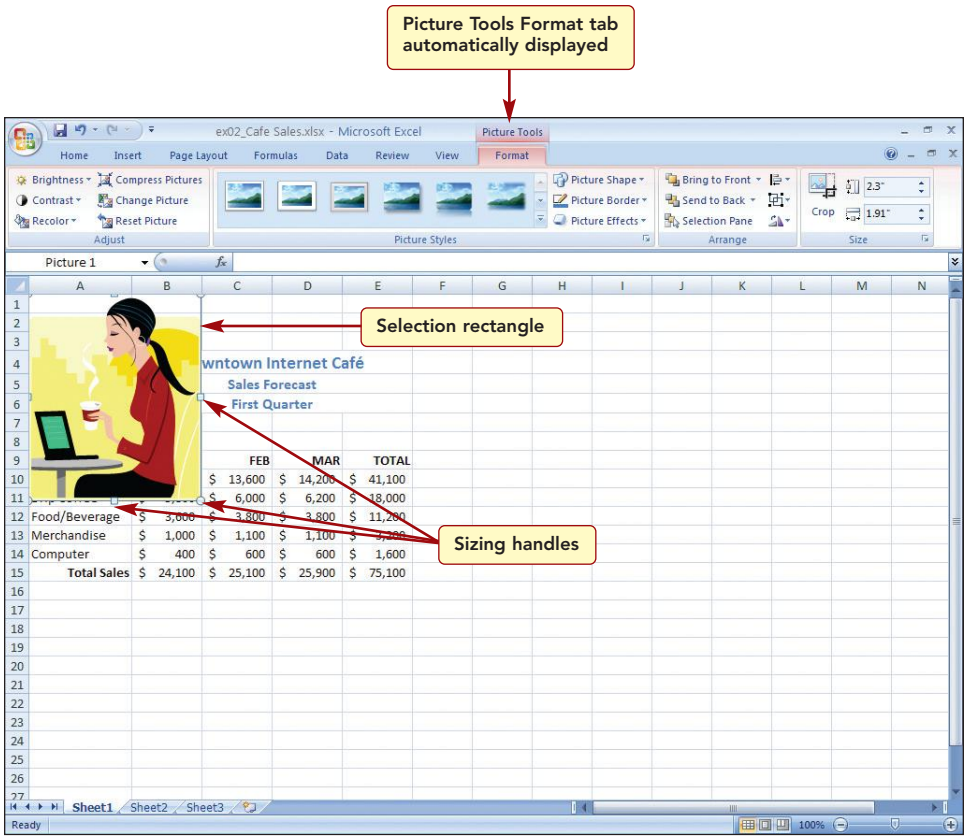


Figure 2.3

The picture is inserted in the worksheet at the location of the cell selector. Notice the picture is surrounded by a **selection rectangle** and eight squares and circles, called **sizing handles**, indicating it is a selected object and can now be deleted, sized, moved, or modified. The Picture Tools Format tab is automatically displayed and can be used to modify the selected picture object.

Sizing a Graphic

Usually, when a graphic is inserted, its size will need to be adjusted. To size a graphic, you select it and drag the sizing handles to increase or decrease the size of the object. The mouse pointer changes to ⤡ when pointing to a corner handle and ↔ or ↕ when pointing to a side handle. The direction of the arrow indicates the direction in which you can drag to size the graphic. Dragging a corner handle maintains the scale of the picture by increasing both the width and length of the graphic equally. You also can move a graphic object by pointing to the graphic and dragging it to the new location. The mouse pointer changes to ✥ when you can move the graphic.

Another Method

You also can size a picture to an exact measurement using commands in the Size group of the Picture Tools tab.

You want to reduce the size of the graphic and position it next to the title.

1. **Point to the lower-right corner sizing handle.**

- **With the pointer as a ↘, drag the mouse inward to reduce the size of the graphic until the bottom of the graphic is even with row 6.**

Additional Information
When you drag to size the graphic, the mouse pointer shape changes to a +.

- **Point to the center of the graphic and, when the mouse pointer is ✥, drag the graphic to position it as in Figure 2.4.**

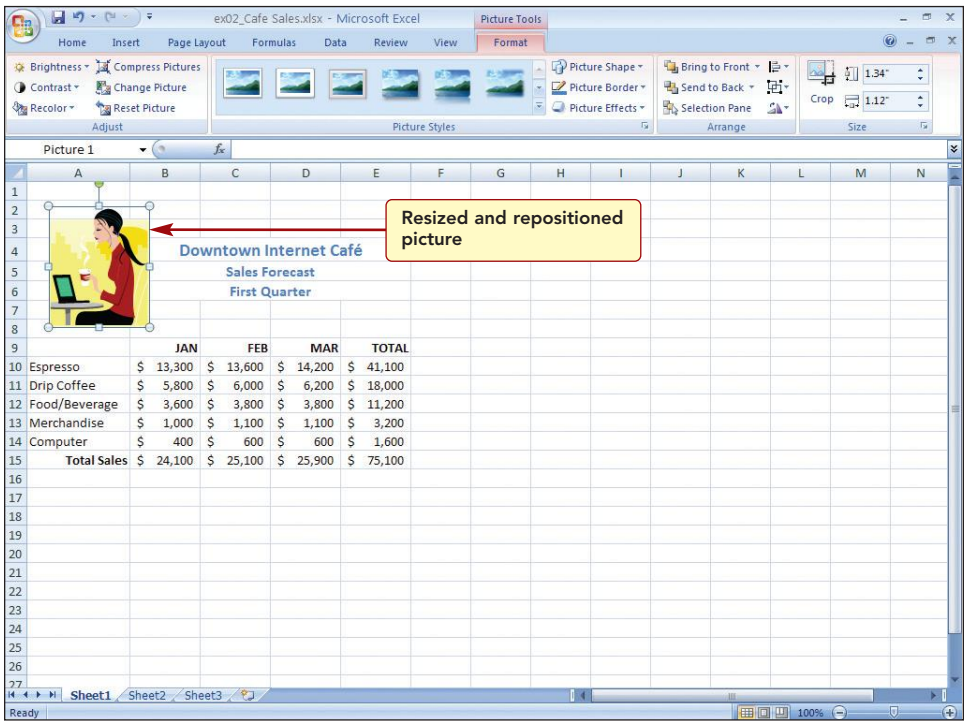


Figure 2.4

Additional Information
When you drag to move the graphic, the mouse pointer shape changes to a ✥.

The picture is smaller and moved to the left of the title as you want it.

Your screen should be similar to Figure 2.4

Additional Information
A selected graphic object can be deleted by pressing Delete.

Modifying the Picture

Next, you want to enhance the picture using features on the Picture Tools Format tab. You decide to enhance it by applying a picture style to it. Picture styles are combinations of border, shadow, and shape effects that can be applied in one simple step. You also can create your own picture style effects by selecting specific style elements such as borders and shadow individually using the Picture Shape, Picture Border, and Picture Effects commands.

1. **If necessary, open the Format tab.**
2. **Click More to open the Picture Styles gallery.**
3. **Point to several styles to see the Live Preview.**

Your screen should be similar to Figure 2.5

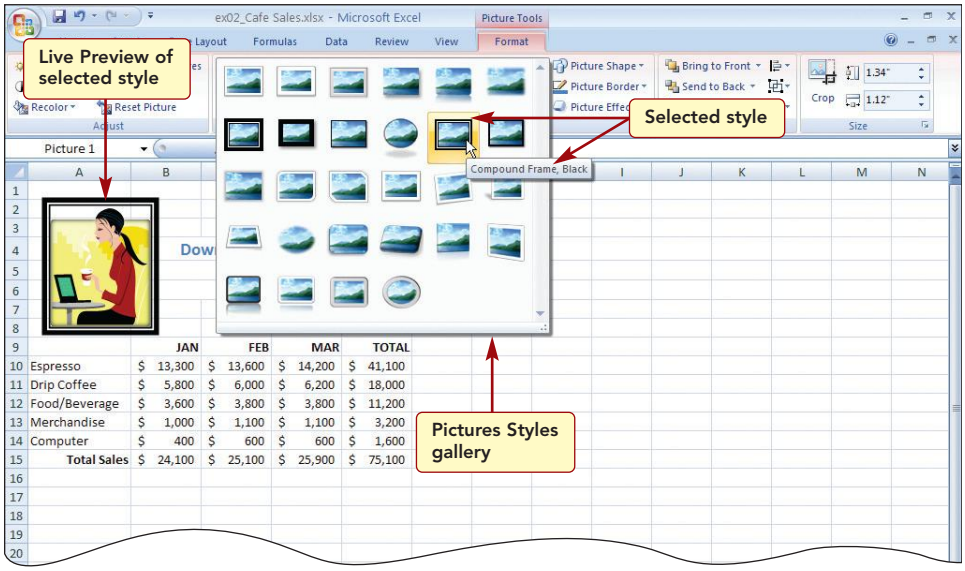


Figure 2.5

When you point to a style, the style name appears in a ScreenTip and the Live Preview shows how the selected picture style will look with your graphic. As you can see, many are not appropriate. However, you decide that the rotated style with a white border will enhance the graphic and the worksheet.

2. **Choose Rotated, White.**
3. **Click outside the graphic to deselect the object.**

Your screen should be similar to Figure 2.6

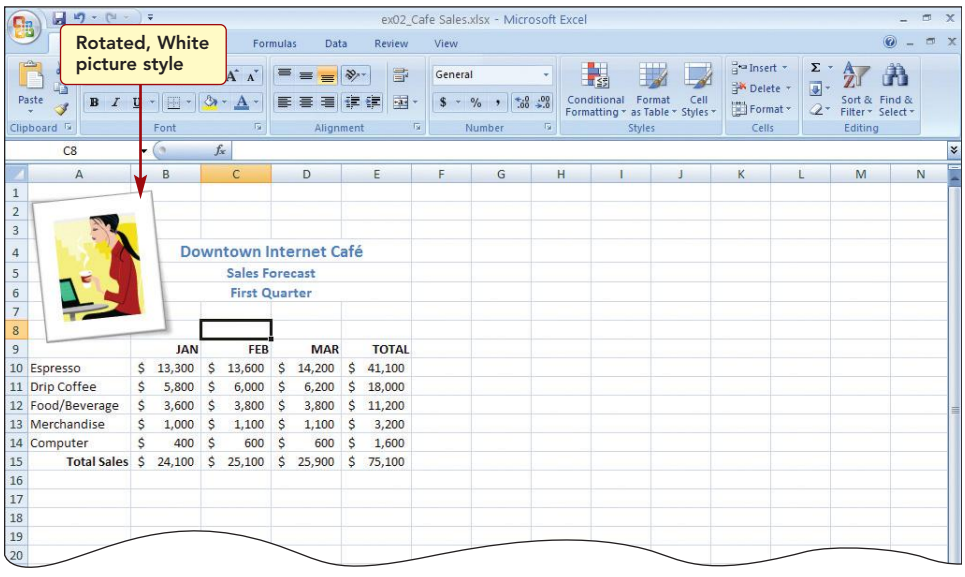


Figure 2.6

After seeing the changes, you decide to further modify the border to add more color and interest.

3. **Click on the graphic to select it again.**

- **Open the Format tab and click** Picture Border.
- **Choose the Blue, Accent1 color from the Theme Colors category.**
- **Click outside the graphic to deselect the object.**
- **Save the revised worksheet as** Café Sales Forecast **to your solution file location.**

Your screen should be similar to Figure 2.7

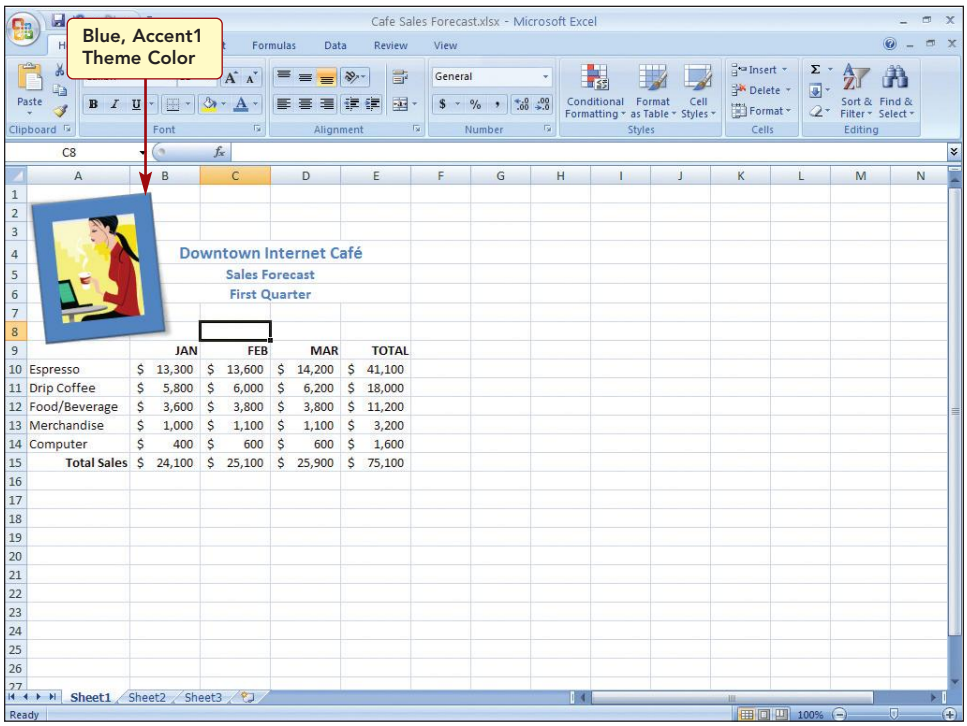


Figure 2.7

Using Themes

The addition of a graphic adds a nice touch to the worksheet title. Now, you want to continue to improve the worksheet appearance by selecting a different theme.

Concept 2

Theme

2 A **theme** is a predefined set of formatting choices that can be applied to an entire workbook in one simple step. Excel includes 20 named built-in themes. Each theme includes three subsets of themes: colors, fonts, and effects. Each color theme consists of 12 colors that are applied to specific elements in a document. Each fonts theme includes different body and heading fonts. Each effects theme includes different lines and fill effects. You also can create your own custom themes by modifying an existing document theme and saving it as a custom theme. The default worksheet uses the Office theme.

Using themes gives your documents a professional and modern look. Because themes are shared across Office 2007 applications, all your office documents can have the same uniform look.

1. **Open the Page Layout tab.**
2. **Click Themes from the Themes group.**

Your screen should be similar to Figure 2.8

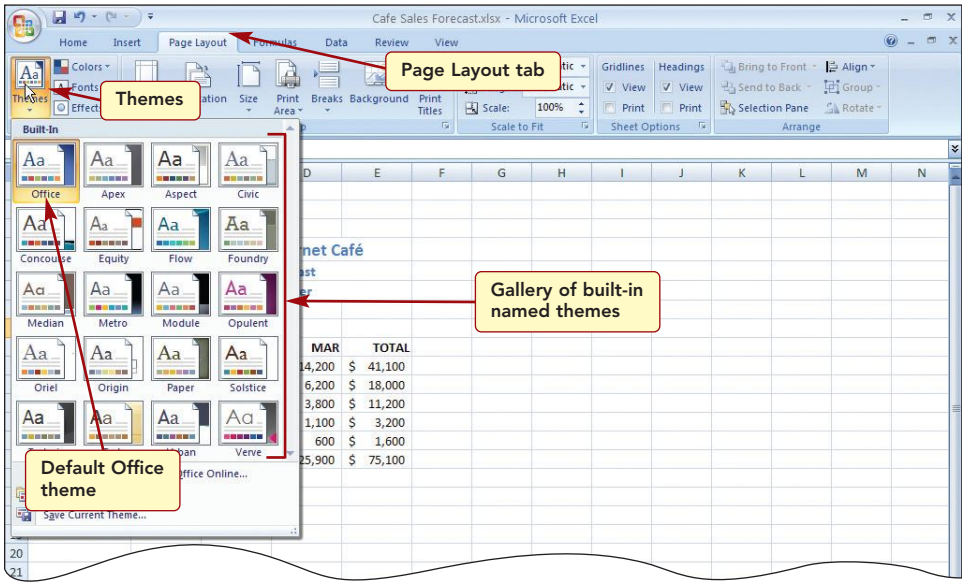


Figure 2.8

A gallery of 20 built-in named themes is displayed. A sample shows the color and font effects included in each theme. The Office theme is highlighted because it is the default theme. Pointing to each theme will display a Live Preview of how it will appear in the document.

2. **Point to several themes to preview them.**
3. **Choose the Solstice theme.**

Your screen should be similar to Figure 2.9

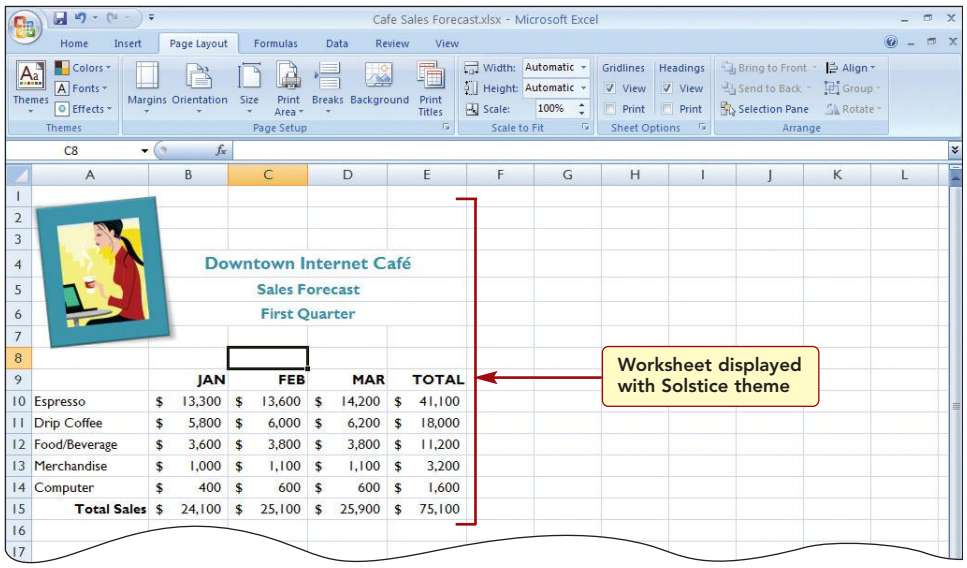


Figure 2.9

Additional Information

If the border and font colors were colors on the Standard colors bar, the color would not have updated to the new theme design.

The formatting settings associated with the selected theme have been applied to the worksheet. Most noticeable is the color change of the picture border and titles to a different shade of blue. This is because the colors in the theme category have been updated to the Solstice theme colors. Additionally, the font has changed from Calibri to Gill Sans MT.

As you add other features to the worksheet, they will be formatted using the Solstice theme colors and effects. The same theme also has been applied to the other sheets in the workbook file.

Additional Information
Only one theme can be used in a workbook.

Customizing a Theme

Sometimes, you cannot find just the right combination of design elements in a built-in theme. To solve this problem, you can customize a theme by changing the color scheme, fonts, and effects. Although you like much of the Solstice theme design, you decide to try customizing the theme by changing the color scheme. Each theme has an associated set of colors that you can change by applying the colors from another theme to the selected theme.

1 **Click Colors in the Themes group.**

Additional Information
The colors you see in the Colors Theme Colors button represent the current text and background colors.

Your screen should be similar to Figure 2.10

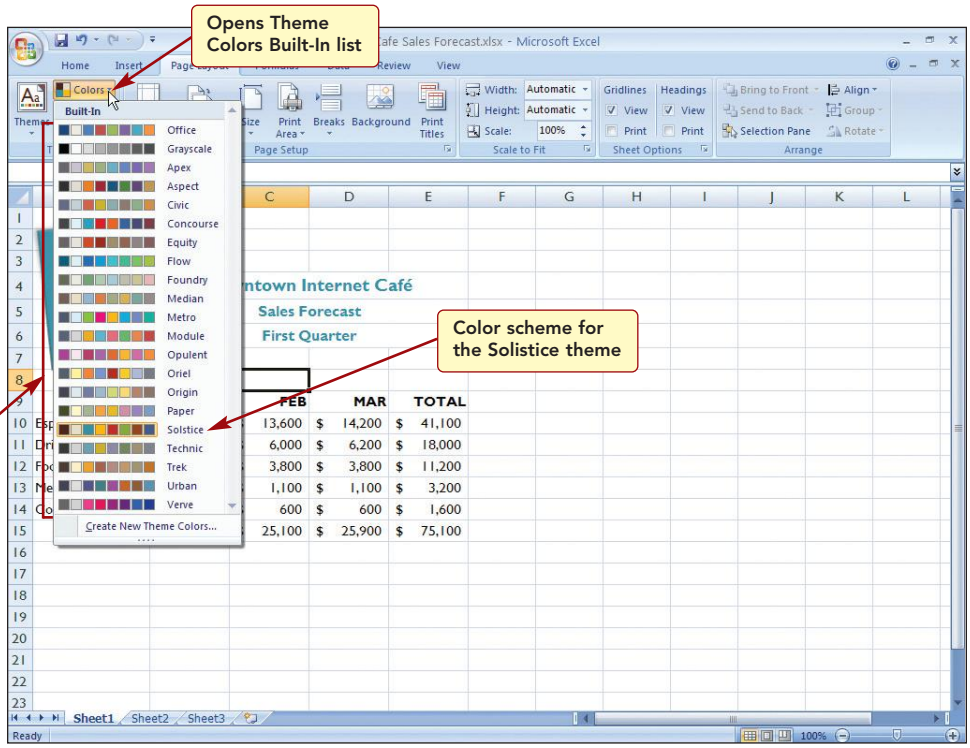


Figure 2.10

The colors used in each of the themes are displayed in the Built-In drop-down list. The set of eight colors that appears next to each theme color name represent the text, background, accent, and hyperlink colors. The Solstice color scheme is selected because it is the color scheme currently in use. Notice that the fourth color from the left in the Solstice color bar is the Accent1 color that is used in the picture border. Although you like that color, you think some of the other colors are drab. Instead, you want to see how the Oriel color scheme would look.

2. **Point to several color schemes to preview them.**
3. **Choose the Oriel theme color scheme.**

Your screen should be similar to Figure 2.11

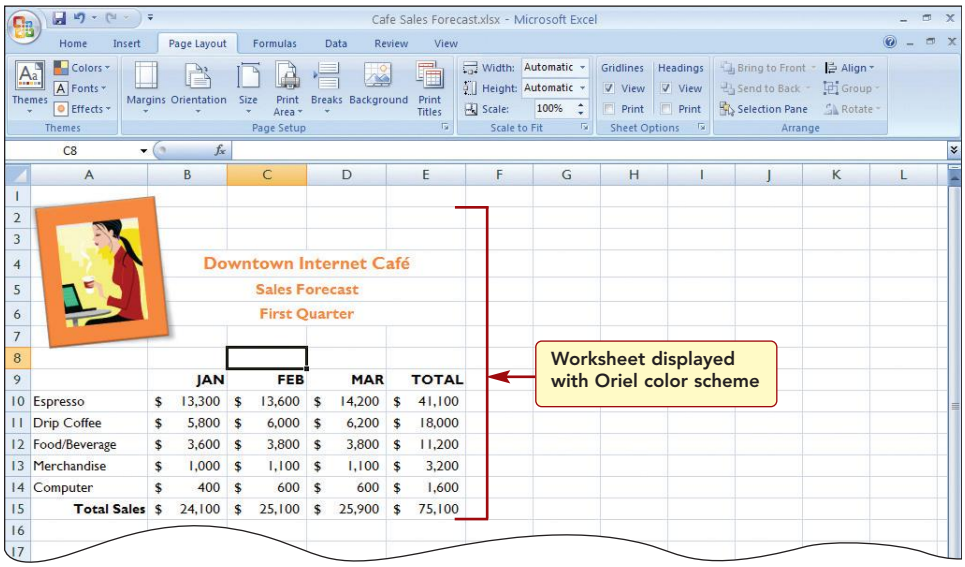


Figure 2.11

Additional Information
You can change the theme fonts and effects in a similar manner.

The new color scheme has been applied to the picture border and titles. All other aspects of the Solstice theme are unchanged.

Saving a Custom Theme

You decide to save the color change you have made to the Solstice theme as a custom theme. This will make it easy to reapply the same settings to another workbook in the future. Custom themes are saved in the Document Themes folder by default and are available in all Office applications that use themes.

1. **Click** Themes.
2. **Choose Save Current Theme.**
3. **Enter Solstice1 as the theme file name.**

Additional Information
Custom themes have the .thmx file extension, which identifies the file as an Office theme template file.

4. **Click** Save.

Having Trouble?
If an advisory message appears indicating this theme already exists, click Yes to replace it.

5. **Click** Themes.

Your screen should be similar to Figure 2.12

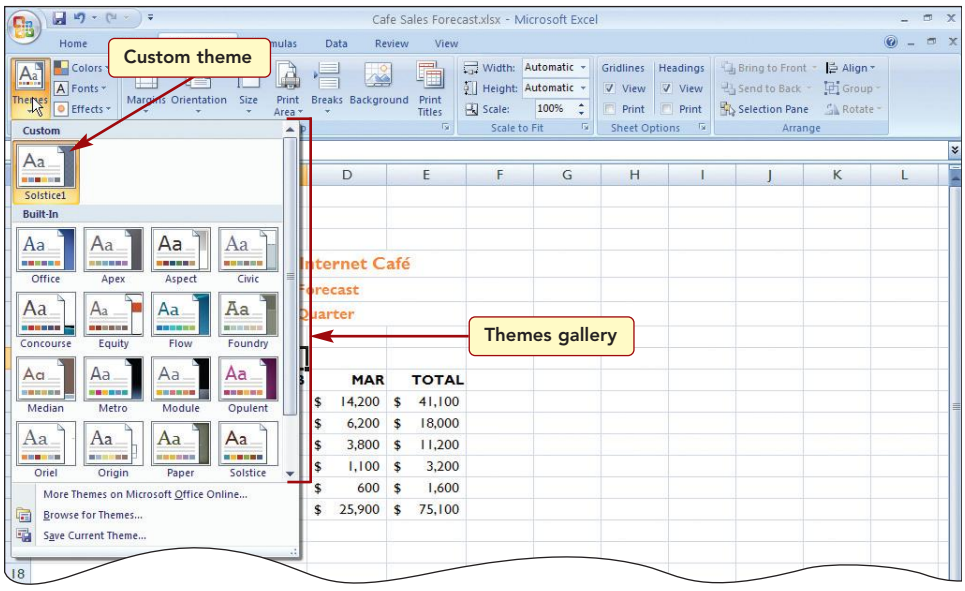


Figure 2.12

Additional Information
To remove a custom theme, choose Delete from the theme's shortcut menu.

The custom theme you created appears at the top of the Themes gallery. Now you can quickly reapply this entire theme in one step to another workbook, just like the built-in themes, or to any other Office document.

Using Cell Styles

Next, you want to enhance the worksheet more by adding background cell shading to define areas of the worksheet, selecting heading styles for the title, and changing the format of the Food, Internet, and Merchandise values to display commas only, without dollar signs.

Although you could make these changes using individual formatting commands, a quicker way is to select a predefined cell style.

Concept 3

Cell Style

3 A **cell style** is a defined theme-based combination of formats that have been named and that can be quickly applied to a selection. Excel includes 44 predefined styles, or you can create your own custom styles. Using styles allows you to apply several formats in one step and helps ensure that cells have consistent formatting.

Cell styles are based on the document theme that is applied to the entire workbook. When you switch to another document theme, the cell styles are updated to match the new document theme.

Applying Themed Cell Styles

First, you want to add background shading behind the entire worksheet.

1. **Select the range A1 through E15.**
2. **Open the Home tab.**
3. **Click**  **in the Styles group.**

Your screen should be similar to Figure 2.13

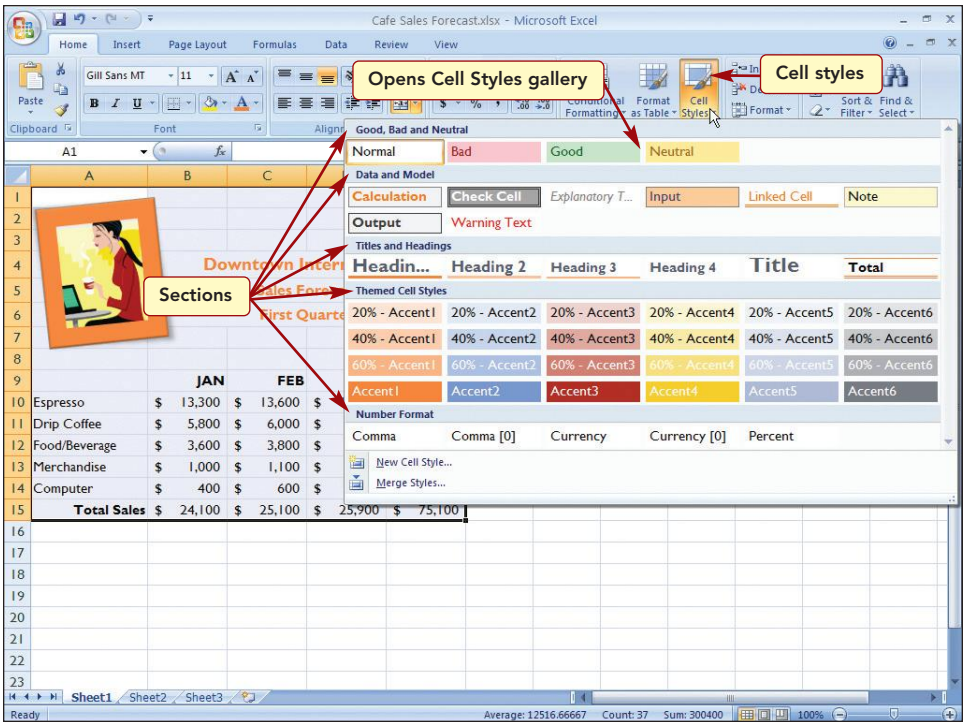


Figure 2.13

The Cell Styles gallery is divided into five sections. The styles in each section are designed to identify different areas of a worksheet and types of cell entries, as explained in the following table:

Section	Identifies
Good, Bad and Neutral	Data trends or outcomes; for example, selecting Bad would be used to identify a bad outcome
Data and Model	Worksheet areas; for example, calculations and warning notes
Titles and Headings	Worksheet titles and headings
Themed Cell Styles	Basic worksheet data
Number Format	Number formats

You will use a cell style in the Themed Cell Styles section. These cell styles consist of background fill colors and either white or black text color. The colors are associated with the theme colors. If you move the mouse over a style, the selection in the worksheet changes to give you a preview of the style.

1. **Choose 40% - Accent4 in the Themed Cell Styles section.**
2. **Click on the worksheet to clear the selection.**

Your screen should be similar to Figure 2.14

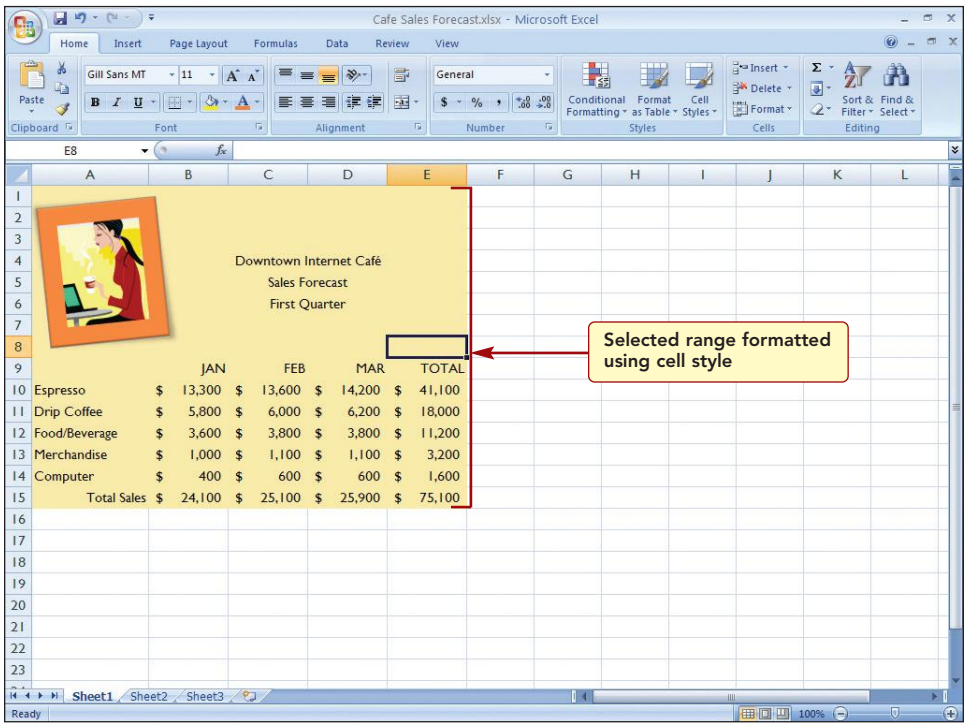


Figure 2.14

The selected range has been formatted using the selected cell style. It consists of a yellow fill color for the cell background and black text in the theme font of Gill Sans MT, 11 point. The original font colors used in the titles were replaced with the font color associated with the cell style.

Applying Heading and Total Cell Styles

The next cell style you will use will define the row and column headings area of the worksheet by using different shading.

1. Select A1:A15.
2. Click Cell Styles and choose the Accent3 style.
3. Select B9:E9 and apply the Heading 3 cell style.
4. Select B15:E15 and apply the Total style.
5. Click outside the selection to see the formatting changes.

Your screen should be similar to Figure 2.15

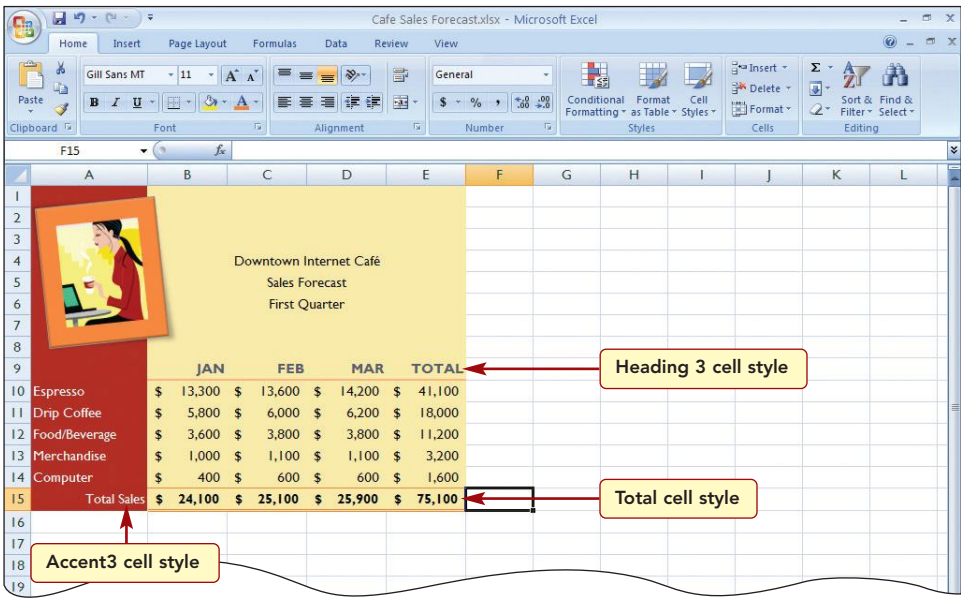


Figure 2.15

This Accent3 style uses a white font color on the dark cell background. The Heading 3 style includes a gray text color and a bottom border. The Total style bolds each cell entry and includes top and bottom border styles.

Next, you will add formatting to the worksheet titles by applying a Title style to the first title line, a Heading 1 style to the second line, and a Heading 2 style to the third line.

2. Apply the Title cell style to cell B4.
3. Apply the Heading 1 cell style to cell B5.
4. Apply the Heading 2 cell style to cell B6.
5. Click outside the selection to see the formatting changes.

Your screen should be similar to Figure 2.16

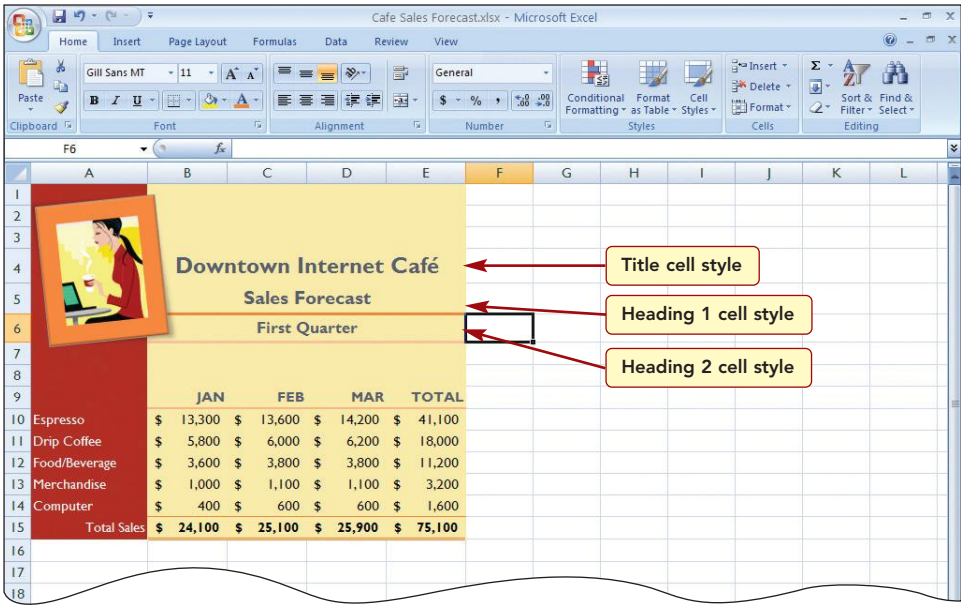


Figure 2.16

Modifying Cell Styles

Although you like the font size change and the colored bottom border line, you feel the titles could be improved by changing the font color to the same color as the fill color used in column A. Again, you like how the modified cell styles look and want to save the changes to these styles so that they will be easily available again.

1. Click Cell Styles and right-click on the Title cell style.
2. Choose Modify from the shortcut menu.
3. Click Format... and open the Font tab.
4. Open the Color gallery and choose Red, Accent3 from the Theme Colors category.
5. Click OK twice.
6. Modify the Heading 1 and Heading 2 cell styles in the same manner.

Your screen should be similar to Figure 2.17

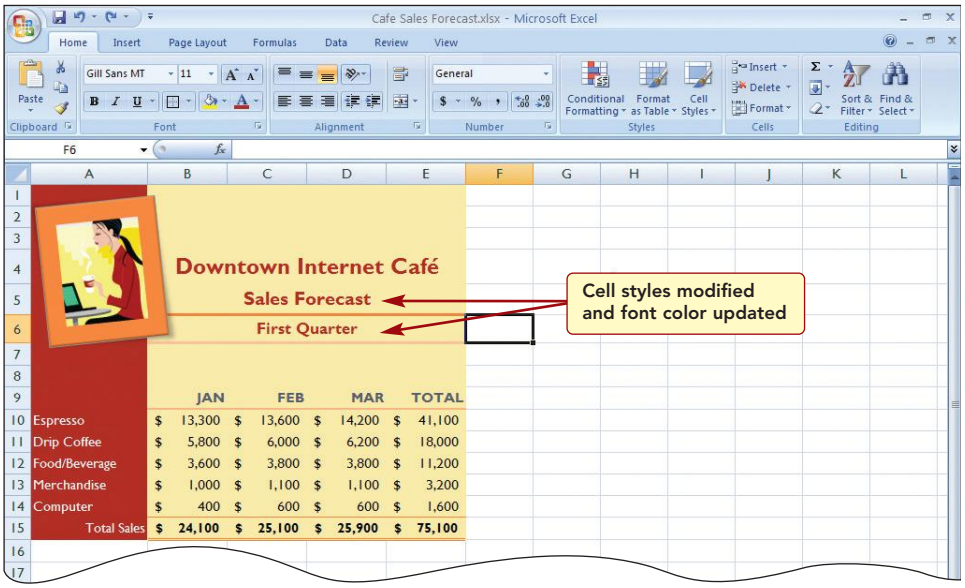


Figure 2.17

The three title lines have been updated to the new color associated with the three cell styles you modified. The changes to cell styles are saved with the current workbook file only.

Applying a Number Cell Style

The final change you want to make is to change the format of some of the worksheet values. Currently all the values are formatted using the Accounting style with zero decimal places. The Cell Styles gallery also includes five predefined number format styles. Examples of the five predefined number styles are shown below.

Style	Example
Comma	89,522.00
Comma [0]	89,522
Currency	$ 89,522.00
Currency [0]	$ 89,522
Percent	89.52200%

Additional Information
The Accounting number style with 0 decimal places is the same as the Currency [0] cell style.

You will use the Comma [0] style for the four middle rows of values.

1. **Select B11:E14.**
2. **Open the Cell Styles gallery.**
3. **Choose Comma [0].**
4. **Clear the selection.**
5. **Save the file.**

Additional Information

Using Comma Style in the Number group applies the Comma number format with two decimal places.

Your screen should be similar to Figure 2.18

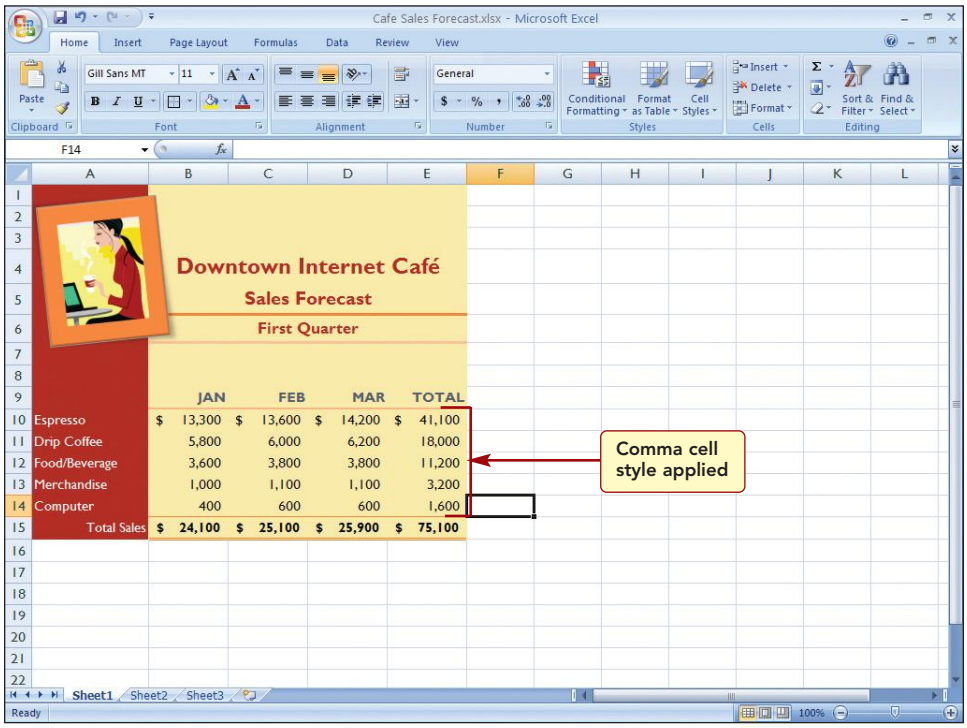


Figure 2.18

The Comma [0] style applies the comma number format with zero decimal places. Using a style applies many formats in one easy step making it quicker to apply formats to cells.

Working with Charts

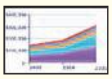
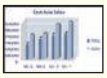
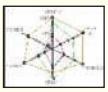
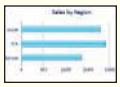
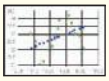
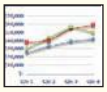
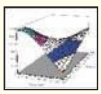
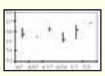
Although the worksheet shows the sales data for each category, it is difficult to see how the different categories change over time. To make it easier to see the sales trends, you decide to create a chart of this data.

Concept 4

Charts

4 A **chart** is a visual representation of data that is used to convey information in an easy-to-understand and attractive manner. Different types of charts are used to represent data in different ways. The type of chart you create depends on the type of data you are charting and the emphasis you want the chart to impart.

Excel 2007 can produce 14 standard types of graphs or charts, with many different subtypes for each standard type. In addition, Excel includes professionally designed, built-in custom charts that include additional formatting and chart refinements. The basic chart types and how they represent data are described in the following table.

Type	Description	Type	Description
	**Area charts** show the magnitude of change over time by emphasizing the area under the curve created by each data series.		**Doughnut charts** are similar to pie charts except that they can show more than one data series.
	**Bar charts** display data as evenly spaced bars. The categories are displayed along the Y axis and the values are displayed horizontally, placing more emphasis on comparisons and less on time.		**Radar charts** display a line or area chart wrapped around a central point. Each axis represents a set of data points.
	**Column charts** display data as evenly spaced bars. They are similar to bar charts, except that categories are organized horizontally and values vertically to emphasize variation over time.		**XY (scatter) charts** are used to show the relationship between two ranges of numeric data.
	**Line charts** display data along a line. They are used to show changes in data over time, emphasizing time and rate of change rather than the amount of change.		**Surface charts** display values in a form similar to a rubber sheet stretched over a 3-D column chart. These are useful for finding the best combination between sets of data.
	**Pie charts** display data as slices of a circle or pie. They show the relationship of each value in a data series to the series as a whole. Each slice of the pie represents a single value in the series.		**Bubble charts** compare sets of three values. They are similar to a scatter chart with the third value displayed as the size of bubble markers.
			**Stock charts** illustrate fluctuations in stock prices or scientific data. They require three to five data series that must be arranged in a specific order.

Creating a Single Data Series Chart

All charts are drawn from data contained in a worksheet. To create a new chart, you select the worksheet range containing the data you want displayed as a chart plus any row or column headings you want used in the chart. Excel then translates the selected data into a chart based upon the shape and contents of the worksheet selection.

A chart consists of a number of parts or elements that are important to understand so that you can identify the appropriate data to select in the worksheet.

Concept 5

Chart Elements

5 A **chart** consists of a number of elements that are used to graphically display the worksheet data. In a two-dimensional chart, the selected worksheet data is visually displayed within the X- and Y-axis boundaries. The **X axis**, also called the **category axis**, is the bottom boundary line of the chart and is used to label the data being charted. The left boundary line of the chart is the **Y axis**, also called the **value axis**. This axis is a numbered scale whose numbers are determined by the data used in the chart. Typically, the X-axis line is the horizontal line and the Y-axis line is the vertical line. In 3-D charts, there also can be an additional axis, called the **Z axis**, that allows you to compare data within a series more easily. This axis is the vertical axis, while the X and Y axes depict the horizontal surface of the chart.

Other basic elements of a two-dimensional chart are

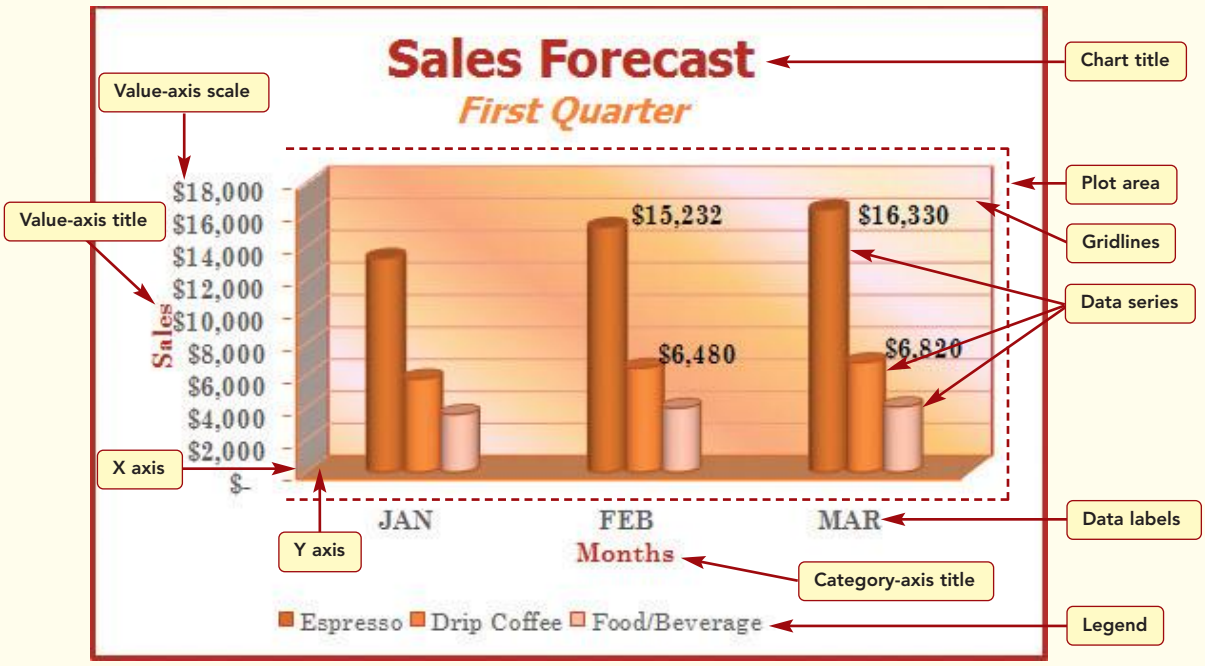
Element	Description
Data labels	Labels that correspond to the headings for the worksheet data that is plotted along the X axis
Plot area	The area within the X- and Y-axis boundaries where the chart appears
Data series	Related data points that are distinguished by different colors or patterns
Chart gridlines	Lines extending from the axis line across the plot area that make it easier to read the chart data
Legend	A box that identifies the chart data series and data markers
Chart title	A descriptive label displayed above the charted data that explains the contents of the chart
Category-axis title	A descriptive label displayed along the X axis
Value-axis title	A descriptive label displayed along the Y axis

(continued)

Concept 5 (concluded)

Chart Elements

5 The basic parts of a two-dimensional chart are shown in the figure below.



Selecting the Data to Chart

The first chart you want to create will show the total sales pattern over the three months. This chart will use the month headings in cells B9 through D9 to label the X axis. The numbers to be charted are in cells B15 through D15. In addition, the heading Total Sales in cell A15 will be used as the chart legend, making the entire range A15 through D15.

Notice that the two ranges, B9 through D9 and A14 through D14, are not adjacent and are not the same size. When plotting nonadjacent ranges in a chart, the selections must form a rectangular shape. To do this, you will include the blank cell A9 in the selection. You will specify the range and create the chart.

9		JAN	FEB	MAR	TOTAL
10	Espresso	$ 13,300	$ 13,600	$ 14,200	$ 41,100
11	Drip Coffee	5,800	6,000	6,200	18,000
12	Food/Beverage	3,600	3,800	3,800	11,200
13	Merchandise	1,000	1,100	1,100	3,200
14	Computer	400	600	600	1,600
15	Total Sales	$ 24,100	$ 25,100	$ 25,900	$ 75,100

X-axis labels

Data to chart

Chart legend

1. **Select A9 through D9.**
2. **Hold down Ctrl.**
3. **Select A15 through D15.**

Your screen should be similar to Figure 2.19

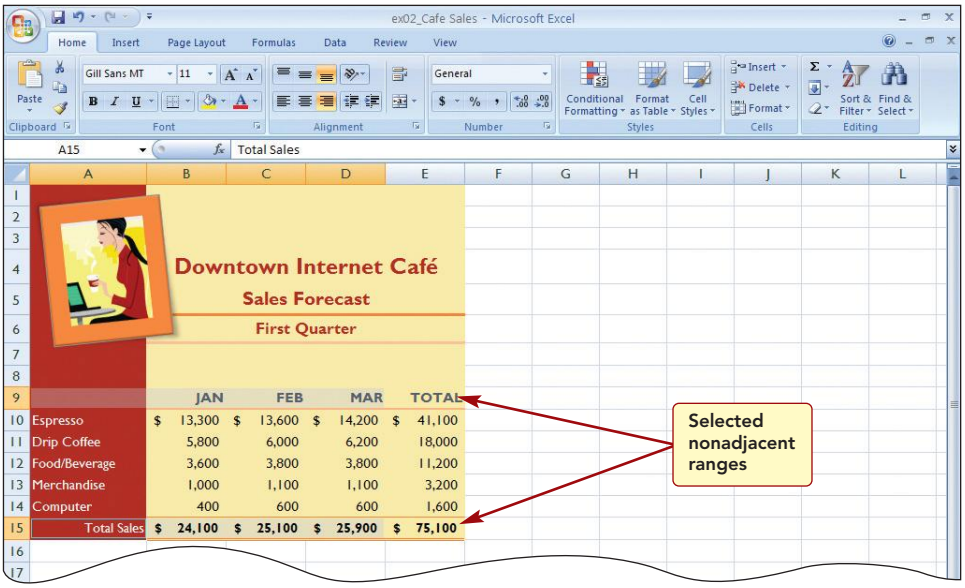


Figure 2.19

Selecting the Chart Type

The next step is to select the chart type from the Charts group, which displays the most commonly used charts as buttons. Each type of chart includes many variations. The Other Charts button accesses the less commonly used charts, and the Charts dialog box displays all the available charts in one place.

1. **Open the Insert tab.**
2. **Click Column in the Charts group.**

Your screen should be similar to Figure 2.20

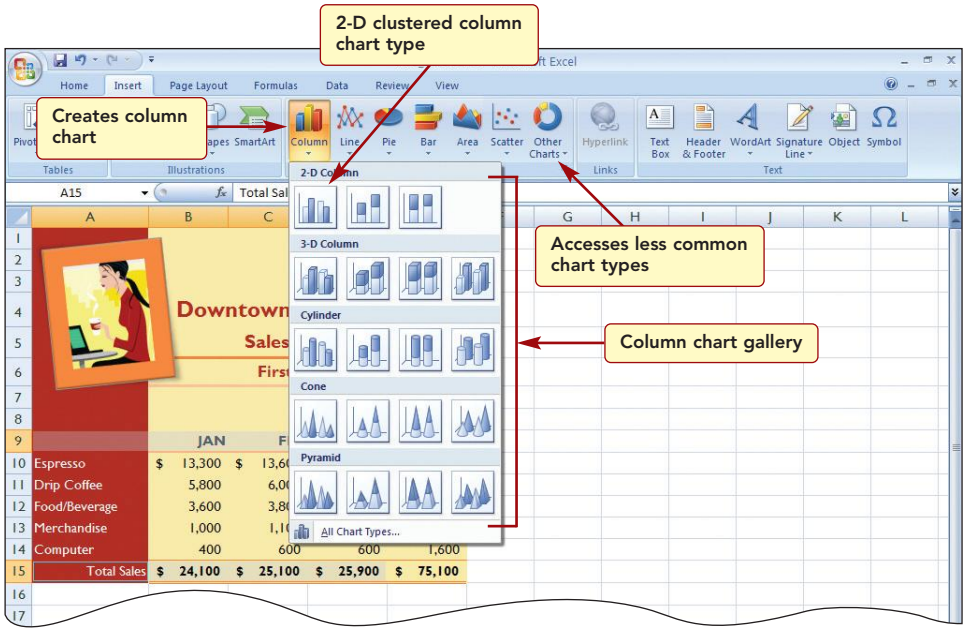


Figure 2.20

The column gallery contains five categories of column charts. You decide to use the two-dimensional clustered column. A Super ScreenTip containing a description of the selected column chart types displays as you point to each chart type.

2 **Choose Clustered Column from the 2-D Column category.**

Your screen should be similar to Figure 2.21

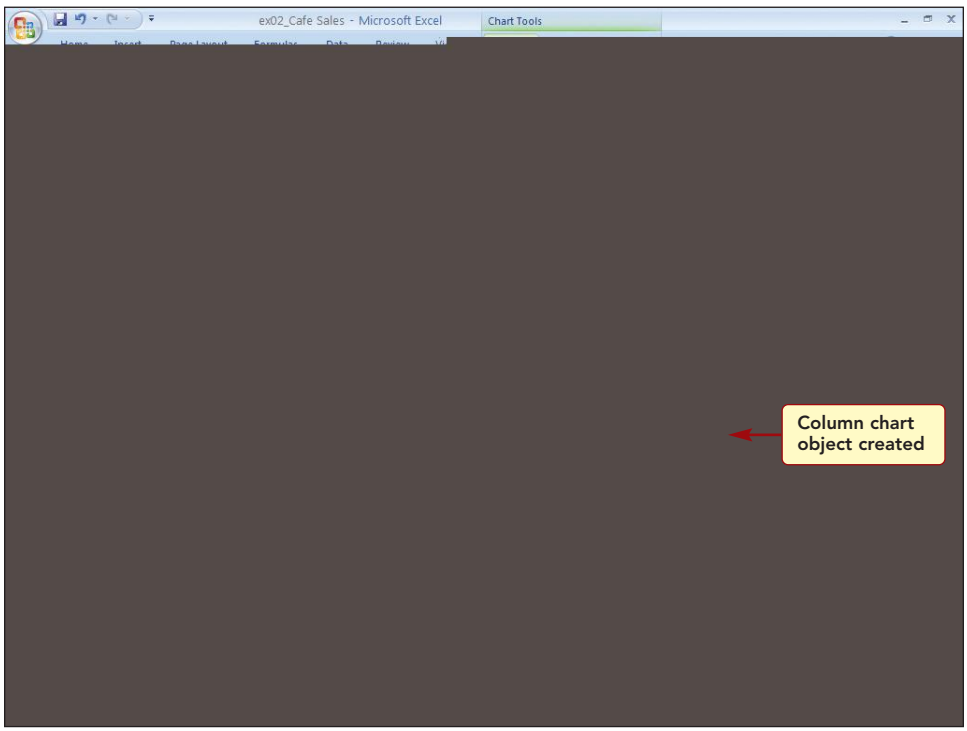


Figure 2.21

The column chart is created using the data from the worksheet and displayed as a chart object in the worksheet.

Concept 6

Chart Object

6 A **chart object** is a graphic object that is created using charting features. A chart object can be inserted into a worksheet or into a special chart sheet. By default, Excel inserts the chart object into the worksheet. Charts that are inserted into a worksheet are embedded objects. An **embedded chart** becomes part of the sheet in which it is inserted and is saved as part of the worksheet when you save the workbook file. Like all graphic objects, an embedded chart object can be sized and moved in a worksheet. A worksheet can contain multiple charts.

A chart that is inserted into a separate chart sheet also is saved with the workbook file. Only one chart can be added to a chart sheet and it cannot be sized and moved.

Excel decides which data series to plot along the X and Y axes based on the type of chart selected and the number of rows and columns defined in the series. The worksheet data range that has the greater number of rows or columns appears along the X axis and the smaller number is charted as the Y data series. When the data series is an equal number of rows and columns, as it is in this case, the default is to plot the rows. The first row defines the X-axis category labels and the second row the plotted data. The content of the first cell in the second row is used as the chart title and legend text.

Moving and Sizing a Chart

Notice that the new chart is on top of the worksheet data. As objects are added to the worksheet, they automatically **stack** in individual layers. The stacking order is apparent when objects overlap. Stacking allows you to create different effects by overlapping objects. Because you can rearrange the stacking order, you do not have to add or create the objects in the order in which you want them to appear.

First you want to move the chart so that it is displayed to the right of the worksheet data. In addition, you want to increase the size of the chart. A chart is moved by dragging the chart border and sized just like a graphic object. The sizing handles of a chart object are the dots that appear in the center and corners of the selected chart's border. If you hold down Alt while dragging to move and size a chart object, the chart automatically snaps into position or aligns with the closest worksheet cell when you release the mouse button. Release the mouse button before you release Alt.

1. **Point to the chart border and drag the chart object so the upper-left corner is in cell F1.**
2. **Point to the bottom-center sizing handle, hold down Alt, and drag the chart border line down until it is even with the bottom of row 15.**

Additional Information
Dragging a side handle does not maintain the scale.

Your screen should be similar to Figure 2.22

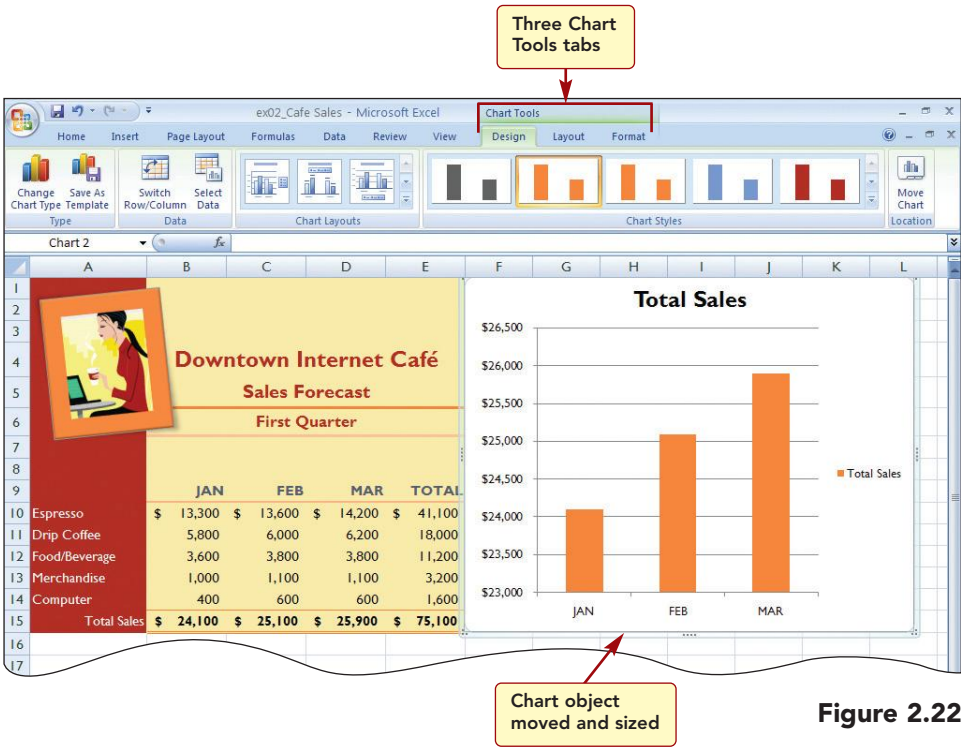


Figure 2.22

It is now easy to see how the worksheet data you selected is represented in the chart. Each column represents the total sales for that month in row 15. The month labels in row 9 have been used to label the X-axis category labels. The range or scale of values along the Y axis is determined from the data in the worksheet. The upper limit is the maximum value in the worksheet rounded upward to the next highest interval.

Three new Chart Tools tabs appear on the Ribbon to help you modify the chart. The Design tab contains options to change the chart orientation, redefine the source data, and change the chart location or type. The Layout tab commands are used to change the display of chart elements by modifying or adding features such as chart titles, text boxes, callout lines, and pictures. The Format tab is used to add embellishments such as fill colors and special effects to the chart.

Applying Chart Layouts

Next, you want to improve the appearance of the chart. To help you do this quickly, Excel includes many predefined chart layouts and styles (also called quick layouts and quick styles) from which you can select. First, you want to change the chart layout.

Concept 7

Chart Layout

7 A **chart layout** is a predefined set of chart elements that can be quickly applied to a chart. The elements include chart titles, a legend, a data table, or data labels. These elements are displayed in a specific arrangement in the chart. Each chart type includes a variety of layouts. You can then modify or customize these layouts further to meet your needs. However, the custom layouts cannot be saved.

To see the different chart layouts for a column chart, you will open the chart layout gallery.

1 **Click More in the Chart Layouts group of the Chart Tools Design tab.**

Your screen should be similar to Figure 2.23

Additional Information
The three chart layouts shown in the Ribbon are the most recently selected chart layouts.

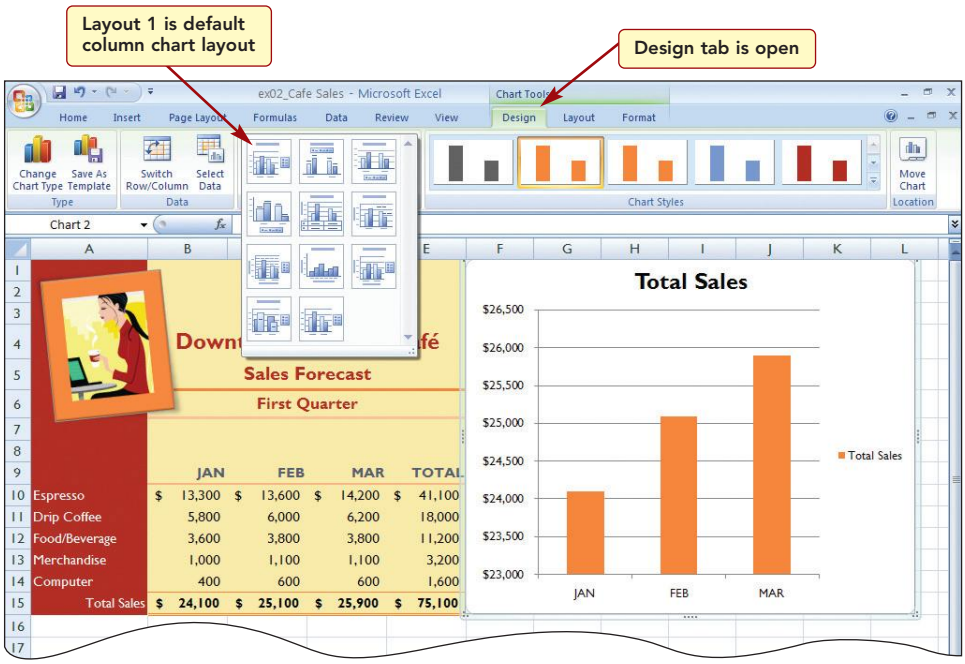


Figure 2.23

The chart layout gallery displays the 11 chart layouts for a column chart. The default chart layout is Layout 1. Since this chart contains only three columns, you decide to try Layout 10 because it shows a chart with wider columns and data labels.

2 **Choose Layout 10.**

Your screen should be similar to Figure 2.24

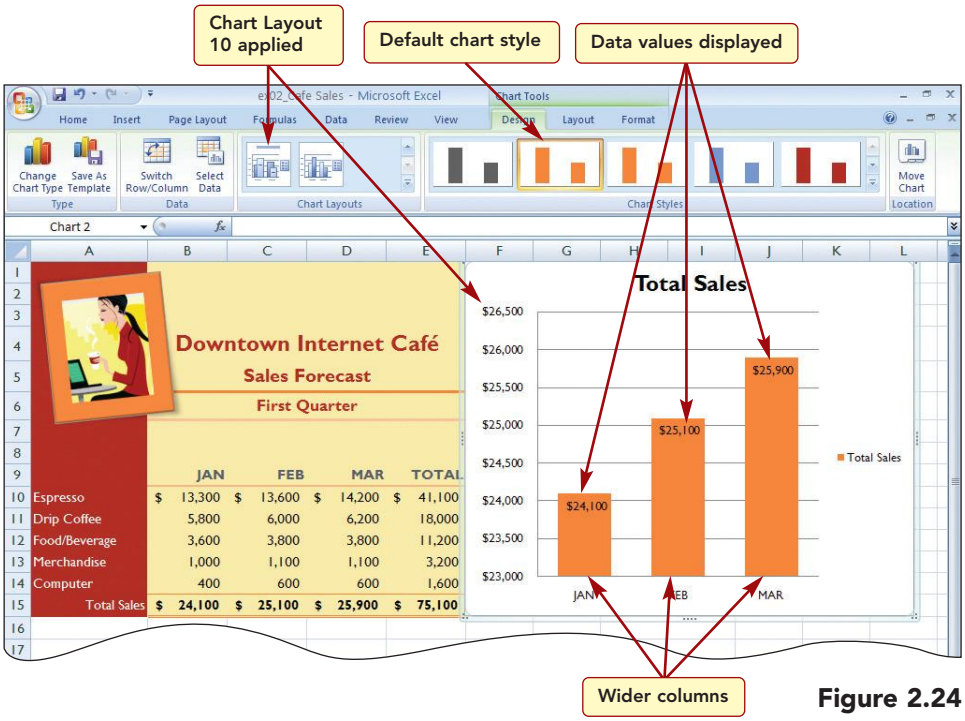


Figure 2.24

The columns are now wider and include the data values.

Applying Chart Styles

Next, you want to change the color of the columns to further enhance the chart. Color is one of the main formats that are included in the predefined chart styles.

Concept 8

Chart Styles

8 A **chart style** is a predefined set of chart formats that can be quickly applied to a chart. The available chart styles are based on the document theme that has been applied. This ensures that the formats you apply to the chart will coordinate with the worksheet formatting. The chart styles use the same colors, fonts, line, and fill effects that are defined in the theme.

The default chart style is selected in the Chart Style group in the Ribbon. You want to see all available choices.

1 **Click More in the Chart Styles group.**

Your screen should be similar to Figure 2.25

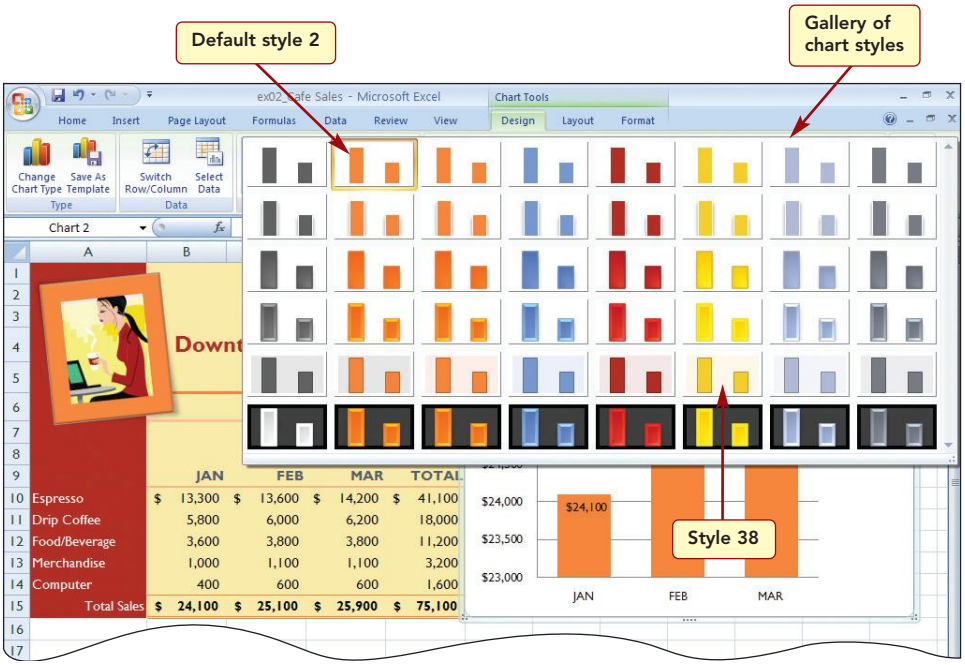


Figure 2.25

The gallery of chart styles consists of 48 sample chart styles with different color columns, background shadings, column shapes, and three-dimensional effects. You want to change the column color and add a background shading to the plot area.

2 **Choose Style 38.**

Your screen should be similar to Figure 2.26

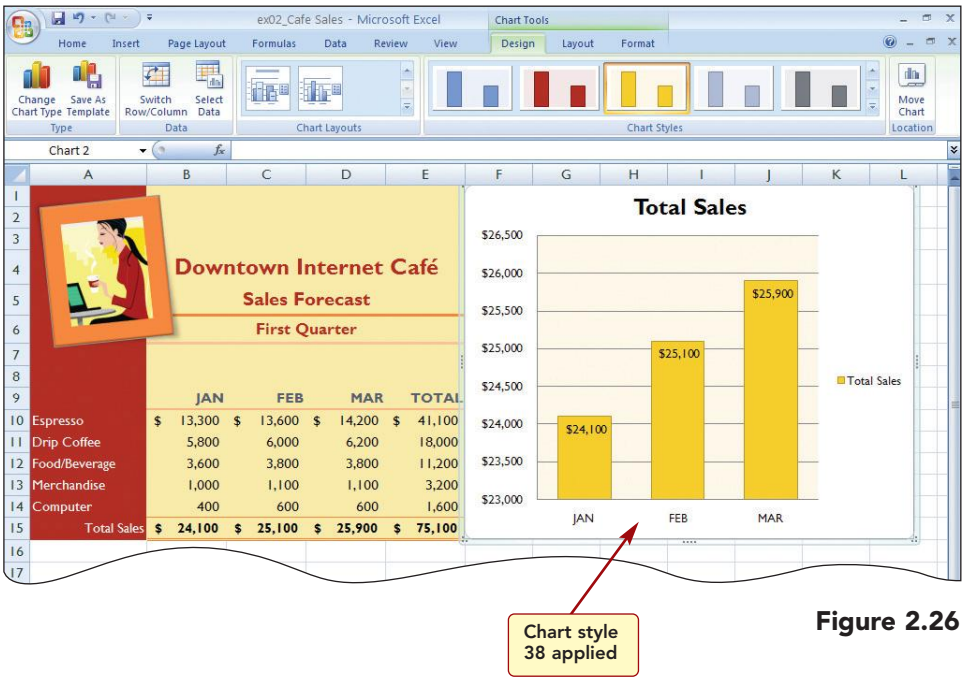


Figure 2.26

The columns are gold and with a shaded background in the plot area.

Adding Chart Labels

Finally, you want to change the appearance of the legend and titles. The Labels group on the Layout tab contains options to modify chart elements. To clarify the data in the chart, you will add titles along the X and Y axes, as well as a more descriptive chart title.

By default, the X- and Y-axis titles do not display. You want to add titles to further explain the data.

1. **Open the Chart Tools Layout tab.**
2. **In the Labels group, click**  **.**
3. **Select Primary Horizontal Axis Title.**
4. **Choose Title Below Axis.**

Your screen should be similar to Figure 2.27

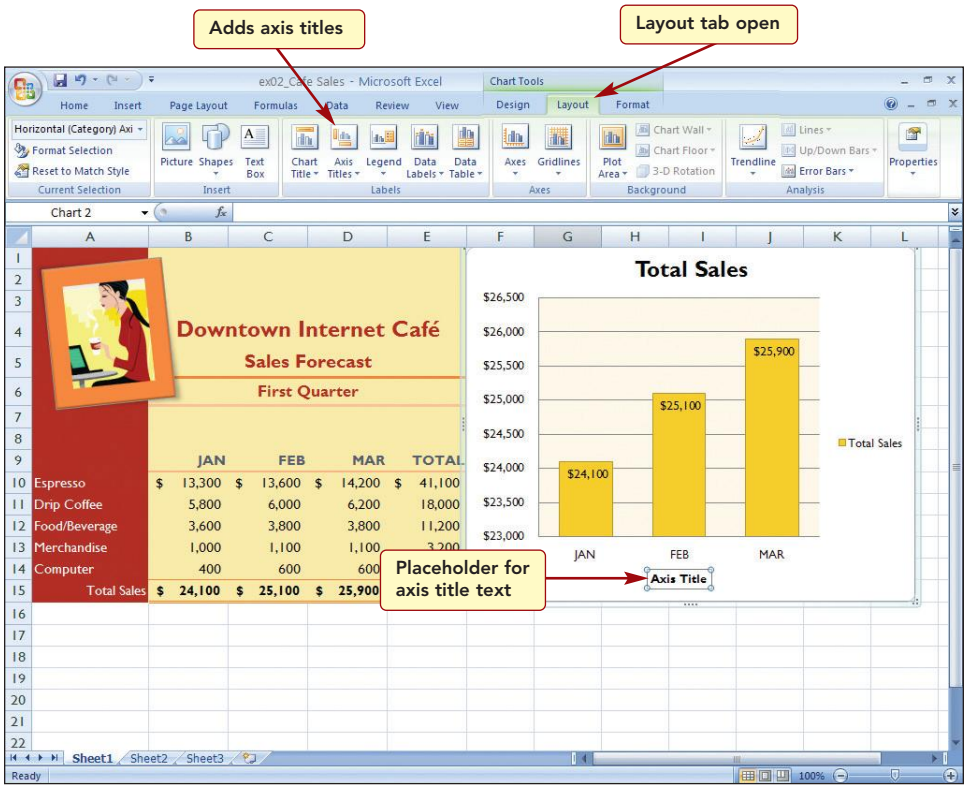


Figure 2.27

The title placeholder is selected and displays Axis Title. A **placeholder** is a graphic element that is designed to contain specific types of information. In this case, it tells you the element should display the axis title. You will replace the sample text with the axis title.

2. **Select the words "Axis Title."**

Having Trouble?
Triple-click on the text to select the entire line.

- **Type Months.**
- **Click anywhere on the chart to deselect the placeholder.**

Your screen should be similar to Figure 2.28

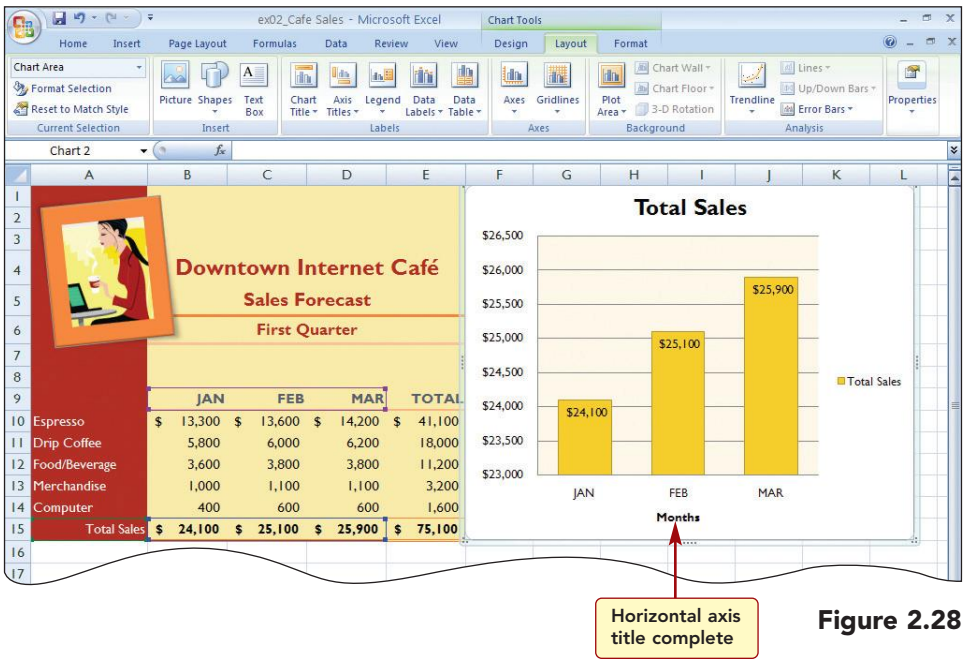


Figure 2.28

Next, you would like to add a title to the Y axis.

3. **Click Axis Titles and select Primary Vertical Axis Title.**
- **Choose Vertical Title.**
- **Select the text and type Total Sales.**
- **Click anywhere on the chart to deselect the text.**

Your screen should be similar to Figure 2.29

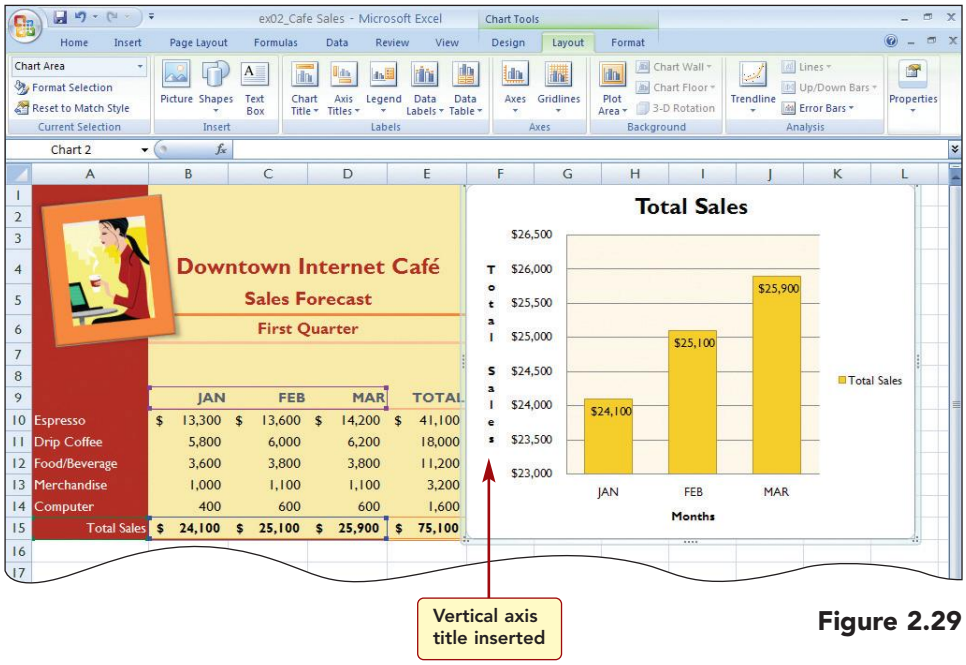


Figure 2.29

You decide the Y-axis title text would look better if it were rotated.

4 Click Axis Titles.

- Select Primary Vertical Axis Title.
- Choose Rotated Title.

Your screen should be similar to Figure 2.30

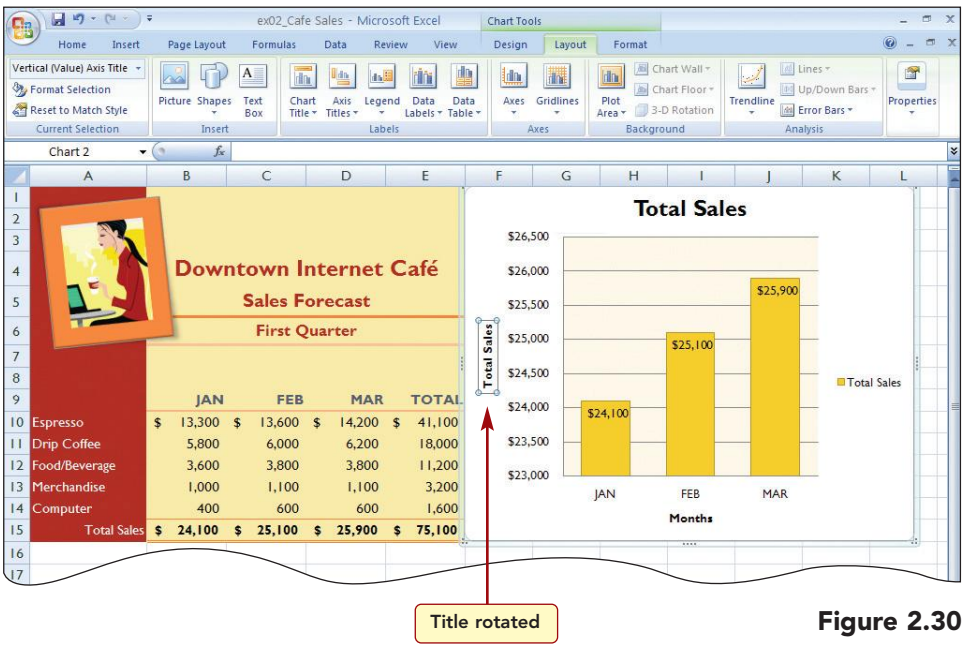


Figure 2.30

The titles clearly describe the information displayed in the chart. Now, because there is only one data range, and the category title fully explains this data, you decide to remove the display of the legend.

5 Click Legend and choose None.

Your screen should be similar to Figure 2.31

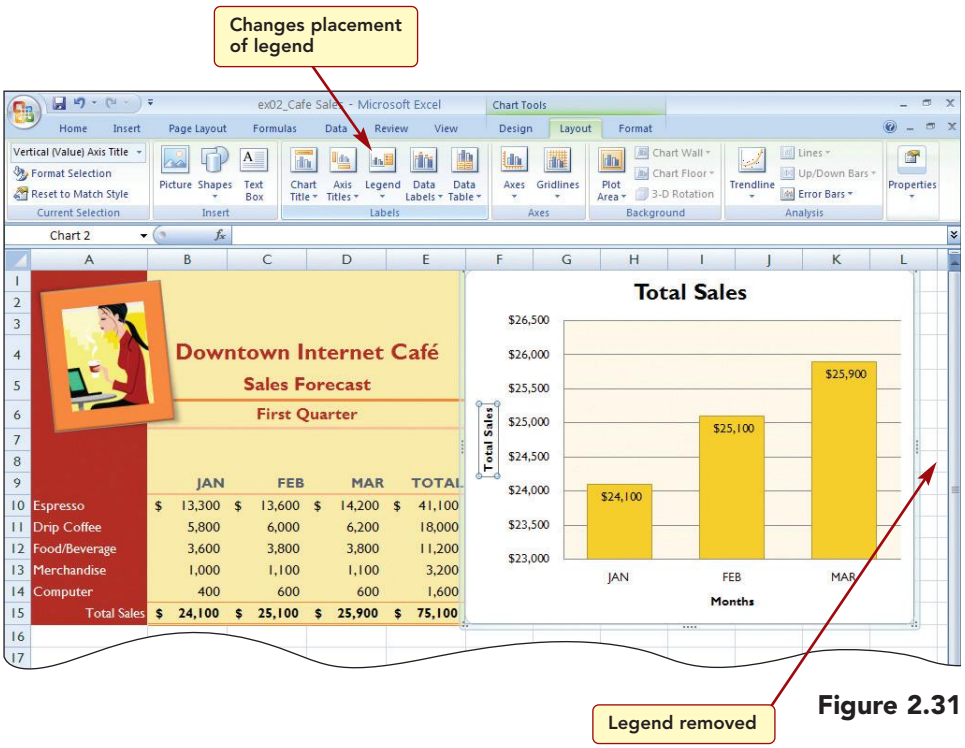


Figure 2.31

The legend is removed and the chart area resized to occupy the extra space.

Finally, you want to add a more descriptive title to the chart. The Chart Title button changes the location of the title on the chart, but the default selection of Above Chart works well. You just need to change the text, which you can do directly on the chart. When you point to different areas in the chart, a chart ScreenTip appears that identifies the chart element that will be affected by your action.

6 **Point to the chart title to see the ScreenTip.**

- **Click on the chart title to select it.**
- **Replace the existing text with Downtown Internet Cafe Sales.**
- **Select the text and point to the Mini toolbar.**

Additional Information
The Mini toolbar appears automatically when you select text and is dim until you point to it.

- **Change the font size to 16 and the font color to Red, Accent3.**
- **Click anywhere in the chart to clear the selection.**

Your screen should be similar to Figure 2.32

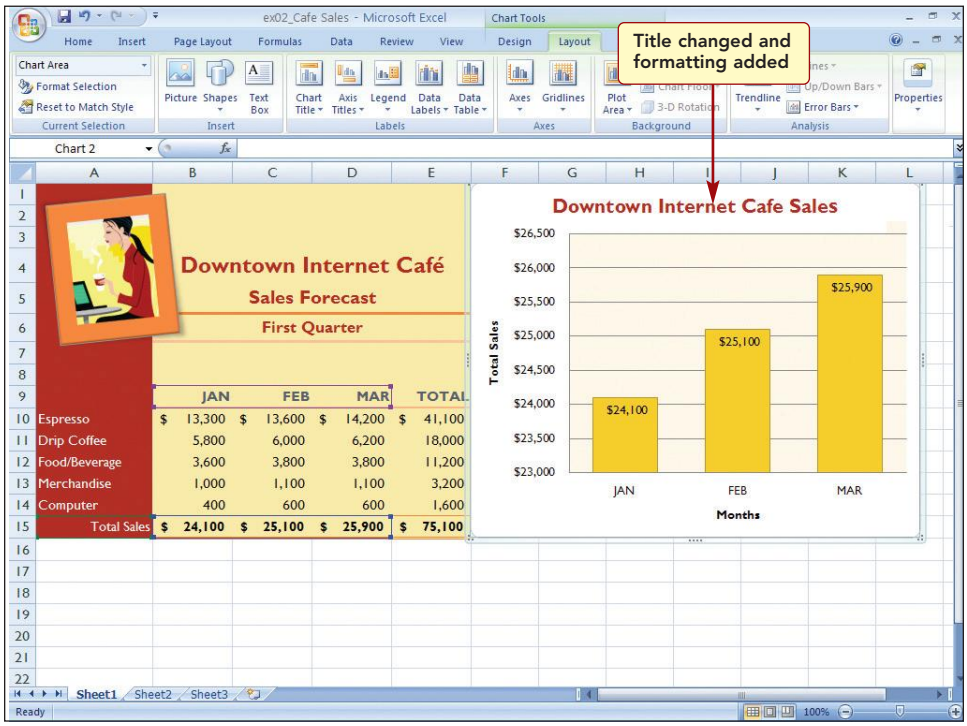


Figure 2.32

Changing the Chart Location

Although this chart compares the total sales for the three months, you decide you are more interested in seeing a comparison for the sales categories. You could delete this chart simply by pressing Delete while the chart is selected. Instead, however, you will move it to a separate worksheet in case you want to refer to it again.

1. Open the Chart Tools Design tab.
2. Click Move Chart in the Location group.
3. Select New sheet.
4. Click OK.
5. Save the workbook.

Your screen should be similar to Figure 2.33

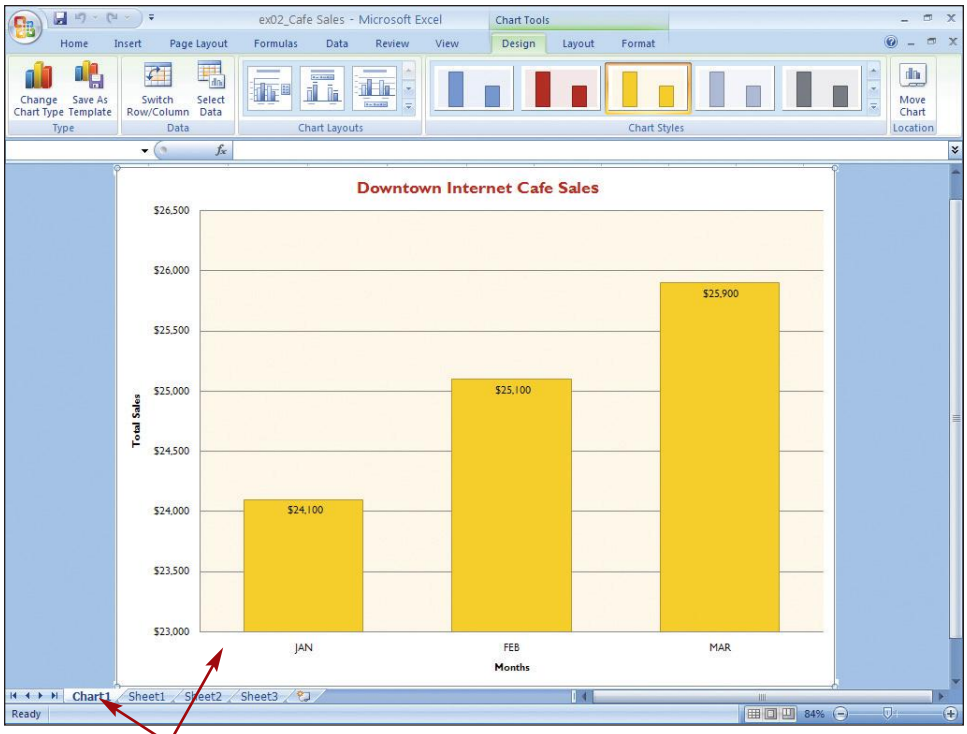


Figure 2.33

The column chart is now an object displayed in a separate chart sheet. Generally, you display a chart in a chart sheet when you want the chart displayed separately from the associated worksheet data. The chart is still automatically linked to the worksheet data from which it was created. The new chart sheet, named Chart1, was inserted to the left of the worksheet, Sheet1. The chart sheet is the active sheet, or the sheet in which you are currently working.

Creating a Multiple Data Series Chart

Now you are ready to continue your analysis of sales trends. You want to create a second chart to display the sales data for each category for the three months. You could create a separate chart for each category and then compare the charts; however, to make the comparisons between the categories easier, you will display all the categories on a single chart.

The data for the three months for the four categories is in cells B10 through D14. The month headings (X-axis data series) are in cells B9 through D9 and the legend text is in the range A10 through A14.

1. **Click the Sheet1 tab.**
2. **Select A9 through D14.**
3. **Open the Insert tab.**
4. **Click Column from the Charts group and choose 3-D Clustered Column.**

Your screen should be similar to Figure 2.34

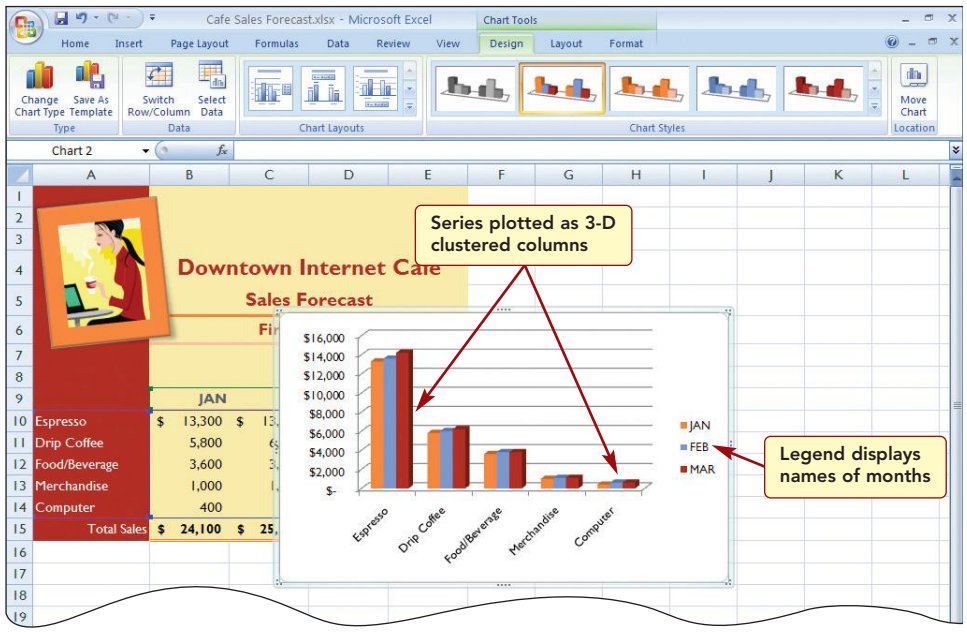


Figure 2.34

A three-dimensional column chart is drawn showing the monthly sales for each category. A different column color identifies each data series, and the legend identifies the categories. When plotting the data for this chart, Excel plotted the three months as the data series because the data range has fewer columns than rows. This time, however, you want to change the data series so that the months are along the X axis.

2. **Click Switch Row/Column in the Data group of the Chart Tools Design tab.**

Your screen should be similar to Figure 2.35

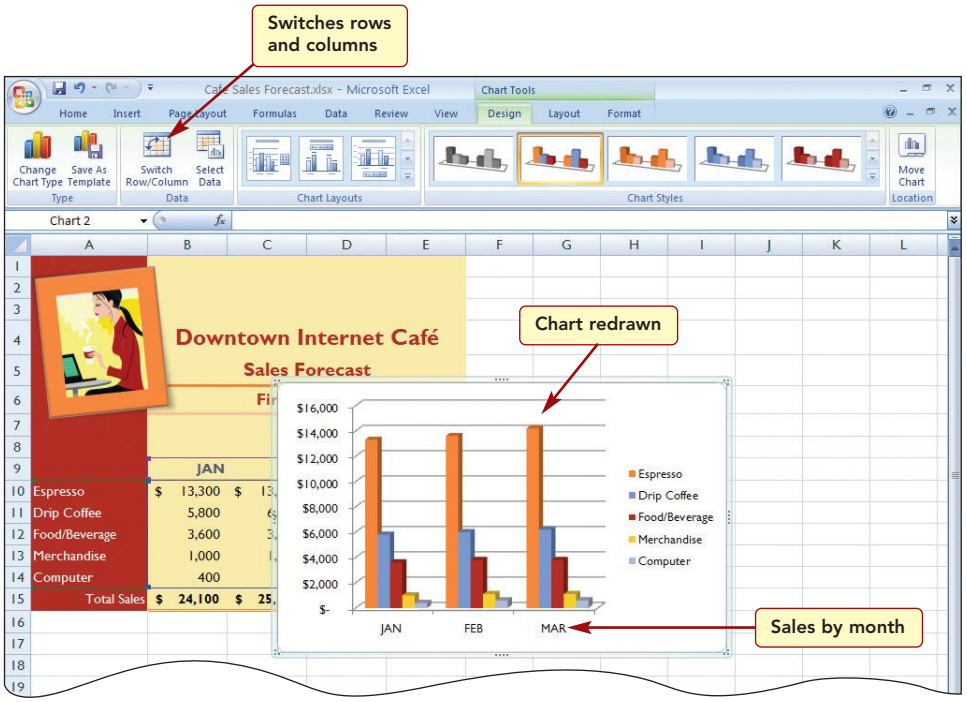


Figure 2.35

The chart is redrawn with the new orientation. The column chart now compares the sales by month rather than by category. The legend displays the names of the sales categories.

Next, you will specify the chart titles and finish the chart.

3 **Change the chart style to Style 18.**

- **Change the chart layout to Layout 9.**
- **Replace the placeholder labels with the titles shown below:**

Title	Entry
Chart title	Sales Forecast
Horizontal Axis	Months
Vertical Axis	Sales

- **Move and size the chart until it covers cells F2 through L15.**

Your screen should be similar to Figure 2.36

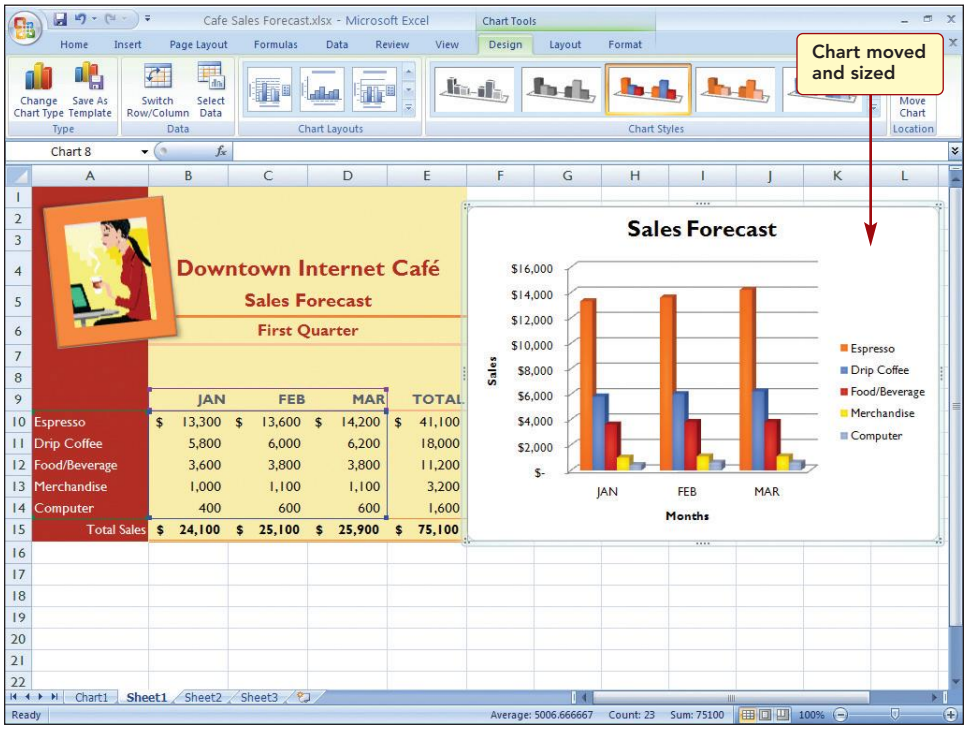


Figure 2.36

The column chart shows that sales in all categories are increasing, with the greatest increase occurring in espresso sales.

Changing the Data Source

As you look at the chart, you see that the Computer and Merchandise sales values are inconsequential to the forecast because they are so small and do not change much. You will remove these data series from the chart.

1. **Click** Select Data **in the Data group.**

Your screen should be similar to Figure 2.37

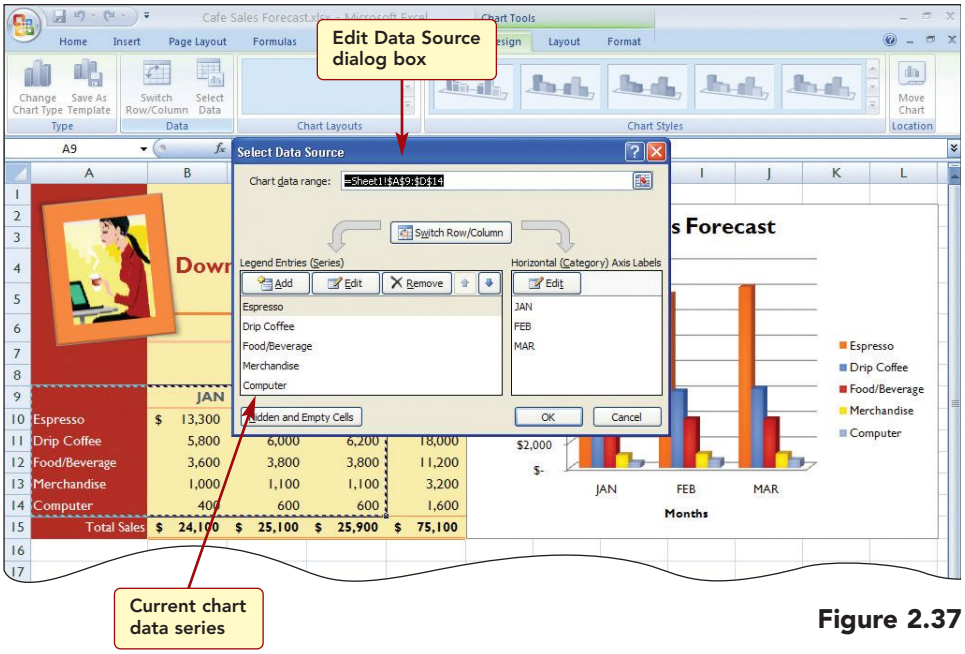


Figure 2.37

In the Select Data Source dialog box, you can change the chart data range, switch the Row and Column orientation, and add, edit, and remove specific data series. You will remove the Computer and Merchandise data series.

2. **Select the Merchandise series name and click** Remove.

   Select the Computer series name and click Remove.

   Click OK.

Your screen should be similar to Figure 2.38

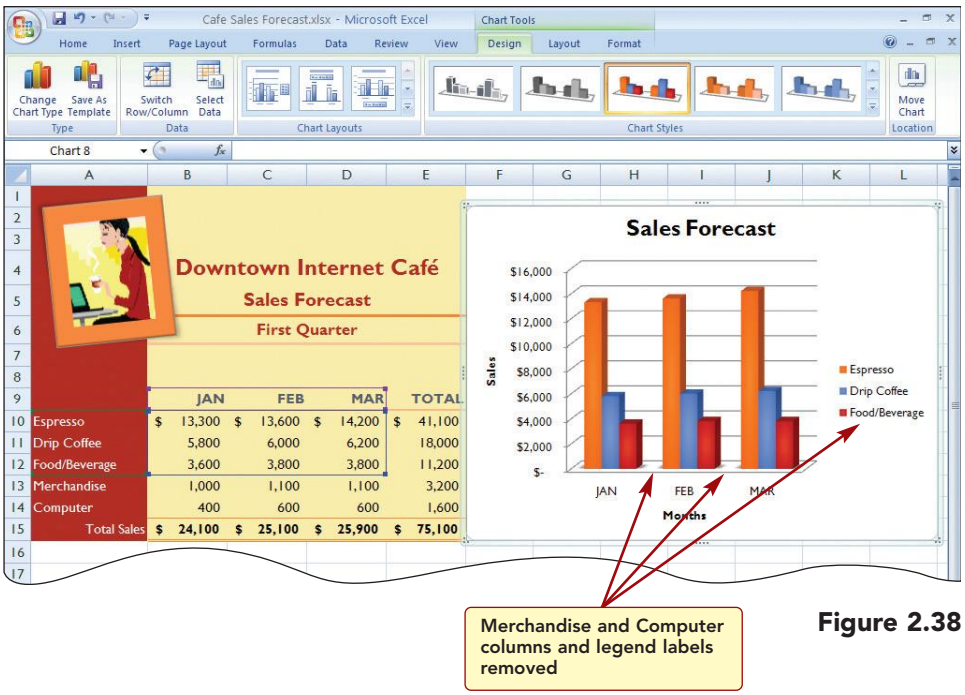


Figure 2.38

The columns representing the Merchandise and Computer series were removed from the chart along with the legend labels.

Changing the Chart Type

Next, you would like to see how the same data displayed in the column chart would look as a line chart. A line chart displays data as a line and is commonly used to show trends over time. You can change the chart type easily using the Change Chart Type button on the Design tab.

1 Click Change Chart Type in the Type group.

Your screen should be similar to Figure 2.39

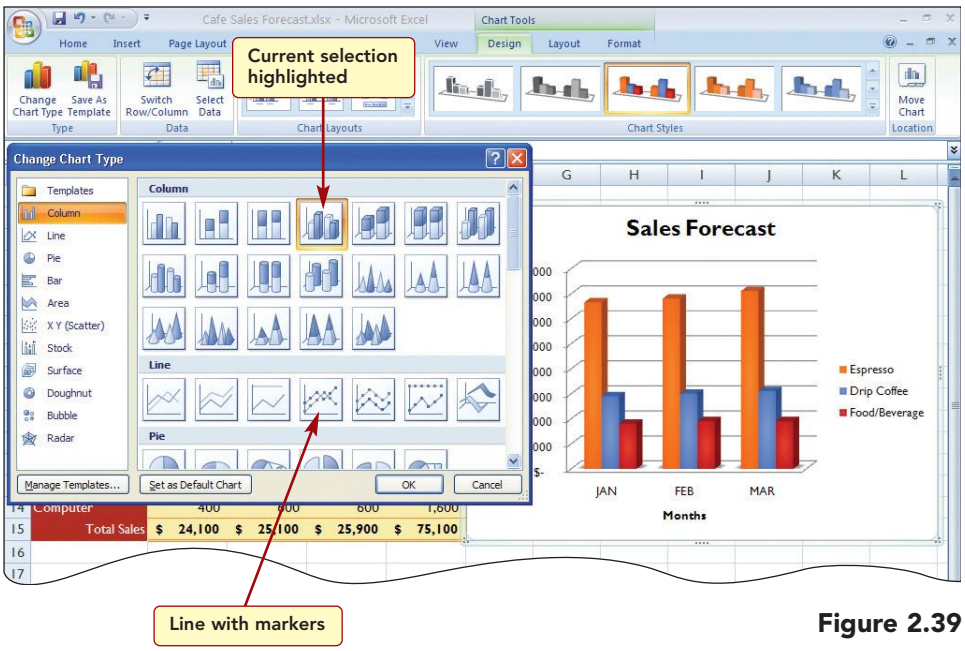


Figure 2.39

The Change Chart Type box displays all the available chart types. The current selection, Clustered Column, is highlighted. You want to change it to a line chart.

2 Choose Line with Markers.

Click OK.

Your screen should be similar to Figure 2.40

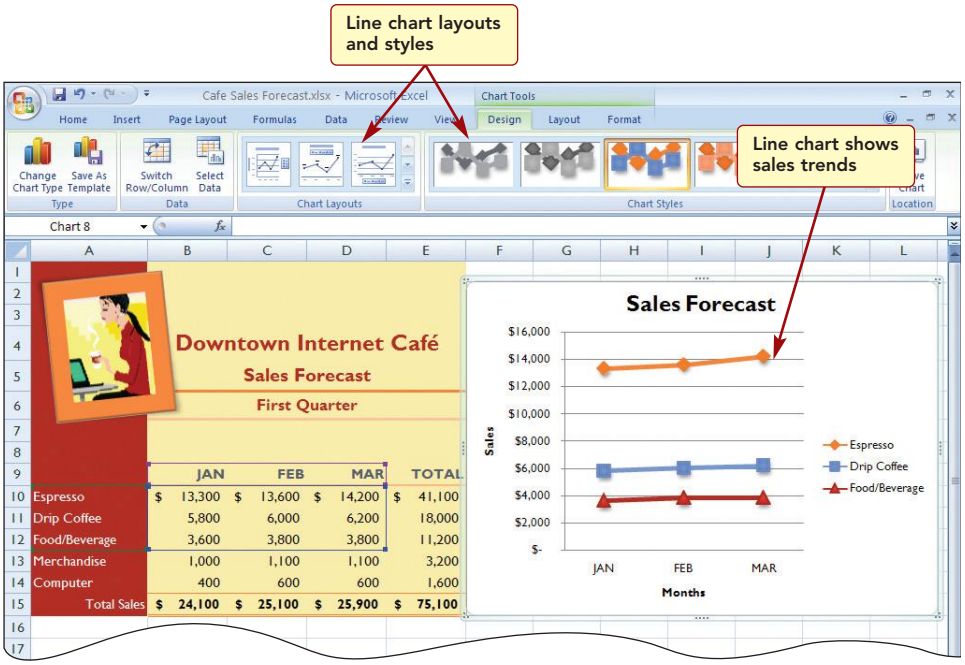


Figure 2.40

The line chart shows the sales trends from month to month. Notice the chart layouts and chart styles in the Ribbon reflect layouts and styles that are available for line charts. You do not find this chart very interesting, so you will change it to a 3-D bar chart next.

3. **Click** Change Chart Type.
   - **Choose Bar from the chart type category list.**
   - **Choose Clustered Bar in 3-D.**
   - **Click** OK

Your screen should be similar to Figure 2.41

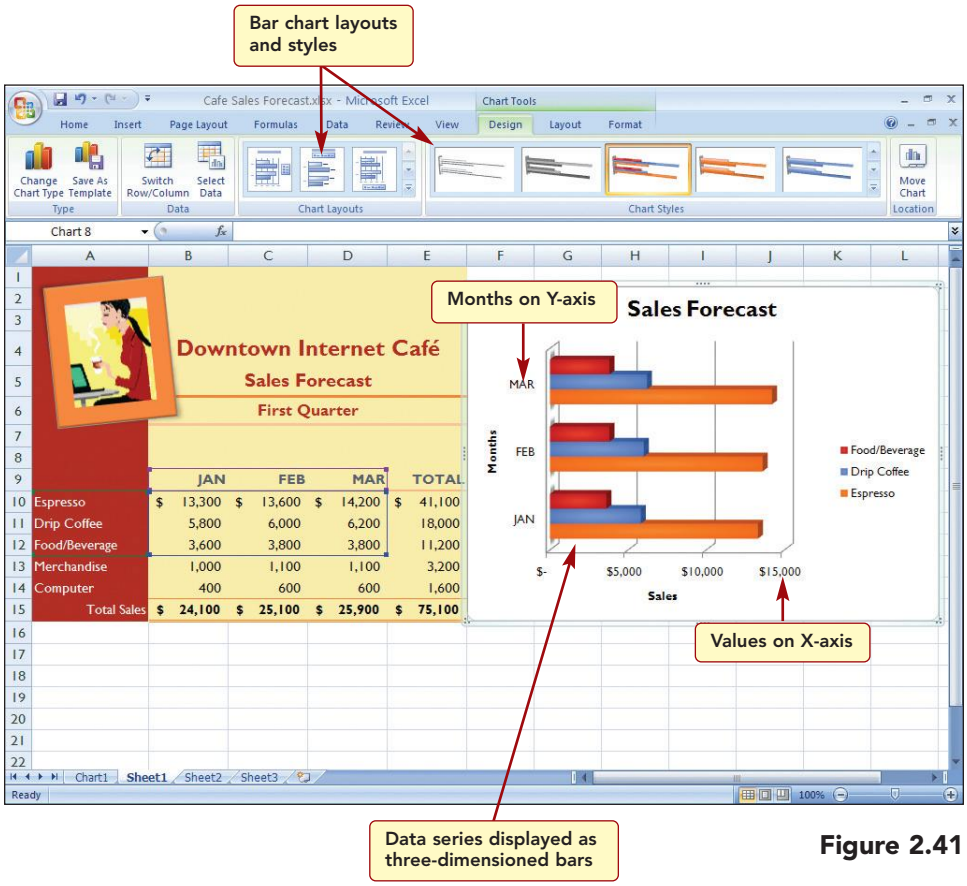


Figure 2.41

The 3-D bar chart reverses the X and Y axes and displays the data series as three-dimensional bars. As you can see, it is very easy to change the chart type and format after the data series are specified. The same data can be displayed in many different ways. Depending upon the emphasis you want the chart to make, a different chart style can be selected.

Although the 3-D bar chart shows the sales trends for the three months for the sales categories, again it does not look very interesting. You decide to look at several other chart types to see whether you can improve the appearance. First you would like to see the data represented as an area chart. An area chart represents data the same as a line chart, but, in addition, it shades the area below each line to emphasize the degree of change.

4 Click Change Chart Type.

Choose Stacked Area.

Click OK.

Your screen should be similar to Figure 2.42

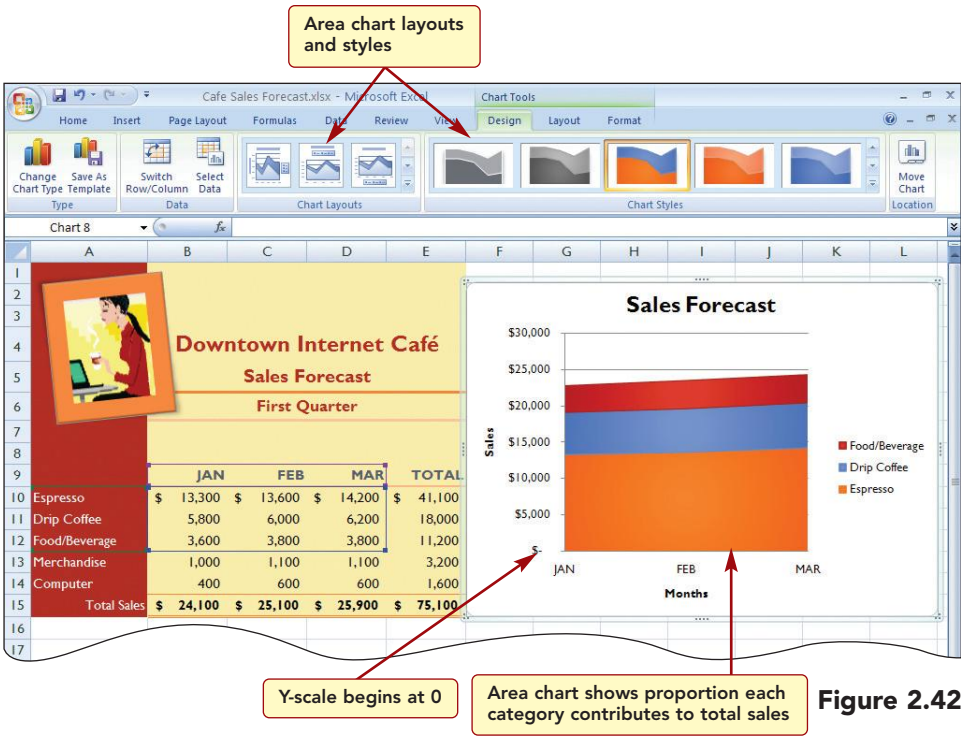


Figure 2.42

The Y-axis scale has changed to reflect the new range of data. The new Y-axis range is the sum of the four categories or the same as the total number in the worksheet. Using this chart type, you can see the magnitude of change that each category contributes to the total sales in each month.

Again, you decide that this is not the emphasis you want to show and will continue looking at other types of charts. You want to see how this data will look as a stacked-column chart. You also can double-click a chart type to select it.

5 Click Change Chart Type.

Double-click Stacked Column in 3-D.

Your screen should be similar to Figure 2.43

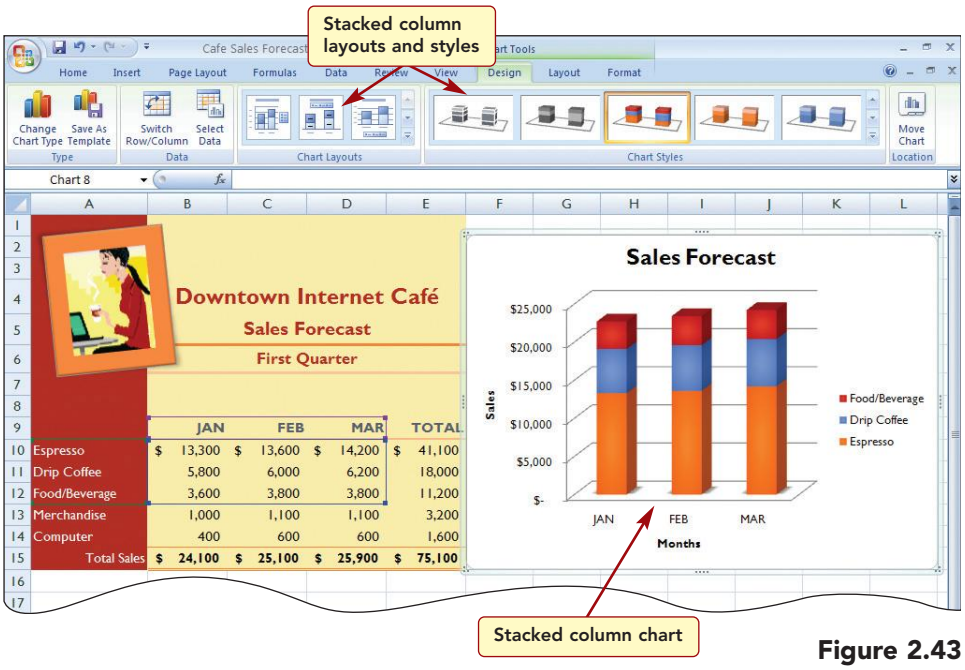


Figure 2.43

The chart is redrawn showing the data as a **stacked-column chart.** This type of chart also shows the proportion of each sales category to the total sales.

Although this chart is interesting, you feel that the data is difficult to read and want to see how the data will be represented in several other chart types.

6 **Choose several other chart types to see how the data appears in the chart.**

Change the chart to  **Clustered Cylinder in the Column category.**

Your screen should be similar to Figure 2.44

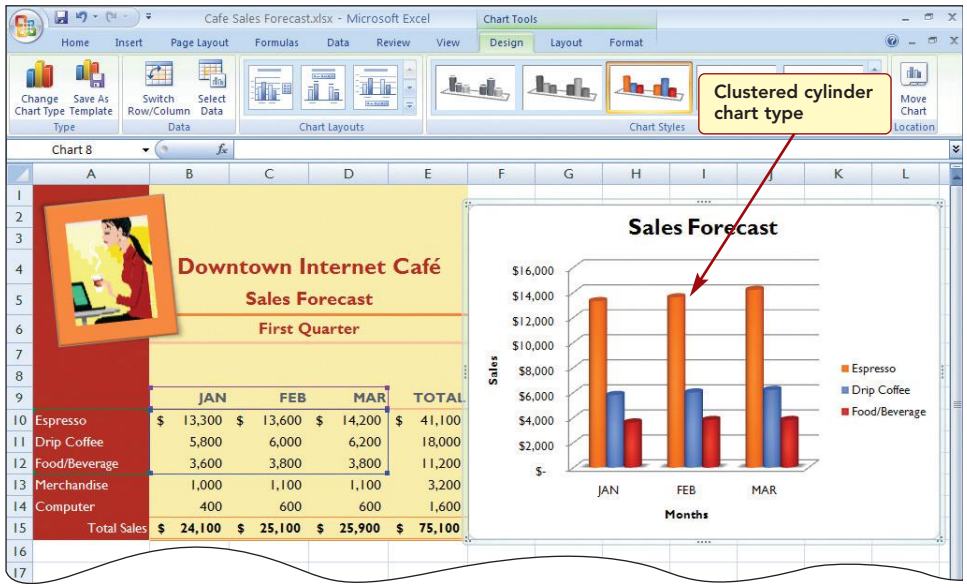


Figure 2.44

You like both the appearance of the clustered cylinders and how the data is represented.

Moving the Legend

While looking at the chart, you decide to move the legend below the X axis.

1 **Open the Chart Tools Layout tab.**

Click  **in the Labels group.**

Choose Show Legend at Bottom.

Your screen should be similar to Figure 2.45

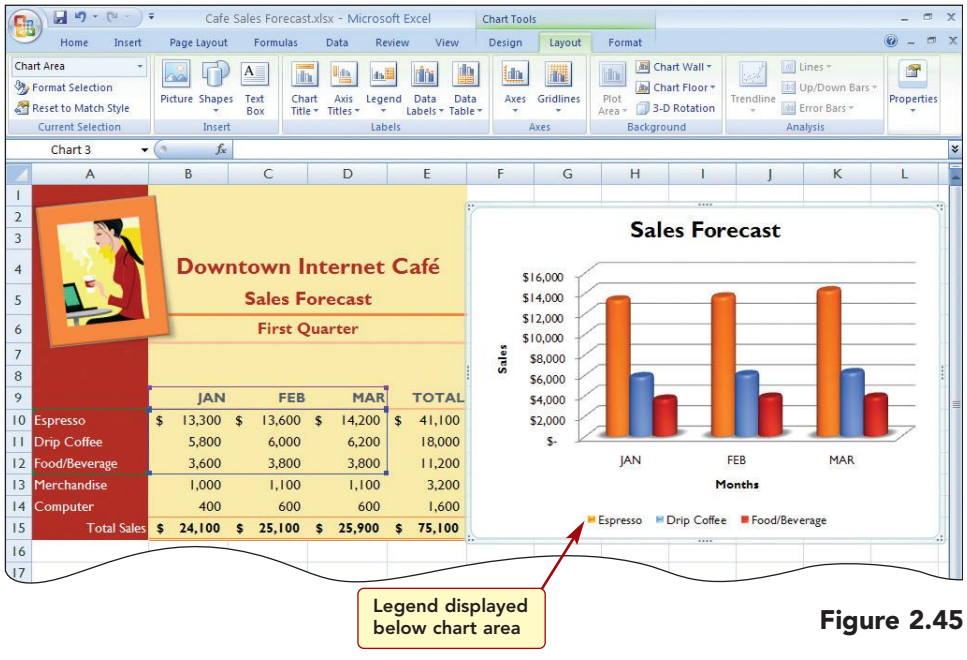


Figure 2.45

The legend appears below the plot area of the chart.

Formatting Chart Elements

Next, you want to further improve the appearance of the chart by applying additional formatting to the chart titles. The chart is an object made up of many different objects or chart elements. Each element of a chart can be enhanced individually to create your own custom style chart. Because a chart consists of many separate objects, it is a group.

Concept 9

Group

9 A **group** is two or more objects that behave as a single object when moved or sized. A chart consists of many separate objects. For example, the chart title is a single object within the chart object. Some of the objects in a chart are also groups that consist of other objects. For example, the legend is a group object consisting of separate items, each identifying a different data series.



Other objects in a chart are the axis lines, a data series, a data marker, the entire plot area, or the entire chart.

There are several methods you can use to select chart elements. One is to click on the element. To help you select the correct chart element, the element name displays when you point to a chart element. Another is to select the element from the Chart Area drop-down list in the Format tab. Finally, you also can use the arrow keys located on the numeric keypad or the directional keypad to cycle from one element to another. The keyboard directional keys used to select chart elements are described in the following table.

Press	To
↓	Select the previous group of elements in a chart.
↑	Select the next group of elements in a chart.
→	Select the next element within a group.
←	Select the previous element within a group.
Esc	Cancel a selection.
Tab	Select the next object or shape in the chart.
Shift + Tab	Select the previous object or shape in the chart.

There are also several different methods you can use to format chart elements. These methods will be demonstrated as you add formatting to the chart.

The first formatting change you want to make is to increase the font size and add color to the chart title.

1. **Right-click on the chart title to select it and open the shortcut menu.**
2. **From the Mini toolbar, select Tahoma as the font type.**
3. **Change the font size to 20.**
4. **Select the Orange, Accent 1, Darker 25% theme font color.**

Your screen should be similar to Figure 2.46

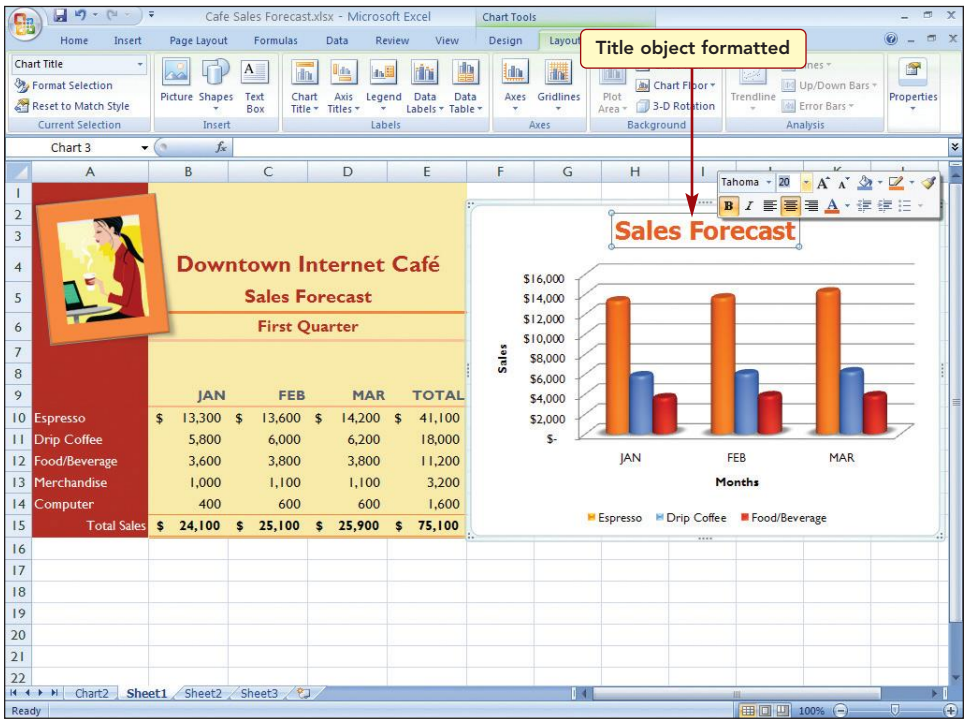


Figure 2.46

Your formatting selections were applied to all the text in the selected object.

Next, you want to add a subtitle below the main title. It will be in a smaller font size and italicized. You also can select individual sections of text in an object and apply formatting to them just as you would format any other text entry.

2 **Click at the end of the title to place the insertion point.**

- **Press** ↵Enter.
- **Type First Quarter.**
- **Triple-click on the second title line to select it.**
- **Use the Mini toolbar to italicize the selection.**
- **Change the font size to 14.**
- **Apply the Red, Accent 3 theme color to the subtitle.**
- **In a similar manner, apply the Red, Accent 3 theme color to the axis titles.**

Your screen should be similar to Figure 2.47

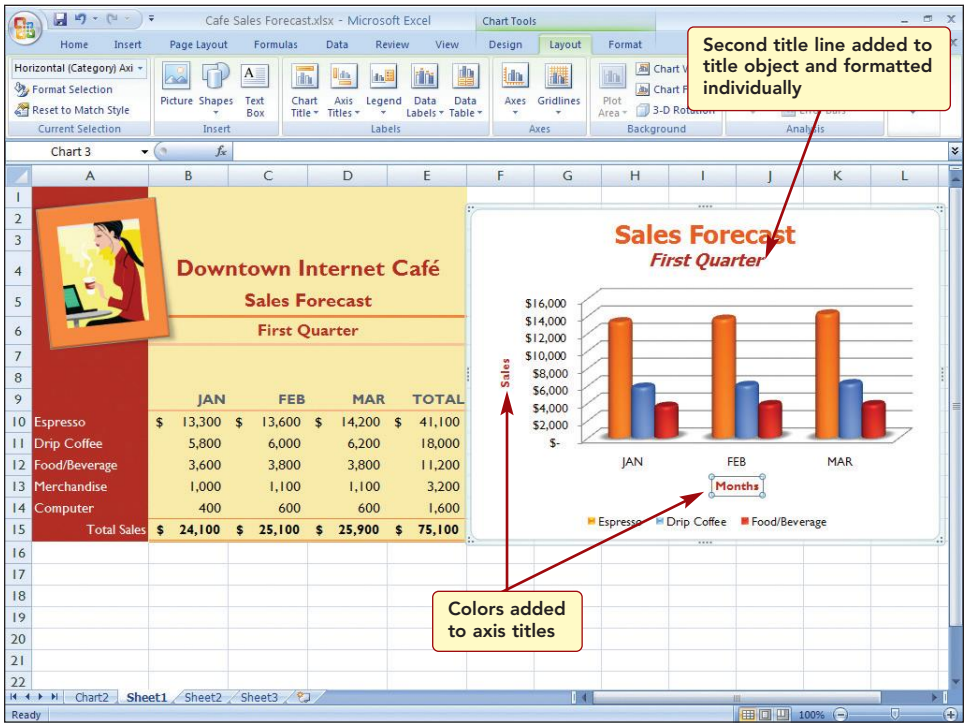


Figure 2.47

Next you decide to add some formatting enhancements to the chart walls and floor.

3. **Open the** Chart Area **Chart Elements drop-down list in the Current Selection group.**

- **Choose Back Wall.**
- **Click** Format Selection **in the Current Selection group.**

Additional Information
The corners of the selected element are marked with circles.

Your screen should be similar to Figure 2.48

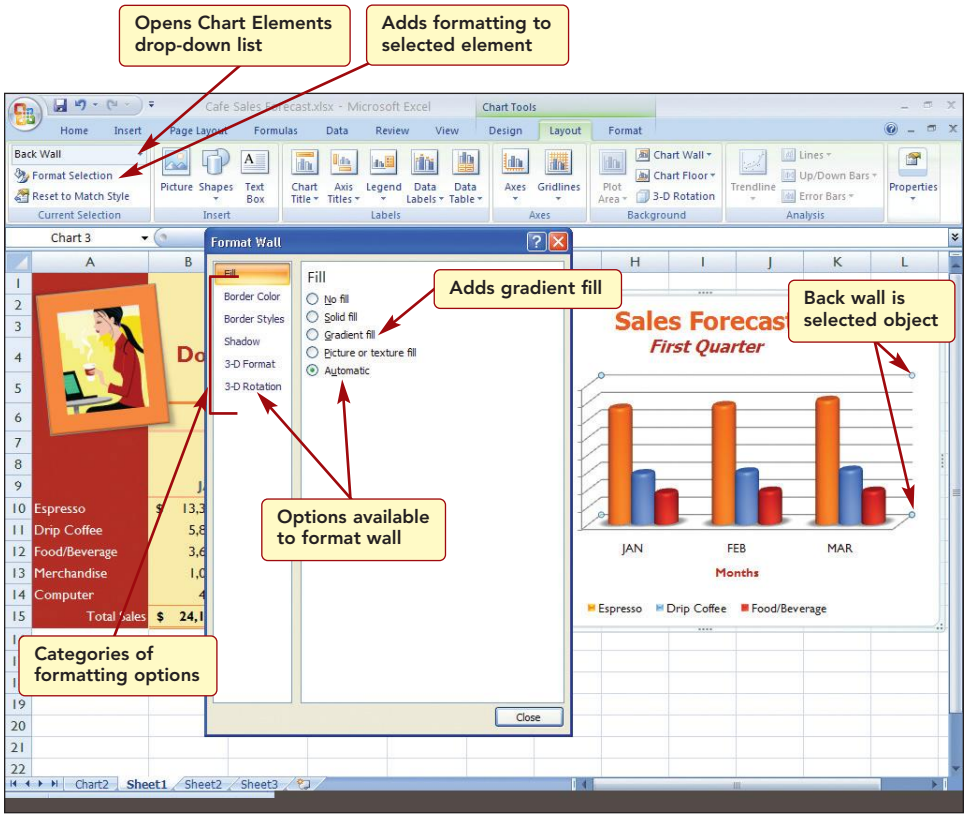


Figure 2.48

From the Format Wall dialog box, you can change the wall fill colors, outside border, and style, and add shadow, 3-D format, and rotation effects. Fill is the currently selected category and shows that the fill colors use the default fill settings that were automatically set by Excel. You decide to add a gradient fill to the background and a solid line around the chart wall. A **gradient** is a gradual progression of colors and shades that can be from one color to another or from one shade to another of the same color. Excel includes several preset colors that include combinations of gradient fills.

5 **Press ← to select the chart side wall.**

Additional Information
The Chart Element box displays the name of the selected element.

- **Click Format Selection.**
- **Choose Solid Fill.**
- **Increase the Transparency to 40%.**

Having Trouble?
Drag the transparency slider, use the scroll arrows, use the ↑ and ↓ keys, or type the percentage value to change the transparency percentage.

- **Click on the chart floor to select it.**
- **Change the chart floor to the same color and transparency as the side wall.**
- **Click Close.**

Your screen should be similar to Figure 2.50

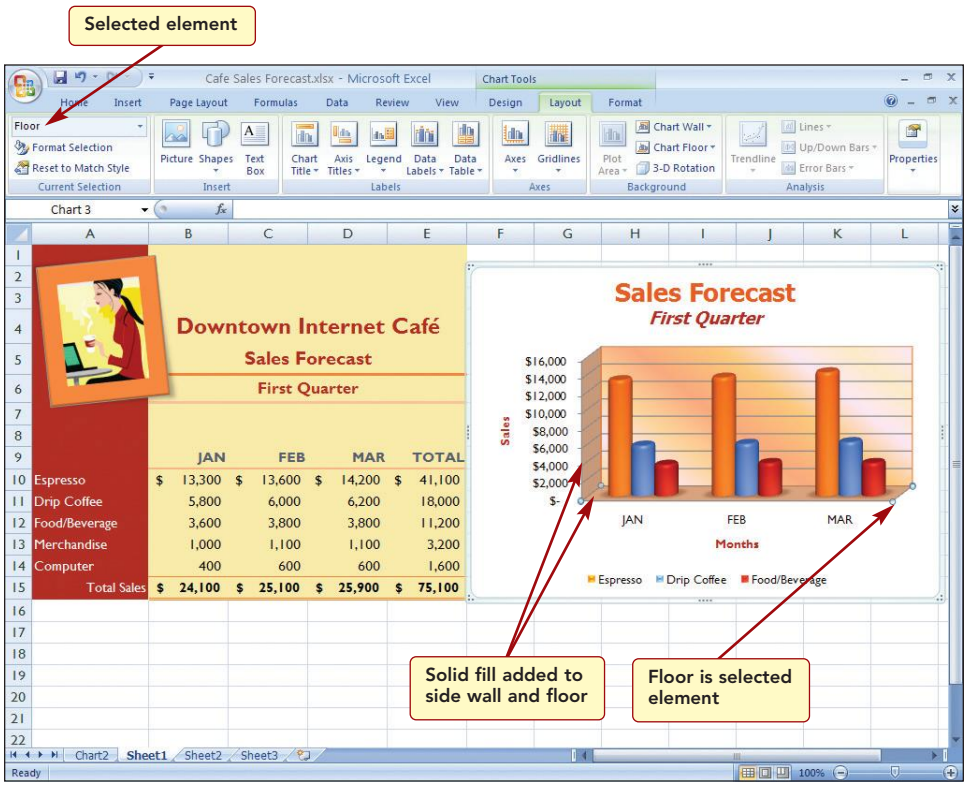


Figure 2.50

The last formatting change you will make is to modify the border line around the entire chart object.

6 **Click on the chart area (the white background) to select the entire chart.**

- **Open the Format tab.**
- **Click** Shape Outline **in the Shape Styles group.**
- **Select Weight and choose 2 1/4 points.**
- **Click** Shape Outline **.**
- **Choose the Red, Accent 3 theme color.**
- **Click outside the chart to deselect it.**

Your screen should be similar to Figure 2.51

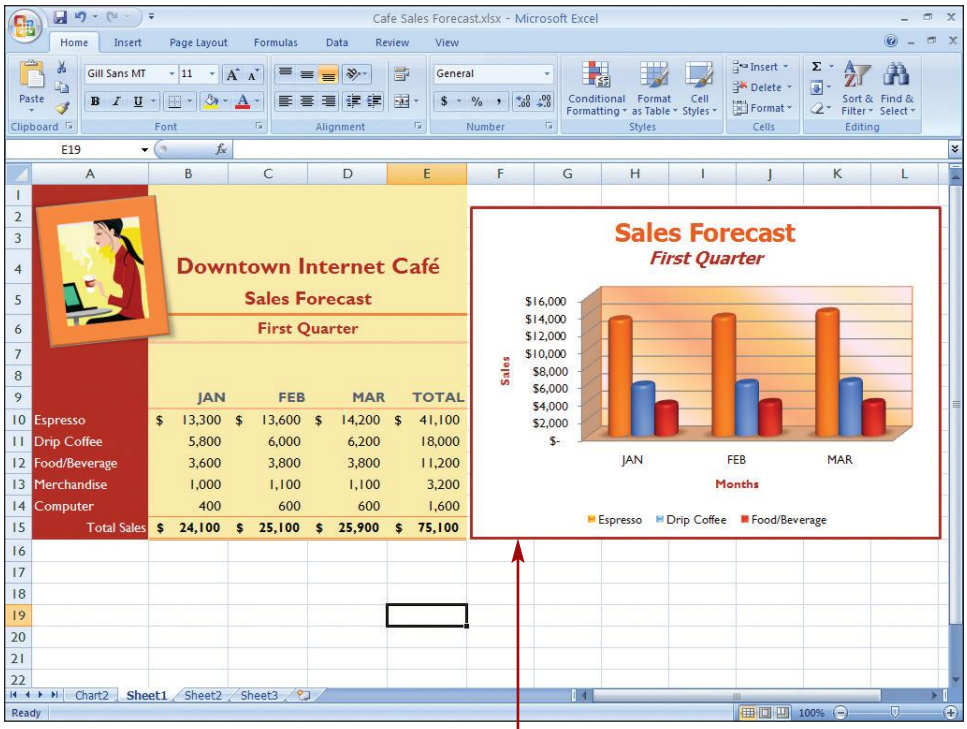


Figure 2.51

Additional Information

You also can use Shape Fill or Shape Effects to add fill color or special effects to a shape.

You have modified and enhanced many of the chart elements individually, creating a unique, professional-looking chart.

Adding and Formatting Data Labels

Finally, to make sure that Evan sees your projected increase in espresso and coffee sales, you will include data labels containing the actual numbers plotted on the column chart.

Concept 10

Data Labels

10 **Data labels** provide additional information about a **data marker.** They can consist of the value of the marker, the name of the data series or category, a percent value, or a bubble size. The different types of data labels that are available depend on the type of chart and the data that is plotted.

Value data labels are helpful when the values are large and you want to know the exact value for one data series. Data labels that display a name are helpful when the size of the chart is large and when the data point does not clearly identify the value. The percent data label is used when you want to display the percent of each series on charts that show parts of the whole. Bubble size is used on bubble charts to help the reader quickly see how the different bubbles vary in size.

You want to display the Espresso and Drip Coffee values as data labels for the months of February and March.

1. **Click on any Espresso data column to select the series.**
2. **Right-click the selection and choose Add Data Labels.**
3. **Add data labels for the Drip Coffee sales.**

Another Method

You also could use Data Labels in the Chart Tools Layout tab to add data labels.

Your screen should be similar to Figure 2.52

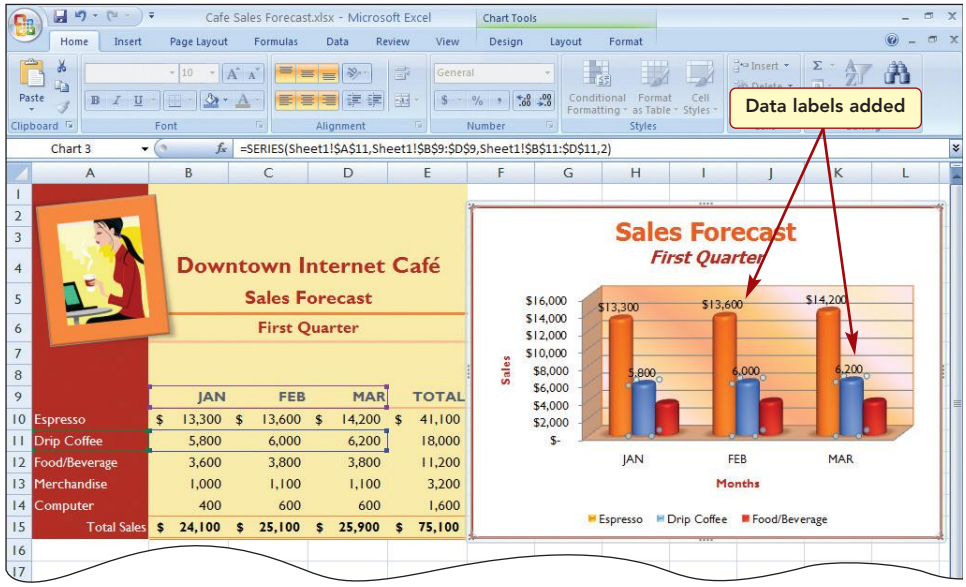


Figure 2.52

Data labels containing the actual values for Espresso and Drip Coffee sales are displayed above the appropriate sales columns on the chart. They use the same formatting as the values in the worksheet.

Data labels, like other chart elements, can be further enhanced by adding fill colors, shadows, 3-D effects, lines, and text orientation to the data label. You will use this feature to add the currency symbol to the Drip Coffee data label so the format matches the Espresso labels.

2. **Right-click on the Drip Coffee data labels and choose Format Data Labels from the shortcut menu.**
3. **Select the Number category and choose Currency.**
4. **Reduce the decimal places to 0.**
5. **Click** Close.

Your screen should be similar to Figure 2.53

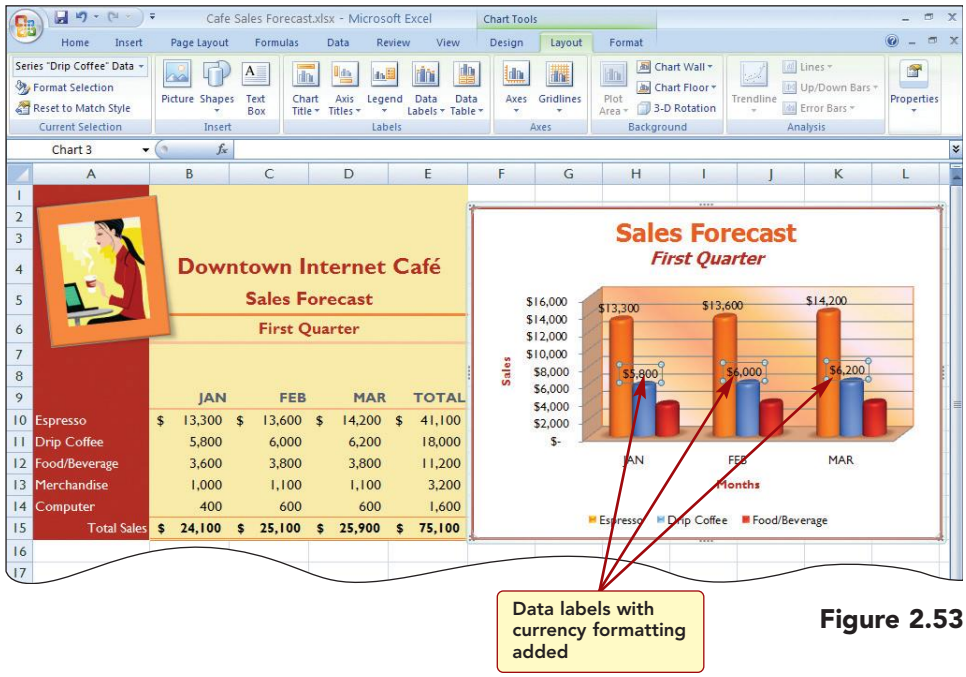


Figure 2.53

Next, you will reposition all the data labels so that they appear to the right of each column. Each data label needs to be selected and moved individually.

3 **Click on the January Drip Coffee data label to select it and drag to position it as in Figure 2.54.**

- **In the same manner, select the February and March Drip Coffee data labels and drag to position them as in Figure 2.54.**

Having Trouble?

To select an individual data label, first click on a data label to select the entire series, and then click on the individual label.

- **Select each Espresso data label and drag to position it as in Figure 2.54.**

Your screen should be similar to Figure 2.54

Additional Information

You can delete individual data labels or the entire series by selecting the data label or series and pressing Delete or choosing Delete from the shortcut menu.

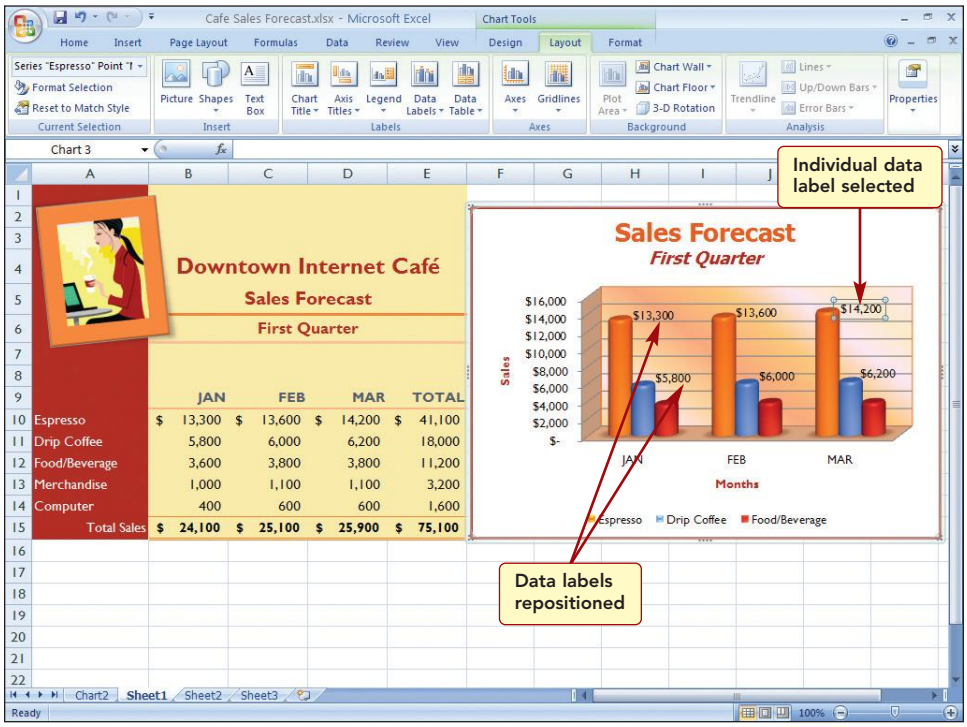


Figure 2.54

The data labels are positioned to the top-right of each column.

Changing Worksheet Data

So far, the charts you have created reflect your original sales estimates for the quarter. You are planning to heavily promote the new Internet aspect of the Café and anticipate that Espresso, Coffee, and Food/Beverage sales in February and March will increase dramatically and then level off in the following months. You want to change the worksheet to reflect these increases.

1. **Increase the February and March Espresso sales by 12% and 15% respectively.**

Having Trouble?

Change the entry to a formula by inserting an = sign at the beginning of the entry and then multiply by 1+ increase; for example, a 12 percent increase in the February Espresso sales is = 13600*1.12.

- **Increase the February and March Drip Coffee sales by 8% and 10%.**
- **Increase the February and March Food/Beverage sales by 5% and 7%.**

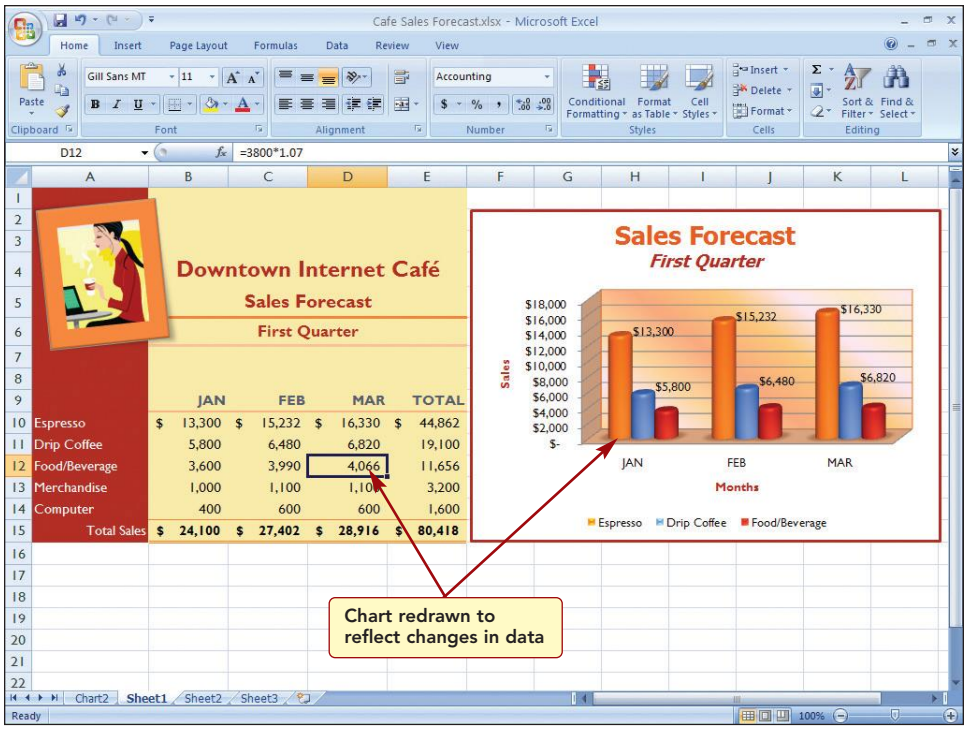


Figure 2.55

Your screen should be similar to Figure 2.55

The worksheet has been recalculated, and the chart columns that reference those worksheet cells have been redrawn to reflect the change in the sales data. Because the chart is linked to the source data, changes to the source data are automatically reflected in the chart. Likewise, the values in the data labels reflect the revised data.

2. **Move the chart to its own chart sheet.**
- **Make Sheet1 active again.**
- **Save the workbook.**

Creating and Formatting a Pie Chart

The last chart you will create will use the Total worksheet data in column E. You want to see what proportion each type of sales is of total sales for the quarter. The best chart for this purpose is a pie chart.

A pie chart compares parts to the whole in a similar manner to a stacked-column chart. However, pie charts have no axes. Instead, the worksheet data that is charted is displayed as slices in a circle or pie. Each slice is displayed as a percentage of the total.

Selecting the Pie Chart Data

Additional Information
You also can create a chart using the default chart type (column) in a new chart sheet by selecting the data range and pressing F11.

The use of X (category) and data series settings in a pie chart is different from their use in a column or line chart. The X series labels the slices of the pie rather than the X axis. The data series is used to create the slices in the pie. Only one data series can be specified in a pie chart.

The row labels in column A will label the slices, and the total values in column E will be used as the data series.

1. **Select A10:A14 and E10:E14.**

Having Trouble?
Hold down Ctrl while selecting nonadjacent ranges.

- **Open the Insert tab.**
- **Click**  **and choose**  **Pie in 3-D.**
- **Move and size the pie chart to be displayed over cells F1 through L15.**

Additional Information
Hold down Alt while moving to snap the chart to the cells.

Your screen should be similar to Figure 2.56

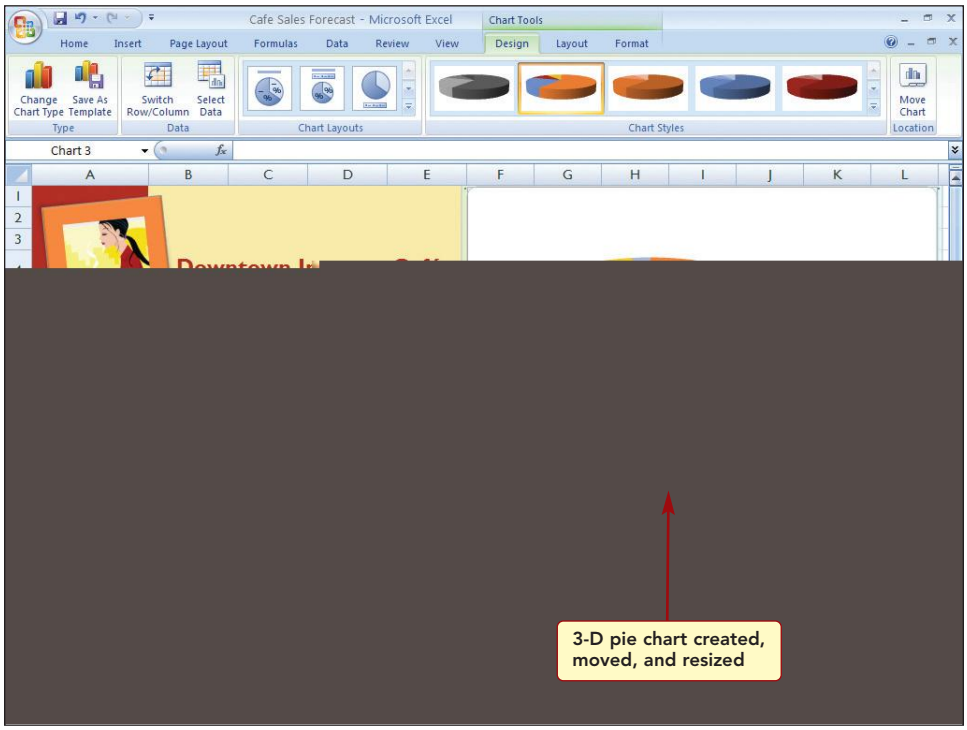


Figure 2.56

A three-dimensional pie chart is drawn in the worksheet. Each value in the data series is displayed as a slice of the pie chart. The size of the slice represents the proportion of total sales that each sales category represents.

Adding Titles and Data Labels

To clarify the meaning of the chart, you need to add a chart title. In addition, you want to remove the legend and display data labels to label the slices of the pie instead. You will take a look at the predefined chart layouts to see if there is a layout that will accomplish all these things in one step.

1. **Click More in the Charts Layout group of the Design tab.**

2. **Choose Layout 1.**

Your screen should be similar to Figure 2.57

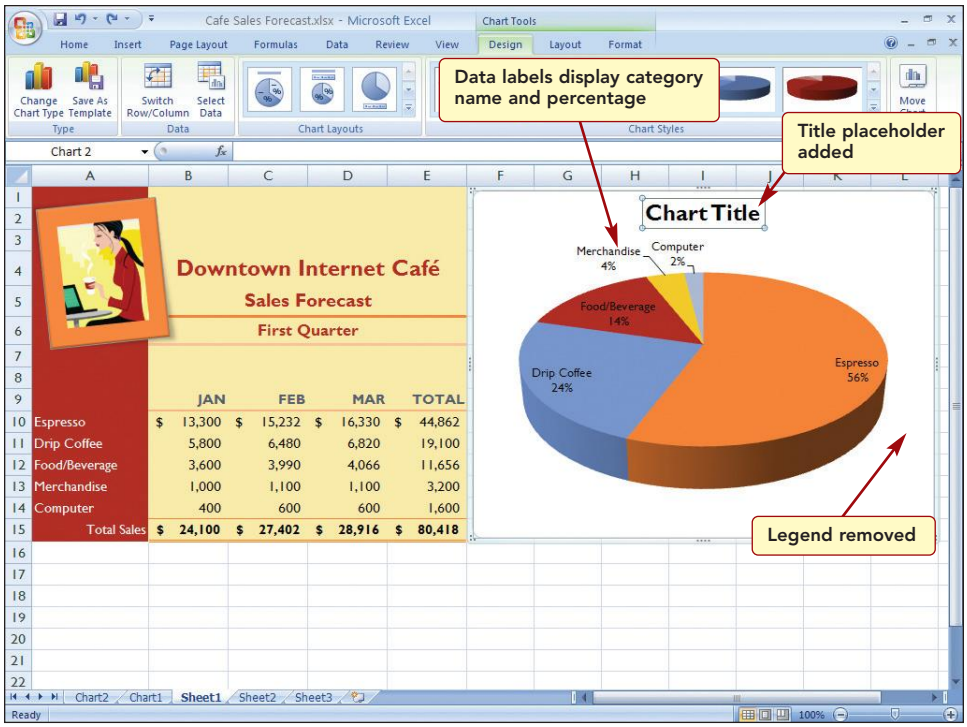


Figure 2.57

The legend has been removed and replaced with data labels that display the category name and the percentage each category is of total sales. The data labels display the category name on a separate line from the value and, if needed, include a leader line to identify the associated wedge. Also, a chart title placeholder has been added to the pie chart.

Next, you will add a title and then you will improve the appearance of the data labels by adding a gradient fill to the labels.

2. **Replace the chart title with Total Sales by Category.**

- **Add the subtitle First Quarter.**
- **Change the first title line to Tahoma, 18 pt with the Red, Accent 3 color and bold.**
- **Change the subtitle line to Tahoma, 14 pt, with the Orange, Accent 1 color, and italic.**
- **Click on one of the data labels to select the data label series.**
- **Choose Format Data Label Series from the context menu.**
- **Choose the Fill category and choose Gradient Fill.**
- **Move the dialog box to see the chart.**

Your screen should be similar to Figure 2.58

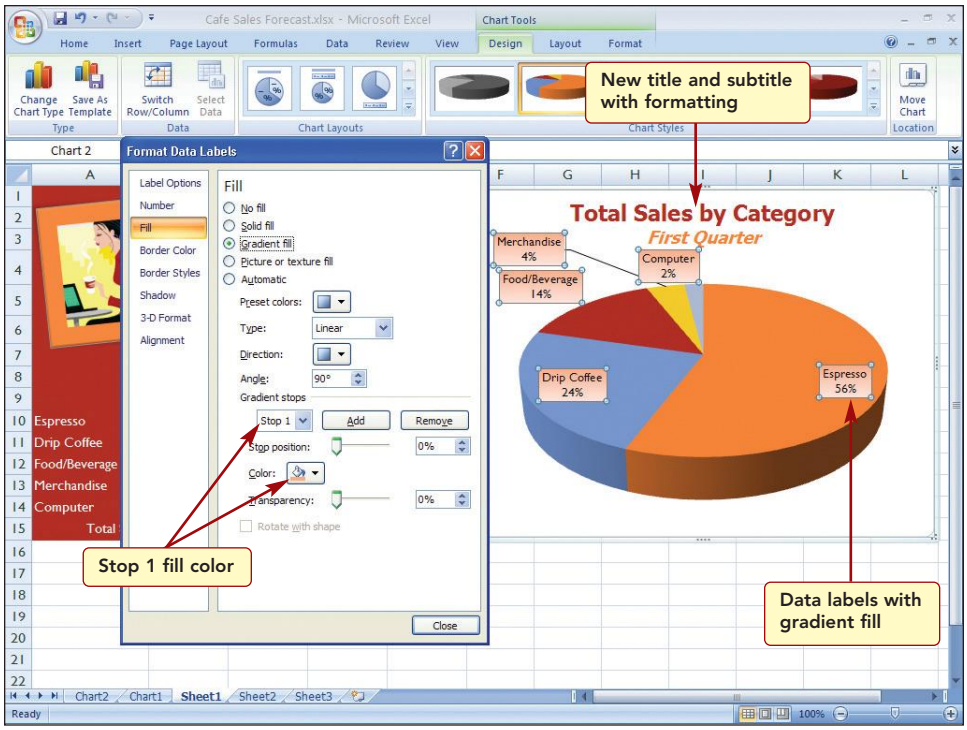


Figure 2.58

The default gradient fill has been added to each data label. You want to change the fill to a gradient fill composed of two colors. Each color is specified as a separate gradient stop. The Stop 1 fill color of orange is already correctly specified. You will change the Stop 2 color to gold.

3. **Open the Gradient Stops drop-down menu and choose Stop 2.**

4. **Open the Color gallery and choose Gold, Accent 4, Lighter 40%.**

5. **Click** Close.

Your screen should be similar to Figure 2.59

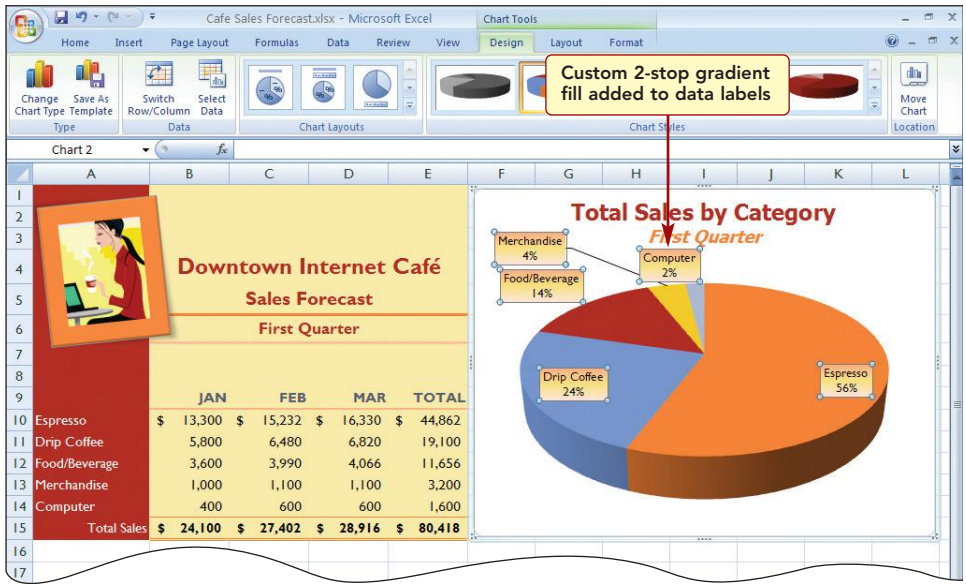


Figure 2.59

The data labels now include a gradient fill background that coordinates well with the chart colors.

The pie chart clearly shows the percent each category is of the total sales. The industry standard for a successful espresso café generates 60 percent of sales from espresso-based drinks. With your suggested advertising campaign, your sales forecast is very close to this standard.

Exploding and Rotating the Pie

Next, you want to separate slightly or **explode** the slices of the pie to emphasize the data in the categories.

1. **Right-click the pie chart and choose Change Series Chart Type.**

2. **Choose**  **Exploded Pie in 3-D.**

3. **Click** OK.

Your screen should be similar to Figure 2.60

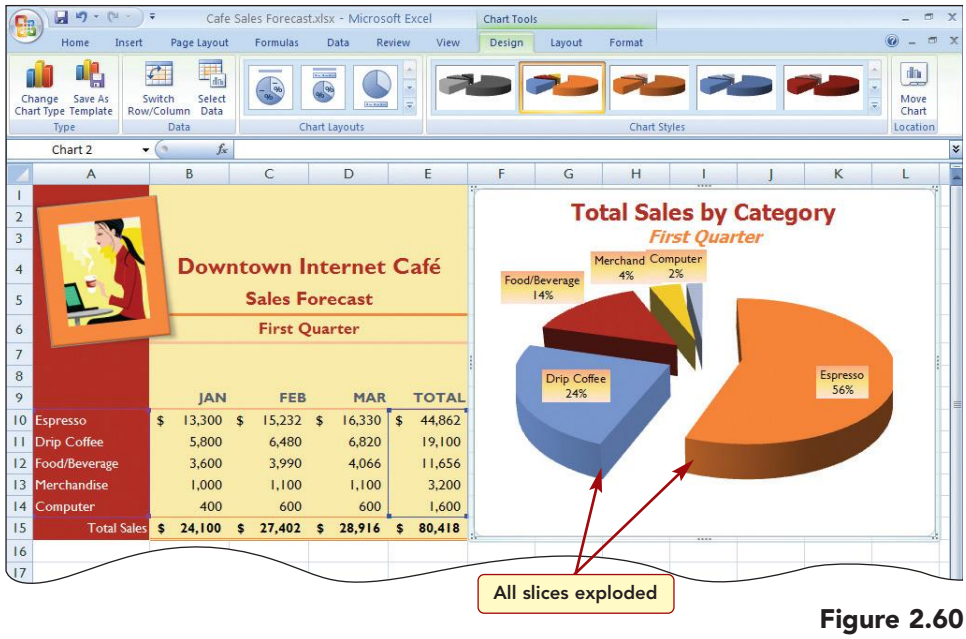


Figure 2.60

All slices are exploded from the center of the pie chart.

You decide you only want to explode the espresso slice to give emphasis to the increase in sales in that category.

2. **Click Undo to cancel your last action.**

- **Select the Espresso slice.**
- **Choose Format Data Point from the context menu.**

Having Trouble?

If Format Data Point is not displayed, the slice is not selected. Double-click on the slice to select it.

Your screen should be similar to Figure 2.61

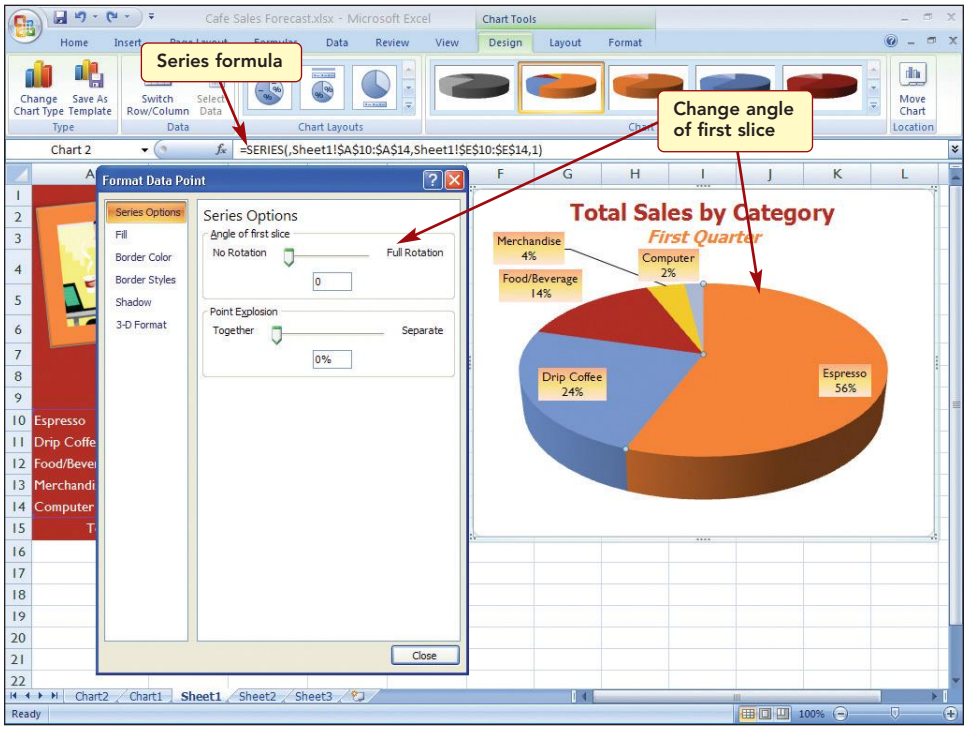


Figure 2.61

Notice that the formula bar displays a **series formula.** A series formula links the chart object to the source worksheet, in this case, Sheet1. The formula contains four arguments: a reference to the cell that includes the data series name (used in the legend), references to the cells that contain the categories (X-axis numbers), references to the numbers plotted, and an integer that specifies the number of data series plotted.

The Format Data Point dialog box has options to rotate the pie and control the amount of explosion of the slices. You want to rotate the pie approximately 330 degrees so that the Espresso slice is more to the right side of the pie. When a pie chart is created, the first data point is placed to the right of the middle at the top of the chart. The rest of the data points are placed in order to the right until the circle is complete. To change the order in which the slices are displayed, you rotate the pie chart. Then you will explode the Espresso slice.

3. **Increase the Angle of first slice to 330 degrees.**

   Increase the Point Explosion to 10%.

   Click Close.

Another Method

You also can drag a slice away from the pie to explode it.

Your screen should be similar to Figure 2.62

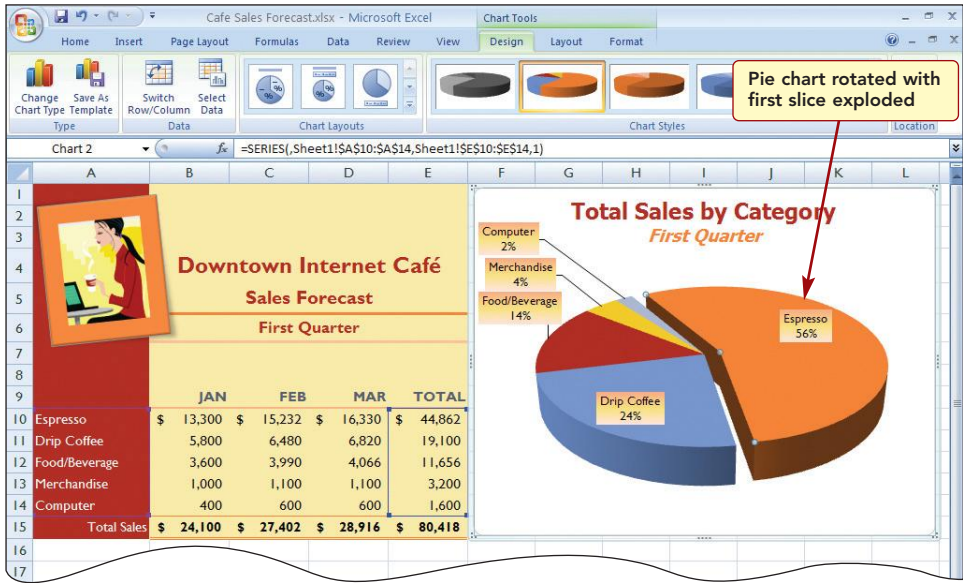


Figure 2.62

Even though the program tries to determine the best position for the data labels, many of the labels are close together and look crowded. In pie charts, you can fix this by changing the position of the data labels.

4. **Select the data label series and choose Format Data Labels from the context menu.**

   Choose Outside End from the Label Position area.

   Click Close.

   Drag the Computer, Espresso, and Drip Coffee labels to the positions shown in Figure 2.63.

Your screen should be similar to Figure 2.63

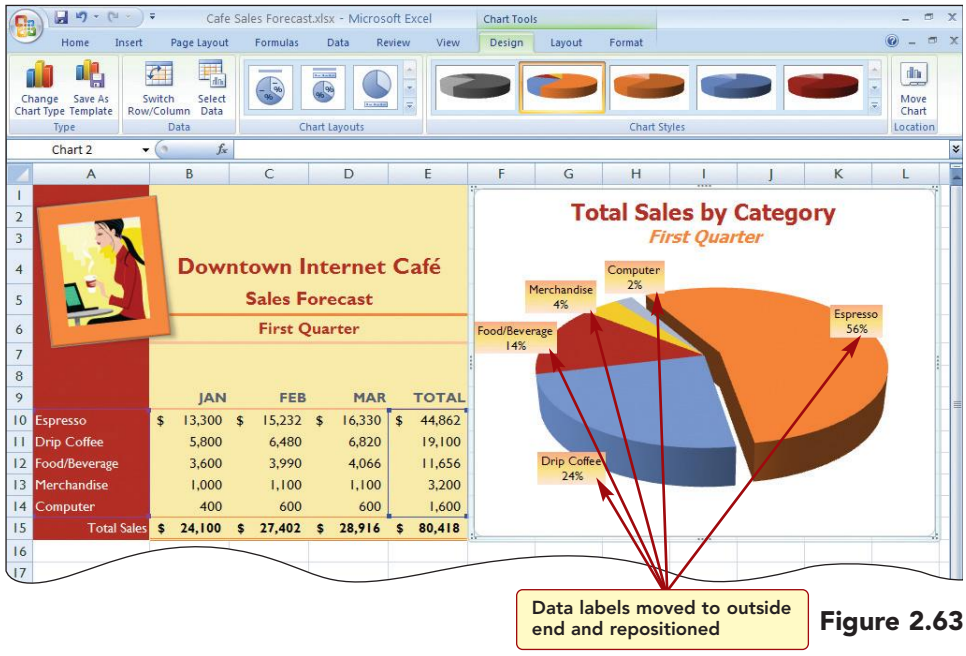


Figure 2.63

Now the labels are more evenly positioned on the pie chart.

Applying Color and Texture

The last change you would like to make is to change the color of the Drip Coffee slice and add a fill to the Espresso slice to make it stand out even further. First, you will enhance the Espresso slice by adding a texture.

1. **Select and then right-click on the Espresso slice.**
2. **Choose Format Data Point.**
3. **Choose Picture or texture fill from the Fill category.**
4. **Open the Texture gallery.**

Your screen should be similar to Figure 2.64

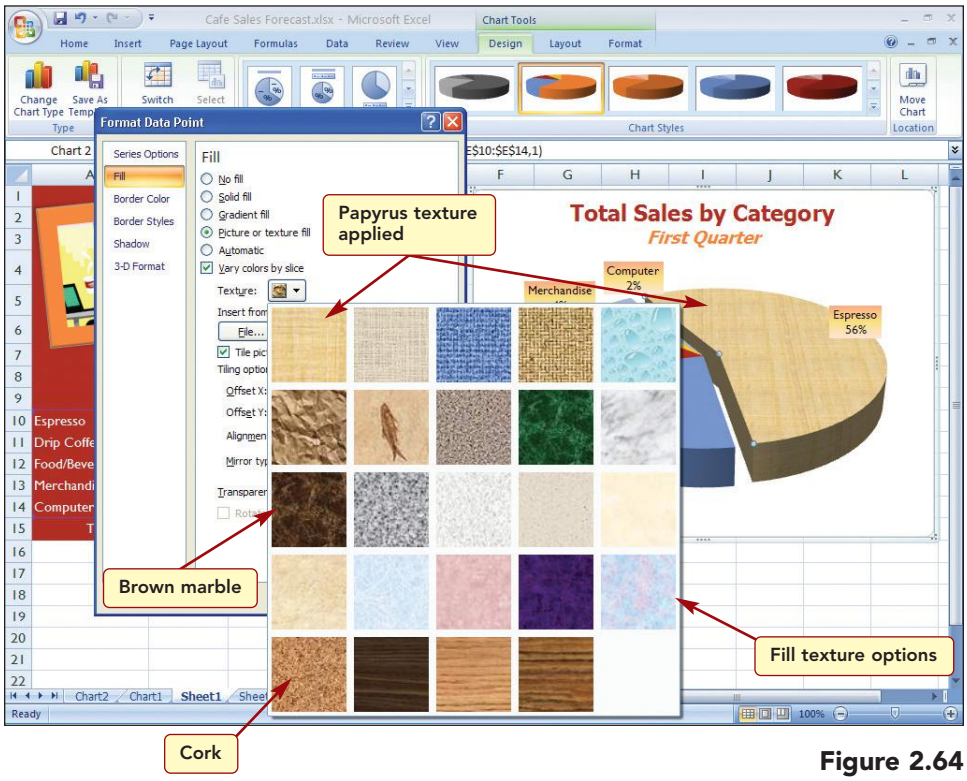


Figure 2.64

Additional Information
The dialog box will stay open as you make different selections and as you select different chart elements.

A variety of pictures and textures is displayed in the gallery. The Papyrus texture is applied by default. If none of the provided choices is suitable, you could use a picture from a file or ClipArt as the fill. You think the brown marble or cork texture may look good.

2. **Choose several texture designs to see how they will look.**

Having Trouble?
You will need to reopen the Texture gallery again after each selection.

- **Choose the Brown Marble texture.**
- **Choose the Cork texture.**
- **Select the Drip Coffee slice.**
- **Choose Gradient fill from the Fill category.**
- **Click** Close.

Your screen should be similar to Figure 2.65

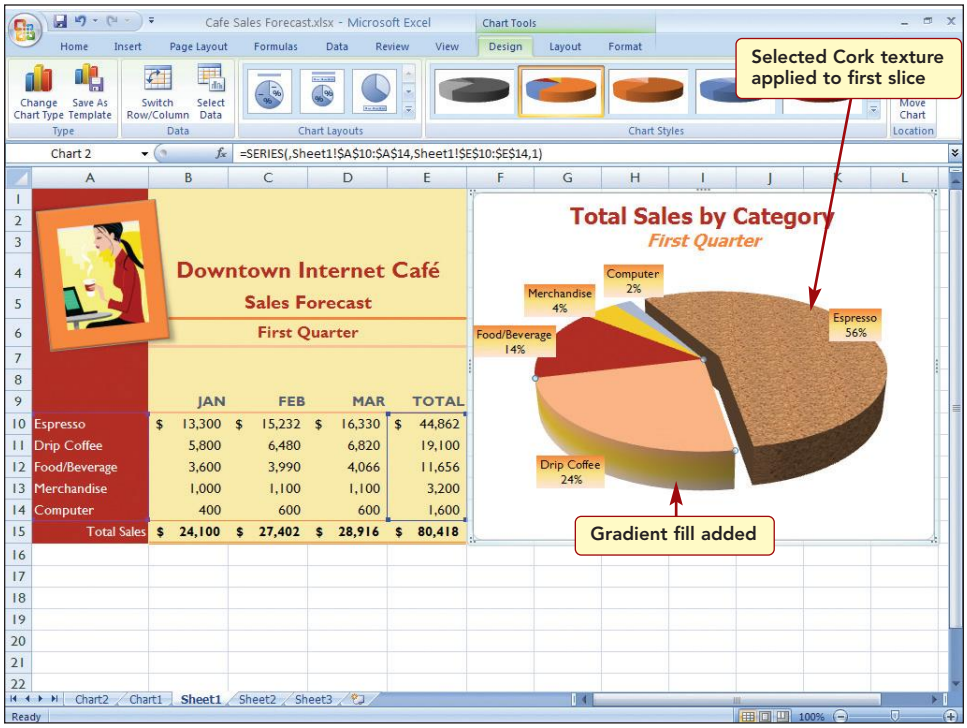


Figure 2.65

The last-used gradient fill colors are automatically applied. You decide, however, that the gradient fill does not look good and instead will try using a Shape Style. Shape Styles consist of predefined combinations of fills, outlines, and effects much like chart styles. Shape styles affect only the selected element.

3. **If necessary, select the Drip Coffee slice.**

- **Open the Format tab.**
- **Open the Shape Styles gallery in the Shape Styles group and point to several styles to see their effect on the slice.**
- **Choose the Subtle Effect – Accent 1 Shape Style (4th row, 2nd column).**

Additional Information

If the style you want to use is displayed in the Ribbon, you can select it without opening the gallery. You also can simply scroll the gallery line by line using the Shape Style scroll buttons.

Your screen should be similar to Figure 2.66

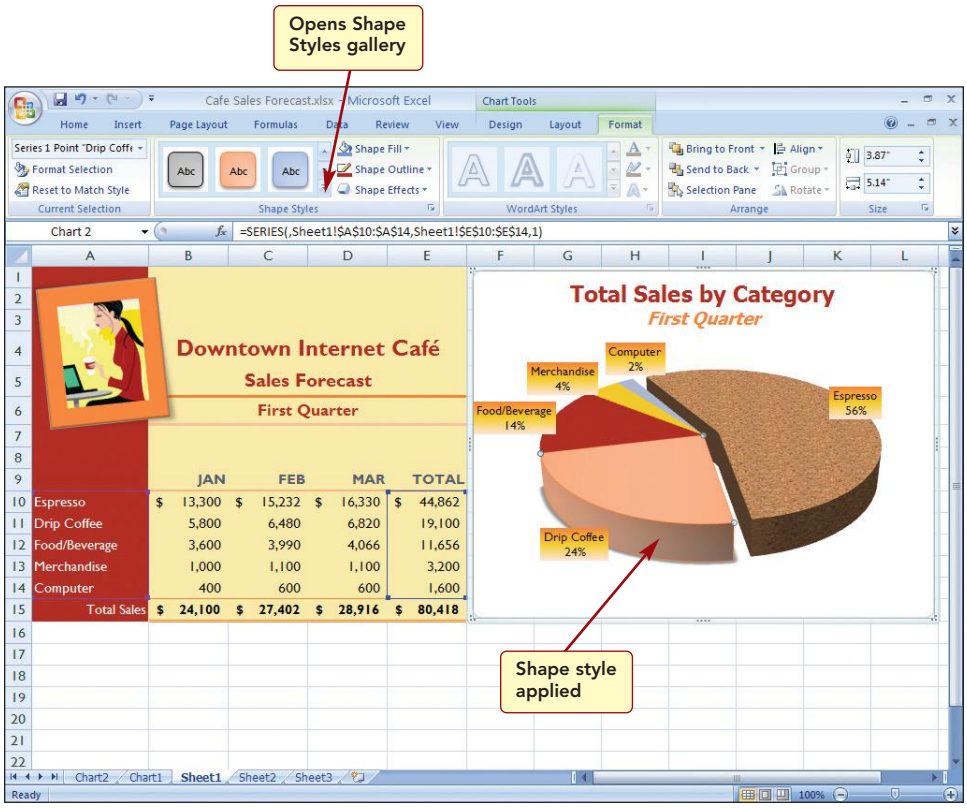


Figure 2.66

Finally, you will add a colored outline border around the entire chart, like the one you used in the column chart. Then you will move the column chart from the chart sheet back into the worksheet.

4. **Select the chart area.**

- **Click** Shape Outline **and increase the Weight to 2¼ points.**
- **Click** Shape Outline **and change the line color to the Red, Accent 3 color.**
- **Make the Chart2 sheet active.**
- **Click** Move Chart **in the Location group of the Design tab.**
- **Choose Object in and select Sheet1 from the drop-down menu.**
- **Click** OK.
- **Move and size the column chart to fit A17 through F33.**
- **Move and size the pie chart to fit A35 through F50.**
- **Deselect the chart.**

Your screen should be similar to Figure 2.67

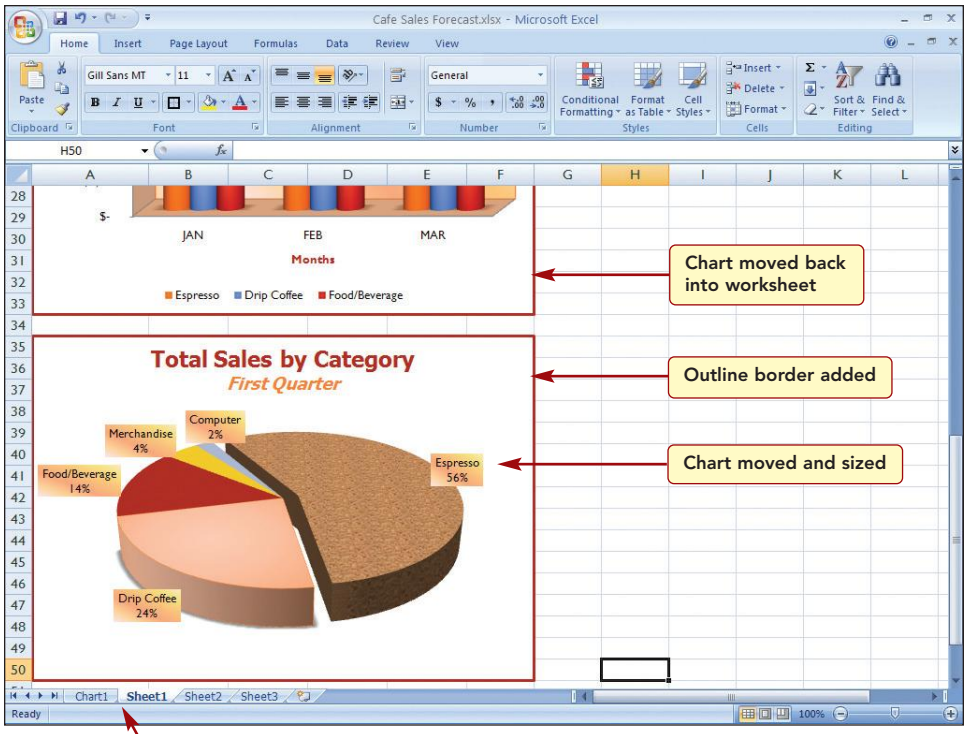


Figure 2.67

The column chart was moved back into the sheet as an embedded object and the chart sheet it occupied was deleted.

Setting File Properties

You are finished working on the worksheet for now and want to save the changes you have made to the file. Along with the content of the file, each file can include additional **file properties** or settings that are associated with the file. Some of these properties are automatically generated. These include statistics such as the date the file was created and last modified. Others, such as the author of the file, are properties that you can add to the file.

Documenting a Workbook

The information you can associate with the file includes a title, subject, author, keywords, and comments about the workbook file. Additionally, you can specify that a picture of the first page of the file be saved for previewing in the Open dialog box. This information helps you locate the workbook file you want to use and helps indicate the objectives and use of the workbook. You will look at the standard and advanced file properties and add documentation to identify you as the author and to specify a title and keywords for the document. **Keywords** are descriptive words that you associate with the file that can be used to search for all files that have that keyword. This information is entered in the Document Information Panel that will appear above the column letters.

1. **Click Office Button, select Prepare, and choose Properties.**

- **Enter the following information in the appropriate boxes of the Document Information Panel:**

Author	Your name
Title	Downtown Internet Cafe
Subject	First quarter sales forecast
Keywords	sales projections

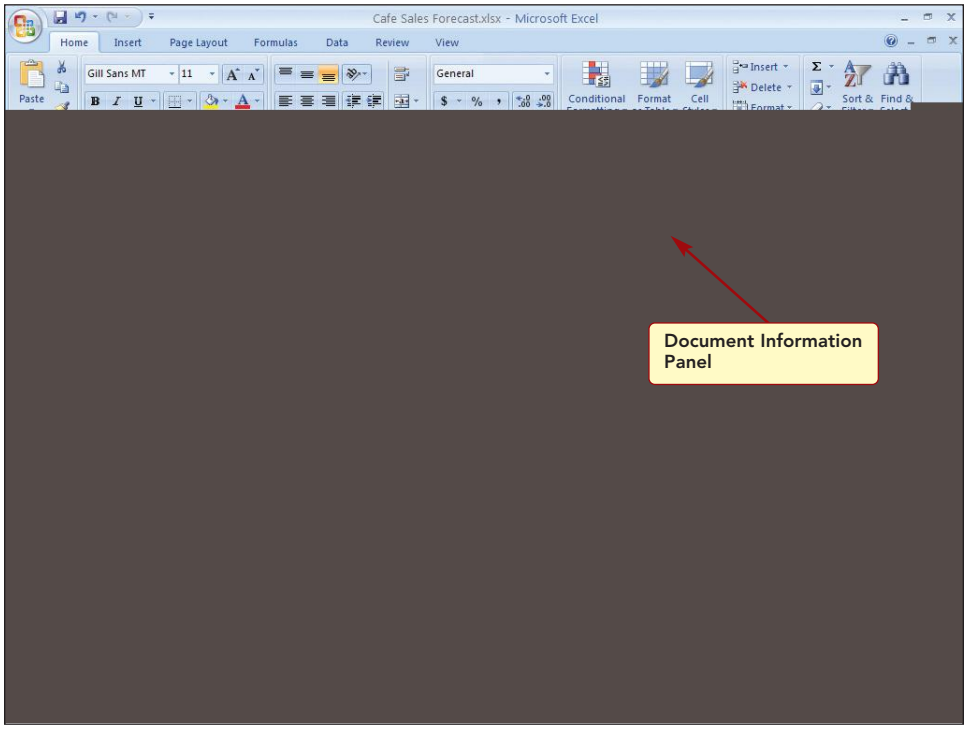


Figure 2.68

Additional Information
The Author text box may be blank or may show your school or some other name. Clear the existing contents first if necessary.

Your screen should be similar to Figure 2.68

The Document Information Panel is used to enter and display the standard properties associated with the file.

Next, you will look at the other information that is stored with the file properties.

2. Click Document Properties and choose Advanced Properties from the menu.
   - Select each tab in the Properties dialog box and look at the recorded information.
   - Open the Summary tab.
   - Select the Save preview picture option, if necessary.

Additional Information
Saving a preview picture with your file increases the file size.

Your screen should be similar to Figure 2.69

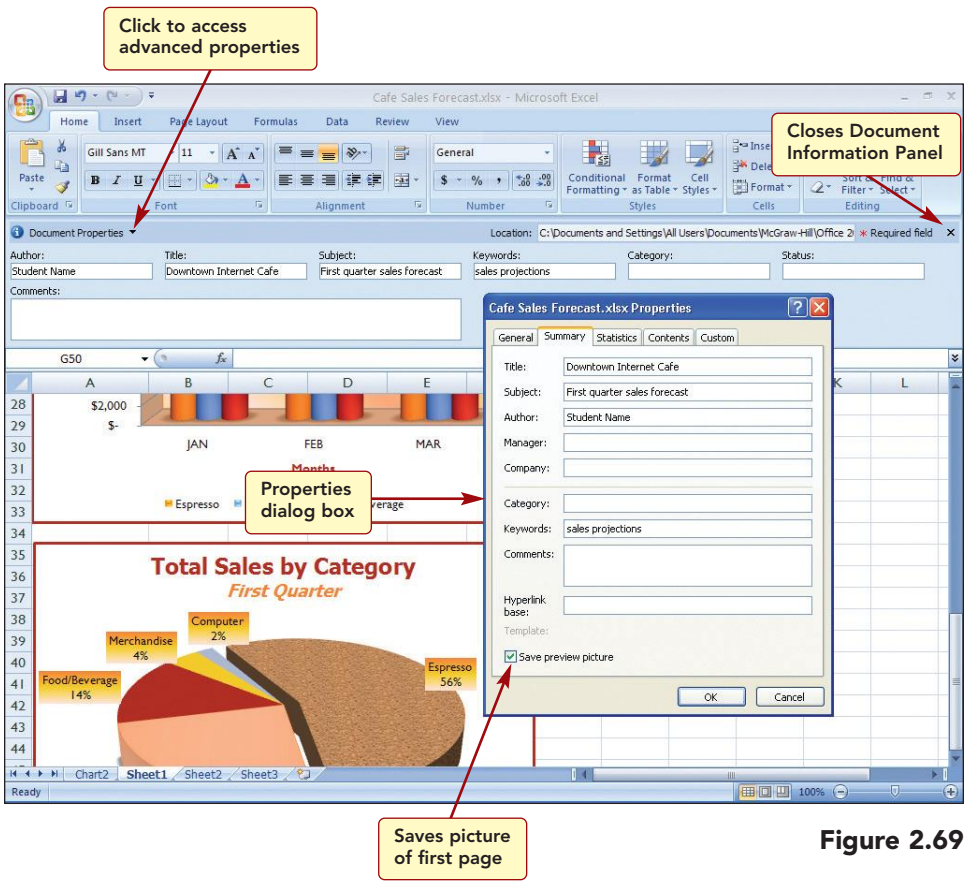


Figure 2.69

The General tab displays information about the type, location, and size of the document as well as about when the document was created and modified. The Statistics tab identifies who last saved the document, the revision number, and the total editing time in minutes. The Summary tab displays much of the same information that appears in the Document Information Panel, plus a few additional properties such as manager and company name that you can define.

You have completed adding the properties to the document. Not until the file is saved are the new properties you added saved with the file.

3. Click OK to close the Properties dialog box.
   - Click × to close the Document Information Panel.
   - Move to the top of the worksheet and save the workbook.

Preparing the Worksheet and Charts for Printing

Before printing a large worksheet or a worksheet that contains charts, you can quickly fine-tune it in Page Layout view. Using this view, you can change the layout and format of data just as in Normal view, but, in addition, you can adjust the layout of the data on the page by changing the page orientation, page margins, scaling, and alignment. Additionally, you can easily add headers and footers.

Using Page Layout View

To get the worksheet ready for printing, you will first make several adjustments to the layout in Page Layout view. While in this view, you also will zoom in on the worksheet to see more information in the workbook window by adjusting the zoom percentage. The default zoom setting is 100 percent. This setting displays data onscreen the same size that it will appear on the printed page. You can reduce or enlarge the amount of information displayed onscreen by changing the magnification from between 10 and 400 percent. You want to decrease the zoom percent to display more information in the window.

Additional Information
The Zoom feature is common in all Office 2007 applications.

There are several methods to zoom the window. Clicking ⊕ or ⊖ on the zoom slider in the status bar increases or decreases the zoom by 10 percent increments. You also can drag the slider to change the percentage.

1 **Click Page Layout view (in the status bar).**

Another Method
You also can use Page Layout in the View tab.

Click Zoom Out in the status bar six times to reduce the zoom to 40%.

Your screen should be similar to Figure 2.70

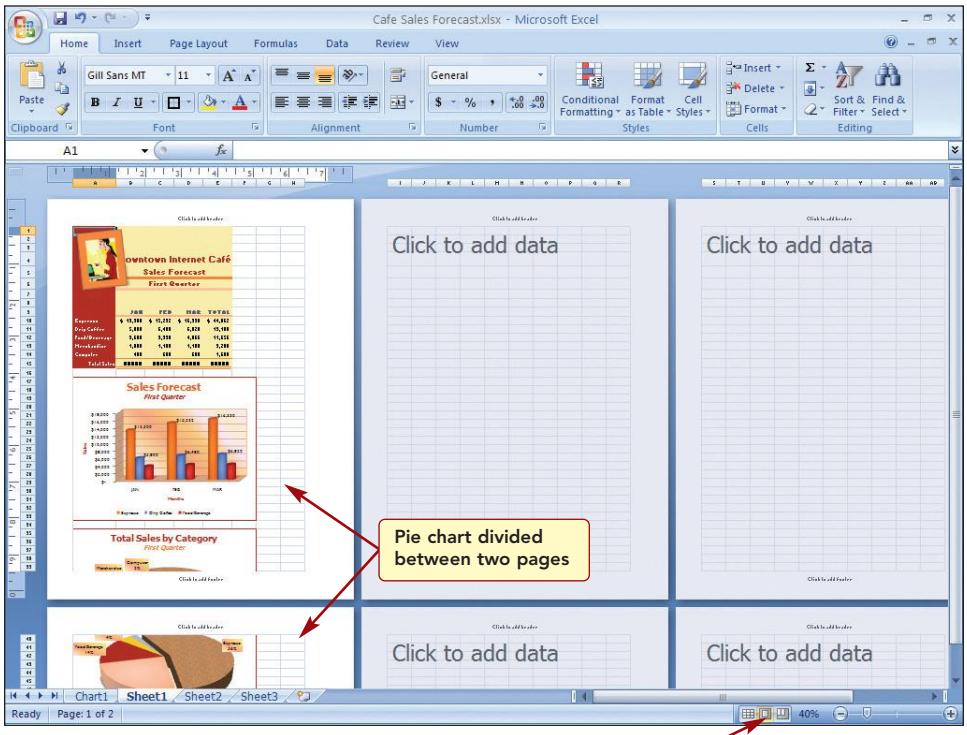


Figure 2.70

This view shows how the data and charts lay out on each page of the worksheet and because you reduced the zoom, you can quickly see that the pie chart is divided between two pages. You also notice that the worksheet and charts are not centered on the page. In Page Layout view, horizontal and vertical rulers are displayed so you can make exact measurements of cells, ranges, and objects in the worksheet. You will make several changes to the layout of the page to correct these problems.

First you will reduce the scale of the worksheet until all the data fits on one page. Because the width is fine, you will only scale the height.

2. **Open the Page Layout tab.**

- **Open the** Height: Automatic **drop-down menu and choose 1 page.**

Your screen should be similar to Figure 2.71

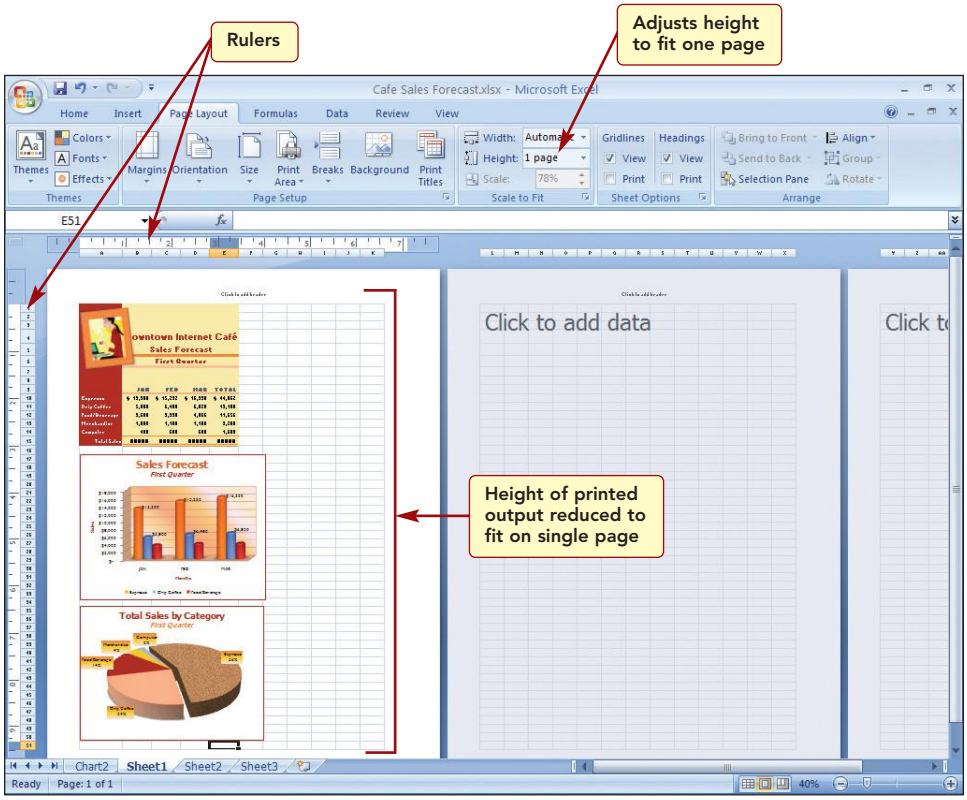


Figure 2.71

The height of the printed worksheet has been reduced to fit on a single page.

Adding Predefined Headers and Footers

Next, you want to include your name and the date in a header.

Concept 11

Headers and Footers

11 Headers and footers provide information that typically appears at the top and bottom of each page and commonly include information such as the date and page number. A **header** is a line or several lines of text that appear at the top of a page just above the top margin line. The header usually contains the file name or worksheet title. A **footer** is a line or several lines of text that appear at the bottom of a page just below the bottom margin line. The footer usually contains the page number and perhaps the date. Headers and footers also can contain graphics such as a company logo. Each worksheet in a workbook can have a different header and footer.

You can select from predefined header and footer text or enter your own custom text. The information contained in the predefined header and footer text is obtained from the file properties associated with the workbook and from the program and system settings.

Header and footer text can be formatted like any other text. In addition, you can control the placement of the header and footer text by specifying where it should appear: left-aligned, centered, or right-aligned in the header or footer space.

You will add a predefined header to the worksheet that displays your name, the date, and page number.

1. **Increase the zoom to 90% and scroll to the top of the worksheet.**
2. **Click in the Header area to activate the header.**
3. **Click**  **in the Header and Footer group of the Header & Footer Tools Design tab.**

Your screen should be similar to Figure 2.72

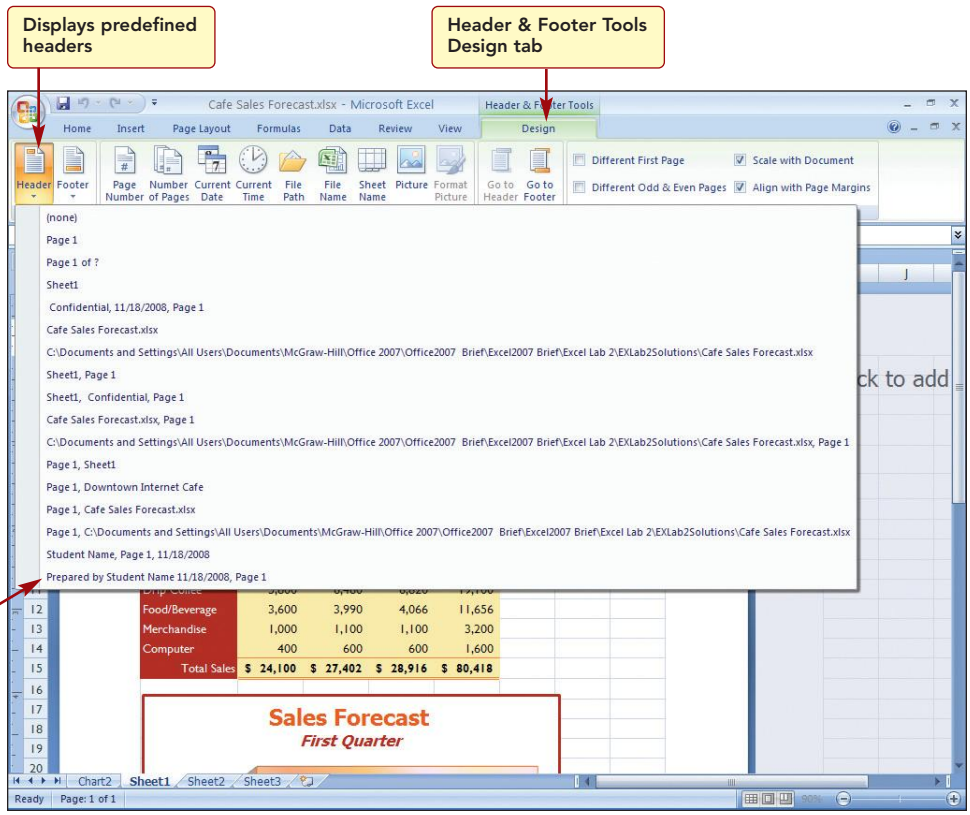


Figure 2.72

Activating the worksheet header displays the Header & Footer Tools Design tab. It contains commands to add elements to, format, or navigate between a header or footer. The Header drop-down list includes many predefined headers that can be quickly inserted into the header. Notice that several of the predefined headers include information that was entered in the document properties.

2. **Choose the Prepared by [your name] [date], Page 1 option.**

Your screen should be similar to Figure 2.73

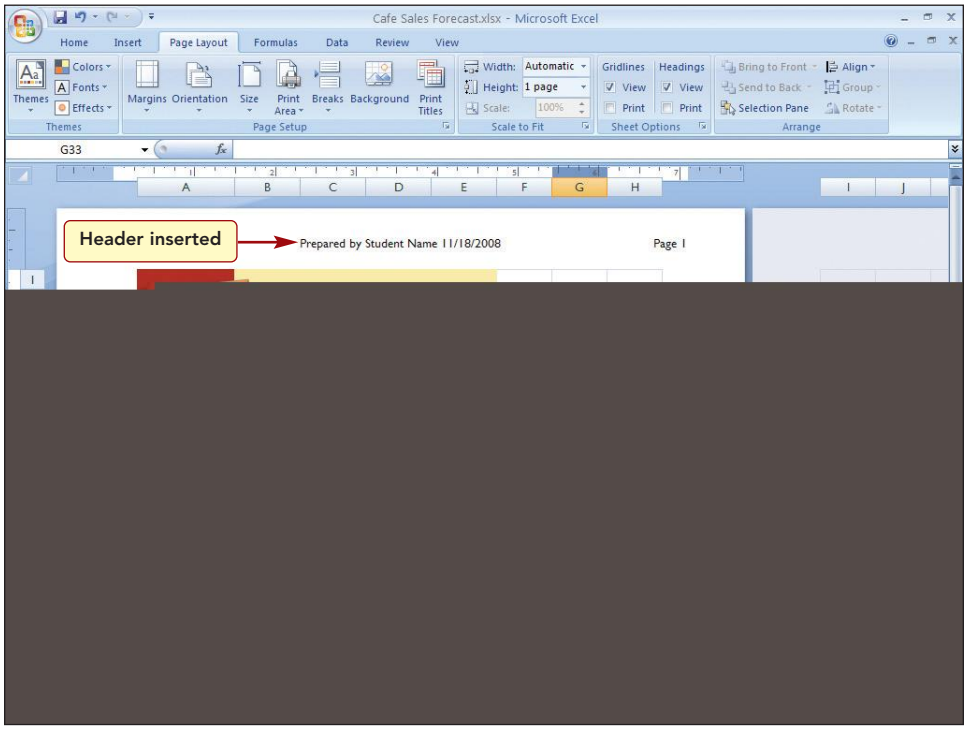


Figure 2.73

The selected header is displayed in the header area of the dialog box. It could then be edited or formatted to meet your needs.

Previewing the Entire Workbook

Finally, you are ready to print the workbook. Because it includes a chart sheet and a worksheet, you will preview the entire workbook. To preview all sheets in a workbook at once, you first need to change the print setting to print the entire workbook.

1. Click Office Button.
2. Choose Print and choose Entire workbook from the Print dialog box.
3. If necessary, select the printer you will use from the Name list box.
4. Click Preview.
5. If necessary, click Zoom to see the entire page.

Your screen should be similar to Figure 2.74

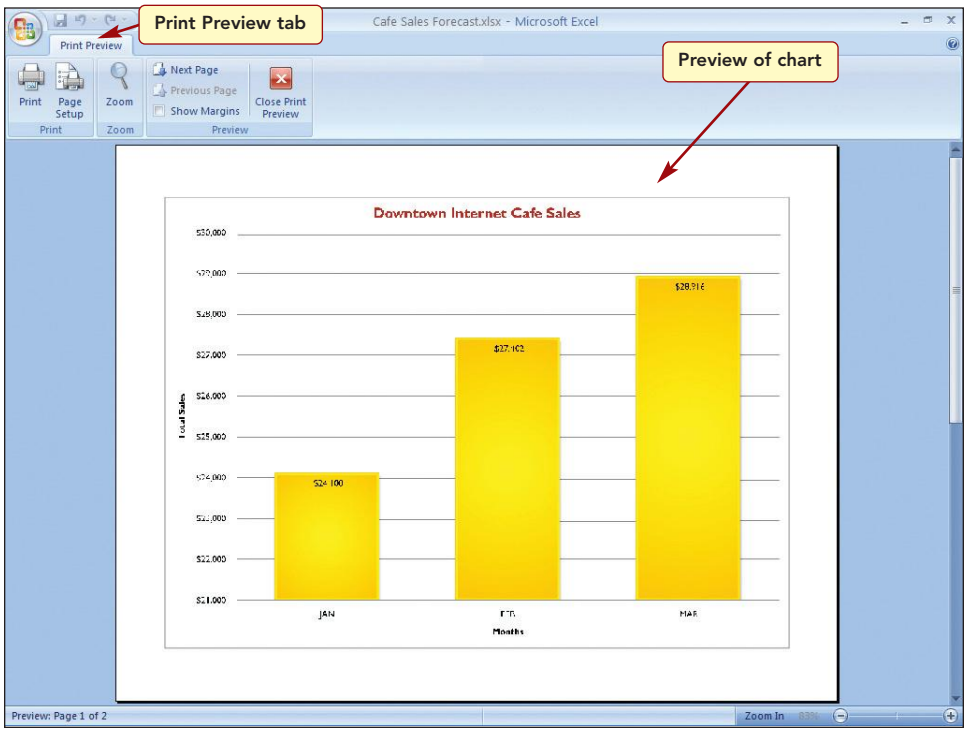


Figure 2.74

Because the column chart is on a separate chart sheet, it is displayed on a page by itself. In addition, if you are not using a color printer, the preview displays the chart colors in shades of gray as they will appear when printed on a black-and-white printer. The Print Preview tab commands are used to access many print and page layout changes while you are previewing a document.

You decide to add a footer to the chart sheet. Each sheet can have its own header and footer definitions.

1. Click Page Setup.
2. Open the Header/Footer tab.

Your screen should be similar to Figure 2.75

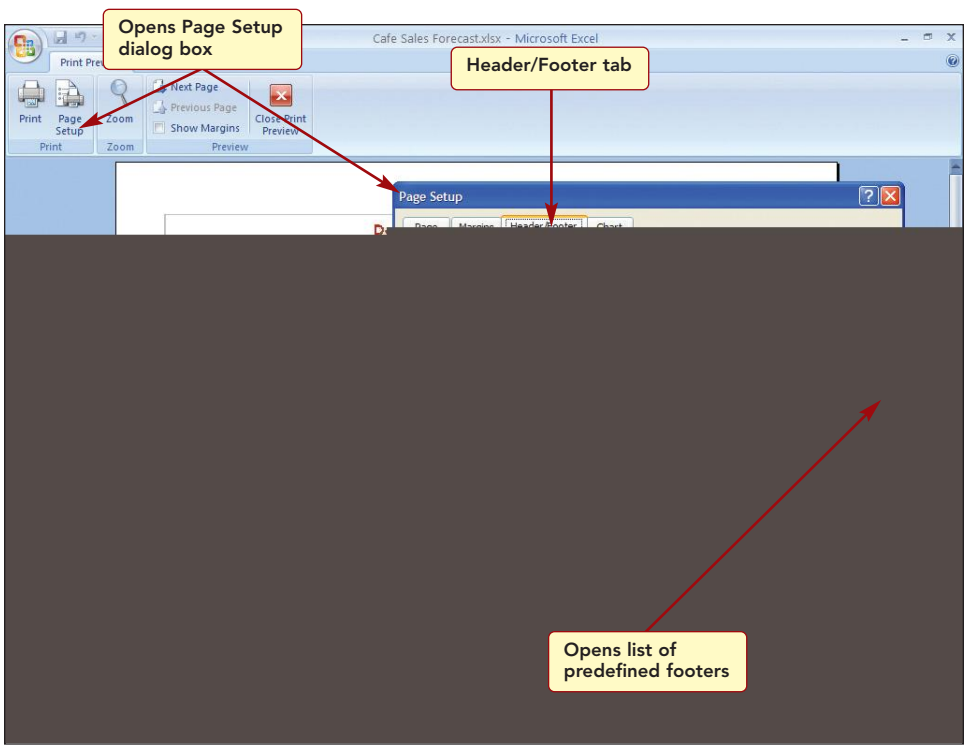


Figure 2.75

Many of the same elements that were available when adding a header in Page Layout view are available in the Page Setup dialog box. You will add a predefined footer to the chart sheet.

3. **Click in the Footer section to open the list of predefined footers.**

   Scroll the list and choose the footer that displays your name, Page 1, and date.

   Click OK to close the Page Setup dialog box.

   Your screen should be similar to Figure 2.76

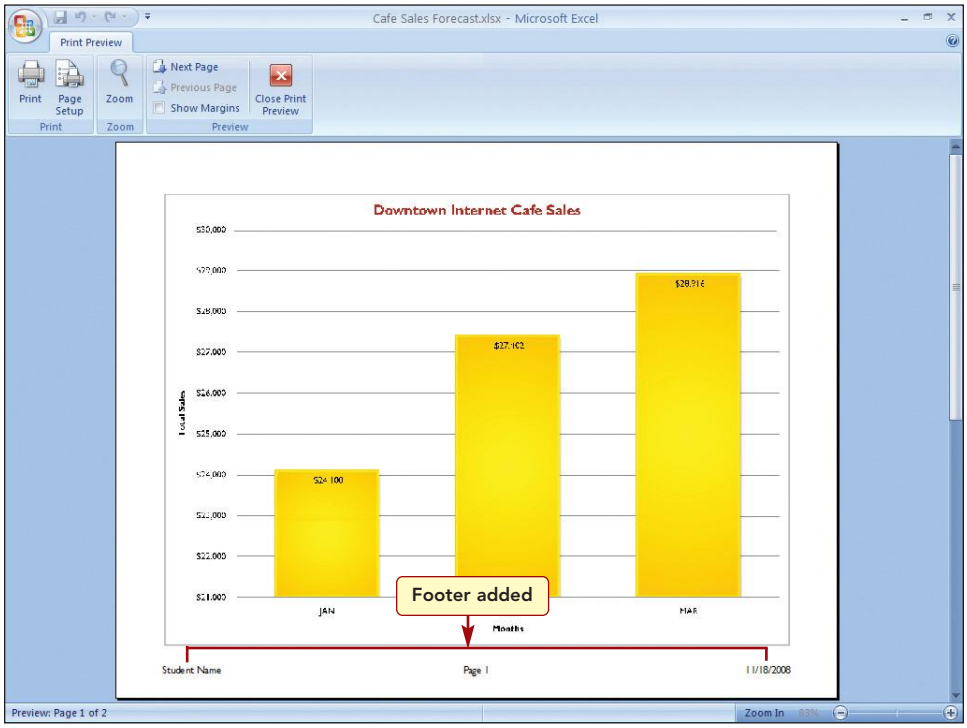


Figure 2.76

4. **Click Next Page in the Preview group to see the worksheet and charts in Sheet1.**

   Your screen should be similar to Figure 2.77

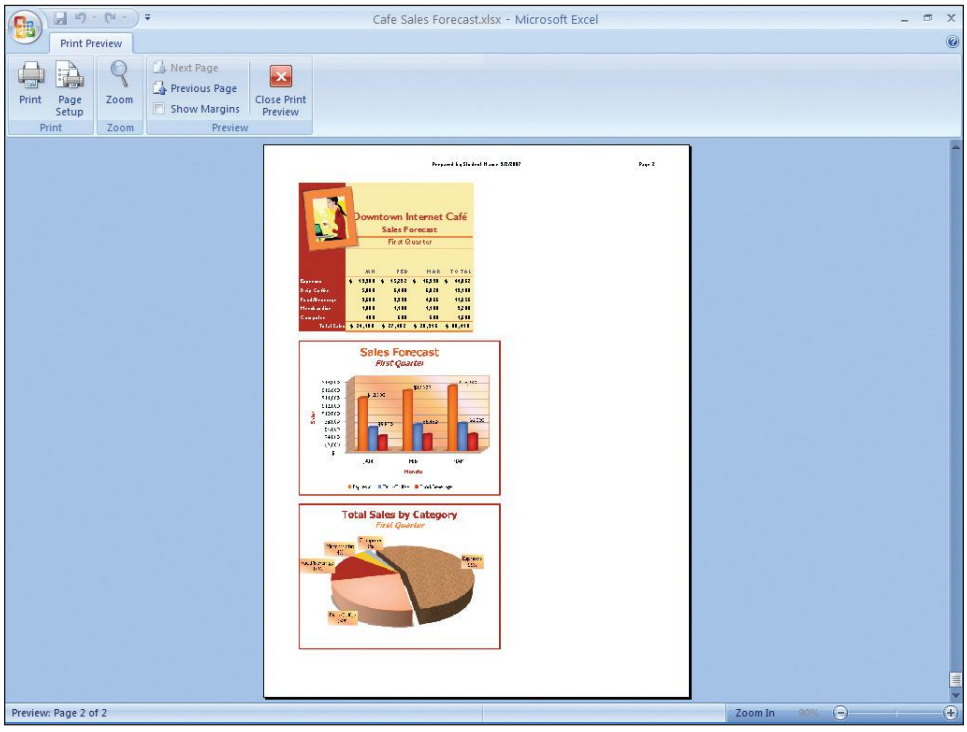


Figure 2.77

The preview shows the header you added to the worksheet and because the worksheet was scaled vertically, all the data fits on a single page.

Aligning a Sheet on a Page

You also would like to center the worksheet horizontally on the page. The default worksheet margin settings include 1-inch top and bottom margins and 0.75-inch right and left margins. The **margins** are the blank space outside the printing area around the edges of the paper. The worksheet contents appear in the printable area inside the margins. You want to center the worksheet data horizontally within the existing margins.

1. Click Page Setup.
   - Open the Margins tab.
   - Choose Horizontally.
   - Click OK.

Your screen should be similar to Figure 2.78

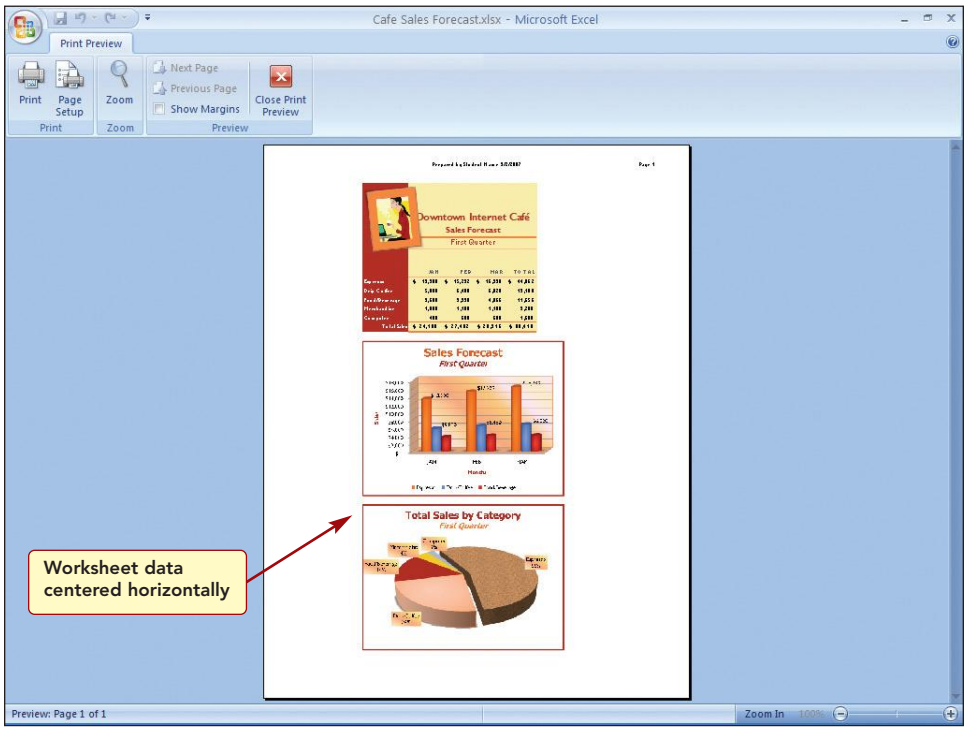


Figure 2.78

The preview window displays the worksheet centered horizontally between the right and left margins. It now appears the way you want it to look when printed.

Now that the workbook is set up the way you want it for printing, you will print a copy of the worksheet and chart from the print preview window. Because you previewed the workbook from the Print dialog box, the worksheets will print immediately using the specified print settings. Then you will exit the application and save the file at the same time.

2. Click Print.
   - Change to Normal view and move to cell A9 of Sheet1.
   - Exit Excel, saving the workbook again.

The page layout settings you specified have been saved with the workbook file.



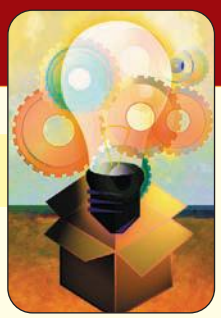
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Financial Advisor

With the stock market fluctuations in the last few years, investors are demanding more from their financial advisors than ever before. An advisor needs to promote the company's potential and growth in order to get investors to buy stock. One way to do this is to create a worksheet of vital information and to chart that information so the investor can see why the stock is a good investment. The position of Financial Advisor usually requires a college degree and commands salaries from $24,000 to $50,000, depending on experience.

Concept Summary

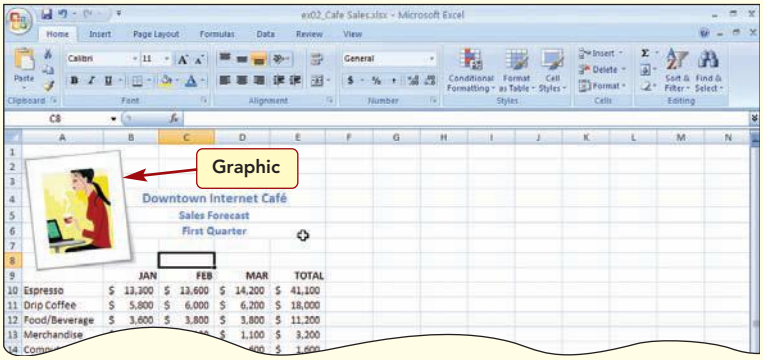


LAB 2

Charting Worksheet Data

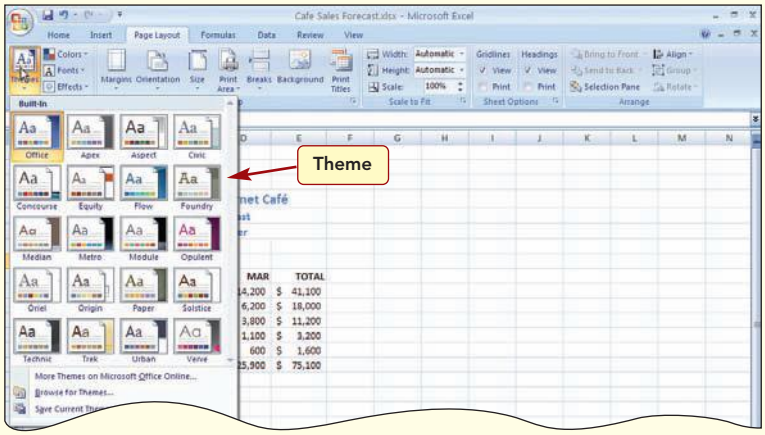
Graphics (EX2.5)

A graphic is a nontext element or object, such as a drawing or picture, that can be added to a document.



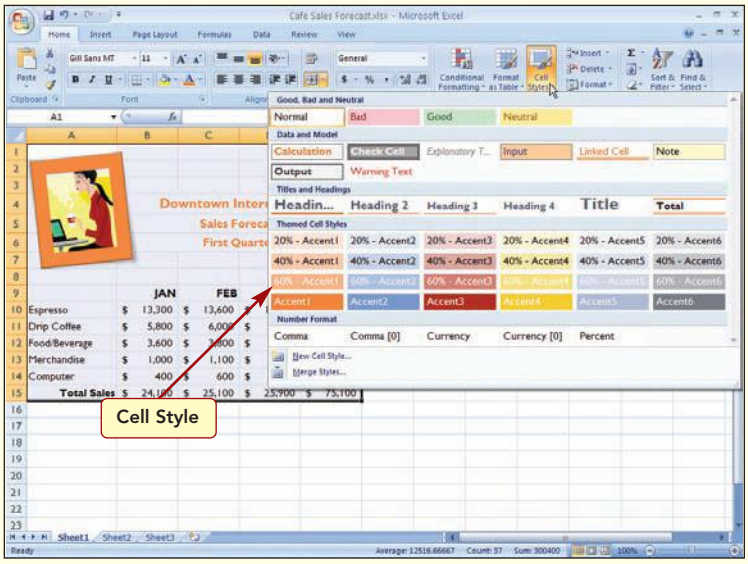
Theme (EX2.10)

A theme is a predefined set of formatting choices that can be applied to an entire document in one simple step.



Cell Style (EX2.14)

A cell style is a predefined theme-based combination of formats that have been named and that can be quickly applied to a selection.



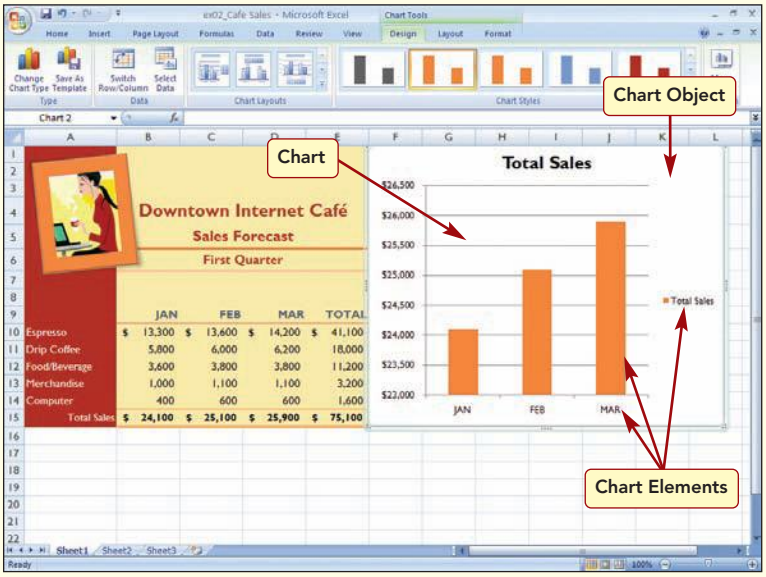


Chart (EX2.19)

A chart is a visual representation of data that is used to convey information in an easy-to-understand and attractive manner. Different types of charts are used to represent data in different ways.

Chart Elements (EX2.20)

A chart consists of a number of elements that are used to graphically display the worksheet data.

Chart Object (EX2.23)

A chart object is a graphic object that is created using charting features. A chart object can be inserted into a worksheet or into a special chart sheet.



Chart Layout (EX2.25)

A chart layout is a predefined set of chart elements that can be quickly applied to a chart.

Chart Style (EX2.26)

A chart style is a predefined set of chart formats that can be quickly applied to a chart.

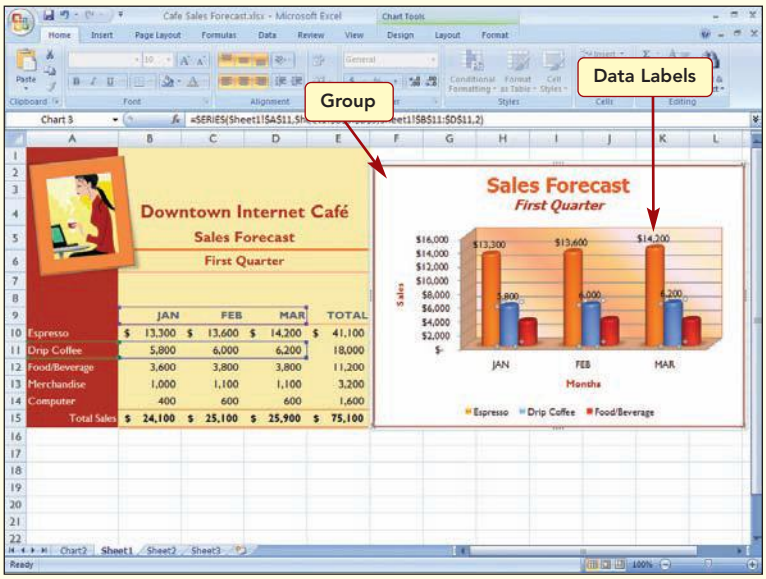
Concept Summary

Group (EX2.40)

A group is two or more objects that behave as a single object when moved or sized. A chart consists of many separate objects.

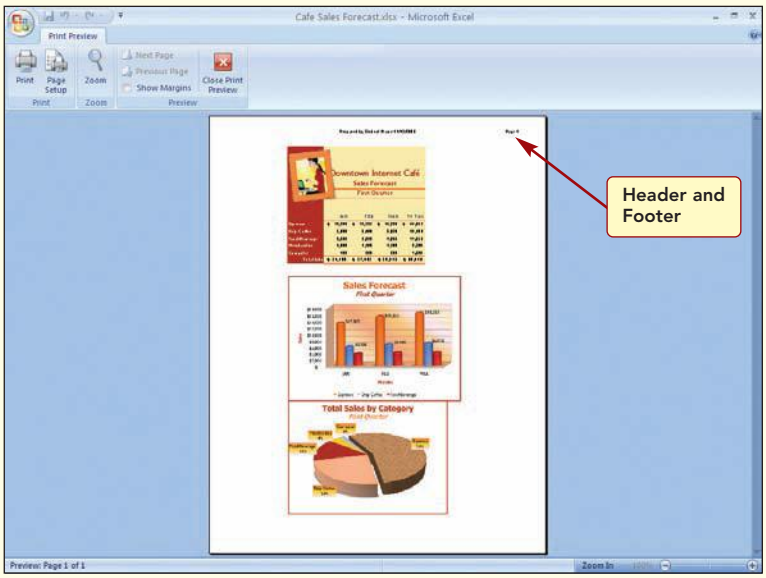
Data Labels (EX2.46)

Data labels provide additional information about a data marker. They can consist of the value of the marker, the name of the data series or category, a percent value, or a bubble size.

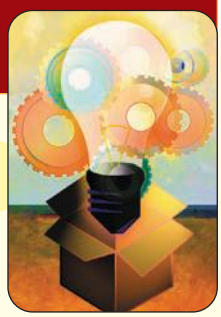


Headers and Footer (EX2.64)

Headers and footers provide information that typically appears at the top and bottom of each page and commonly includes the date and page number.



Lab Review



LAB 2

Charting Worksheet Data

key terms

area chart EX2.19
bar chart EX2.19
bubble chart EX2.19
category axis EX2.20
category-axis title EX2.20
cell style EX2.13
chart EX2.19, EX2.20
chart gridlines EX2.20
chart layout EX2.25
chart object EX2.23
chart style EX2.26
chart title EX2.20
clip art EX2.6
column chart EX2.19
data label EX2.20, EX2.46
data marker EX2.46
data series EX2.20
doughnut chart EX2.19
drawing object EX2.5
embedded chart EX2.23
embedded object EX2.5
explode EX2.53
file property EX2.60
footer EX2.64
gradient EX2.43
graphic EX2.5
group EX2.40
header EX2.64
keyword EX2.60
legend EX2.20
line chart EX2.19
margin EX2.68
object EX2.5
picture EX2.5
pie chart EX2.19
placeholder EX2.28
plot area EX2.20
radar chart EX2.19
selection rectangle EX2.7
series formula EX2.54
sizing handle EX2.7
source program EX2.5
stack EX2.24
stacked-column chart EX2.38
stock chart EX2.19
surface chart EX2.19
theme EX2.10
value axis EX2.20
value-axis title EX2.20
X axis EX2.20
XY (scatter) chart EX2.19
Y axis EX2.20
Z axis EX2.20

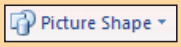
MCAS skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2 MCAS Certification Guide for a complete list of the skills that were covered in Lab 2.

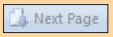
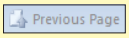
command summary

Command	Shortcut	Action
Office Button		
Prepare/Properties		View and edit document properties
Home tab		
Styles group		
		Applies predefined combinations of colors, effects, and formats to selected cells
 /Modify		Modifies existing cell style
Insert tab		
Illustrations group		
		Inserts a picture from a file
		Inserts selected graphic from Clip Organizer and Microsoft's Clip Art and Media Web site
Charts group		
		Inserts a column chart
		Inserts a pie chart
Page Layout tab		
Themes group		
		Applies selected theme to worksheet
 /Save Current Theme		Saves modified theme settings as a custom theme
Scale to Fit group		
		Scales worksheet width to specified number of pages
		Scales worksheet height to specified number of pages
		Scales worksheet by entering a percentage

command summary

Command	Shortcut	Action
View tab		
Workbook Views group		
		Displays document as it will appear when printed
Picture Tools Format tab		
Picture Styles group		
		Changes shape of drawing, preserving all formatting
		Specifies color, width, and line style for outline of shape
		Adds glow, shadow, and other effects to pictures
Chart Tools Design tab		
Type group		
		Changes to a different type of chart
Data group		
		Swap the data over the axes
		Change the data range included in chart
Location group		
		Moves chart to another sheet in the workbook
Chart Tools Layout tab		
Labels group		
		Adds, removes, or positions the chart title
		Adds, removes, or positions the axis titles
		Adds, removes, or positions the chart legend

command summary

Command	Shortcut	Action
		Adds, removes, or positions the data labels
Background group 		Formats chart walls
Chart Tools Format tab		
Current Selection group 		Selects an element on the chart
		Opens Format dialog box for selected element
Shape Styles group /More		Opens Shape Styles gallery
		Adds selected fill to shape
		Specifies color, weight, and type of outline
		Adds selected effect to shape
Print Preview tab		
Print group 	Ctrl + P	Prints selection, worksheets, or workbook
 /Header/Footer tab		Adds header or footer to worksheet
 /Margins tab/Horizontally		Horizontally aligns worksheet between margins
Zoom group 		Magnifies worksheet
Preview group 		Displays next page
		Displays previous page



matching

Match the lettered item on the right with the numbered item on the left.

1.	theme	_____	**a.** bottom boundary line of the chart
2.	value axis	_____	**b.** numbered scale along the left boundary line of the chart
3.	explode	_____	**c.** identifies each number represented in a data series
4.	X axis	_____	**d.** area of chart bounded by X and Y axes
5.	legend	_____	**e.** applies a set of colors, fonts, and effects
6.	plot area	_____	**f.** identifies the chart data series and data markers
7.	column chart	_____	**g.** a chart that displays data as vertical columns
8.	data marker	_____	**h.** a gradual progression of colors and shades
9.	category ranges	_____	**i.** to separate a slice slightly from other slices of the pie
10.	gradient	_____	**j.** identifies the data along the X axis

true/false

Circle the correct answer to the following questions.

1.	A group is two or more objects that behave as a single object when moved or sized.	True	False
2.	Sizing a chart also adjusts the size of the chart elements.	True	False
3.	The chart title is visually displayed within the X- and Y-axis boundaries.	True	False
4.	A line chart displays data commonly used to show trends over time.	True	False
5.	The X-axis title line is called the category-axis title.	True	False
6.	You cannot edit or format data in Page Layout view.	True	False
7.	A data series links the chart object to the source worksheet.	True	False
8.	A pie chart is best suited for data that compares parts to the whole.	True	False
9.	Exploding a slice of a pie chart emphasizes the data.	True	False
10.	A header is a line or several lines of text that appear at the bottom of each page just above the bottom margin.	True	False

fill-in

Complete the following statements by filling in the blanks with the correct key terms.

1. The small circles and squares that surround a selected object are called _____.
2. A(n) _____ is a named combination of formats.
3. _____ is a collection of graphics that is usually bundled with a software application.
4. A(n) _____ is an object that contains other objects.
5. The X axis of a chart is also called the _____ axis.
6. A(n) _____ formula is a formula that links a chart object to the source worksheet.
7. The axis of the chart that usually contains numerical values is called the _____ or _____.
8. _____ provide more information about a data marker.
9. A(n) _____ is text displayed at the top of each page.
10. The _____ is the part of the chart that gives a description of the symbols used in a chart.

multiple choice

Circle the correct response to the questions below.

1. A visual representation of data in an easy-to-understand and attractive manner is called a(n) _____.
   - **a.** object
   - **b.** picture
   - **c.** chart
   - **d.** drawing
2. 3-D charts have an additional axis called the _____.
   - **a.** W axis
   - **b.** X axis
   - **c.** Y axis
   - **d.** Z axis
3. A chart consists of a number of _____ that are used to graphically display the worksheet data.
   - **a.** elements
   - **b.** groups
   - **c.** gridlines
   - **d.** titles

4. A group is one or more _____ that behave as one when moved or sized.
   a. objects
   b. lines
   c. data markers
   d. symbols

5. A chart that is inserted in a worksheet is an _____ object and becomes part of the worksheet.
   a. attached
   b. enabled
   c. embedded
   d. inserted

6. _____ provide additional information about information displayed in the chart.
   a. Data masks
   b. Data labels
   c. Headers
   d. Chart titles

7. A(n) _____ describes the symbols used within the chart to identify different data series.
   a. X axis
   b. legend
   c. Y axis
   d. chart title

8. The _____ of a chart usually displays a number scale determined by the data in the worksheet.
   a. Z axis
   b. value axis
   c. X axis
   d. category axis

9. A _____ chart shows the relationship of each value in a data series to the series as a whole.
   a. line
   b. bar
   c. pie
   d. bubble

10. A _____ is a line of text that appears at the top of a page just below the top margin line.
    a. footer
    b. header
    c. footing
    d. heading

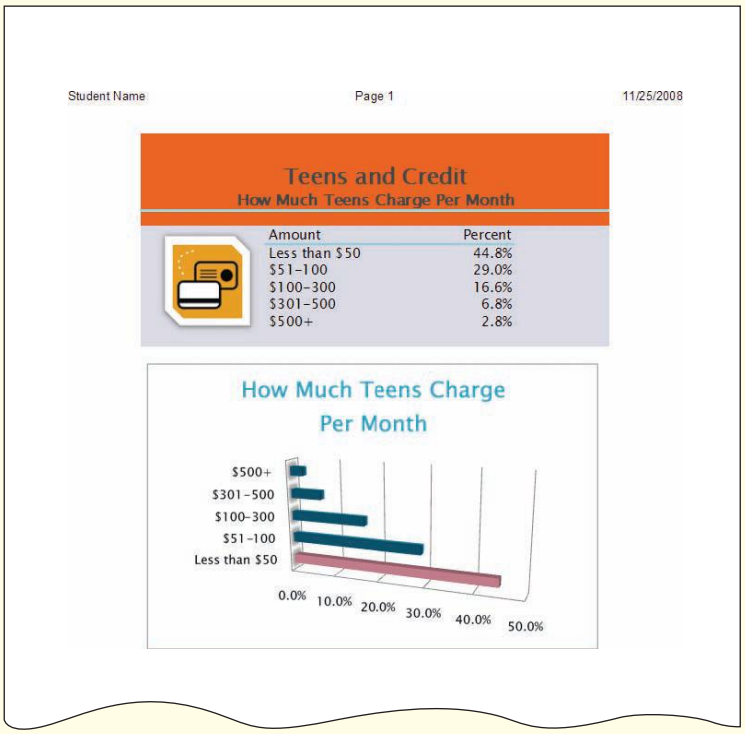
Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Teens and Credit ★

1. Max's economics paper is on teens and credit. He has some data saved in a worksheet on how much teens charge to a credit card per month. He has asked you to help him chart the data and make the worksheet look more attractive. The completed worksheet with charts is shown here. (Your solution may look different depending upon the formatting selections you have made.)

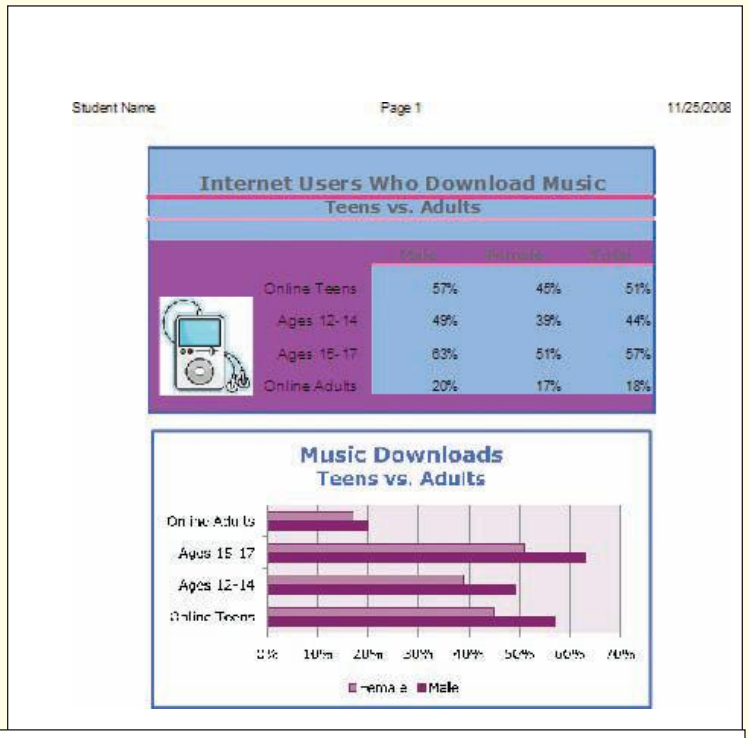


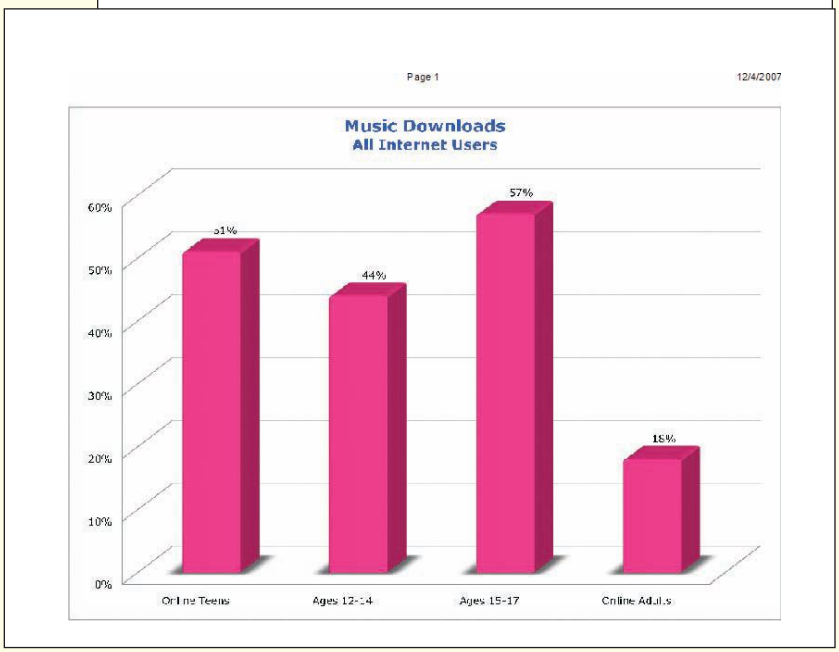
a. Open the workbook ex02_Credit Data. Apply a theme of your choice. Use cell styles and adjust column widths as needed.
b. Format the data in column C to Percent style with one decimal place.
c. Insert a graphic of your choice to the left of the worksheet data (or use ex02_Credit Card.bmp) and size it appropriately. Apply a picture style of your choice. Save the workbook as Teens and Credit to your solution file location.
d. Create a clustered-column chart and move it below the worksheet data.
e. Enter the chart title **How Much Teens Charge** on the first line and **Per Month** on the second. Turn off the display of the legend.
f. Change the chart type to Clustered Bar in 3-D. Select a chart style of your choice.
g. Add color to the chart title and reduce the font size. Change the color for the Less than $50 data series.
h. Size the chart to the same width as the worksheet. Document the workbook; include your name as the author.
i. Preview the worksheet. Add a predefined header to the worksheet that displays your name, page number, and date. Center the worksheet horizontally on the page.
j. Print the worksheet on one page.
k. Save the workbook again.

Music Download Analysis ★★

2. The Downtown Internet Café is considering providing MP3 download kiosks in the café. To help with the decision, you have collected some data on the number of people who download music. You want to graph the data to get a better idea of the popularity of this activity. The completed worksheet with charts is shown here. (Your completed solution may be slightly different

depending upon the formatting choices you make.)





a. Open the workbook file ex02_Music Download Analysis.

b. Insert a clip art image of your choice to the left of the data. Size the image as necessary. If you do not have an image, you can use ex02_MP3 Player.bmp.

c. Change the theme to Verve with the Aspect font. Apply cell styles and adjust column widths as needed.

d. Create a line chart using the data in cells A5 through C9. Title the chart appropriately.

e. Change the chart type to a bar chart of your choice. Apply a chart style of your choice. Adjust and format the chart title as needed and add a text color of your choice. Display the legend at the bottom of the chart.

f. Position the chart below the worksheet data and size it appropriately. Add borders around the worksheet and chart.

g. Save the workbook as Music Download Analysis to your solution file location.

h. Create a 3-D column chart showing the total percentage. Select the Style 27 chart style. Title the chart appropriately using font sizes and colors of your choice.

i. While reviewing the charts, you realize that the Male and Female columns of data were transposed. Correct the data using the table below.

	Male	Female
Online teens	**57**	**45**
Ages 12–14	**49**	**39**
Ages 15–17	**63**	**51**
Online Adults	**20**	**17**

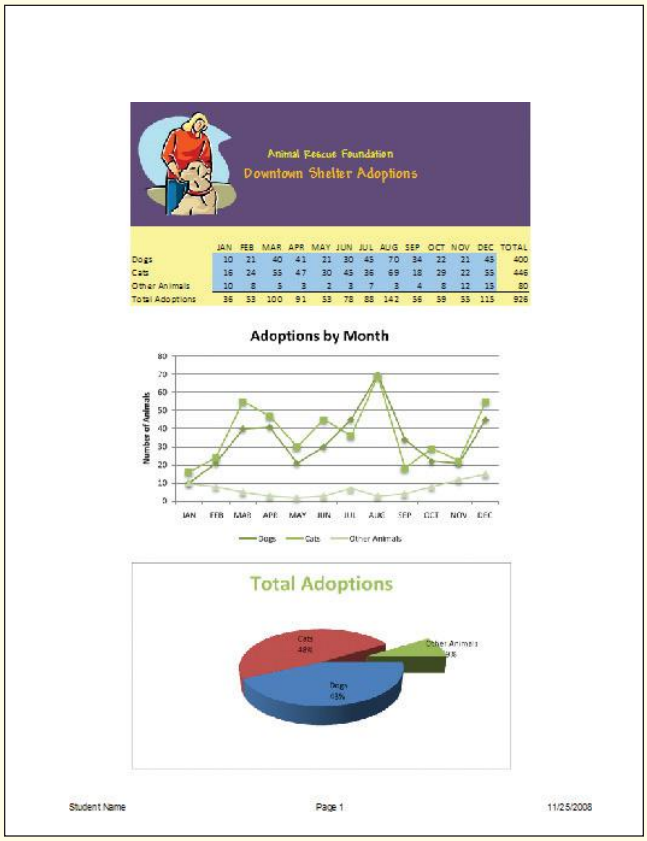
j. Move the chart to a separate chart sheet. Add data labels centered above each column. Remove the legend.

k. Document the workbook file by adding your name as author and include a preview picture.

l. Preview the workbook. Add a predefined header to the worksheet and chart sheet that displays your name, page number, and date. Center the worksheet horizontally on the page. Print the worksheet. Print the chart sheet.
m. Save the workbook again.

Tracking Animal Adoptions ★★

3. Richard Phillipe volunteers for Animal Angels, a volunteer group that supports the Animal Rescue Agency. He has compiled a worksheet of the number of adoptions in the downtown shelter for the last year. He would like to create a chart that shows how the adoptions differ by month and a chart that shows the total number of adoptions this year. The completed worksheet with charts is shown here. (Your completed solution may be slightly different depending upon the formatting choices you make.)



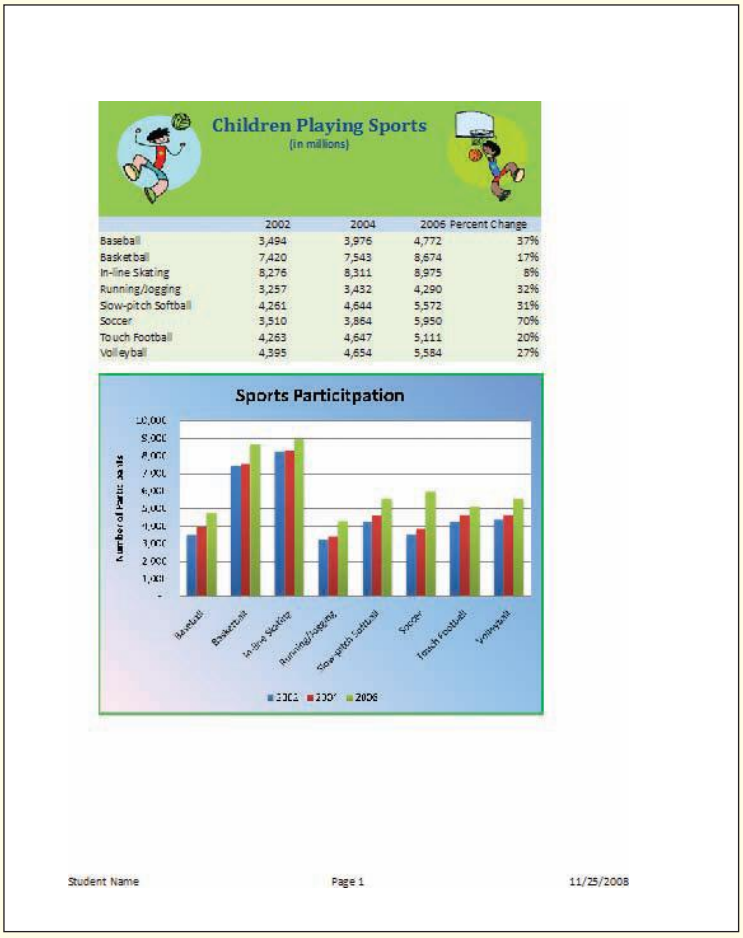
a. Open the file ex02_Adoptions.
b. Insert a clip art image of your choice in the top-left corner of the worksheet. Size and position the image as necessary. If you don't have an image, use ex02_Pets.bmp. Hint: Use Recolor in the Adjust group and choose Set transparent color to change the picture background to transparent.
c. Save the workbook as Adoption Tracking to your solution file location.
d. Chart the monthly data for the three animal categories as a column chart.
e. Enter the chart title **Adoptions by Month** and the value (Y) axis title **Number of Animals**. Display the legend below the chart.
f. Position the chart over cells A16 through N35.
g. Change the chart type to a line chart with markers.
h. Create a 3-D pie chart of the data in columns A11:A13 and N11:N13. Title the chart **Total Adoptions**. Turn off the legend and use the category names and percentages to label the data series.
i. Position the chart over cells A38 through N55. Add color and font refinements to the chart title as you like. Rotate the chart so the Dogs slice is at the front of the chart. Explode the Other Animals slice. Apply a chart style of your choice to the pie chart.
j. Richard found an error in the data. Change the value of Other Animals in June to **3** and Dogs to **22** in October.
k. Document the workbook file by adding your name as author and include a preview picture.
l. Save the workbook.
m. Preview the worksheet. Scale the worksheet and charts to fit on one page. Add a predefined footer to the worksheet that displays your name, page number, and date. Center the worksheet horizontally on the page. Print the worksheet.
n. Save the workbook file again.

Children's Sports Participation ★★★

4. Mary Ellen is the program coordinator for Lifestyle Fitness, a physical conditioning and health center. She is proposing to management that they increase their emphasis on child fitness. To reinforce the need for this type of investment, she has compiled some recent data about growth in the number of children (in millions) participating in sports. She wants to create several charts of this data to emphasize the demand. (Your completed solution may be slightly different depending upon the formatting choices you make.)

a. Create a worksheet in columns A through D of the following data.

	2002	2004	2006
Baseball	3494	3976	4772
Basketball	7420	7543	8674
In-line Skating	8276	8311	8975
Running/ Jogging	3257	3432	4290
Slow-pitch Softball	4261	4644	5572
Soccer	3510	3864	5950
Touch Football	4263	4647	5111
Volleyball	4395	4654	5584



b. Add an appropriate title over the data and format the numbers to show commas with no decimal places. Calculate the percent change from 2002 to 2006 in column E ((2006 value – 2002 value)/2002 value). Add a column heading for the percent change column. Change the cell formatting of column E to percentage with no decimal places. Enhance the worksheet as you like to improve its appearance with font and fill colors and clip art (you can use ex02_Basketball.bmp and ex02_Volleyball.bmp) Hint: Use Recolor in the Adjust group and choose Set transparent color to change the picture background to transparent. Save the workbook as Youth Sports Data to your solution file location.

c. Create a column chart of the worksheet data in columns A through D. Enter a chart title and Y-axis title. Enhance the chart using features presented in the lab.

d. Move the chart below the worksheet and resize it appropriately.

e. Create a 3-D column chart in the worksheet showing the percent change data for the sports. Include the title **Percent Change in Participation 2002–2006**. Use Chart Layout 2 and a chart style of your choice. Remove the legend.

f. Enhance the chart using features presented in the lab. Move the chart to a new chart sheet.

g. Document the workbook by adding your name as author. Save the workbook with a picture preview.

h. Preview the workbook. Add a predefined footer to the worksheet that displays your name, page number, and date on both sheets. Center the worksheet horizontally on the page. Print the workbook.

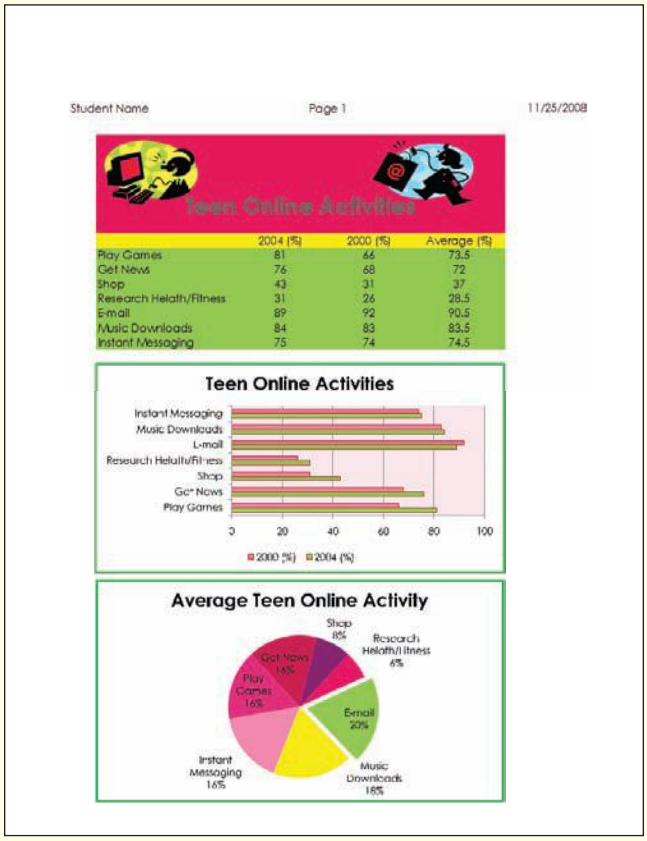
i. Save the workbook again.

Internet Experience ★★★

5. Wendy Murray's class is studying Internet technology. She has discovered some intriguing research that shows how teens using the Internet has changed over the years. She would like to share this information with her students.

a. Create a worksheet of the data in the table below. Average the rows. Add an appropriate heading for the averaged row.

Teen Online Activities		
	2004 (%)	2000 (%)
Play Games	81	66
Get News	76	68
Shop	43	31
Research Health/Fitness	31	26
E-mail	89	92
Music Downloads	84	83
Instant Messaging	75	74



b. Format the worksheet using the features you have learned. Add fill color behind the data. Insert clip art graphics of your choice, or use ex02_Computer Girl.bmp and ex02_Computer Boy.bmp.
Hint: Use Recolor in the Adjust group and choose Set transparent color to change the picture background to transparent.

c. Save the workbook as Teen Online Activities.

d. Create a bar chart for the activities for both years. Move the legend to the bottom of the chart. Include an appropriate chart title.

e. Display the chart below the worksheet. Change the color of the chart to colors that match the worksheet. Size the chart appropriately.

f. Create a pie chart of the average data. Include an appropriate title. Remove the legend and display data labels for the category names and values. Move the chart below the bar chart. Size it appropriately. Format the pie chart to be similar to your bar chart. Explode a slice of the pie. Rotate the pie to display the exploded slice at the right.

g. Add colored borders around both charts.

h. Document the workbook file by adding your name as author. Include a preview picture.

i. Preview the worksheet. Add a predefined header to the worksheet that displays your name, page number, and date. Center the worksheet horizontally on the page. Scale the worksheet to fit on one page. Print the worksheet.

j. Save the workbook file again.

on your own

Job Market Seminar ★

1. Nancy Fernandez is preparing for an upcoming job market seminar she is presenting. She has collected data comparing the mean hourly pay rate for several computer and mathematical jobs in the Midwest and Northeast to the U.S. average rates. Open the workbook ex02_ Job Market. Calculate the percent difference between the Midwest states and U.S. average in column E. Calculate the percent difference between the Northeast states and U.S. average in column F. Add appropriate fill and font colors to the worksheet. Add a graphic to the top-left corner of the worksheet. Nancy thinks the information would be much more meaningful and have greater impact if it were presented in a chart. Create an appropriate chart of the average hourly wage for Computer Programmers, Computer Support Specialists, Computer Systems Analysts, and Database Administrators on a separate chart sheet. Include appropriate chart titles. Add a pattern to the data series and change the plot area fill color. Enhance the chart in other ways using different font sizes and font colors. Position the legend at the bottom of the chart. Add a predefined header to the chart sheet that displays your name, page number, and date. Save the workbook as Seminar and print the chart.

Grade Tracking ★

2. Create a worksheet that tracks your GPA for at least four semesters or quarters. (If necessary, use fictitious data to attain four grading periods.) Create a chart that best represents your GPA trends. Use the formatting techniques you have learned to change the appearance of the worksheet and the chart. Save the workbook as Grades. Include a header or footer that displays your name and the current date in the worksheet. Print the worksheet with the chart.

Stock Market Workbook ★★

3. You are interested in the stock market. Use Help to learn more about the Stock chart type. Pick five related mutual funds and enter data about their performance over a period of time. Create a stock chart of the data. Save the worksheet with the chart as Mutual Funds. Include a header or footer that displays your name and the current date in the worksheet. Print the worksheet and the chart.

Graduate School Data ★★★

4. Andrew Romine is considering graduate school at Ohio State and has gathered some data to present to his parents to make a case for paying part of his tuition and fees. Open the file ex02_Graduate School, which has two worksheets, one that shows Earnings and the other Payback data if Andrew chooses Ohio State. Using what you learned in the lab, create two charts from the data on the Earnings worksheet. One chart should represent the lifetime earnings potential of people based on their level of education and the other should represent median earning by level. Create a pie chart on the Payback worksheet to represent the number of years after graduation that it will take to earn back what he paid for the higher education. Use the difference in Salary as the data labels. Use the features you have learned to enhance the appearance of the worksheets and charts. Include a header on both worksheets that displays your name and the current date. Save the worksheet as Graduate School2. Print the worksheet with the charts.

Insurance Comparisons ★★★

5. Roberto Sanchez is thinking about purchasing a new car. However, he is concerned about the insurance rates. Before purchasing, he wants to find out the insurance rates on the cars he is evaluating. Select three different car manufacturers and models. Use the Web and select three different comparable insurance companies to get the insurance premium cost information for different amounts of coverage (minimum required). Use your own personal information as the basis for the insurance quotes. Create a worksheet that contains the cost of minimum coverage, cost of optional coverage, deductibles available, and insurance premium quotes for each vehicle. Create a chart of the data that shows the coverage and premiums. Enhance the chart appropriately. Add a picture of the cars. Include a header or footer that displays your name and the current date in the worksheet. Save the workbook as Insurance. Print the worksheet and chart.

Managing and Analyzing a Workbook

LAB 3

Objectives

After completing this lab, you will know how to:

1. Correct worksheet errors.
2. Use absolute references.
3. Copy, move, name, and delete sheets.
4. Use AutoFill.
5. Reference multiple sheets.
6. Use Find and Replace.
7. Zoom the worksheet.
8. Split windows and freeze panes.
9. Use what-if analysis and Goal Seek.
10. Control page breaks.
11. Change page orientation.
12. Add custom headers and footers.
13. Print selected sheets and areas.

Case Study

Downtown Internet Café

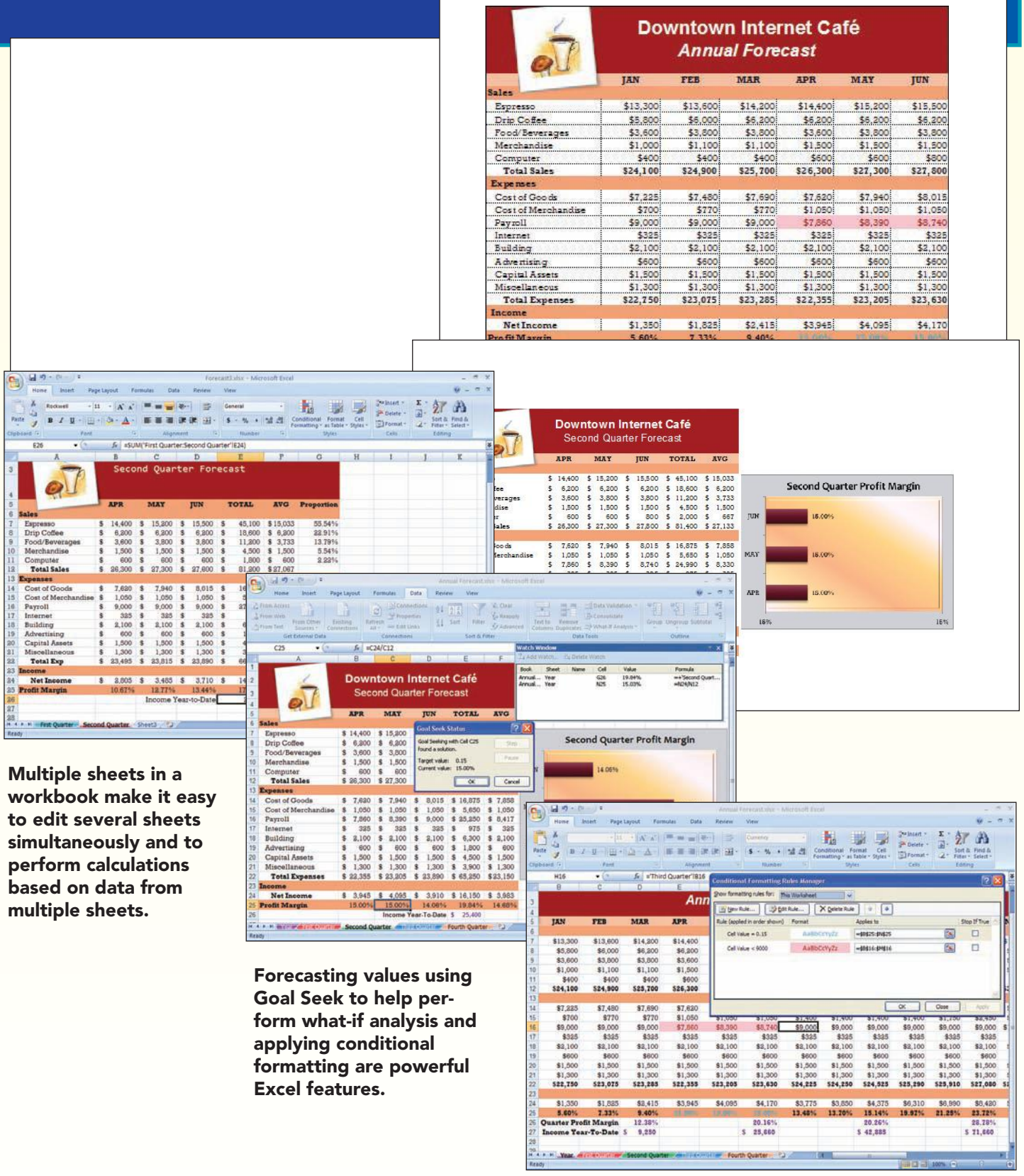
You presented your new, more-optimistic, first-quarter sales forecast for the Downtown Internet Café to Evan. He was impressed with the charts and projected increase in sales if an aggressive advertising promotion is launched. However, because the Café's funds are low due to the cost of the recent renovations, he has decided to wait on launching the advertising campaign.

Evan wants you to continue working on the Café forecast using the original, more-conservative projected sales values for the first quarter. In addition, he asks you to include an average calculation and to extend the forecast for the next three quarters.

After discussing the future sales, you agree that the Café will likely make a small profit during the first quarter of operations. Then the Café should show increasing profitability. Evan stresses that the monthly profit margin should reach 20 percent in the second quarter.

As you develop the Café's financial forecast, the worksheet grows in size and complexity. You will learn about features of Office Excel 2007 that help you manage a large workbook efficiently. You also will learn how you can manipulate the data in a worksheet to reach a goal using the what-if analysis capabilities of Excel. The completed annual forecast is shown here.





Multiple sheets in a workbook make it easy to edit several sheets simultaneously and to perform calculations based on data from multiple sheets.

Forecasting values using Goal Seek to help perform what-if analysis and applying conditional formatting are powerful Excel features.

Conditional formatting allows you to quickly emphasize worksheet data based on specified conditions.

Concept Preview

The following concepts will be introduced in this lab:

1. **Absolute Reference** An absolute reference is a cell or range reference in a formula whose location does not change when the formula is copied.
2. **Sheet Name** Each sheet in a workbook can be assigned a descriptive sheet name to help identify the contents of the sheet.
3. **AutoFill** The AutoFill feature makes entering a series of headings easier by logically repeating and extending the series. AutoFill recognizes trends and automatically extends data and alphanumeric headings as far as you specify.
4. **Sheet and 3-D References** A formula that contains references to cells in other sheets of a workbook allows you to use data from multiple sheets and to calculate new values based on this data. The formula contains a sheet reference consisting of the name of the sheet, followed by an exclamation point and the cell or range reference.
5. **Find and Replace** The Find and Replace feature helps you quickly find specific information and automatically replace it with new information.
6. **Split Window** The split window feature allows you to divide a worksheet window into sections, making it easier to view different parts of the worksheet at the same time.
7. **Freeze Panes** Freezing panes prevents the data in the pane from scrolling as you move to different areas in a worksheet.
8. **What-If Analysis** What-if analysis is a technique used to evaluate the effects of changing selected factors in a worksheet.
9. **Goal Seek** The Goal Seek tool is used to find the value needed in one cell to attain a result you want in another cell.
10. **Conditional Formatting** Conditional formatting changes the appearance of a range of cells based on a condition that you specify.

Correcting Worksheet Errors

After talking with Evan, the owner of the Café, about the first-quarter forecast, you are ready to begin making the changes he suggested. Evan returned the workbook file to you containing several changes he made to the format of the worksheet.

1. **Start Office Excel 2007.**
2. **Open the workbook** ex03_First Quarter Forecast**.**
3. **If necessary, maximize the application and workbook windows.**

Your screen should be similar to Figure 3.1

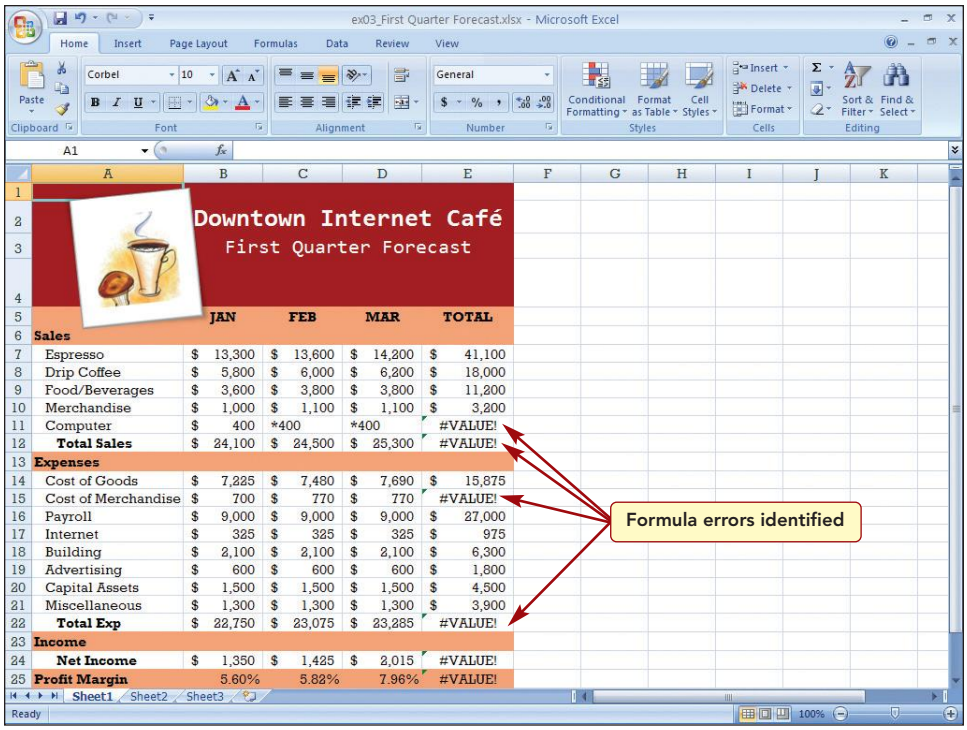


Figure 3.1

As you can see, Evan made several formatting changes to the worksheet. He changed the theme, fill, and text colors and made several changes to the row headings. For example, the Pay heading has been replaced with Payroll. Evan also decided to decrease the Computer sales values to $400 for February and March. He included an asterisk (*) in the cells to make sure you saw the change. However, this has resulted in a formula error.

Excel 2007 includes several tools to help you find and correct errors in formula entries. These tools provide the capability to display the relationships between formulas and cells and to identify and suggest corrections to potential problems in formulas.

Using the Formula Error Checker

As you check the worksheet, you notice a problem in cell E11. When a formula cannot properly calculate a result, an error value is displayed and a green triangle appears in the top-left corner of the cell. Each type of error value has a different cause, as described in the following table.

Error Value	Cause
#####	Column not wide enough to display result, or negative date or time is used
#VALUE!	Wrong type of argument or operand is used
#DIV/0!	Number is divided by zero
#NAME?	Text in formula not recognized
#N/A	Value not available
#REF!	Cell reference is not valid
#NUM!	Invalid number values
#NULL!	Intersection operator is not valid

You can correct each identified error individually or use Excel's formula error checker tool to check them all, one at a time. The formula error checker is similar to the spelling checker in that it goes to each location in the worksheet containing a formula error, identifies the problem, and suggests corrections. You will use the formula error checker to correct this error and check the entire worksheet for others.

1. **Open the Formulas tab.**
2. **Click** Error Checking **in the Formula Auditing group.**
3. **If necessary, move the dialog box to see the located formula error.**

Your screen should be similar to Figure 3.2

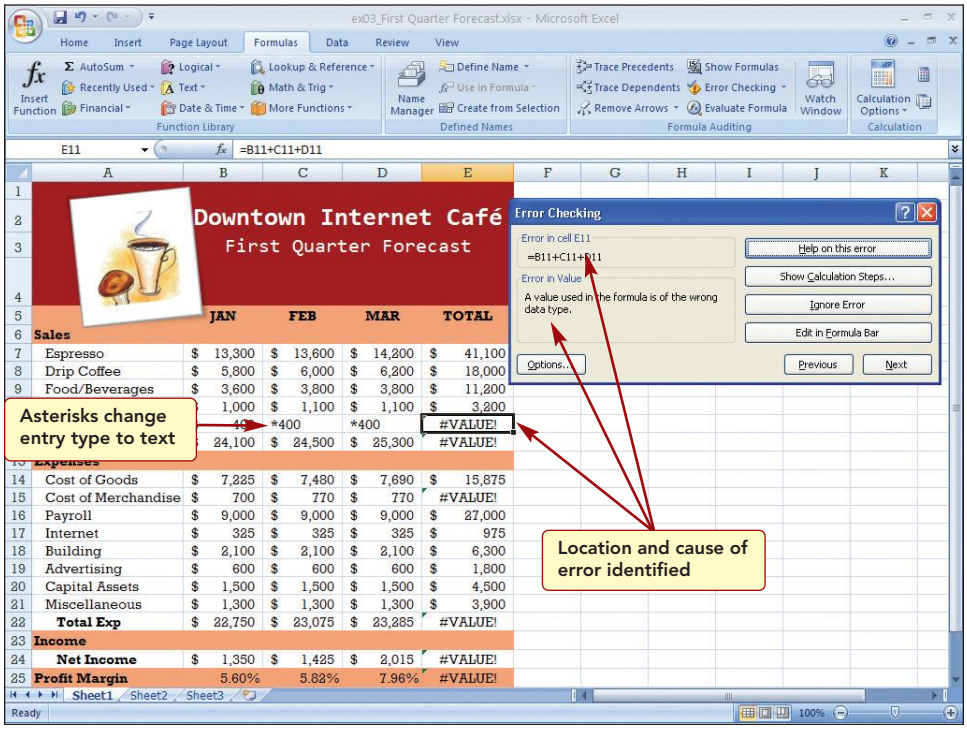


Figure 3.2

The Error Checking dialog box identifies the location and cause of the error. In this case, when Evan changed the February and March computer

sales values, he included an asterisk in the cell entries to make sure you noticed the change. This caused Excel to interpret the entry as a text entry, which cannot be used in this formula. To correct the problem, you need to enter the values correctly.

2 **Edit the values in cell C11 and D11 to 400.**

Your screen should be similar to Figure 3.3

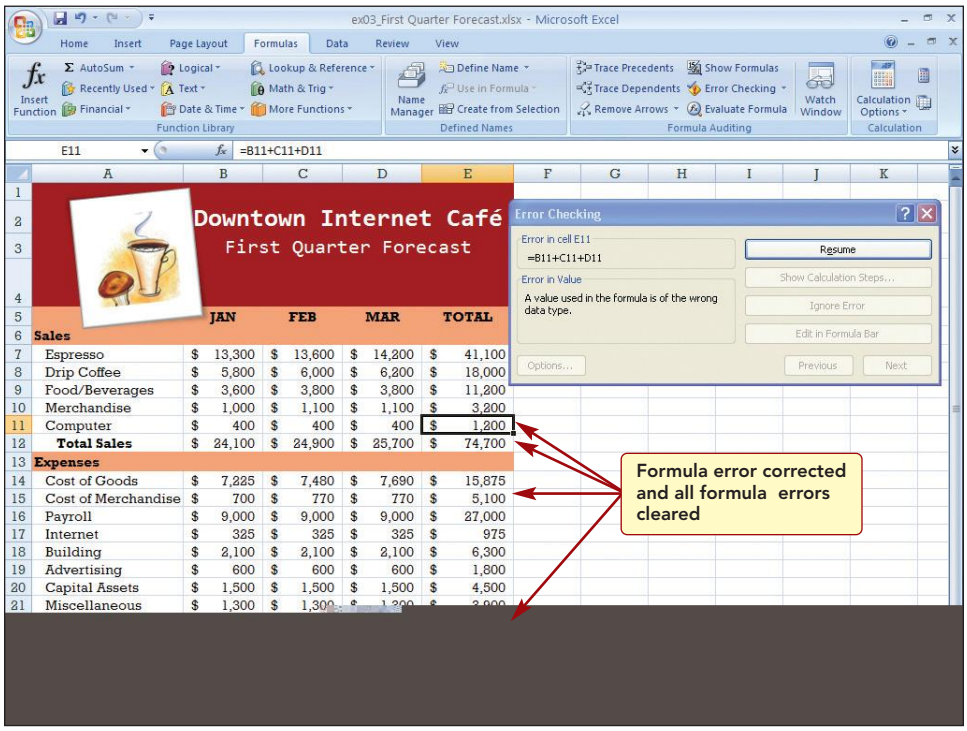


Figure 3.3

Cell E11 now displays the correctly calculated result. Additionally, all other cells that displayed errors also are fixed because their formulas no longer reference cells containing text entries. You will continue checking the worksheet for formula errors.

3 **Click** Resume.

Click OK.

No other errors were located. You are now ready to make several of the changes requested by Evan.

Calculating an Average

First you will add a column showing the average values for the first quarter. You will start by entering a new column heading. Then you will enter the Average function to calculate the average for Espresso sales.

In addition to using Σ Sum in the Home tab to enter commonly used functions, you can use Σ AutoSum in the Function Library group of the Formulas tab.

1. **Enter the heading AVG in cell F5.**
2. **Copy cell E6 to F6 to copy the formatting.**
3. **Move to F7.**
4. **Open the Σ AutoSum drop-down menu in the Function Library group and choose Average.**

Your screen should be similar to Figure 3.4

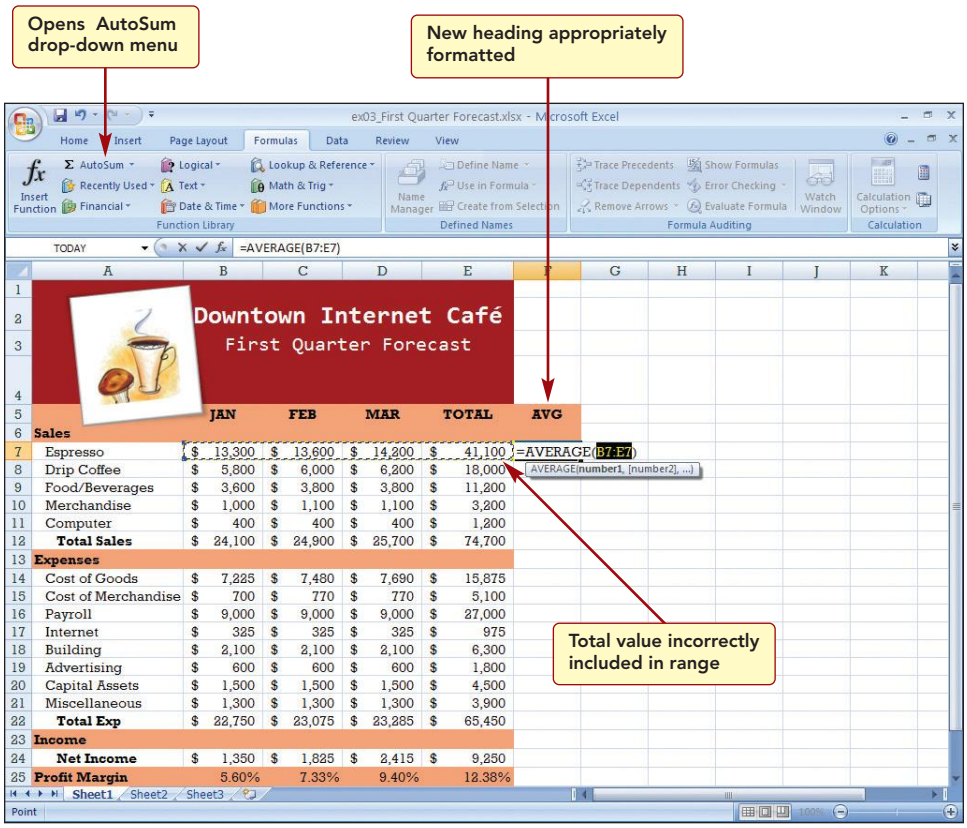


Figure 3.4

Notice that the AVG heading is already appropriately formatted to bold and centered. This is because Excel automatically extends formats to new cells if the format of at least three of the last five preceding cells in the row appears that way.

Excel identifies the range of cells B7 through E7 for the function argument. Because it incorrectly includes the total value in cell E7, you need to specify the correct range.

2 **Drag to select cells B7 through D7.**

Click Enter.

Your screen should be similar to Figure 3.5

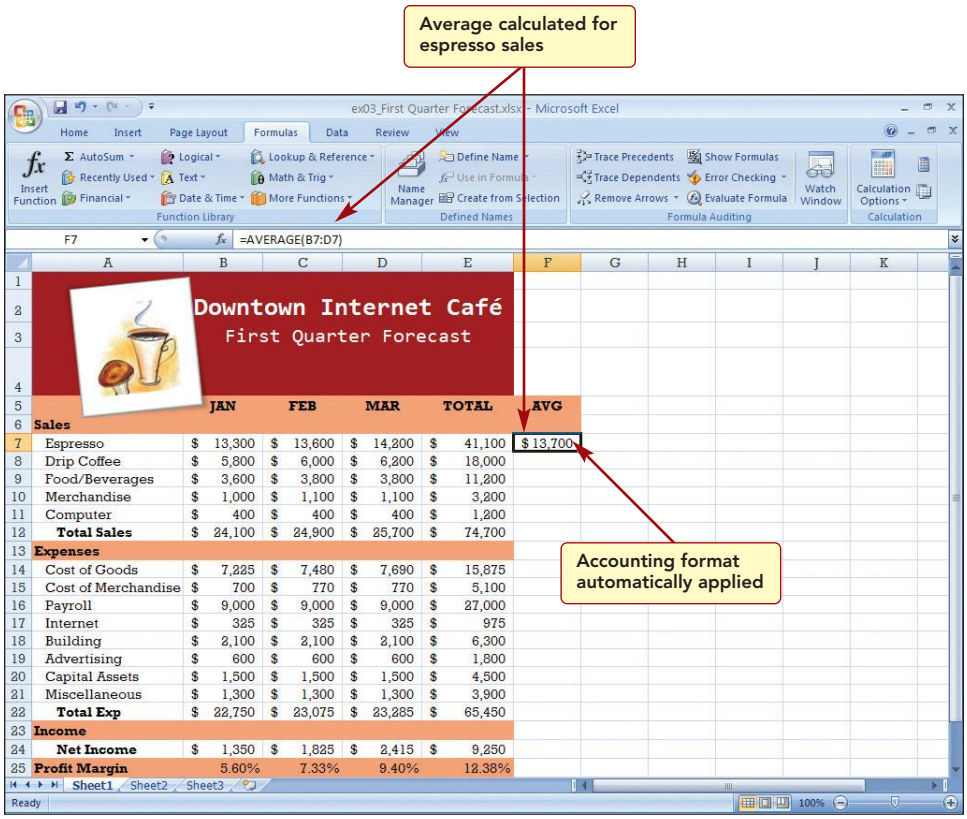


Figure 3.5

The average of the Espresso sales for the quarter, $13,700, is calculated and displayed in cell F7. Notice that Excel again extended the format to the new cell, saving you the step of applying the Accounting format.

Next you need to copy the function down column F.

3 **Copy the function from cell F7 into cells F8 through F24.**

Move to cell F13.

Your screen should be similar to Figure 3.6

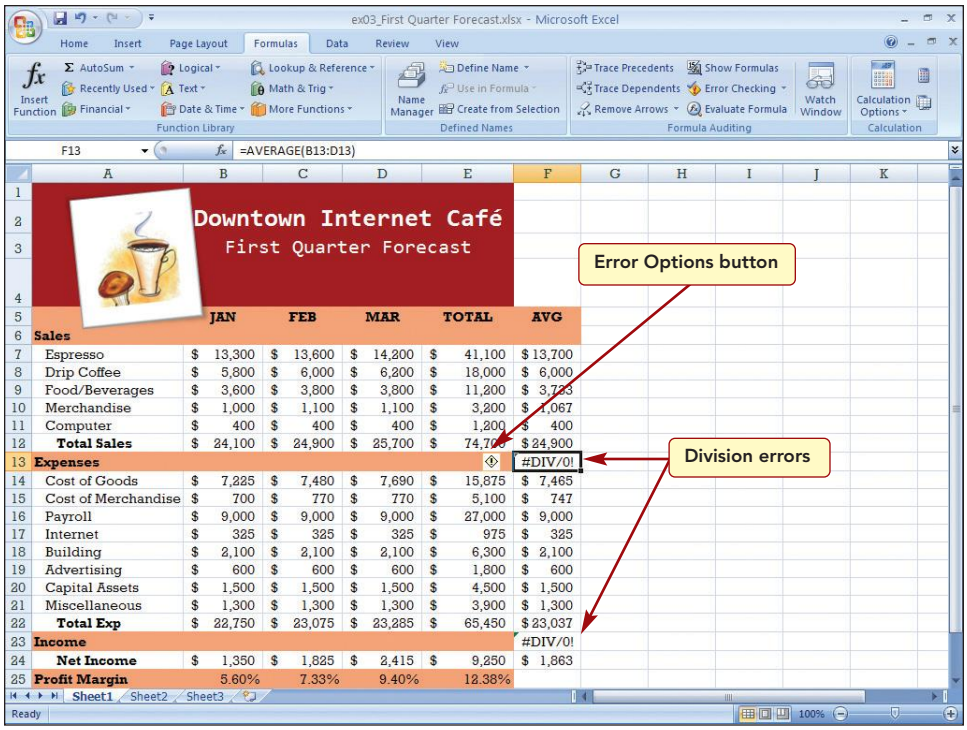


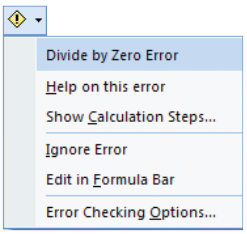
Figure 3.6

The average value has been correctly calculated for each row. Notice, however, that two cells display the error value #DIV/0!, indicating the cells contain a formula error. In addition, the Error Options button appears when you select a cell containing an error.

Correcting Formula Errors Individually

To correct this problem, you need to find out the cause of the error. Pointing to the Error Options button displays a ScreenTip identifying the cause of the error; in this case, the formula is attempting to divide by zero or empty cells. This time you will individually correct the error.

1. **Point to Error Options to see the ScreenTip.**
2. **Click Error Options.**



3. **Choose Edit in Formula Bar.**

Your screen should be similar to Figure 3.7

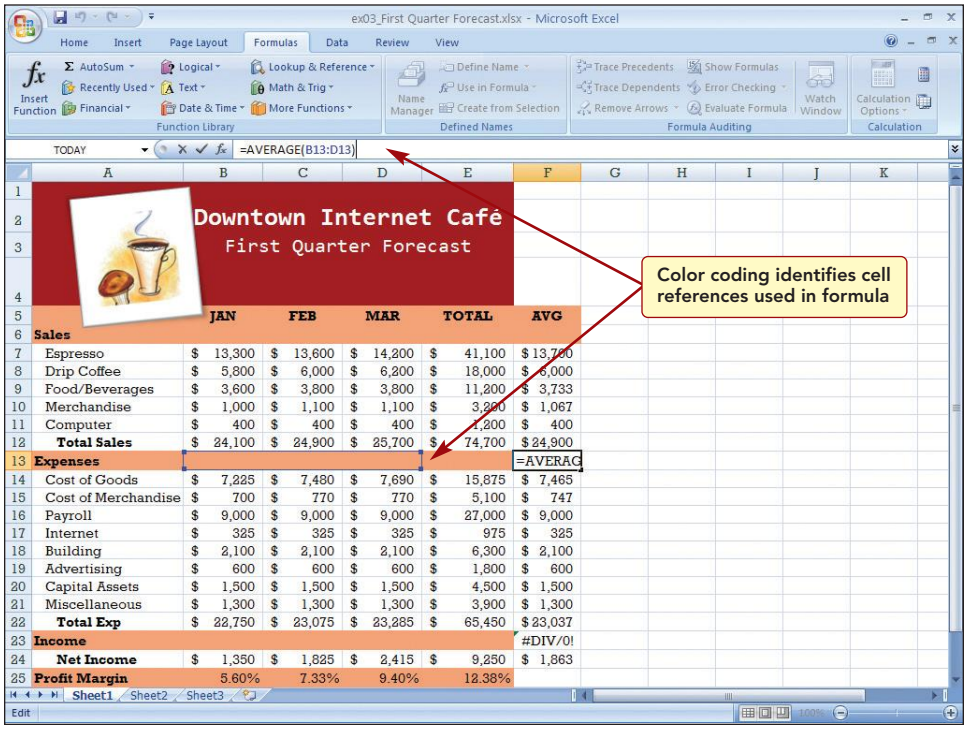


Figure 3.7

Notice that the cell references in the formula are color coded to match the borders Excel displays around the referenced worksheet cells. It is designed to provide visual cues to the relationships between the cells that provide values to the formulas or the cells that depend on the formulas.

You can now easily see the error is caused by references to blank cells when the function was copied. Since you do not need this formula, you will delete it. Likewise, you need to delete the function that was copied into cell F23. You will clear the entry in this cell using the fill handle.

2. **Press** Esc.
   - **Press** Delete.
   - **Move to cell F23.**
   - **Point to the fill handle and when the mouse pointer changes to +, drag upward until the cell is gray.**



Your screen should be similar to Figure 3.8

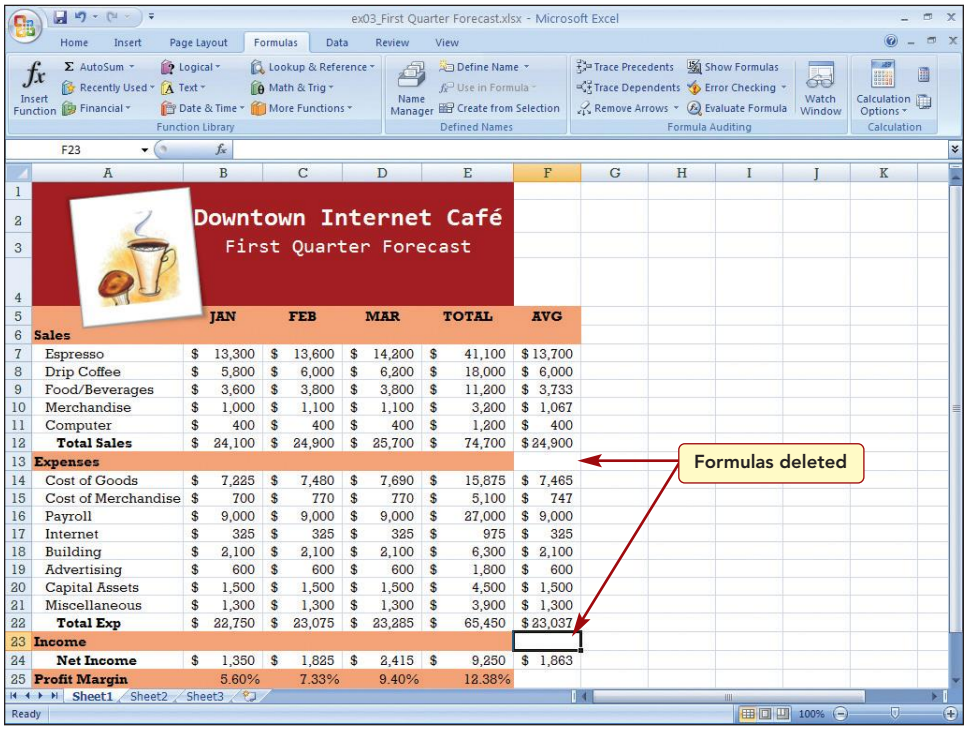


Figure 3.8

Using Absolute References

While looking at the sales data in the worksheet, you decide it may be interesting to know what contribution each sales item makes to total sales. To find out, you will enter a formula to calculate the proportion of sales by each in column G. You will start by entering a new column heading in cell G5 and adding formatting to G6 using the AutoFill feature. Then you will enter the formula = Total Espresso Sales/Total Sales to calculate the proportion for Espresso sales in G7 and copy it to G8 to calculate the proportion for Drip Coffee sales.

1. **Enter the heading Proportion in cell G5.**
- **Drag the fill handle of cell G5 to copy the entry into cell G6.**
- **Open the drop-down menu and choose Fill Formatting Only.**
- **Best fit column G.**
- **Enter the formula =E7/E12 in cell G7.**
- **Drag the fill handle to copy the formula in cell G7 to G8.**

Your screen should be similar to Figure 3.9

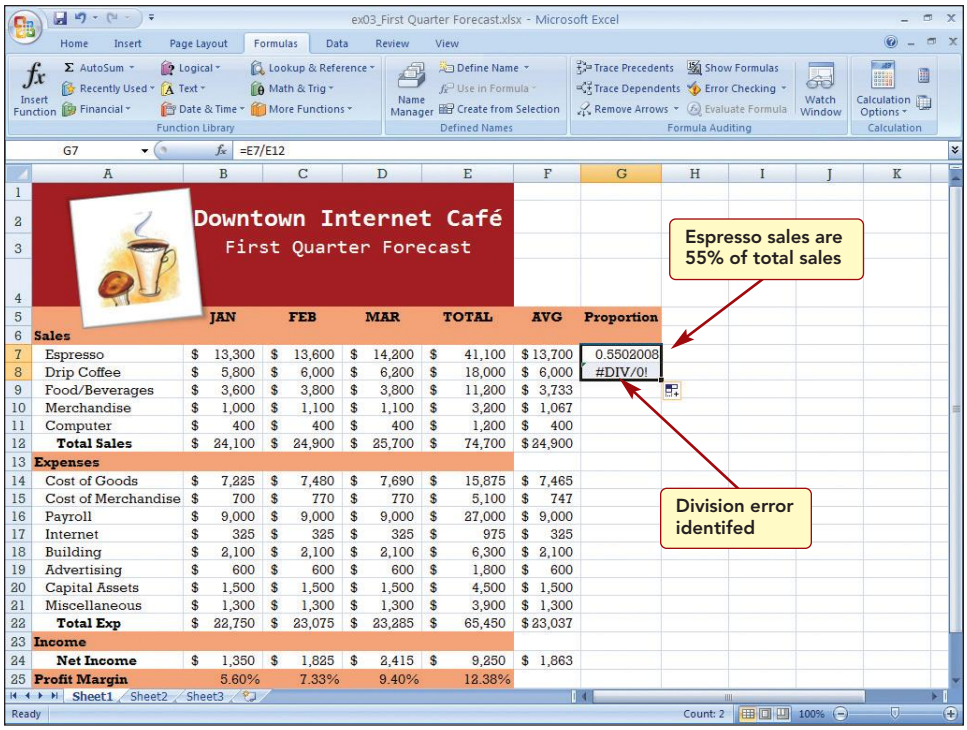


Figure 3.9

The value 0.550201 is correctly displayed in cell G7. This shows that the Espresso sales are approximately 55 percent of Total Sales. However, a division error has occurred in cell G8. You will quickly check the formula in that cell by changing to Edit mode.

2. **Double-click on cell G8.**

Your screen should be similar to Figure 3.10

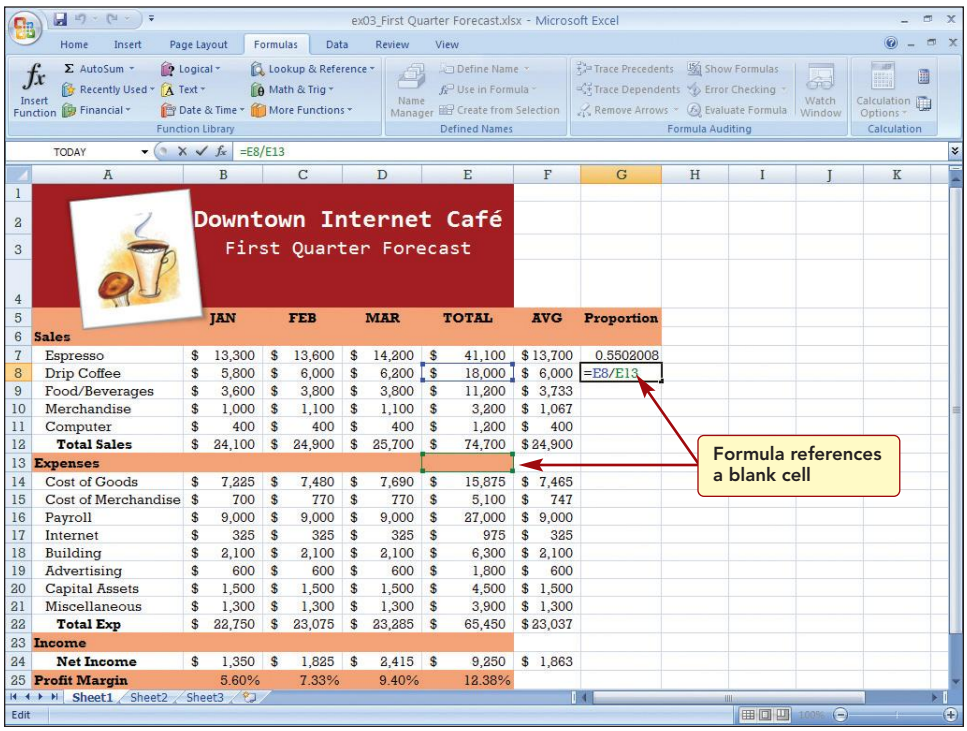


Figure 3.10

In Edit mode, the formula references are again color coded to the worksheet cells. You can now see the error occurred because the relative reference to cell E12 adjusted correctly to the new location when the formula was copied and now references cell E13, a blank cell. The formula in G7 needs to be entered so that the reference to the Total Sales value in cell E12 does not change when the formula is copied. To do this, you need to make the cell reference absolute.

Concept 1

Absolute Reference

1 An **absolute reference** is a cell or range reference in a formula whose location does not change when the formula is copied.

To stop the relative adjustment of cell references, enter a $ (dollar sign) character before the column letter and row number. This changes the cell reference to absolute. When a formula containing an absolute cell reference is copied to another row and column location in the worksheet, the cell reference does not change. It is an exact duplicate of the cell reference in the original formula.

A cell reference also can be a **mixed reference.** In this type of reference, either the column letter or the row number is preceded with the $. This makes only the row or column absolute. When a formula containing a mixed cell reference is copied to another location in the worksheet, only the part of the cell reference that is not absolute changes relative to its new location in the worksheet.

The table below shows examples of relative and absolute references and the results when a reference in cell G8 to cell E8 is copied to cell H9.

Cell Contents of G8	Copied to Cell H9	Type of Reference
E8	E8	Absolute reference
E$8	F$8	Mixed reference
$E8	$E9	Mixed reference
E8	F9	Relative reference

You will change the formula in cell G7 to include an absolute reference for cell E11. Then you will copy the formula to cells G8 through G10.

You can change a cell reference to absolute or mixed by typing in the dollar sign directly or by using the ABS (Absolute) key, F4. To use the ABS key, the program must be in Edit mode and the cell reference that you want to change must be selected. If you continue to press F4, the cell reference will cycle through all possible combinations of cell reference types.

3 Press Esc to exit Edit mode.

- Move to G7.
- Click on the reference to E12 in the formula bar to enter Edit mode and select the reference.
- Press F4 four times to cycle through all reference types.
- Press F4 again to display an absolute reference.

Your screen should be similar to Figure 3.11

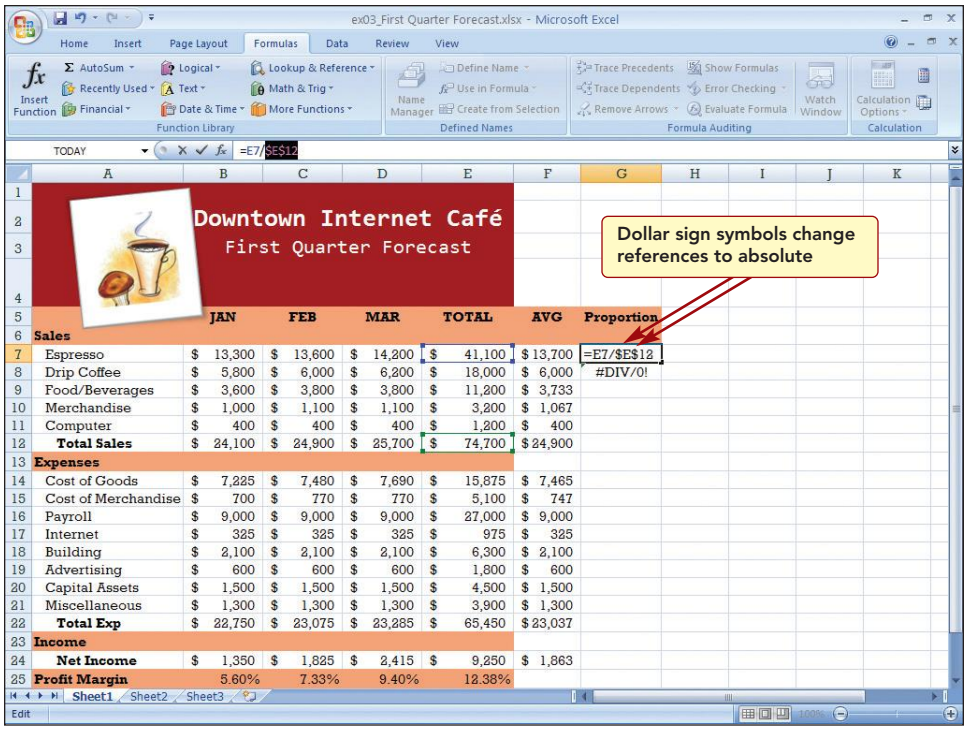


Figure 3.11

MORE ABOUT

To learn how to create a formula with a mixed cell reference, see 3.1 Reference Data in Formulas in the More About appendix.

The cell reference now displays $ characters before the column letter and row number, making this cell reference absolute. Leaving the cell reference absolute, as it is now, will stop the relative adjustment of the cell reference when you copy it again.

4 Click Enter.

- Copy the revised formula to cells G8 through G11.
- Double-click on cell G8.

Your screen should be similar to Figure 3.12

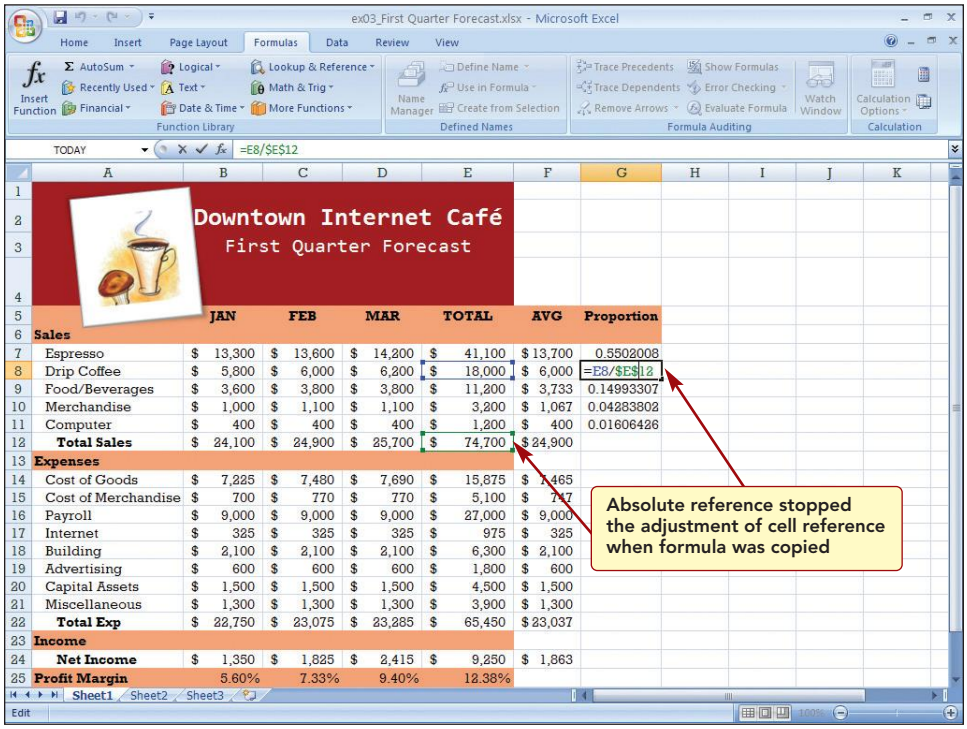


Figure 3.12

The formula when copied correctly adjusted the relative cell reference to Drip Coffee sales in cell E8 and did not adjust the reference to E12 because it is an absolute reference.

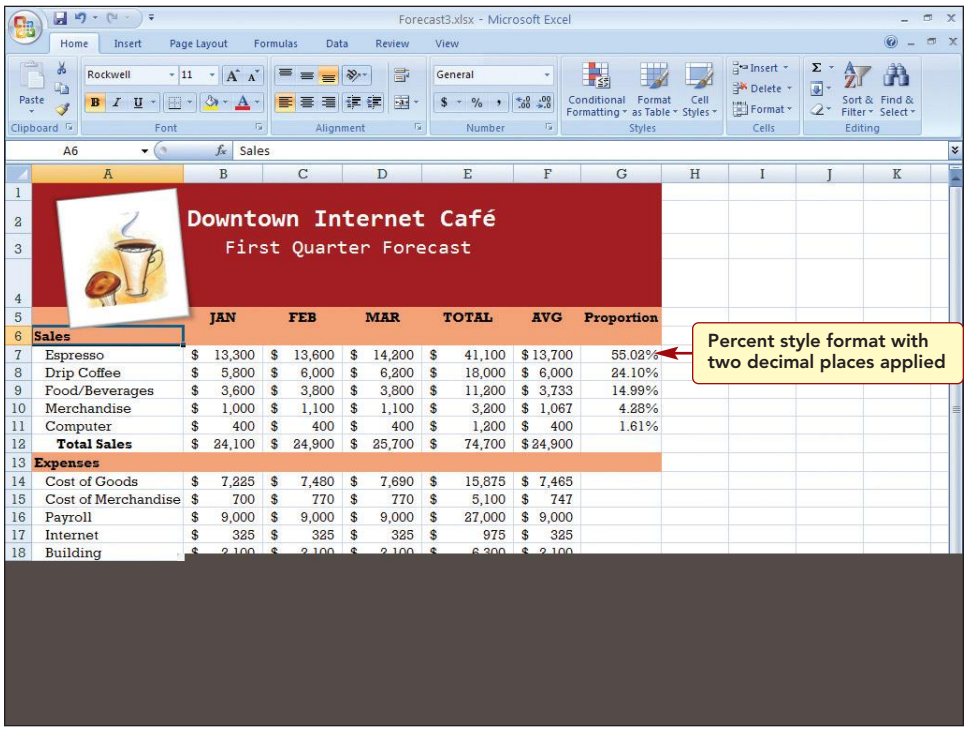
The last change you need to make to the proportion data is to format it to the Percent style.

5. **Press Esc.**
- **Select G7 through G11.**
- **Open the Home tab.**
- **Click % Percent Style in the Number group of the Home tab.**
- **Click Increase Decimal (twice).**
- **Extend the fill in the title area to columns F and G.**

Having Trouble?
Use fill series with formatting only or Format Painter to copy the fill colors.

- **Extend the fill in rows 13, 23, and 25 to columns F and G.**
- **Move to cell A6 and save the workbook as Forecast3 to your solution file location.**

Your screen should be similar to Figure 3.13



	A	JAN	FEB	MAR	TOTAL	AVG	Proportion
6	Sales						
7	Espresso	$ 13,300	$ 13,600	$ 14,200	$ 41,100	$ 13,700	55.02%
8	Drip Coffee	$ 5,800	$ 6,000	$ 6,200	$ 18,000	$ 6,000	24.10%
9	Food/Beverages	$ 3,600	$ 3,800	$ 3,800	$ 11,200	$ 3,733	14.99%
10	Merchandise	$ 1,000	$ 1,100	$ 1,100	$ 3,200	$ 1,067	4.28%
11	Computer	$ 400	$ 400	$ 400	$ 1,200	$ 400	1.61%
12	**Total Sales**	$ 24,100	$ 24,900	$ 25,700	$ 74,700	$ 24,900	
13	**Expenses**						
14	Cost of Goods	$ 7,225	$ 7,480	$ 7,690	$ 15,875	$ 7,465	
15	Cost of Merchandise	$ 700	$ 770	$ 770	$ 5,100	$ 747	
16	Payroll	$ 9,000	$ 9,000	$ 9,000	$ 27,000	$ 9,000	
17	Internet	$ 325	$ 325	$ 325	$ 975	$ 325	
18	Building	$ 2,100	$ 2,100	$ 2,100	$ 6,300	$ 2,100	

Figure 3.13

The calculated proportion shows the same values that a pie chart of this data would show.

Working with Sheets

Next, you want to add the second-quarter forecast to the workbook. You want this data in a separate sheet in the same workbook file. To make it easier to enter the forecast for the next quarter, you will copy the contents of the first-quarter forecast in Sheet1 into another sheet in the workbook.

MORE ABOUT

You also can copy between workbooks. To learn about this feature, see Copy Worksheets between Workbooks in the 1.5 Manage Worksheets section of the More About appendix.

Then you will change the month headings, the title, and the number data for the second quarter. Finally, you want to include a formula to calculate a year-to-date total for the six months.

Copying between Sheets

You want to copy the worksheet data from Sheet1 to Sheet2. Copying between sheets is the same as copying within a sheet, except that you switch to the new sheet to specify the destination.

1. **Select the worksheet range A1 through G25.**

Having Trouble?
A quick way to select this range is to move to cell A1, hold down Shift, and click on cell G25.

- **Click Copy.**
- **Click on the Sheet2 tab.**
- **Click Paste.**

Your screen should be similar to Figure 3.14

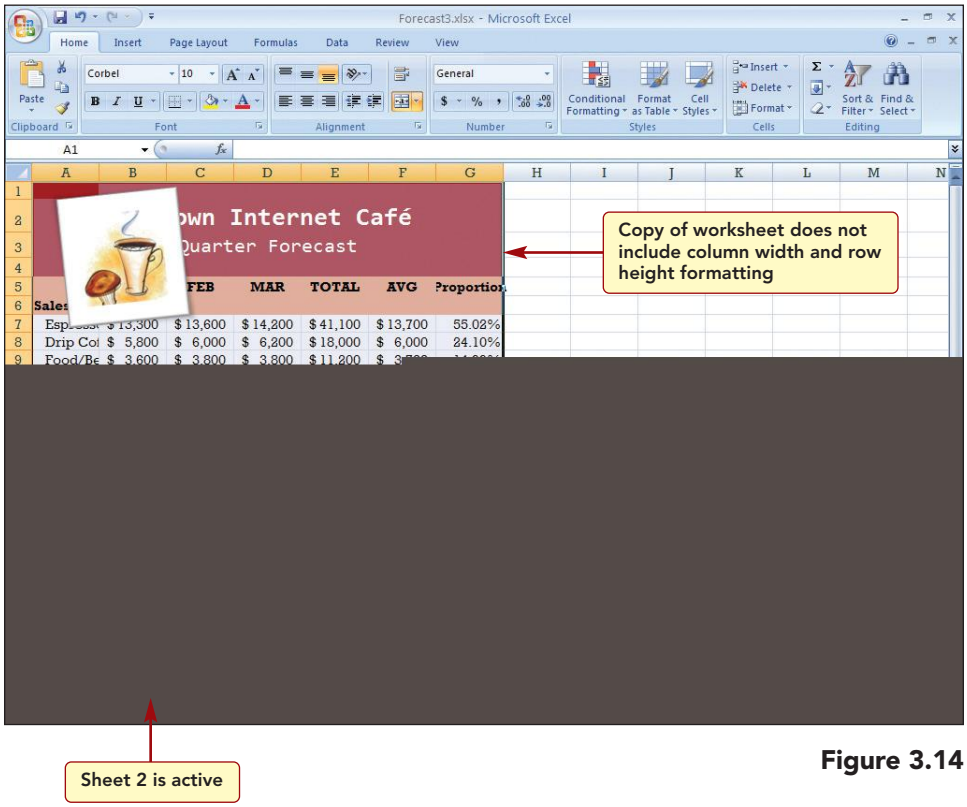


Figure 3.14

All the worksheet data, graphic objects, and formatting, except for the column width settings, are copied into the existing Sheet2. You want to include the column width settings from the source. Notice also that the extra row height of row four was not copied. You will need to manually adjust the height.

2. **Open the Paste menu and choose Paste Special.**
   - **Choose Column Widths.**
   - **Click OK.**
   - **Increase the row height of row 4 to 39 points (52 pixels).**
   - **Click in the worksheet to clear the selection.**

Your screen should be similar to Figure 3.15

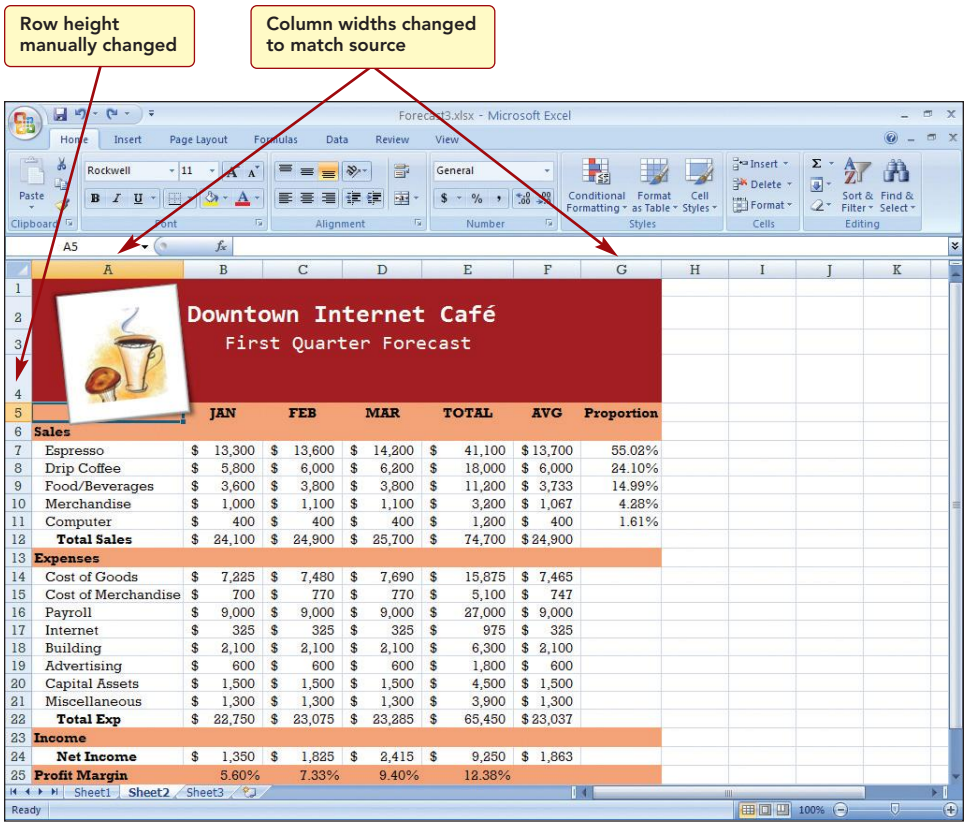


Figure 3.15

MORE ABOUT

To learn about other Paste Special options, see 1.3 Modify Cell Contents and Formats in the More About appendix.

Another Method

You also can use Format /Move or Copy Sheet in the Cells group or hold down Ctrl while dragging the active sheet tab to copy an entire sheet. All formatting, including column widths, is copied into the destination sheet.

The column widths from the copied selection are pasted into the new sheet. Sheet2 now contains a duplicate of the first-quarter forecast in Sheet1.

Renaming Sheets and Coloring Sheet Tabs

As more sheets are added to a workbook, remembering what information is in each sheet becomes more difficult. To help clarify the contents of the sheets, you can rename the sheets.

Concept 2

Sheet Name

2 Each sheet in a workbook can be assigned a descriptive **sheet name** to help identify the contents of the sheet. The following guidelines should be followed when naming a sheet. A sheet name

- Can be up to 31 characters.
- Can be entered in uppercase or lowercase letters or a combination (it will appear as entered).
- Can contain any combination of letters, numbers, and spaces.
- Cannot contain the characters : ? * / \.
- Cannot be enclosed in square brackets [ ].

Double-clicking the sheet tab makes the sheet active and highlights the existing sheet name in the tab. The existing name is cleared as soon as you begin to type the new name. You will change the name of Sheet1 to First Quarter and Sheet2 to Second Quarter.

1. **Double-click the Sheet1 tab.**
2. **Type First Quarter.**
3. **Press Enter.**
4. **Change the name of the Sheet2 tab to Second Quarter.**

Another Method

You also can use Format /Rename Sheet in the Cells group of the Home tab

Your screen should be similar to Figure 3.16

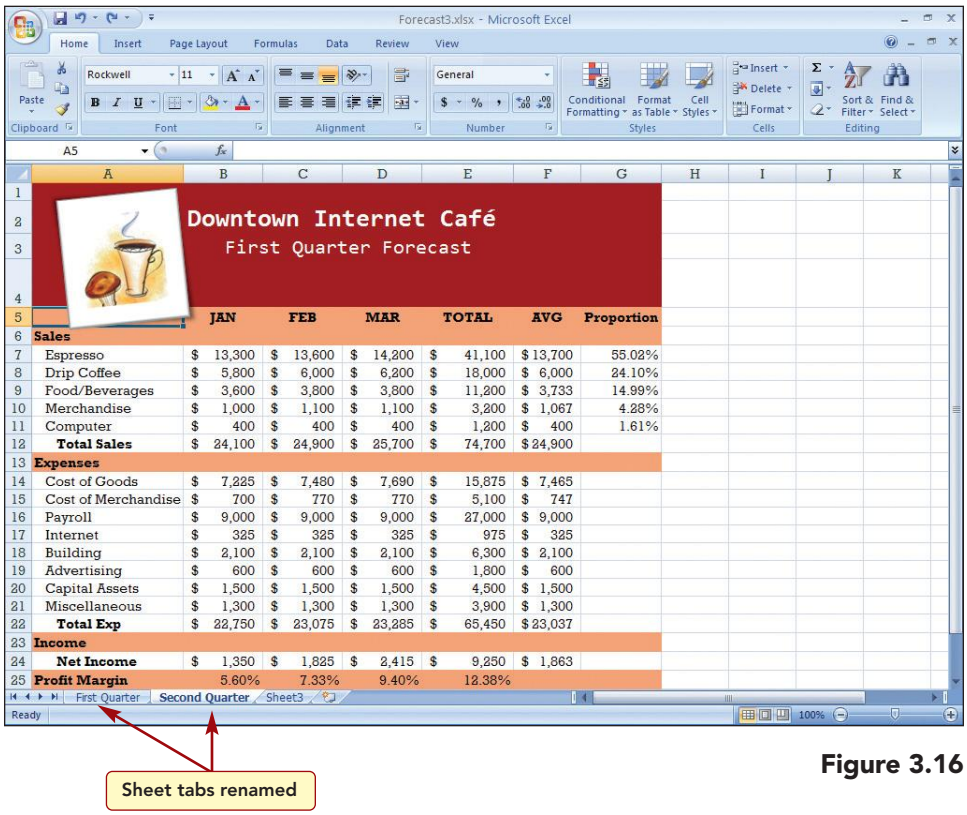


Figure 3.16

To further differentiate the sheets, you can add color to the sheet tabs.

2. **Right-click on the First Quarter tab.**

- **Select Tab Color from the shortcut menu.**
- **Choose the Turquoise, Accent 1 theme color from the color palette.**
- **In the same manner, change the color of the Second Quarter sheet tab to the Red, Accent 2 theme color.**

Another Method

You also can use Format / Tab Color in the Cells group.

Your screen should be similar to Figure 3.17

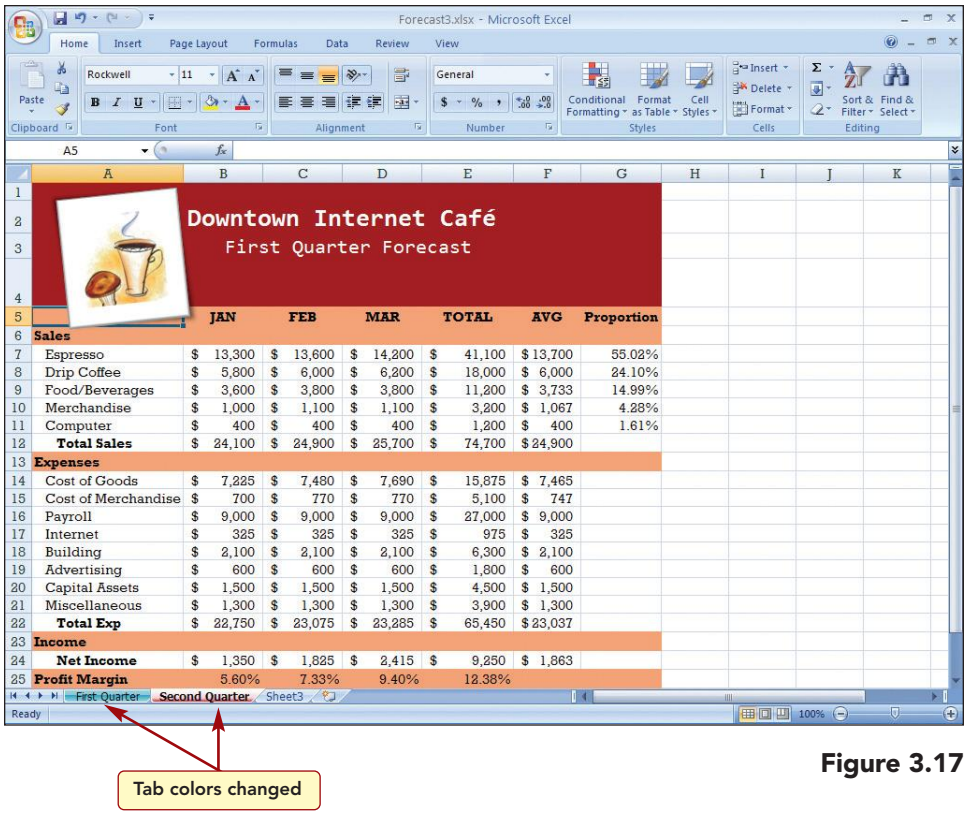


Figure 3.17

The sheet tab name of the selected sheet is underlined in the tab color of red and the First Quarter sheet tab is blue. When a sheet is not selected, the sheet tab is displayed with the background color.

Filling a Series

Now you can change the worksheet title and data in the Second Quarter sheet. First you will change the worksheet title to identify the worksheet contents as the second-quarter forecast. Then you will change the month headings to the three months that make up the second quarter: April, May, and June.

1. **Change the title in cell B3 to Second Quarter Forecast.**

2. **Change the month heading in cell B5 to APR.**

Your screen should be similar to Figure 3.18

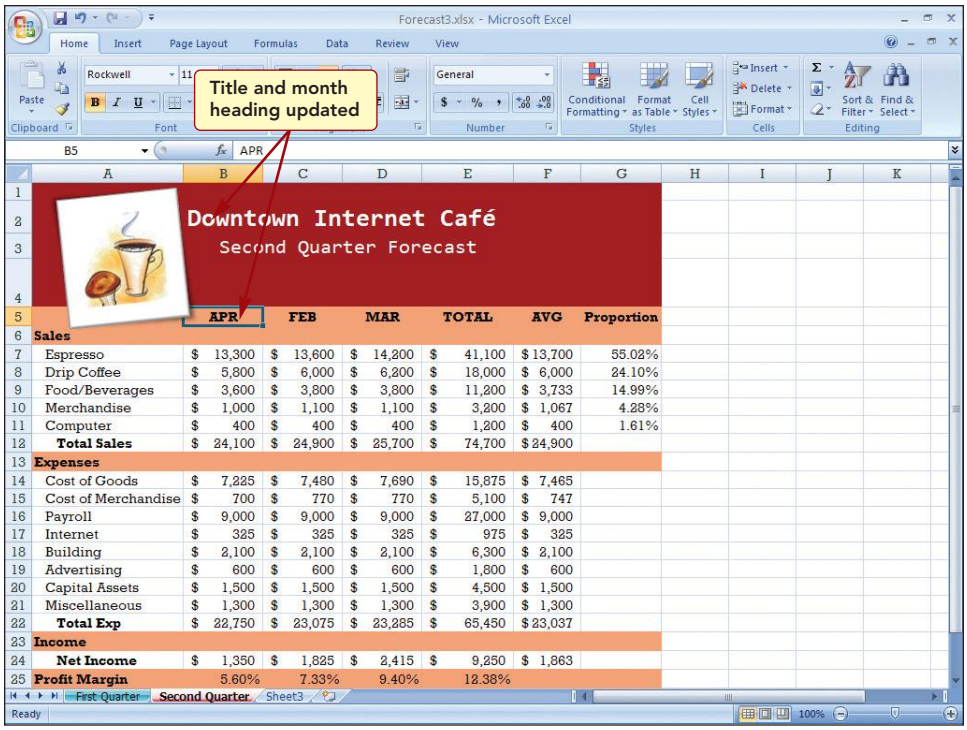


Figure 3.18

Now you need to change the remaining month headings to MAY and JUN. You will use the AutoFill feature to enter the month headings.

Concept 3

AutoFill

3 The **AutoFill** feature makes entering a series of numbers, numbers and text combinations, dates, or time periods easier by logically repeating and extending the series. AutoFill recognizes trends and automatically extends data and alphanumeric headings as far as you specify.

Dragging the fill handle activates the AutoFill feature if Excel recognizes the entry in the cell as an entry that can be incremented. When AutoFill extends the entries, it uses the same style as the original entry. For example, if you enter the heading for July as JUL (abbreviated with all letters uppercase), all the extended entries in the series will be abbreviated and uppercase. Dragging down or right increments in increasing order, and up or left increments in decreasing order. A linear series increases or decreases values by a constant value, and a growth series multiplies values by a constant factor. Examples of how AutoFill extends a series are shown in the table below.

Initial Selection	Extended Series
Qtr1	Qtr2, Qtr3, Qtr4
Mon	Tue, Wed, Thu
Jan, Apr	Jul, Oct, Jan

A starting value of a series may contain more than one item that can be incremented, such as JAN-02, in which both the month and year can increment. You can specify which value to increment by selecting the appropriate option from the AutoFill Options menu.

The entry in cell B5, APR, is the starting value of a series of months. You will drag the fill handle to the right to increment the months. The mouse pointer displays the entry that will appear in each cell as you drag.

2. **Drag the fill handle of cell B5 to extend the range from cell B5 through cell D5.**

3. **Save the workbook.**

Your screen should be similar to Figure 3.19

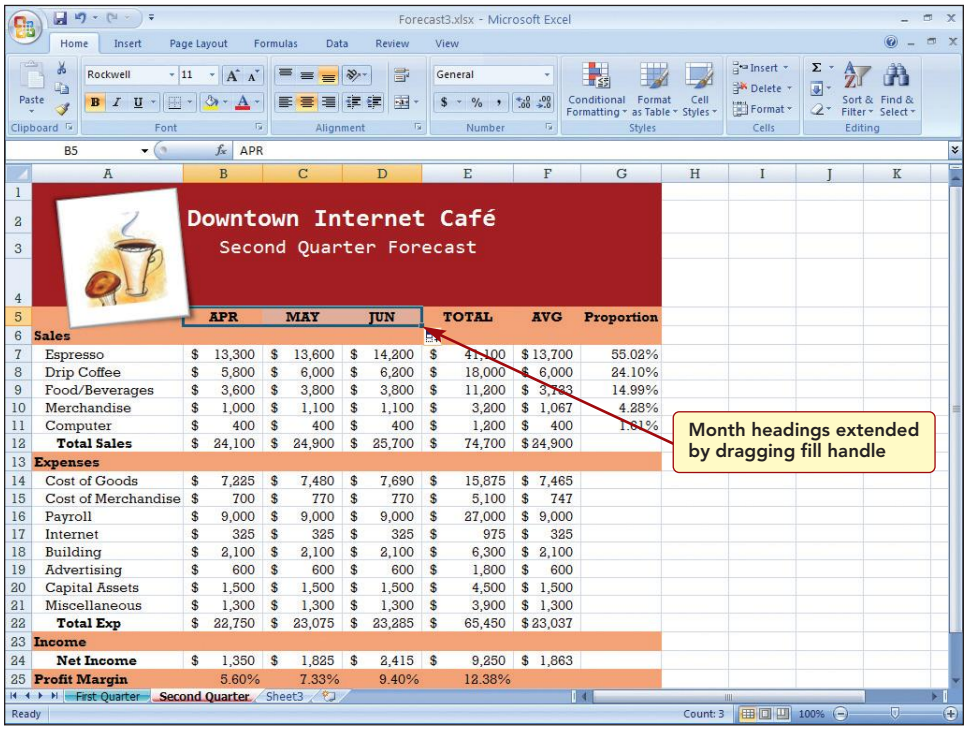


Figure 3.19

Additional Information

If you do not want a series created when you drag the fill handle, hold down Ctrl as you drag and the entries will be copied, not incremented. Alternatively, you can choose Copy Cells from the AutoFill Options menu.

The month headings now correctly reflect the three months for the second quarter. This is because the entry in cell B5 was a month that was recognized as an entry that can be incremented. Additionally, the months appear in uppercase characters, the same as the starting month. This is because AutoFill copies formatting when extending the series.

Referencing Multiple Sheets

Finally, you need to update the forecast to reflect the April through June sales. Then you will enter a formula to calculate the year-to-date income total using data from both sheets.

1 **Enter the following values in the specified cells.**

Sales	Cell	Number
Espresso	B7	14400
	C7	15200
	D7	15500
Drip Coffee	B8	6200
	C8	6200
	D8	6200
Food/Beverages	B9	3600
	C9	3800
	D9	3800
Merchandise	B10	1500
	C10	1500
	D10	1500
Computer	B11	600
	C11	600
	D11	600

Your screen should be similar to Figure 3.20

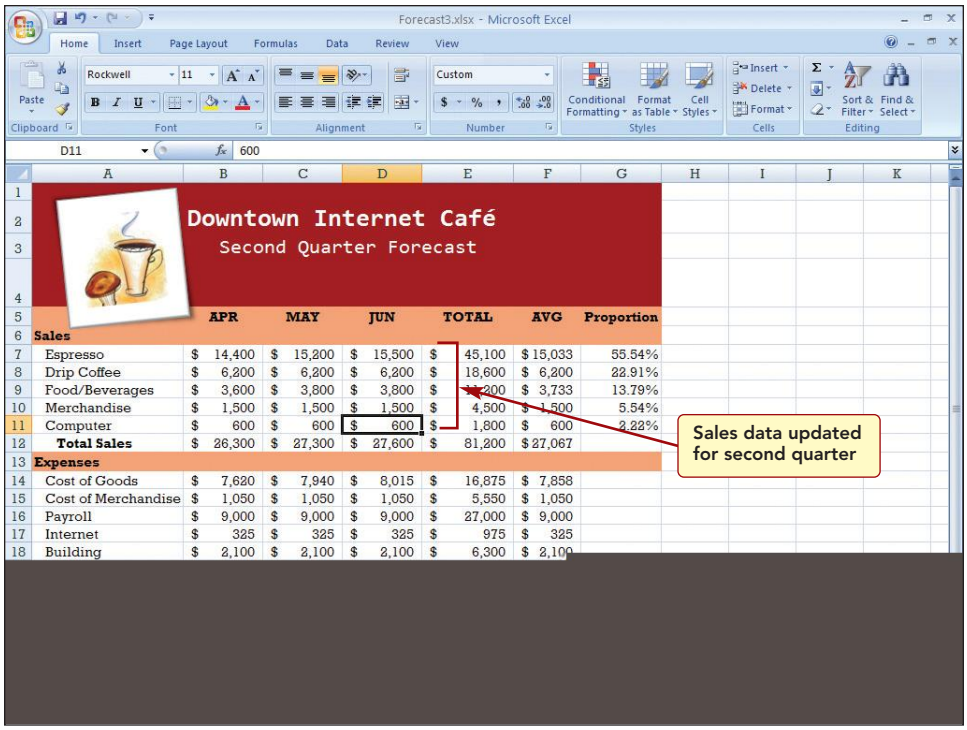


Figure 3.20

The worksheet now contains the data for the second quarter and all dependent formulas have been recalculated.

Now you can enter the formula to calculate a year-to-date income total. The formula to make this calculation will sum the total income numbers from cell E24 in the First Quarter sheet and cell E24 in the Second Quarter sheet. To reference data in another sheet in the same workbook, you enter a formula that references cells in other worksheets.

Concept 4

Sheet and 3-D References

4 A formula that contains references to cells in other sheets of a workbook allows you to use data from multiple sheets and to calculate new values based on this data. The formula contains a **sheet reference** consisting of the name of the sheet, followed by an exclamation point and the cell or range reference. If the sheet name contains nonalphabetic characters, such as a space, the sheet name (or path) must be enclosed in single quotation marks.

If you want to use the same cell or range of cells on multiple sheets, you can use a 3-D reference. A **3-D reference** consists of the names of the beginning and ending sheets enclosed in quotes and separated by a colon. This is followed by an exclamation point and the cell or range reference. The cell or range reference is the same on each sheet in the specified sheet range. If a sheet is inserted or deleted, the range is automatically updated. 3-D references make it easy to analyze data in the same cell or range of cells on multiple worksheets.

Reference	Description
=Sheet2!B17	Displays the entry in cell B17 of Sheet2 in the active cell of the current sheet
=Sheet1!A1 + Sheet2!B2.	Sums the values in cell A1 of Sheet1 and B2 of Sheet2
=SUM(Sheet1:Sheet4!H6:K6)	Sums the values in cells H6 through K6 in Sheets 1, 2, 3, and 4
=SUM(Sheet1!H6:K6)	Sums the values in cells H6 through K6 in Sheet1
=SUM(Sheet1:Sheet4!H6)	Sums the values in cell H6 of Sheets 1, 2, 3, and 4

Just like a formula that references cells within a sheet, a formula that references cells in multiple sheets is automatically recalculated when data in a referenced cell changes.

You will enter a descriptive text entry in cell D25 and then use a 3-D reference in a SUM function to calculate the year-to-date total in cell E25.

The SUM function argument will consist of a 3-D reference to cell E24 in the First and Second Quarter sheets. Although a 3-D reference can be entered by typing it using the proper syntax, it is much easier to enter it by pointing to the cells on the sheets. To enter a 3-D reference, select the cell or range in the beginning sheet and then hold down ⇧Shift and click on the sheet tab of the last sheet in the range. This will include the indicated cell range on all sheets between and including the first and last sheets specified.

2. **In cell D26, enter and right-align the entry Income Year-to-Date.**
   - **Move to E26.**
   - **Click Σ Sum.**
   - **Click cell E24.**
   - **Hold down Shift and click the First Quarter tab.**
   - **Release Shift.**
   - **Press Enter.**
   - **Move to E26.**

Your screen should be similar to Figure 3.21

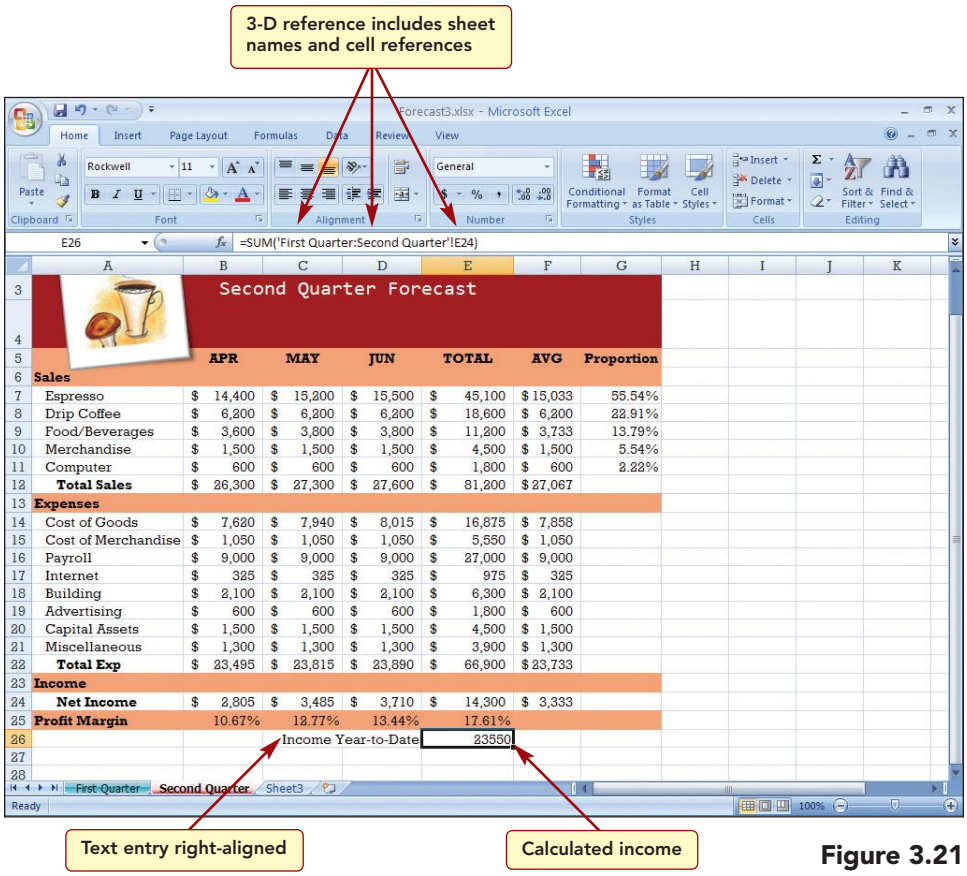


Figure 3.21

The calculated number 23550 appears in cell E26, and the function containing a 3-D reference appears in the formula bar.

Hiding Gridlines and Headings

Just as you completed the forecast for the first half of the year, Evan, the Café owner, stopped in and you decide to show him the forecast. To simplify the screen display while showing Evan the worksheet, you will hide the gridlines and column and row headings.

1. **Move to cell A1 and open the View tab.**
2. **Choose** Gridlines **from the Show/Hide group to clear the selection.**
3. **Choose** Headings **from the Show/Hide group to clear the selection.**

Your screen should be similar to Figure 3.22

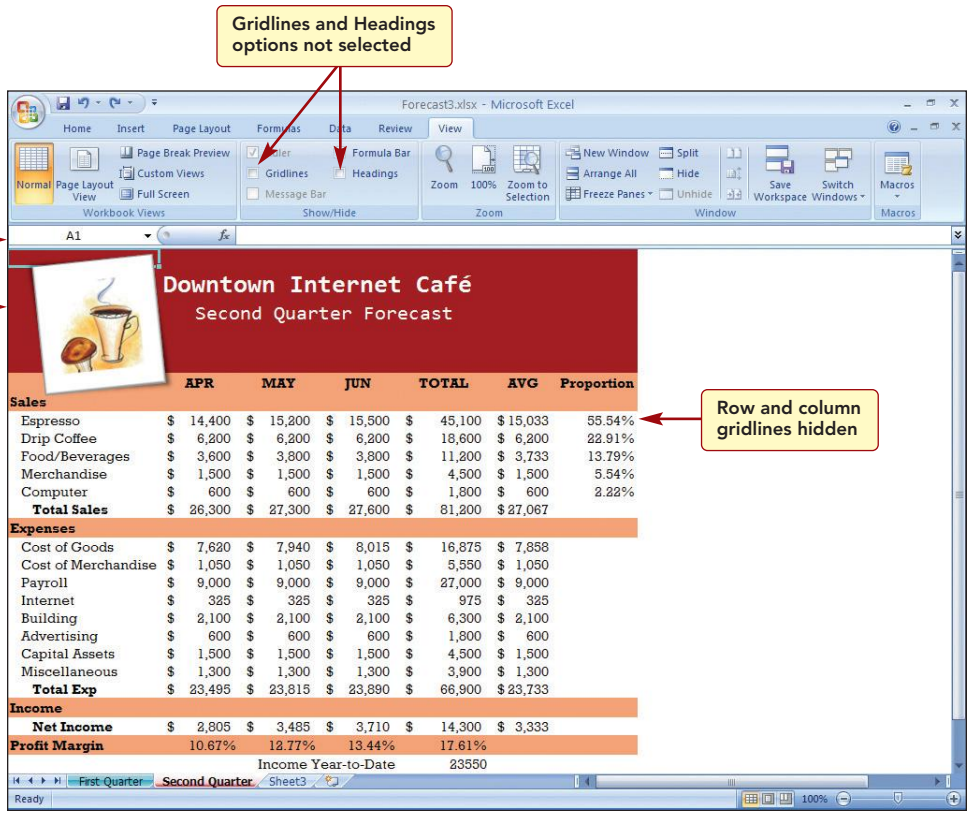


Figure 3.22

While these features are off, you will format the year-to-date income value to Accounting with zero decimal places. Rather than opening the Home tab to access these features, you will copy the format from another cell. The Paste Special menu option, Formatting only, will do this quickly for you.

2. **Select any cell that is formatted in the Accounting format and choose Copy from the context menu.**
3. **Right-click on cell E26 and choose Paste Special from the context menu.**
4. **Choose Formats and click** OK **.**

Your screen should be similar to Figure 3.23

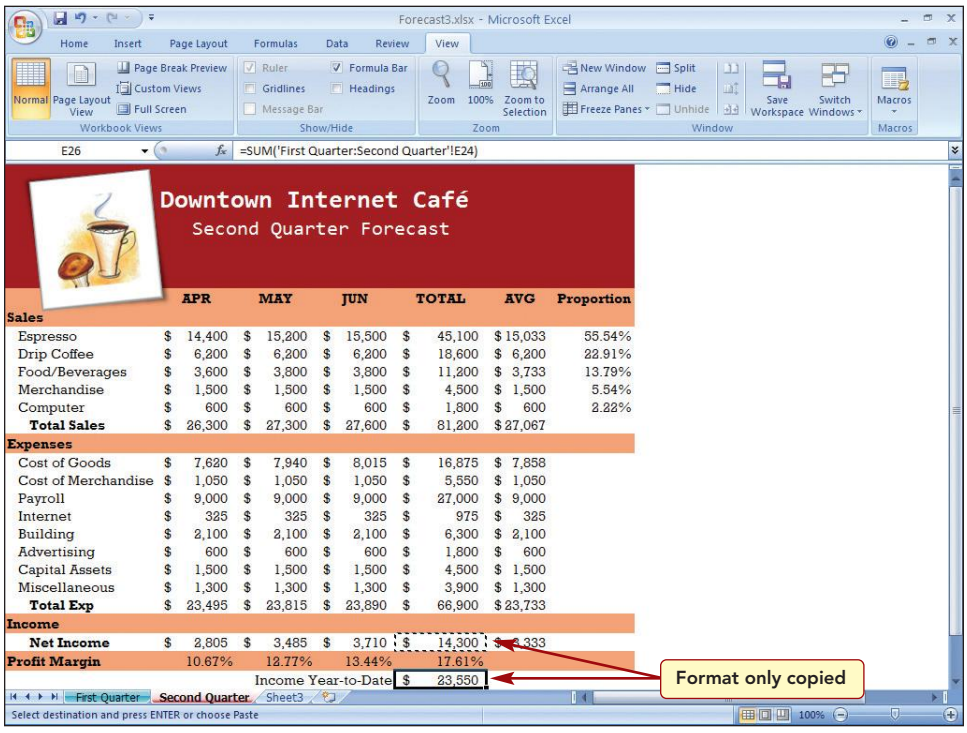


Figure 3.23

Hiding gridlines and headers is convenient for presenting the worksheet to others; however, it is not as easy to work in the sheet with these features off. You will turn them back on and then print a copy of the workbook for Evan.

3 **Choose** Gridlines **from the Show/Hide group to select it.**

Choose Headings **from the Show/Hide group to select it.**

Enter the following information in the workbook properties.

Author	**your name**
Title	**Downtown Internet Cafe**
Subject	**First and second quarter forecasts**

Having Trouble?

Click Office Button, point to Prepare, and choose Properties to open the Document Information Panel.

Preview the entire workbook.

Add a predefined header containing your name, page number, and the date to both sheets.

Print the workbook.

Move to cell A6 in both sheets and save the workbook.

Close the workbook.

Note: If you are running short on lab time, this is an appropriate place to end this session and begin again at a later time.

Deleting and Moving Sheets

You presented the completed first- and second-quarter forecasts to Evan. He is very pleased with the results and now wants you to create worksheets for the third and fourth quarters and a combined annual forecast. Additionally, Evan has asked you to include a column chart of the data for each quarter. Finally, after looking at the forecast, Evan wants the forecast to show a profit margin of 15 percent for each month in the second quarter.

You have already made several of the changes requested and saved them as a workbook file. You will open this file to see the revised and expanded forecast.

1. **Open the workbook file** ex03_Annual Forecast.

Your screen should be similar to Figure 3.24

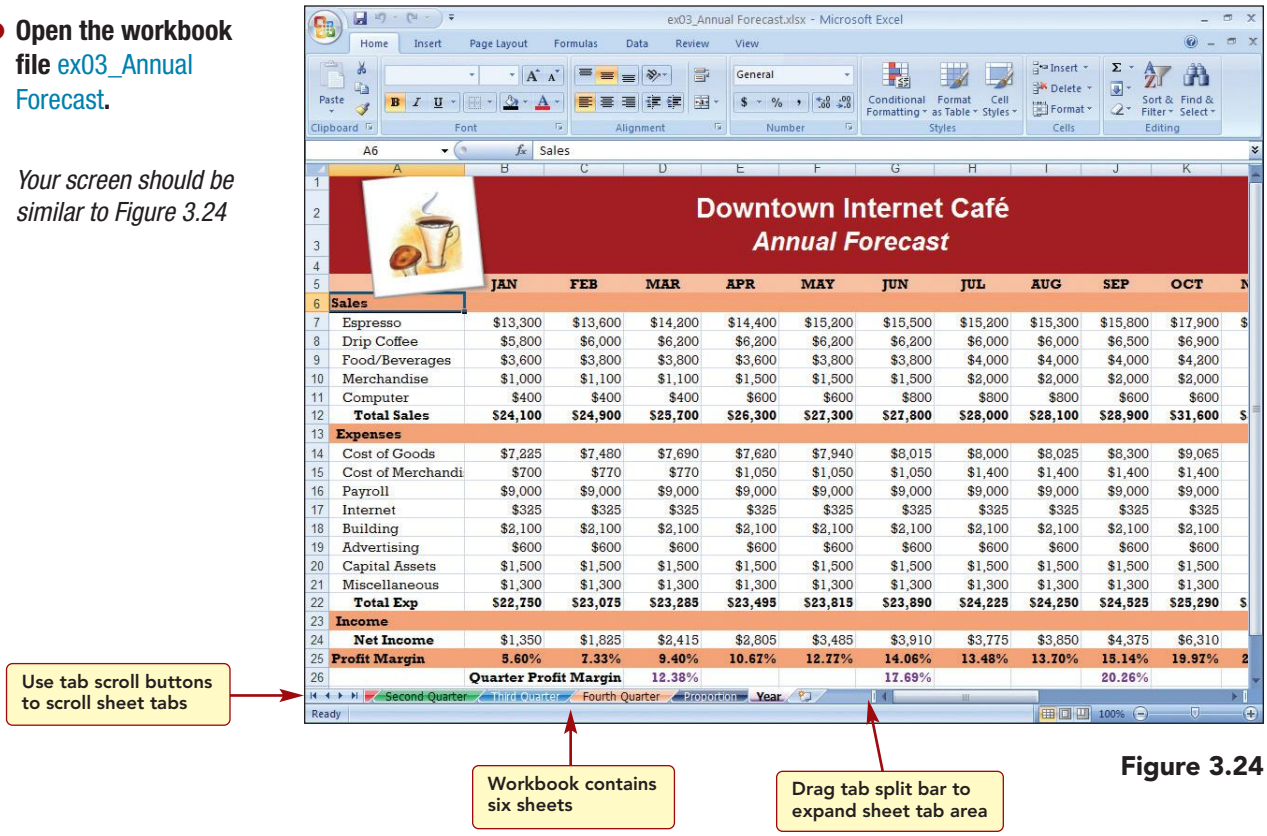


Figure 3.24

The workbook file now contains six sheets: First Quarter, Second Quarter, Third Quarter, Fourth Quarter, Proportion, and Year. The Proportion sheet contains the proportion of sales values from the first and second quarters. The Year sheet contains the forecast data for the entire 12 months. Each quarter sheet also includes a chart of the profit margin for that quarter.

Notice also that the First Quarter sheet tab is not entirely visible. This is because there is not enough space in the sheet tab area to display all the tabs. To see the tabs, you can drag the tab split bar located at the right edge of the sheet tab area to expand the area or use the sheet tab scroll buttons to scroll the tabs into view.

2 **Click on each of the Quarter sheet tabs to view the quarterly data and profit margin chart.**

Display the Proportion sheet.

Your screen should be similar to Figure 3.25

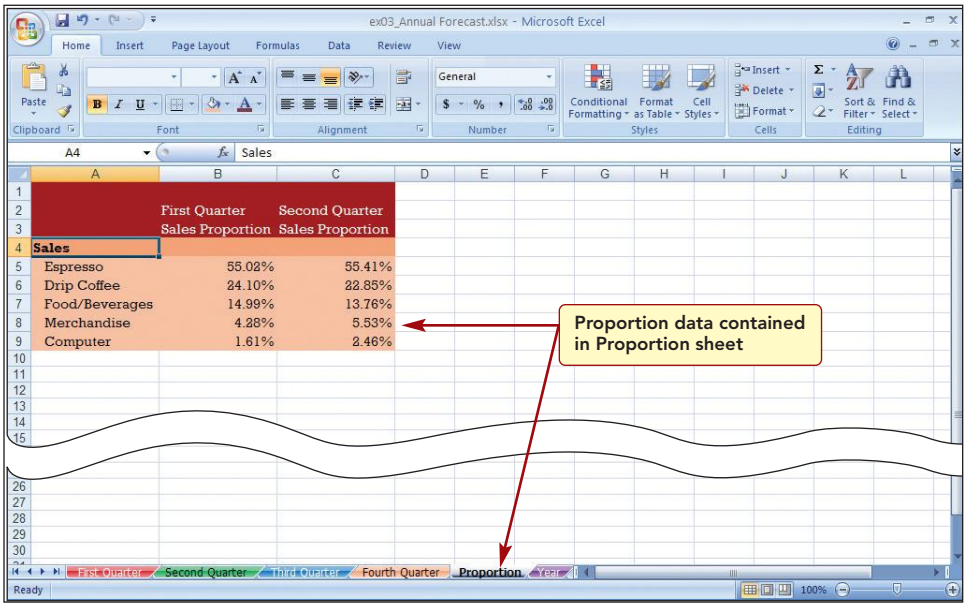


Figure 3.25

You decide this data, although interesting, is not needed in the forecast workbook and want to delete the entire sheet.

3 **In the Cells group of the Home tab, open the Delete menu and choose Delete Sheet.**

Click Delete to confirm that you want to permanently remove the sheet.

Another Method

You also can choose Delete from the sheet tab's shortcut menu to delete a sheet.

Your screen should be similar to Figure 3.26

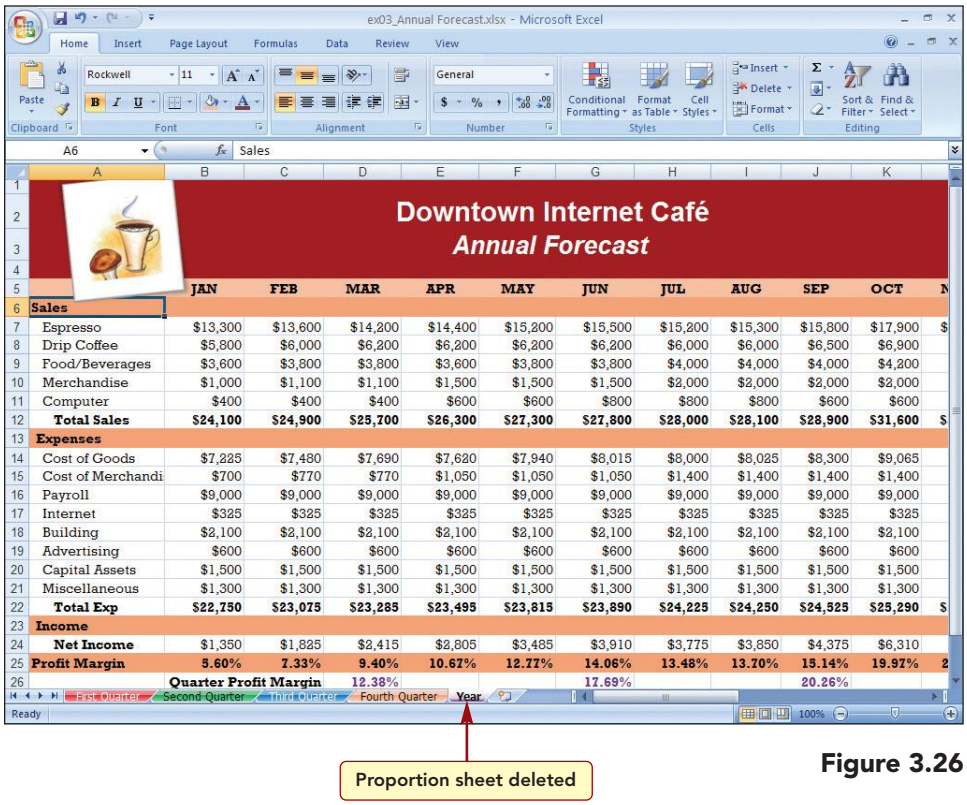


Figure 3.26

Additional Information

You can insert a blank new sheet using Insert and choosing Insert Sheet. It is inserted to the left of the active sheet.

The entire sheet is deleted, and the Year sheet is now the active sheet. Next you want to move the Year sheet from the last position in the workbook to the first. You can quickly rearrange the order of sheets in a workbook by dragging the selected sheet tab along the row of sheet tabs to the new location.

4 **Drag the Year tab to the left of the First Quarter tab.**

Additional Information

The mouse pointer appears as and the symbol indicates the location where the sheet will be moved.

Another Method

You also can use Move or Copy from the sheet tab's shortcut menu to move a sheet to another location in the workbook.

Your screen should be similar to Figure 3.27

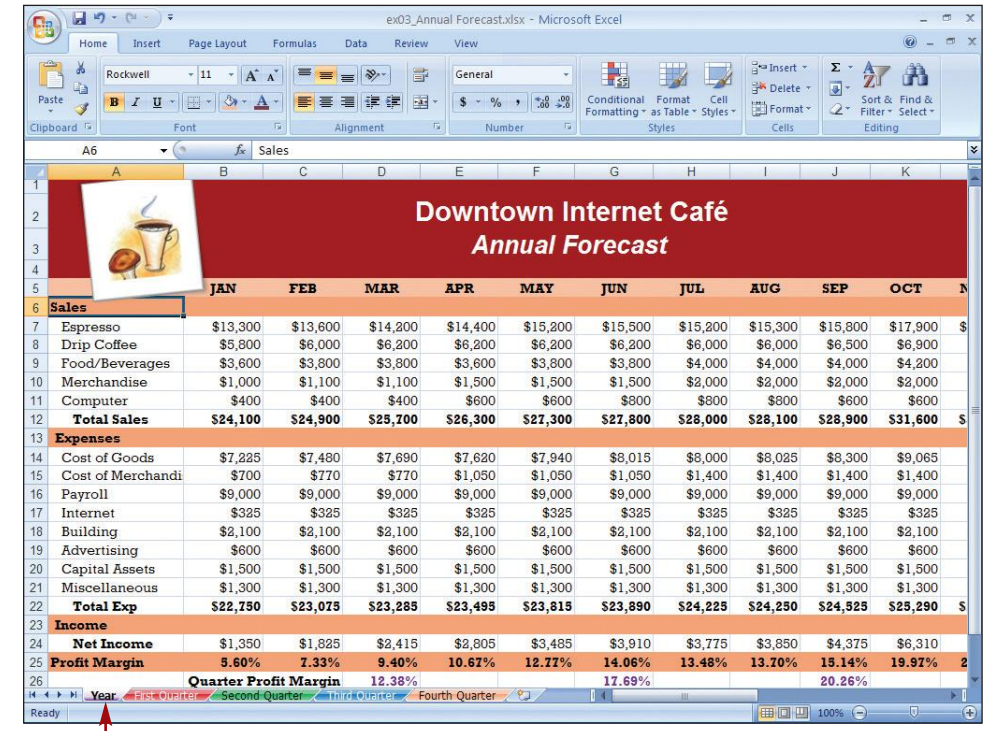


Figure 3.27

The Year sheet is now the first sheet in the workbook.

Finding and Replacing Information

As you look over the worksheets, you notice that the only abbreviation used in the entire workbook is for expenses in the Total Exp row heading. You want to change it to "Expenses" in all worksheets in the workbook.

You could change the word in each sheet by changing the text directly on the worksheet cells. However, the larger your workbook becomes, the more difficult it will be to find the data you want to modify. Therefore, you will use the Find and Replace feature to quickly locate the word and make the change.

Concept 5

Find and Replace

5 The **Find and Replace** feature helps you quickly find specific information and automatically replace it with new information. The Find command locates all occurrences of the text or numbers you specify. The Replace command is used with the Find command to locate the specified entries and replace the located occurrences with the replacement text you specify. You also can find cells that match a format you specify and replace the format with another. Finding and replacing data and formats is both fast and accurate, but you need to be careful when replacing that you do not replace unintended matches.

Finding Information

First, you will locate and correct the abbreviation using the Find command. This command can be used to locate data in any type of worksheet.

1. Click Find & Select in the Editing group and choose Find.

- If necessary, click Options >> to display the additional search options.

Another Method
The keyboard shortcut is Ctrl + F.

Your screen should be similar to Figure 3.28

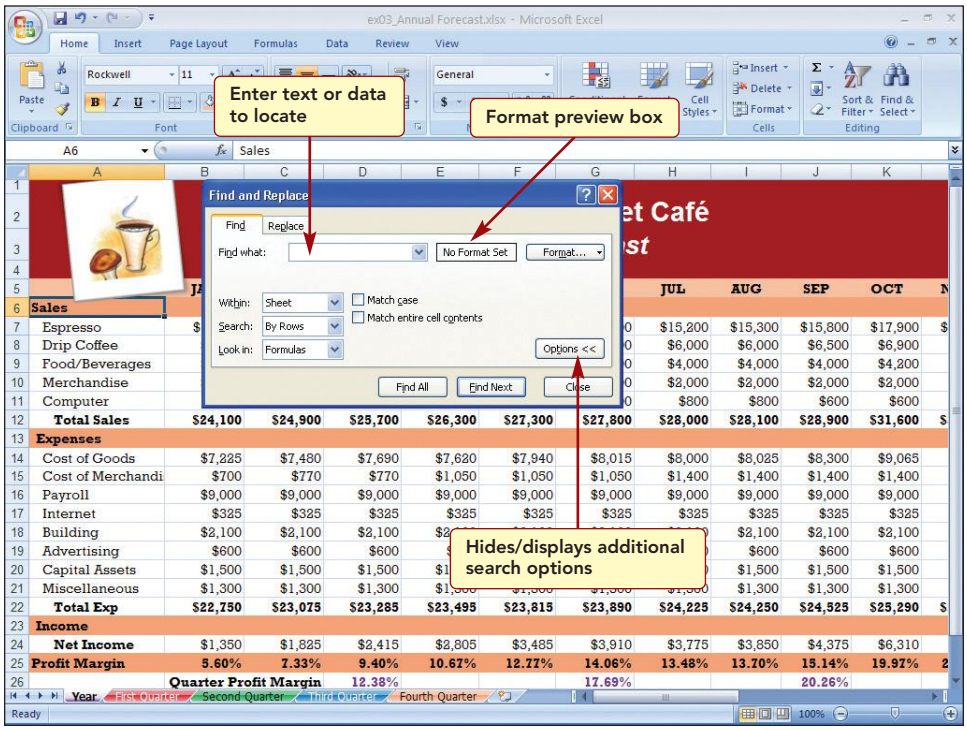


Figure 3.28

In the Find and Replace dialog box, you enter the information you want to locate in the Find What text box. It must be entered exactly as it appears in the worksheet. The additional options in the dialog box can be combined in many ways to help locate information. They are described in the table below.

Option	Effect
Within	Searches the active worksheet or workbook.
Search	Specifies the direction to search in the worksheet: By Columns searches down through columns and By Rows searches to the right across rows.
Look in	Looks for a match in the specified worksheet element: formulas, values, comments.
Match case	Finds words that have the same pattern of uppercase letters as entered in the Find What text box. Using this option makes the search case sensitive.
Match entire cell contents	Looks for an exact and complete match of the characters specified in the Find What text box.
Format	Used to specify a cell format to locate and replace. A sample of the selected format is displayed in the preview box.

You will enter the text to find, exp, and will search using the default options.

2 **Type exp in the Find What box.**

Click Options >> **to hide the additional search options.**

Click Find Next **.**

Additional Information

Because the Match Case option is not selected, Find looks for an exact match regardless of whether the characters are uppercase or lowercase.

Your screen should be similar to Figure 3.29

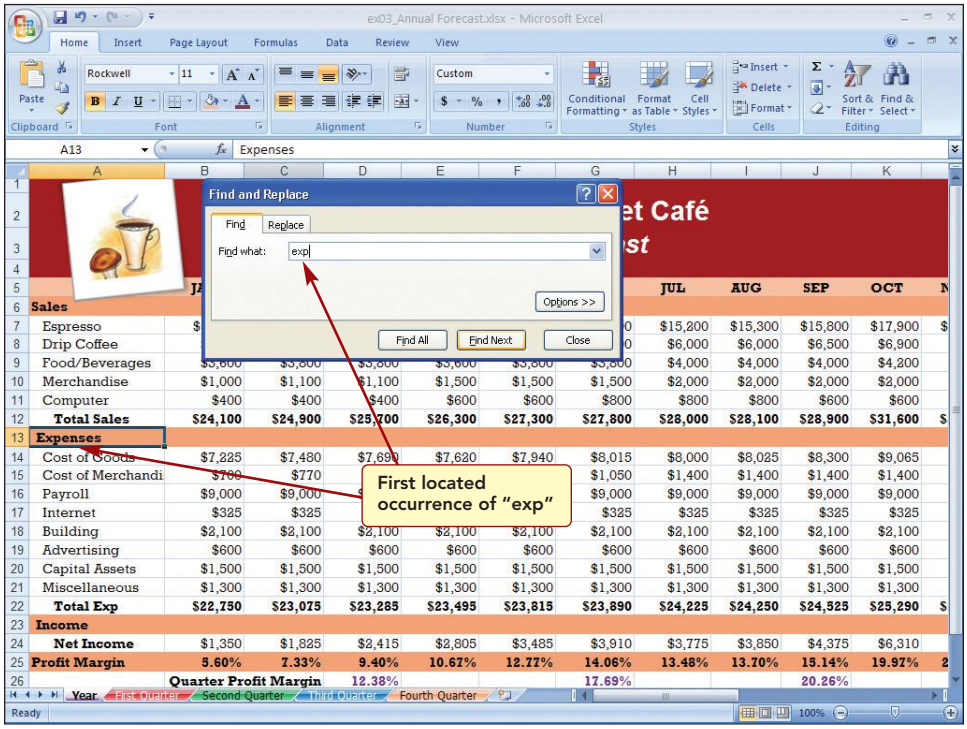


Figure 3.29

Additional Information

Clicking Find All displays all text or format matches in a list. Selecting an item from the list moves the cell selector to the cell containing the entry.

The cell selector jumps to the first occurrence of "exp," in cell A13, which contains the word "Expenses." It located this word because the first three letters match. However, this is not the entry you are trying to locate. You will continue the search to locate the next occurrence. Then you will edit the cell to display the word "Expenses."

3. Click Find Next.

- Double-click on the selected cell.
- Change Exp to Expenses.
- Click Enter or press Enter.

Your screen should be similar to Figure 3.30

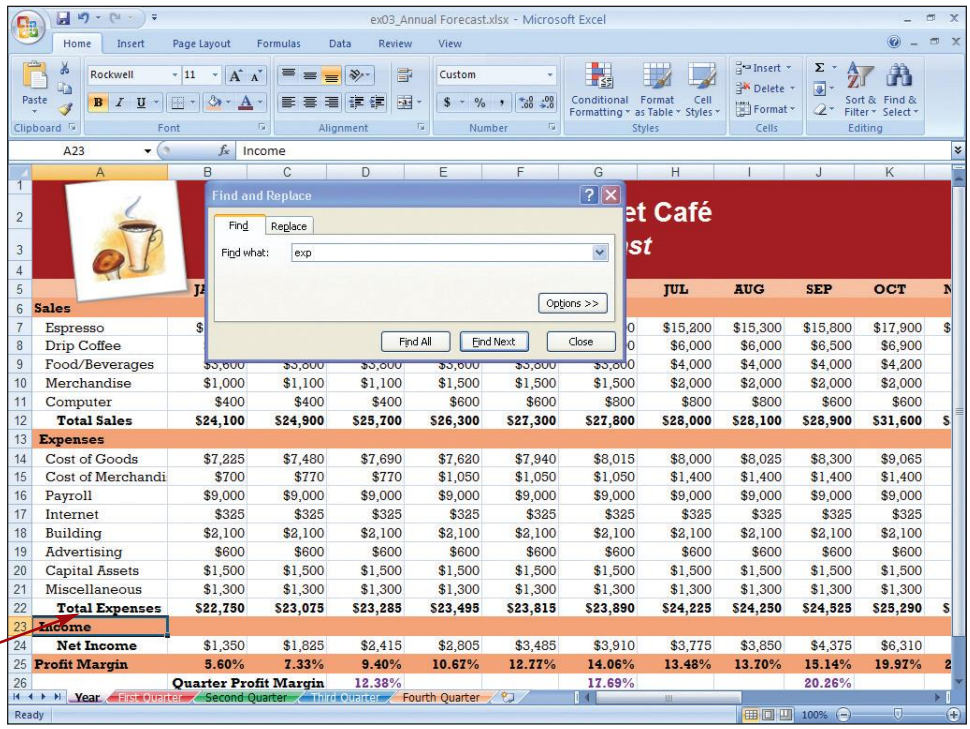


Figure 3.30

You manually made the correction to the label in cell A22. Next, you want to locate the word in all the other sheets and correct the entries.

Replacing Information

You realize that "exp" will be located twice in every worksheet. Since you want to change only the Total Exp headings, you will refine your search term to locate only this heading and use the Replace command to make the correction automatically on the other sheets. The replacement text must be entered exactly as you want it to appear.

First, you will select all four quarter sheets as a group so that any changes you make are made to all selected sheets. To select two or more adjacent sheets click on the tab for the first sheet and click on the last sheet tab while holding down Shift. You can select nonadjacent sheets by holding down Ctrl while clicking on each sheet. The title bar displays "[Group]" whenever multiple sheets are selected.

1. **Click on the First Quarter sheet tab, hold down Shift, and click on the Fourth Quarter tab.**
2. **Change the entry in the Find What box to total exp.**
3. **Open the Replace tab.**
4. **Type Total Expenses in the Replace With box.**
5. **Click Find Next.**
6. **Click Replace All.**

Additional Information

You can select all sheets using Select All Sheets from the sheet tab shortcut menu.

Additional Information

The tabs of all sheets appear with a white top, indicating they are selected; the active sheet tab name is bold.

Another Method

You also can use Find & Select /Replace; the keyboard shortcut is Ctrl + H.

Your screen should be similar to Figure 3.31

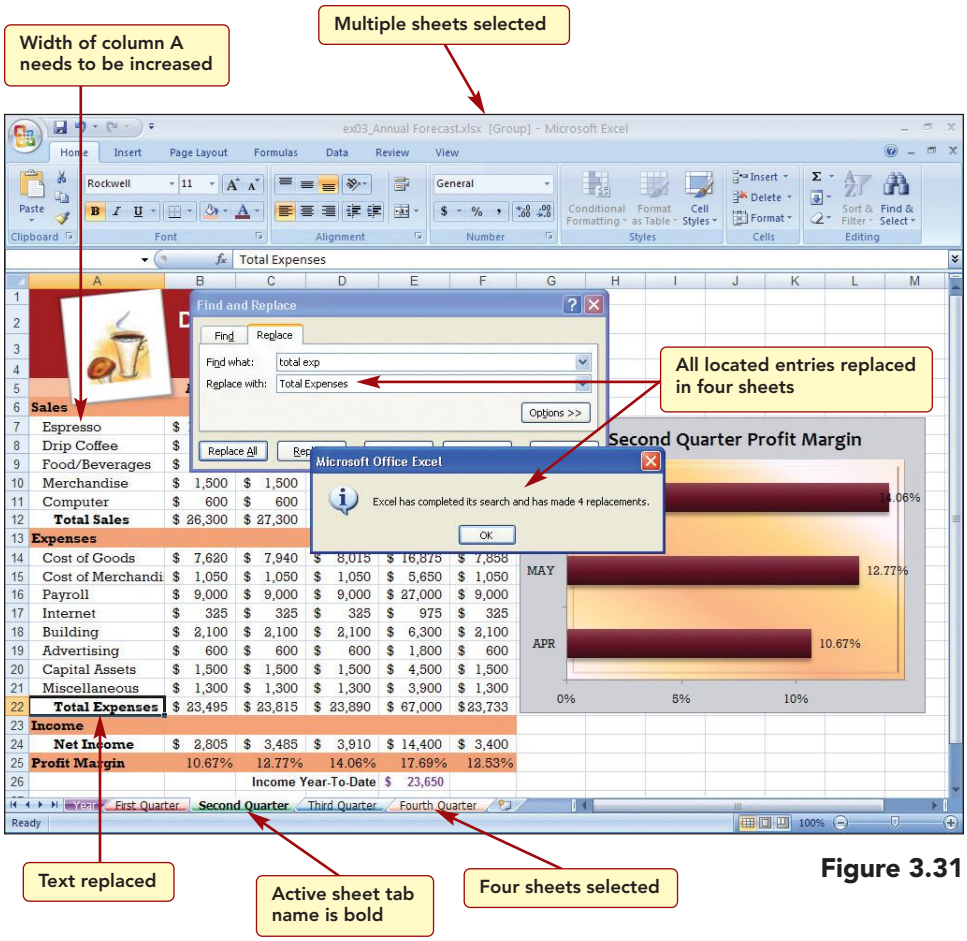


Figure 3.31

Four replacements were made, indicating that the heading was corrected on all four sheets. It is much faster to use Replace All than to confirm each match separately. However, exercise care when using Replace All because the search text you specify might be part of another word and you may accidentally replace text you want to keep.

Now, you also notice that the labels in column A are not fully displayed, so you need to increase the column width. You will expand the group selection to include the Year sheet and adjust the width of column A on all worksheets at the same time.

2. Click OK.
- Click Close.
- Hold down Ctrl and click on the Year tab to add it to the group.
- AutoFit column A.

Having Trouble?
Double-click on the column border of column A when the mouse pointer is a ✛.

- Right-click on the Second Quarter tab and choose Ungroup Sheets to cancel the group selection and make it active.

Another Method
You also can click on any unselected sheet tab to cancel a group selection.

Your screen should be similar to Figure 3.32

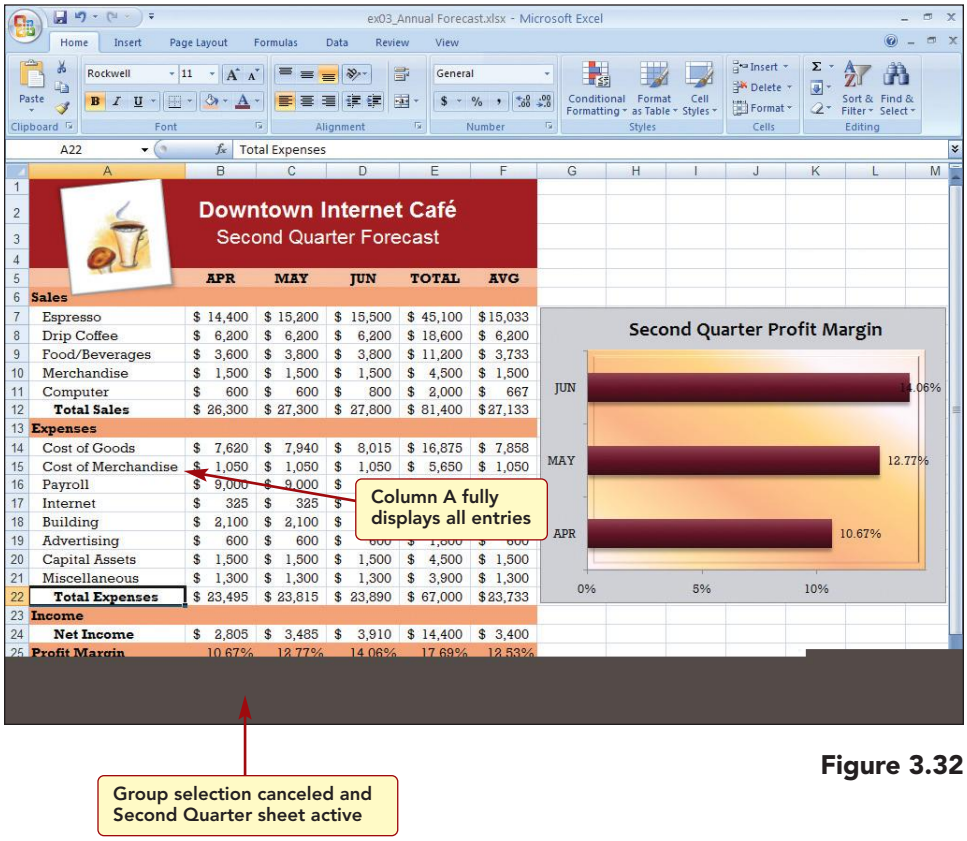


Figure 3.32

You can now see that the width of column A has been adjusted and that the Total Exp label has been replaced with Total Expenses, as it has in all other sheets. When multiple sheets are selected, be careful when making changes, as all selected sheets are affected.

Saving to a New Folder

You have made several changes to the workbook, and before continuing, you want to save it. Since the workbook is for projected forecasts, you decide to save it in a separate folder from the rest of the Café's financial workbooks. You will save the file to a new folder named Forecasts.

1. **Display the Year sheet.**
2. **Click Office Button and choose Save As.**
3. **If necessary, change the location to where you save your files.**
4. **Enter Annual Forecast as the file name.**
5. **Click Create New Folder in the Save As dialog box.**

Additional Information
In Windows Vista, click New Folder.

Your screen should be similar to Figure 3.33

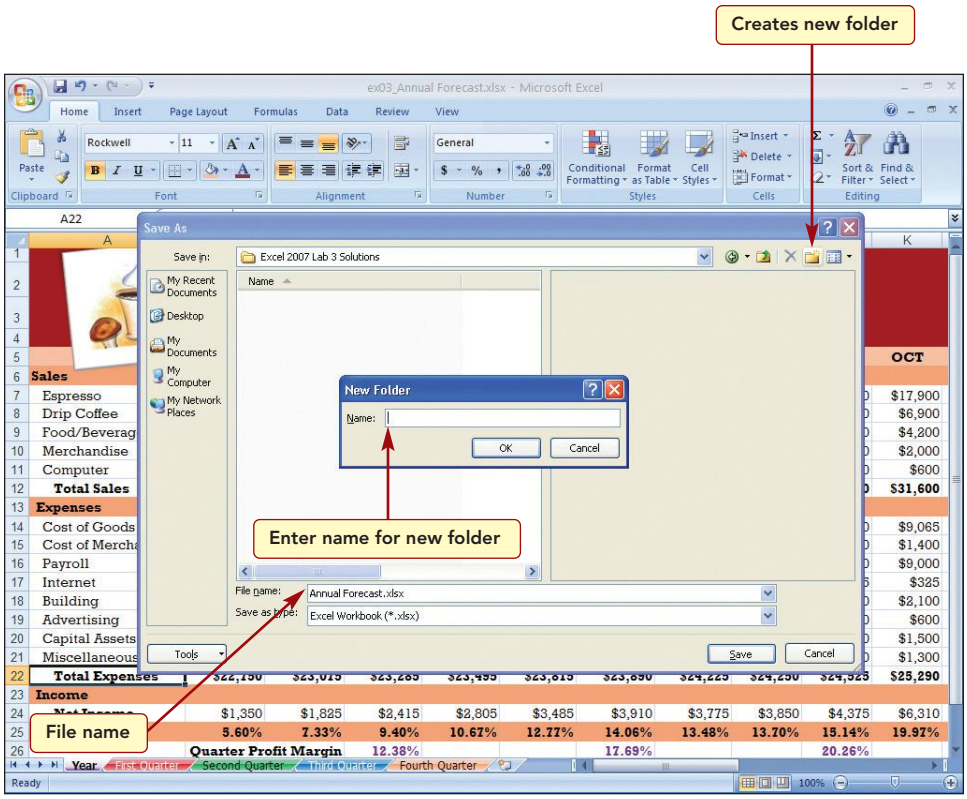


Figure 3.33

Additional Information
You also can rename an existing folder from the Save As dialog box by choosing Rename from the folder's shortcut menu and entering the new name.

The New Folder dialog box enables you to create and name a new folder.

2. **Type Café Forecasts in the Name text box.**
3. **Click** OK.
4. **Click** Save.

The Annual Forecast workbook is saved in the new Café Forecasts folder.

Managing Large Worksheets

Now that the Year worksheet is much larger, you are finding that it takes a lot of time to scroll to different areas within the worksheet. To make managing large worksheets easier, you can zoom a worksheet, split the workbook window, and freeze panes.

The Year worksheet displays all of the quarterly data. The entire worksheet, however, is not visible in the window.

1. **Reduce the zoom percentage to 80%.**
2. **Move to B7.**

Another Method

You also can use Zoom in the Zoom group on the View tab or click the zoom percentage in the status bar to open the Zoom dialog box and set the magnification.

Your screen should be similar to Figure 3.34

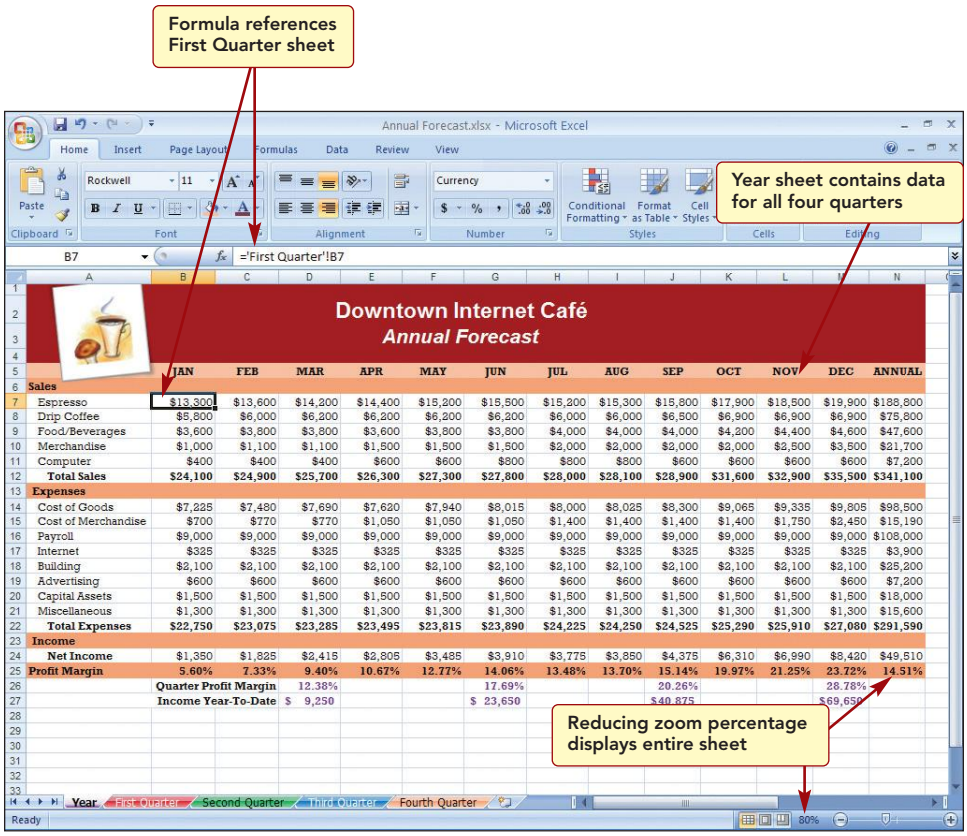


Figure 3.34

You can now see the entire worksheet. Most of the monthly values in the Year sheet, such as cell B7, contain linking formulas that reference the appropriate cells in the appropriate quarter sheets.

Going to a Specific Cell

The only formulas that do not reference cells outside the Year worksheet are those in the Annual column, N. Because you reduced the zoom, it is easy to see the values in column N and to move to a cell by clicking on the cell. However, when the worksheet is at 100 percent zoom, you would need to scroll the worksheet first. You will return the zoom to 100 percent and then use the Go To feature to quickly move to a cell that is not currently visible in the window.

1. **Return the zoom to 100%.**

Additional Information

Click on the vertical line in the center of the zoom scale to jump to 100%.

- **Click in the Name box and type N16.**

Having Trouble?

The Name box is located at the left end of the formula bar.

- **Press Enter.**

Another Method

You also can use Find & Select and choose Go To in the Editing group on the Home tab or the keyboard shortcut Ctrl + G.

Your screen should be similar to Figure 3.35

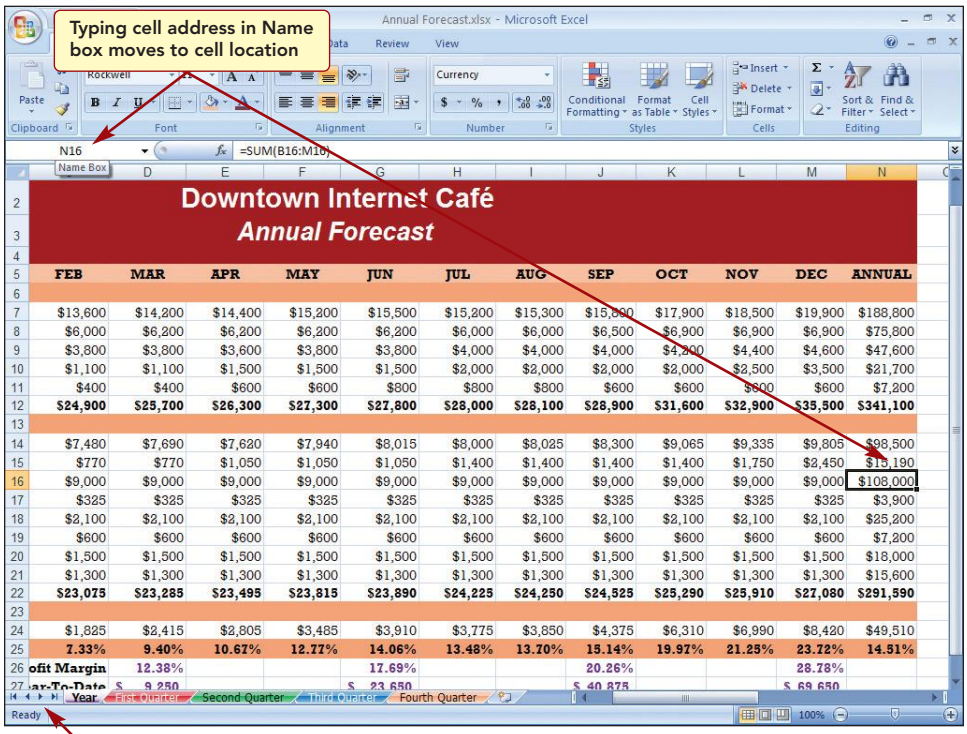


Figure 3.35

The cell selector jumps directly to cell N16 in the Annual column. The formula in this cell calculates the total of the values in row 16 and does not reference another sheet. However, it is difficult to know what the numbers represent in this row because the row headings are not visible. For example, is this number the total for the lease expenses, advertising expenses, or miscellaneous expenses? Without scrolling back to see the row headings, it is difficult to know.

Splitting Windows

Whenever you scroll a large worksheet, you will find that information you may need to view in one area scrolls out of view as you move to another area. Although you could reduce the zoom percent to view more of a worksheet in the window, you still may not be able to see the entire worksheet if it is very large. And as you saw, continuing to reduce the zoom makes the worksheet difficult to read. To view different areas of the same worksheet at the same time, you can split the window.

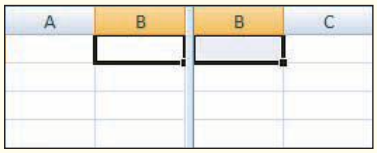
Concept 6

Split Window

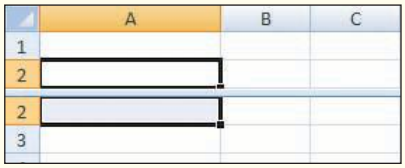
6 The **split window** feature allows you to divide a worksheet window into sections, making it easier to view different parts of the worksheet at the same time. The sections of the window, called **panes**, can consist of any number of columns or rows along the top or left edge of the window. You can divide the worksheet into two panes either horizontally or vertically, or into four panes if you split the window both vertically and horizontally.

Each pane can be scrolled independently to display different areas of the worksheet. When split vertically, the panes scroll together when you scroll vertically, but scroll independently when you scroll horizontally. Horizontal panes scroll together when you scroll horizontally, but independently when you scroll vertically.

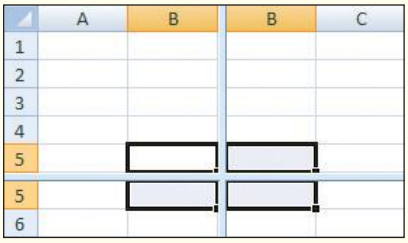
Panes are most useful for viewing a worksheet that consists of different areas or sections. Creating panes allows you to display the different sections of the worksheet in separate panes and then to quickly switch between panes to access the data in the different sections without having to repeatedly scroll to the areas.



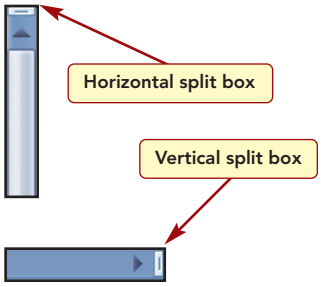
Two vertical panes



Two horizontal panes



Four panes



Dragging the split box at the top of the vertical scroll bar downward creates a horizontal split, and dragging the split box at the right end of the horizontal scroll bar leftward creates a vertical split.

You will split the window into two vertical panes. This will allow you to view the headings in column A at the same time as you are viewing data in column N.

1. **Point to the vertical split box in the horizontal scroll bar.**

2. **Drag the split box to the left and position the bar between columns D and E.**

Additional Information

The mouse pointer changes to a ↔ to show you can drag to create a split.

Your screen should be similar to Figure 3.36

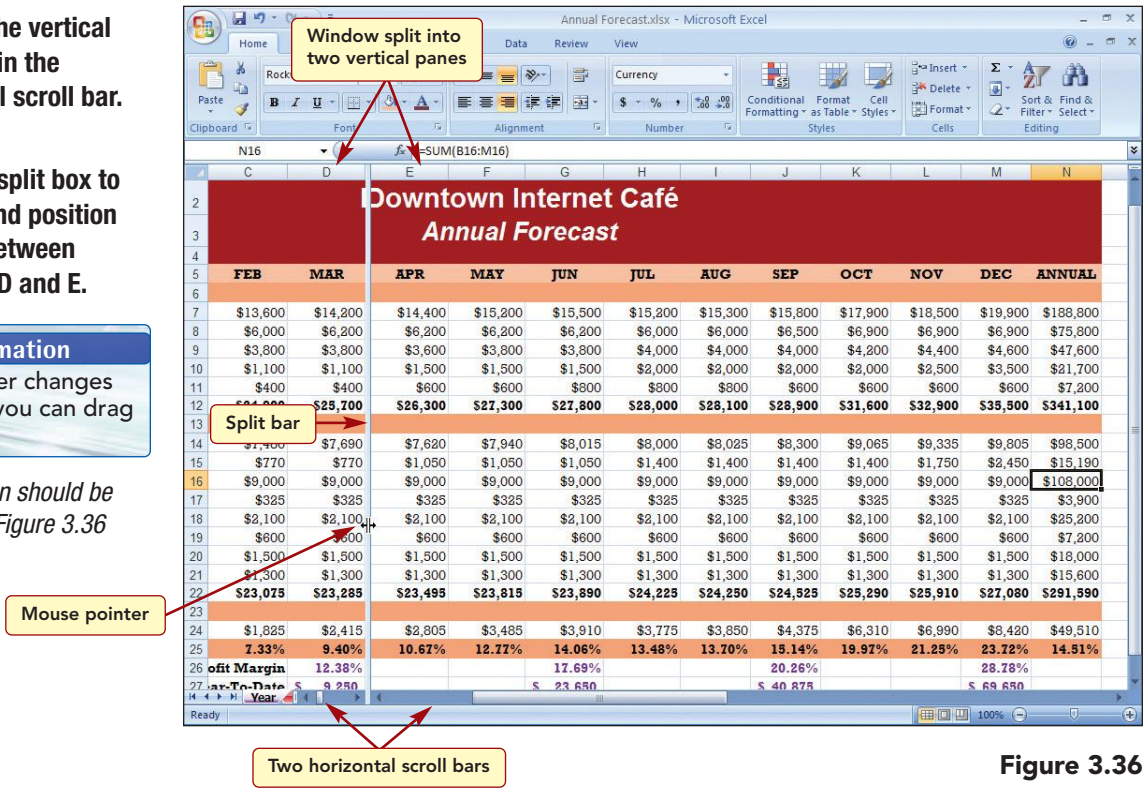


Figure 3.36

There are now two vertical panes with two separate horizontal scroll bars. The highlighted cell selector is visible in the right pane. The left pane also has a cell selector in cell N16, but it is not visible because that area of the worksheet is not displayed in the pane. When the same area of a worksheet is visible in multiple panes, the cell selector in the panes that are not active is highlighted whereas the cell selector in the active pane is clear. The active pane will be affected by your movement horizontally. The cell selector moves in both panes, but only the active pane scrolls.

You will scroll the left pane horizontally to display the month headings in column A.

Additional Information

The Split command in the Window group on the View tab can be used to quickly create a four-way split at the active cell.

2 **Click C16 in the left pane to display the active cell selector in the pane.**

Press ← twice.

Your screen should be similar to Figure 3.37

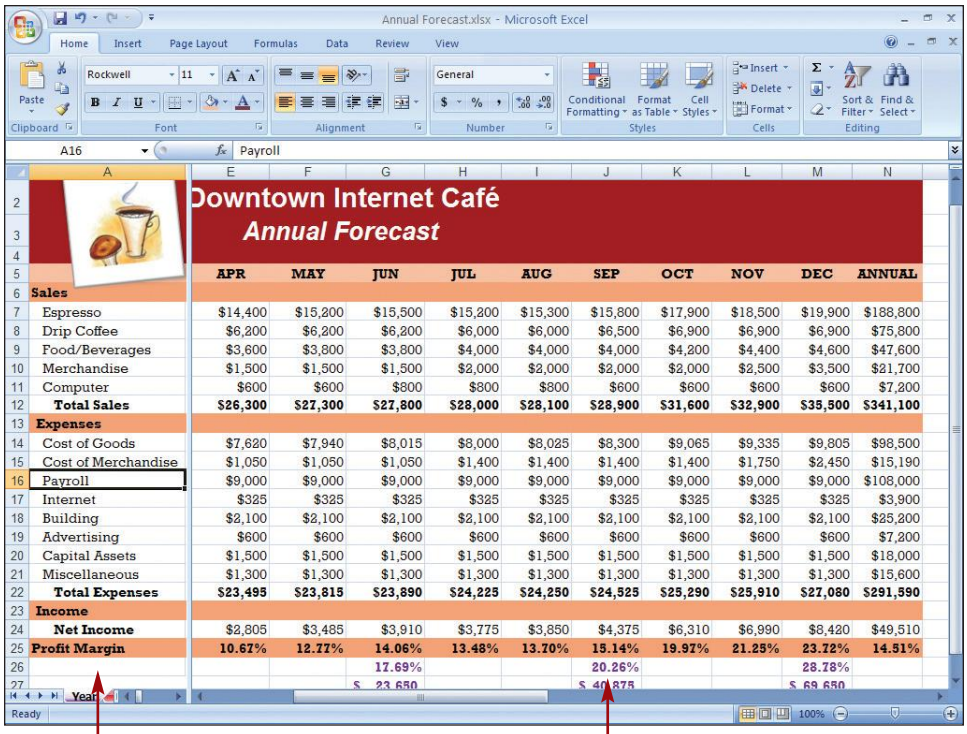


Figure 3.37

The right pane did not scroll when you moved horizontally through the left pane to display the row headings. The cell selector in the right pane is in the same cell location as in the left pane (A16), although it is not visible. You want to change the location of the split so that you can view an entire quarter in the left pane in order to more easily compare quarters.

3 **Drag the split bar to the right three columns.**

Click cell E16 in the right pane.

Press End →.

Press → (four times).

Your screen should be similar to Figure 3.38

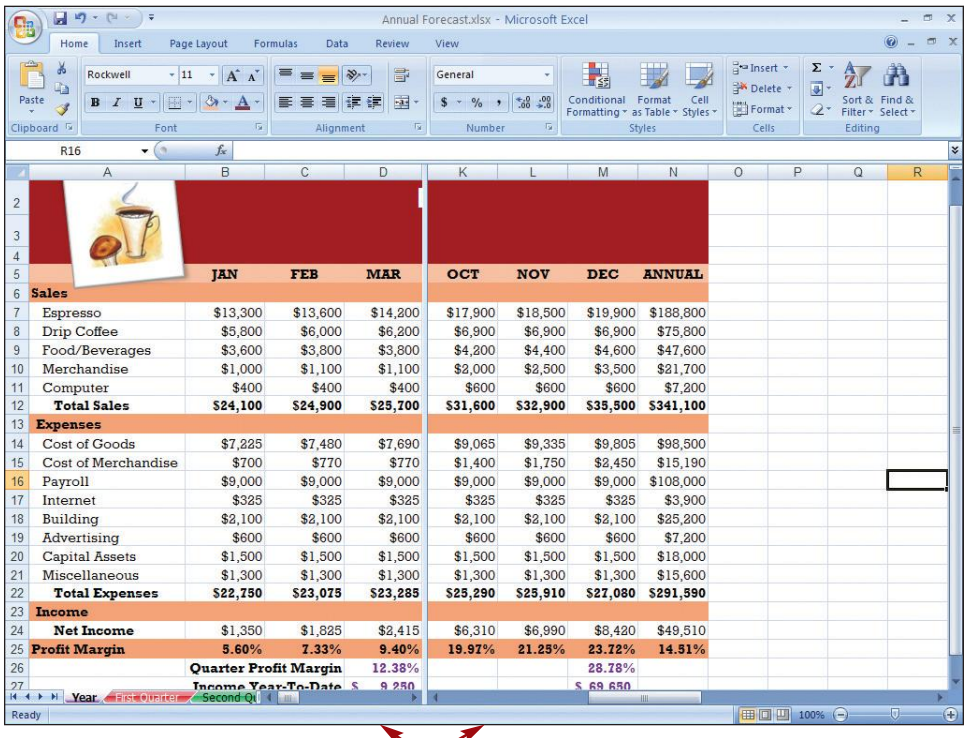


Figure 3.38

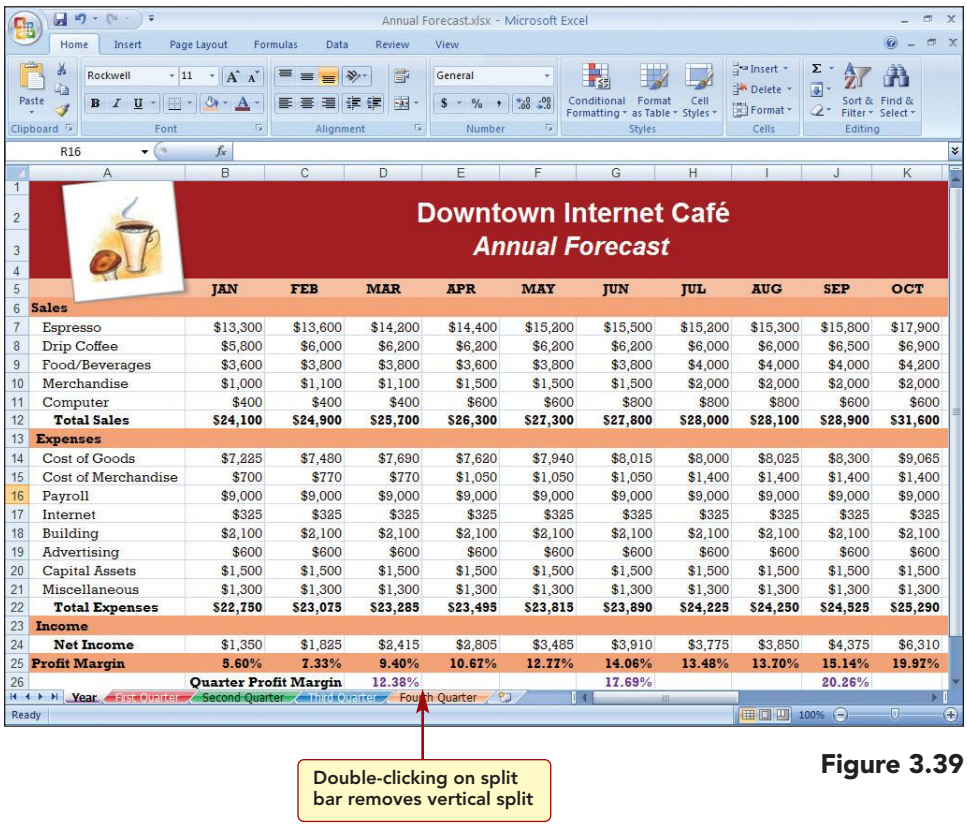
Now you can easily compare the first-quarter data to the last-quarter data. As you can see, creating panes is helpful when you want to display and access distant areas of a worksheet quickly. After scrolling the data in the panes to display the appropriate worksheet area, you can then quickly switch between panes to make changes to the data that is visible in the pane. This saves you the time of scrolling to the area each time you want to view it or make changes to it. You will clear the vertical split from the window.

4 **Double-click anywhere on the split bar.**

Another Method

You also can use Split in the Window group on the View tab to clear the split.

Your screen should be similar to Figure 3.39



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Sales										
Espresso	$13,300	$13,600	$14,200	$14,400	$15,200	$15,500	$15,200	$15,300	$15,800	$17,900
Drip Coffee	$5,800	$6,000	$6,200	$6,200	$6,200	$6,200	$6,000	$6,000	$6,500	$6,900
Food/Beverages	$3,600	$3,800	$3,800	$3,600	$3,800	$3,800	$4,000	$4,000	$4,000	$4,200
Merchandise	$1,000	$1,100	$1,100	$1,500	$1,500	$1,500	$2,000	$2,000	$2,000	$2,000
Computer	$400	$400	$400	$600	$600	$800	$800	$800	$600	$600
Total Sales	**$24,100**	**$24,900**	**$25,700**	**$26,300**	**$27,300**	**$27,800**	**$28,000**	**$28,100**	**$28,900**	**$31,600**
Expenses										
Cost of Goods	$7,225	$7,480	$7,690	$7,620	$7,940	$8,015	$8,000	$8,025	$8,300	$9,065
Cost of Merchandise	$700	$770	$770	$1,050	$1,050	$1,050	$1,400	$1,400	$1,400	$1,400
Payroll	$9,000	$9,000	$9,000	$9,000	$9,000	$9,000	$9,000	$9,000	$9,000	$9,000
Internet	$325	$325	$325	$325	$325	$325	$325	$325	$325	$325
Building	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100
Advertising	$600	$600	$600	$600	$600	$600	$600	$600	$600	$600
Capital Assets	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
Miscellaneous	$1,300	$1,300	$1,300	$1,300	$1,300	$1,300	$1,300	$1,300	$1,300	$1,300
Total Expenses	**$22,750**	**$23,075**	**$23,285**	**$23,495**	**$23,815**	**$23,890**	**$24,225**	**$24,250**	**$24,525**	**$25,290**
Income										
Net Income	$1,350	$1,825	$2,415	$2,805	$3,485	$3,910	$3,775	$3,850	$4,375	$6,310
Profit Margin	**5.60%**	**7.33%**	**9.40%**	**10.67%**	**12.77%**	**14.06%**	**13.48%**	**13.70%**	**15.14%**	**19.97%**
	Quarter Profit Margin		12.38%			17.69%			20.26%	

Figure 3.39

Freezing Panes

Another way to manage a large worksheet is to freeze panes.

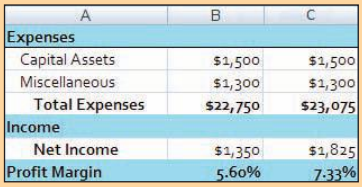
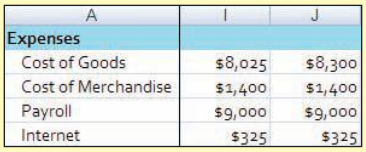
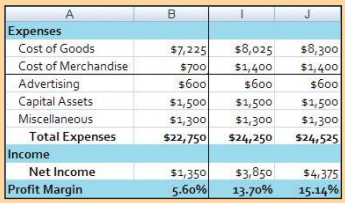
Concept 7

Freeze Panes

7 **Freezing panes** prevents the data in the pane from scrolling as you move to different areas in a worksheet. You can freeze the information in the top and left panes of a window only. This feature is most useful when your worksheet is organized using row and column headings. It allows you to keep the titles on the top and left edge of your worksheet in view as you scroll horizontally and vertically through the worksheet data.

You want to keep the month headings in row 5 and the row headings in column A visible in the window at all times while looking at the Income and Profit Margin data beginning in row 22. To do this, you will create four panes with the upper and left panes frozen.

When creating frozen panes, first position the worksheet in the window to display the information you want to appear in the top and left panes. This is because data in the frozen panes cannot be scrolled like data in regular panes. Then move to the location specified in the following table before using the Freeze Panes command in the Window group on the View tab to create and freeze panes.

To Create	Cell Selector Location	Example
Two horizontal panes with the top pane frozen	Move to the leftmost column in the window and to the row below where you want the split to appear.	 **Top Pane Frozen**
Two vertical panes with the left pane frozen	Move to the top row of the window and to the column to the right of where you want the split to appear.	 **Left Pane Frozen**
Four panes with the top and left panes frozen	Move to the cell below and to the right of where you want the split to appear.	 **Top and Left Panes Frozen**

You want to split the window into four panes with the month column headings at the top of the window and the row headings in column A at the left side of the window.

1. **Move to B6.**
2. **Open the View tab.**
3. **Click Freeze Panes in the Window group and choose Freeze Panes.**

Your screen should be similar to Figure 3.40

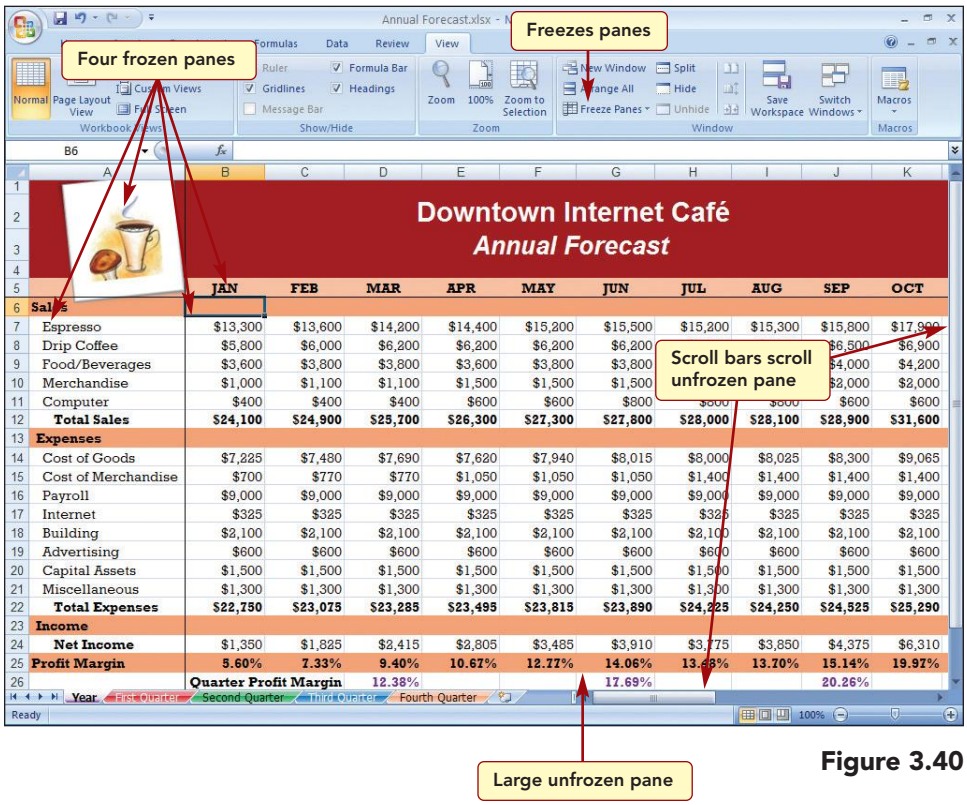


Figure 3.40

The window is divided into four panes at the cell selector location. Only one set of scroll bars is displayed because the only pane that can be scrolled is the larger lower-right pane. You can move the cell selector into a frozen pane, but the data in the frozen panes will not scroll. Also, there is only one cell selector that moves from one pane to another over the pane divider, making it unnecessary to click on the pane to make it active before moving the cell selector in it.

Because Evan has asked you to adjust the Profit Margin values, you want to view this area of the worksheet only.

2. **Use the vertical scroll bar to scroll the window until row 25 is below row 5.**

- **Move to cell G25.**

Your screen should be similar to Figure 3.41

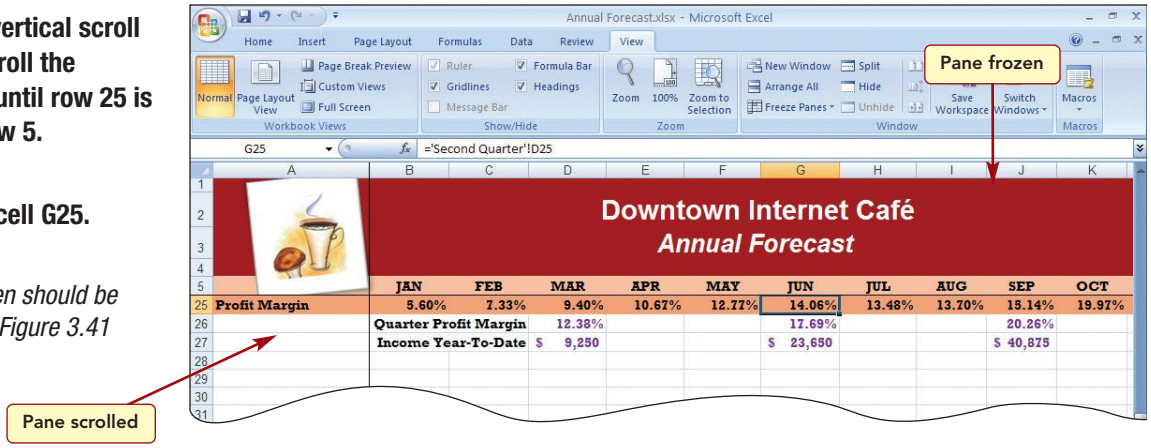


Figure 3.41

Now the Income and Profit Margin data are displayed immediately below the month headings in row 5. The data in rows 6 through 24 is no longer visible, allowing you to concentrate on this area of the worksheet.

Watching Cells

While using a workbook with large worksheets and/or multiple sheets, you may want to keep an eye on how changes you make to values in one area affect cells in another. For example, if you change a value in one sheet that is referenced in a formula in another, you can view the effect on the calculated value using the Watch Window toolbar.

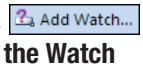
You will be changing values in the Second Quarter sheet next and want to be able to see the effect on the second-quarter profit margin (G26) and Annual Profit Margin (N25) in the Year sheet at the same time.

1. **Select cells G26 and N25.**

- **Open the Formulas tab.**

- **Click**  **in the Formula Auditing group.**

- **If the Watch Window toolbar is docked along an edge of the window, drag it into the workbook window area.**

- **Click**  **from the Watch Window toolbar.**

Your screen should be similar to Figure 3.42

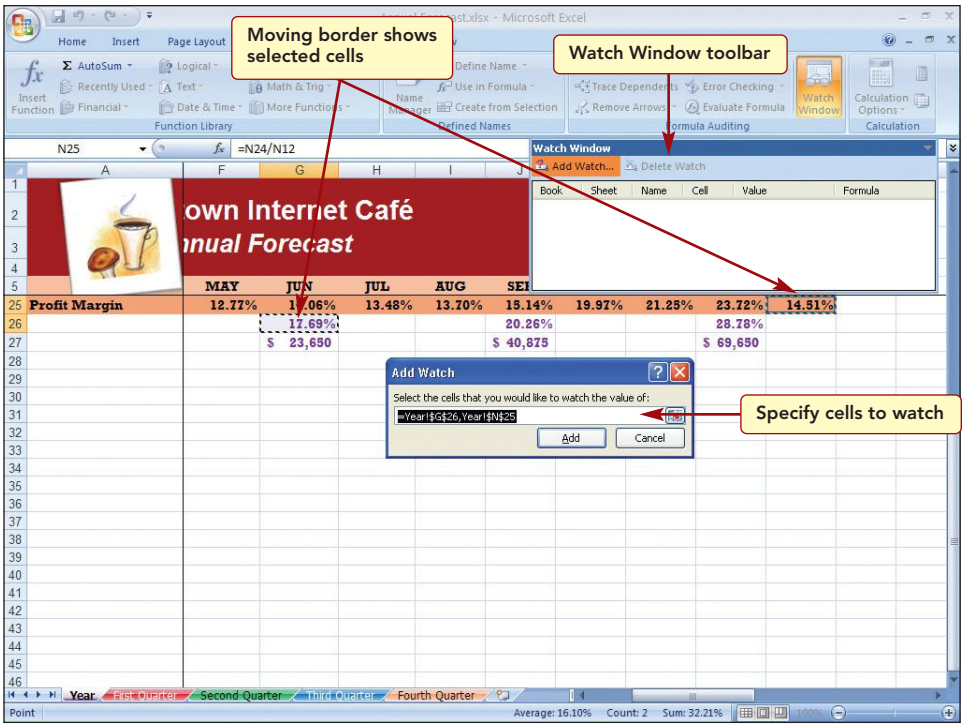


Figure 3.42

The Add Watch dialog box is used to specify the cells you want to see in the Watch Window toolbar. The currently selected cells are identified with a moving border. You will add these cells to the Watch Window.

2 Click Add.

If necessary, move the Watch Window toolbar to the upper-right corner of the worksheet window below the column headings.

Your screen should be similar to Figure 3.43

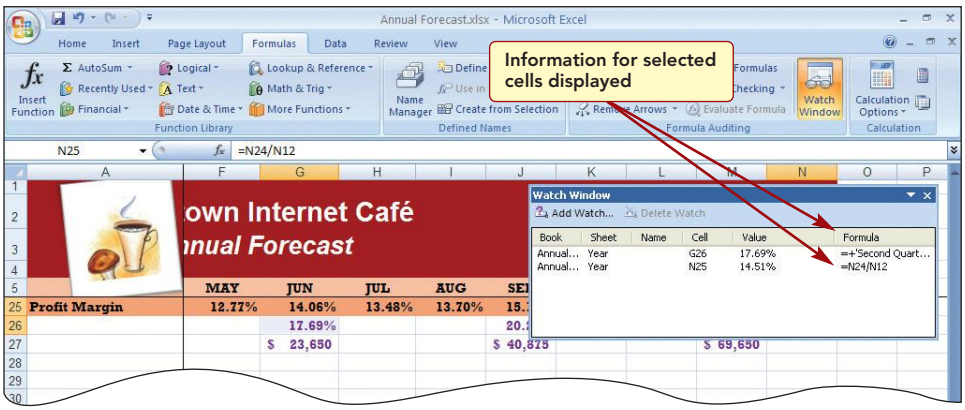


Figure 3.43

Additional Information
You also can watch linked cells in other open workbooks.

The values in the selected cells as well as the formula and location information are displayed in the Watch Window. The Watch Window toolbar will remain open on top of the worksheet as you move from one sheet to another.

Forecasting Values

Evan has asked you to adjust the forecast for the second quarter to show a profit margin of at least 15 percent for each month. After some consideration, you decide you can most easily reduce monthly payroll expenses by carefully scheduling the hours employees work during these three months. Reducing the monthly expense will increase the profit margin for the quarter. You want to find out what the maximum payroll value you can spend during that period is for each month to accomplish this goal. The process of evaluating what effect changing the payroll expenses will have on the profit margin is called what-if analysis.

Concept 8

What-If Analysis

8 **What-if analysis** is a technique used to evaluate the effects of changing selected factors in a worksheet. This technique is a common accounting function that has been made much easier with the introduction of spreadsheet programs. By substituting different values in cells that are referenced by formulas, you can quickly see the effect of the changes when the formulas are recalculated.

You can perform what-if analysis by manually substituting values or by using one of the what-if analysis tools included with Excel.

Performing What-If Analysis Manually

To do this, you will enter different payroll expense values for each month and see what the effect is on that month's profit margin. You will adjust the April payroll value first.

1. **Select the Second Quarter sheet.**
2. **Type 7000 in cell B16.**
3. **Press Enter.**

Your screen should be similar to Figure 3.44

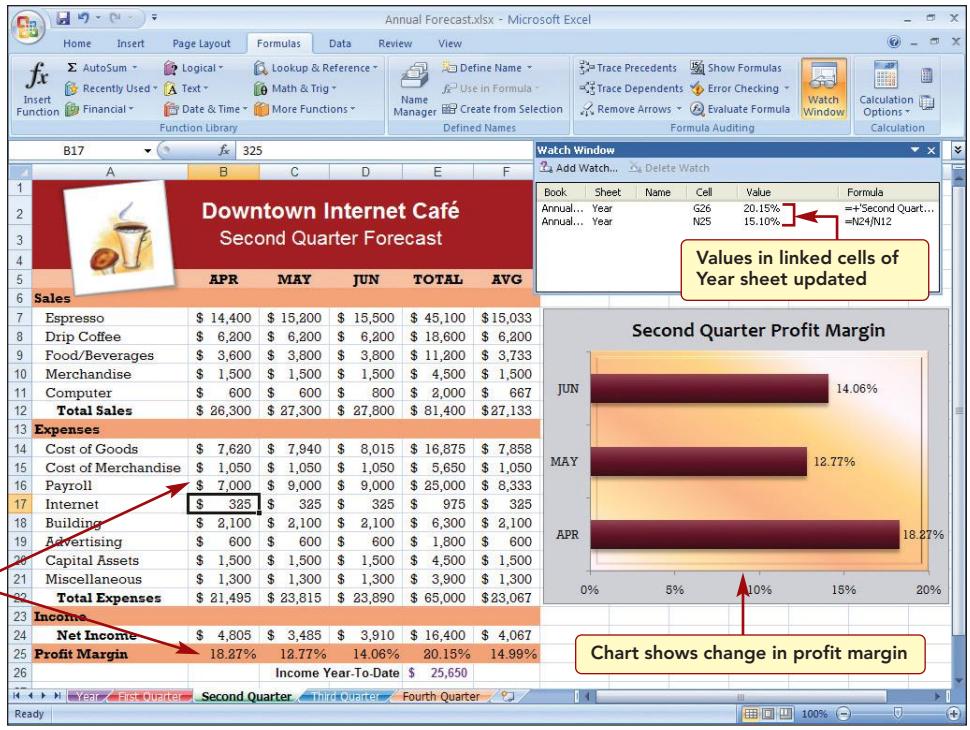


Figure 3.44

Now by looking in cell B25, you can see that decreasing the payroll expenses has increased the profit margin for the month to 18.27 percent. This is more than you need. Also notice the chart has changed to reflect the change in April's profit margin. The Watch Window shows that the values in the two linked cells in the Year sheet were updated accordingly.

You will continue to enter payroll values until the profit margin reaches the goal.

2. **Type 7900 in cell B16.**
3. **Click Enter.**
4. **Type 7850 in cell B16.**
5. **Click Enter.**
6. **Type 7860 in cell B16.**
7. **Click Enter.**
8. **Save the workbook.**

Your screen should be similar to Figure 3.45

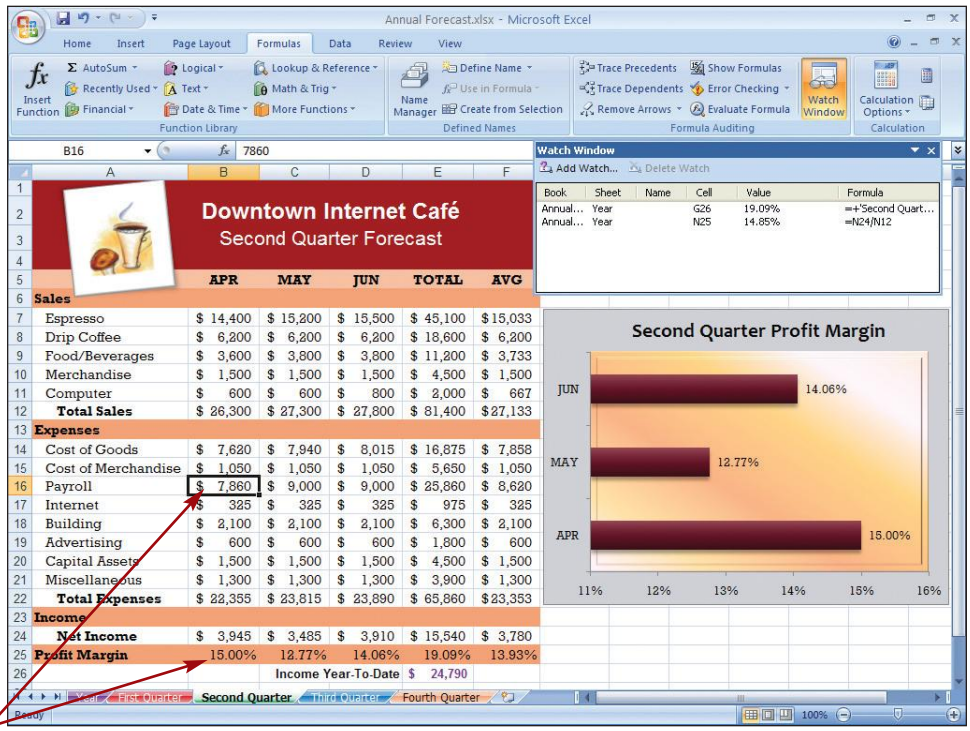


Figure 3.45

That's it! Reducing the payroll value from 9000 to 7860 will achieve the 15 percent profit margin goal for the month. Also notice that the column chart reflects the change in the April profit margin.

Using Goal Seek

It usually takes several tries to find the appropriate value when manually performing what-if analysis. A quicker way is to use the what-if analysis Goal Seek tool provided with Excel.

Concept 9

Goal Seek

9 The **Goal Seek** tool is used to find the value needed in one cell to attain a result you want in another cell. Goal Seek varies the value in the cell you specify until a formula that is dependent on that cell returns the desired result. The value of only one cell can be changed.

You will use this method to find the payroll value for May that will produce a 15 percent profit margin for that month. The current profit margin value is 12.77 percent in cell C25.

1. **Move to C25.**
2. **Open the Data tab.**
3. **Click** What-If Analysis **in the Data Tools group.**
4. **Choose Goal Seek.**

Your screen should be similar to Figure 3.46

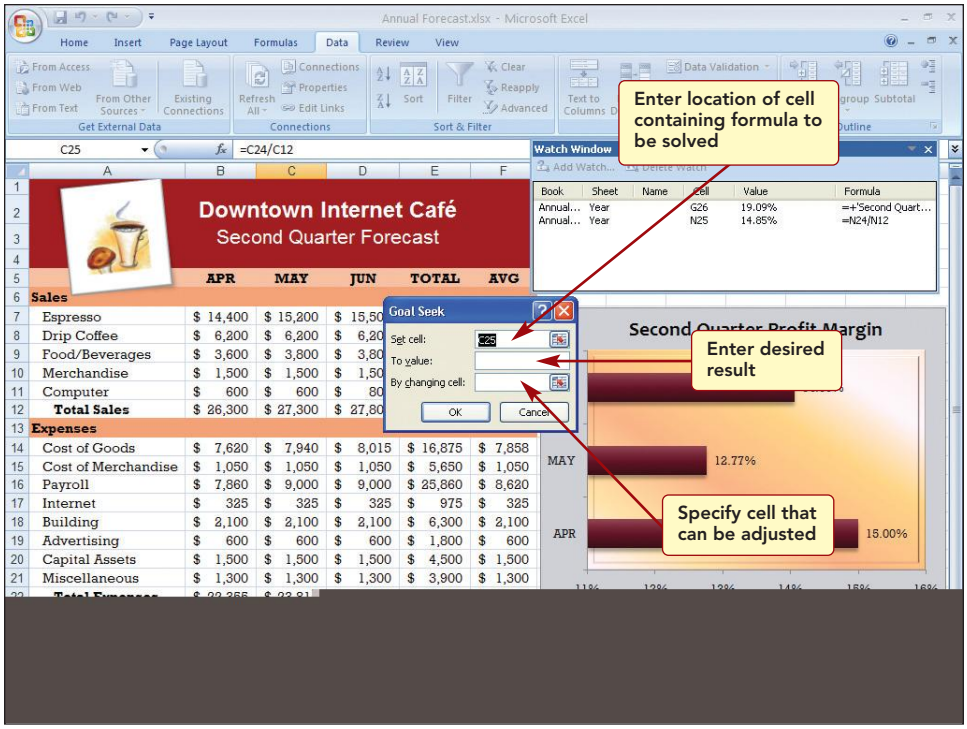


Figure 3.46

In the Goal Seek dialog box, you need to specify the location of the cell containing the formula to be solved, the desired calculated value, and the cell containing the number that can be adjusted to achieve the result. You want the formula in cell C25 to calculate a result of 15 percent by changing the payroll number in cell C16. The Set Cell text box correctly displays the current cell as the location of the formula to be solved. You will enter the information needed in the Goal Seek dialog box.

2. **Click in the To Value text box and enter 15.00%.**

3. **Click in the By Changing Cell text box and then click on cell C16 in the worksheet to enter the cell reference.**

4. **Click** OK.

Your screen should be similar to Figure 3.47

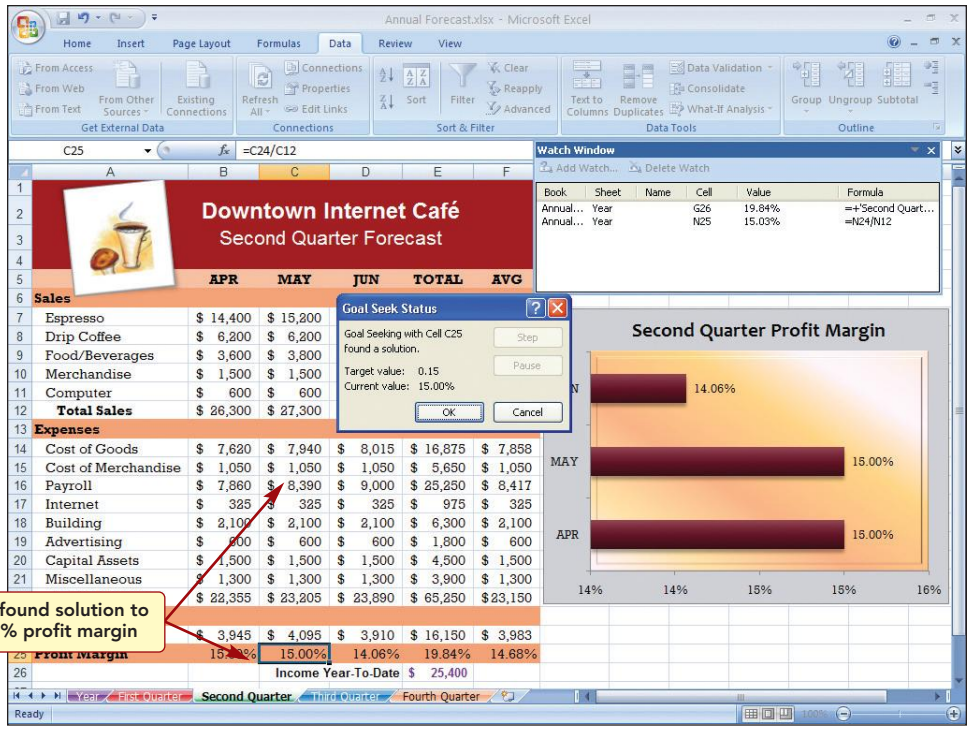


Figure 3.47

The Goal Seek dialog box tells you it found a solution that will achieve the 15 percent profit margin. The payroll value of 8390 that will achieve the desired result has been temporarily entered in the worksheet. You can reject the solution and restore the original value by choosing Cancel. In this case, however, you want to accept the solution.

5. **Click** OK.

Your screen should be similar to Figure 3.48

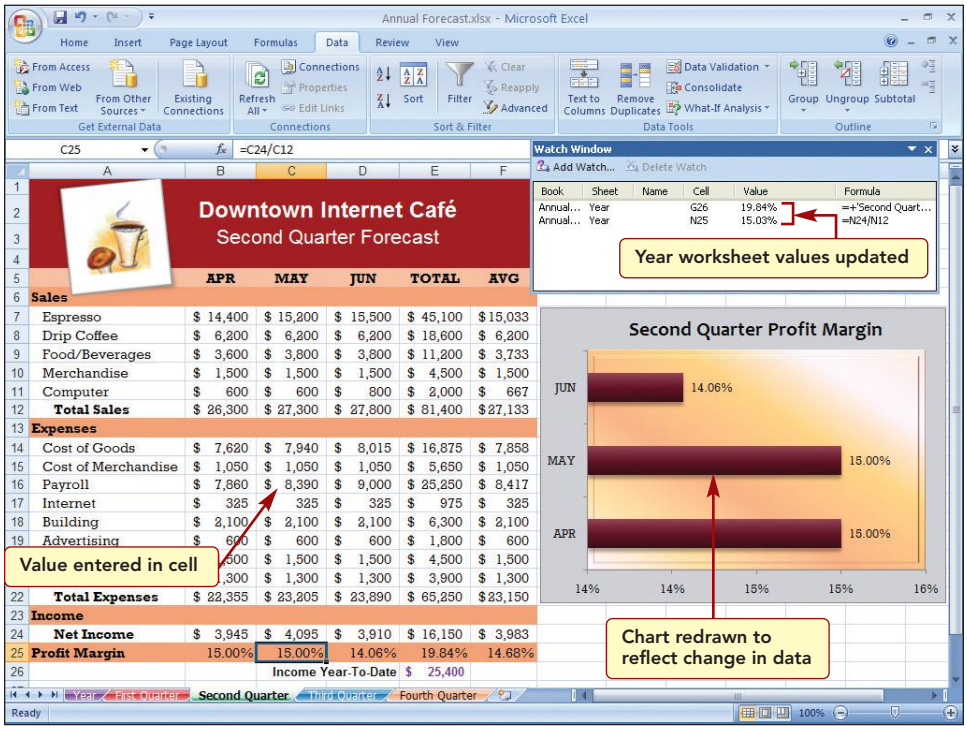


Figure 3.48

The payroll value is permanently updated and the chart redrawn to reflect the change in the May profit margin. Finally, you will adjust the June payroll value. When you are finished, you will close the Watch Window and unfreeze the Year sheet window.

4 **In a similar manner, use Goal Seek to adjust the June payroll value to achieve a 15% profit margin.**

- **Select both watch cell entries in the Watch Window and click** Delete Watch **.**
- **Click** × **Close to close the Watch Window.**
- **Make the Year sheet active to further verify that the profit margin values for the second quarter were updated.**
- **Open the View tab.**
- **Click** Freeze Panes **in the Window group and choose Unfreeze panes.**
- **Save the workbook file again.**

Your screen should be similar to Figure 3.49

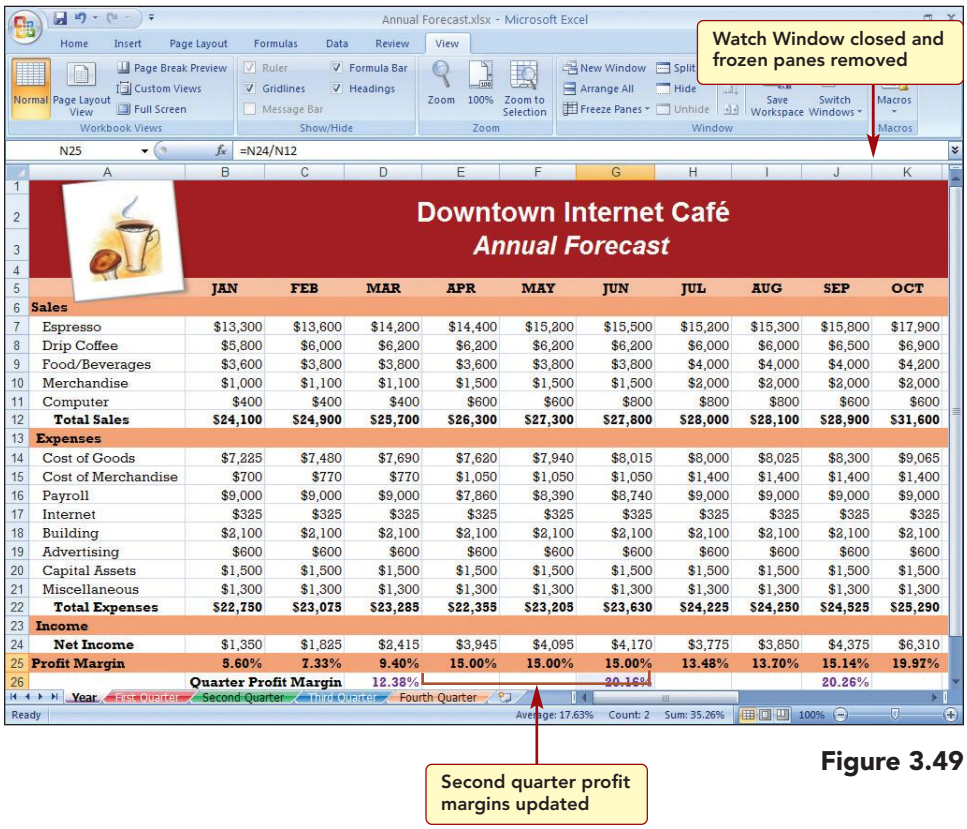


Figure 3.49

The second-quarter values are now at the 15 percent profit margin objective.

Using Conditional Formatting

Next, you want to highlight or emphasize certain values in the worksheet to help visualize the data and quickly analyze information in a worksheet. To do this, you can use conditional formatting.

Concept 10

Conditional Formatting

10 **Conditional formatting** changes the appearance of a range of cells based on a condition that you specify. If the cells in the range meet the conditions (the condition is true), they are formatted. If they do not meet the conditions (the condition is false), they remain unformatted. There are several different ways you can apply conditional formatting as described in the following table.

Conditional Formatting	Description
Cell Rules	Highlights cells based on rules you specify, such as greater than or less than, between, or equal to. It also can highlight cells that contain certain text, dates, and duplicate values.
Top/Bottom Rules	Highlights the highest and lowest values in a range by number, percent, or average based on a cutoff value that you specify.
Data Bars	Displays a color bar in a cell to help you see the value of a cell relative to other cells. The length of the bar represents the value in the cell. A longer bar is a higher value and a shorter bar, a lower value.
Color Scales	Applies a two- or three-color graduated scale to compare values in a range. A two-color scale uses two different colors to represent high or low values and a three-color scale uses three colors to represent high, mid, and low values.
Icon Sets	Displays different color icons in the cell to classify data into three to five categories. Each icon represents a range of values.

Creating Cell Rules

You will use the cell rules conditional formatting to highlight the payroll values that are less than 9,000 a month and profit margin values equal to 15.00%.

1. **Select cells B16 through M16.**
2. **Open the Home tab.**
3. **Click** Conditional Formatting **in the Styles group.**
4. **Select Highlight Cells Rules.**
5. **Choose Less Than.**

Your screen should be similar to Figure 3.50

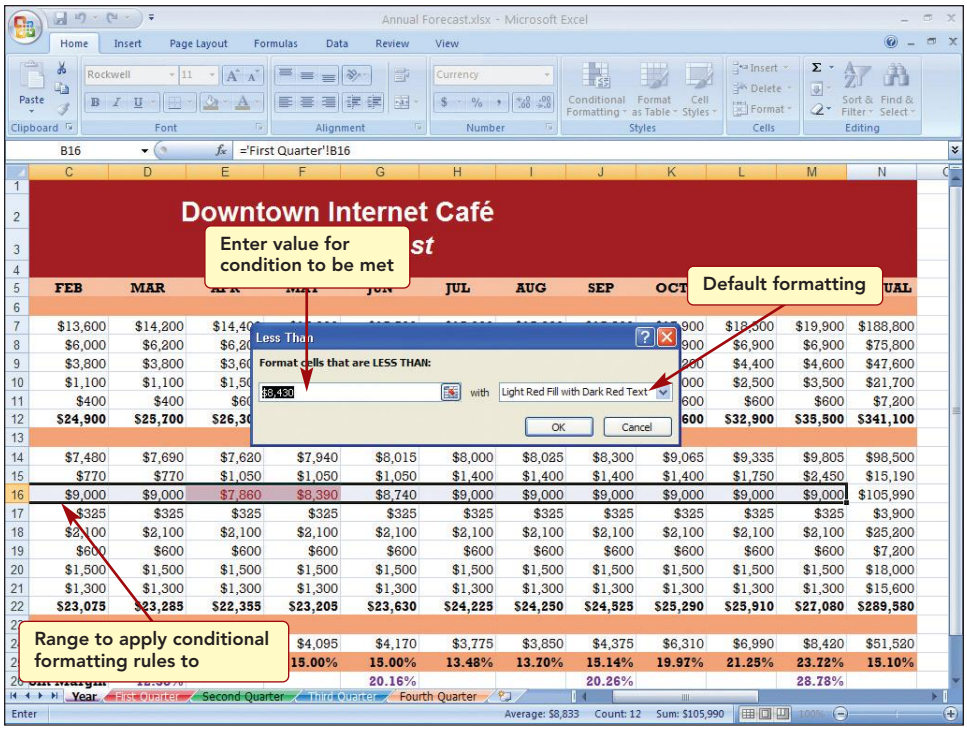


Figure 3.50

In the Less Than dialog box, you enter the value that will be used to determine which cells to highlight. In this case, you will enter the value 9000 so that all values below this amount in the selected range will be highlighted. It also lets you select the formatting to apply to those cells meeting the condition. The default formatting, a light red fill with dark red text, is acceptable.

6. **Type 9000 in the Less Than box.**
7. **Click** OK.
8. **Click cell H16 to clear the selection.**

Your screen should be similar to Figure 3.51

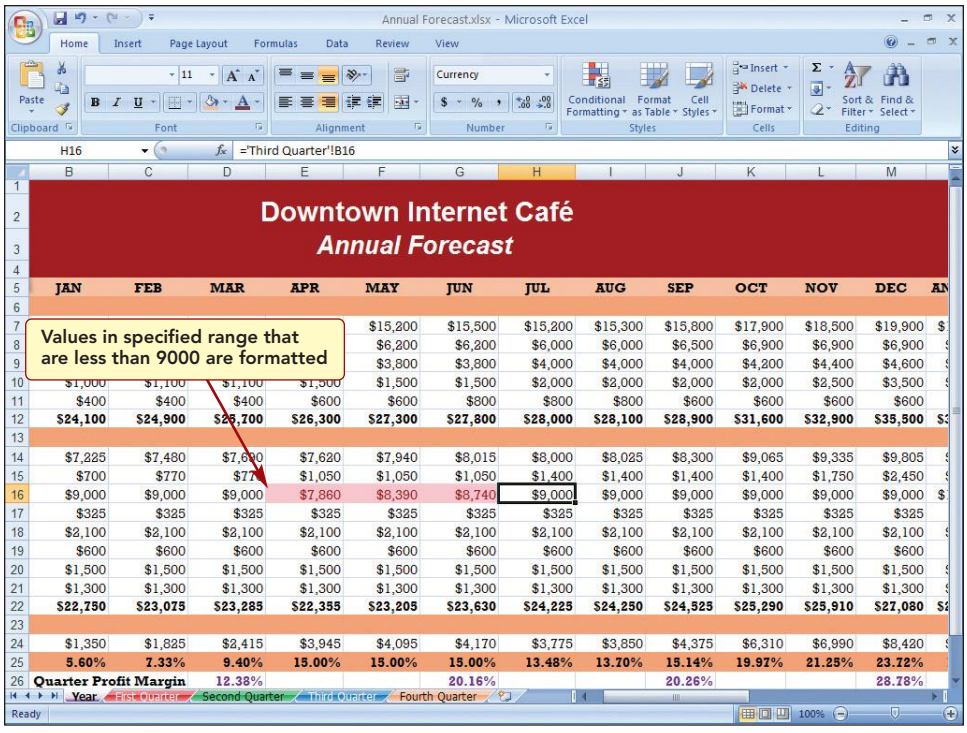


Figure 3.51

Only those cells in the Payroll row whose value is less than 9,000 are formatted using the light-red highlight and dark-red font color.

Using Rules Manager

Next you will use the Rules Manager to add a cell rule to highlight the profit margin values that are equal to 15 percent. The Rules Manager is used to create, edit, and delete conditional formatting rules in a worksheet.

1 **Click** Conditional Formatting **and choose Manage Rules.**

Your screen should be similar to Figure 3.52

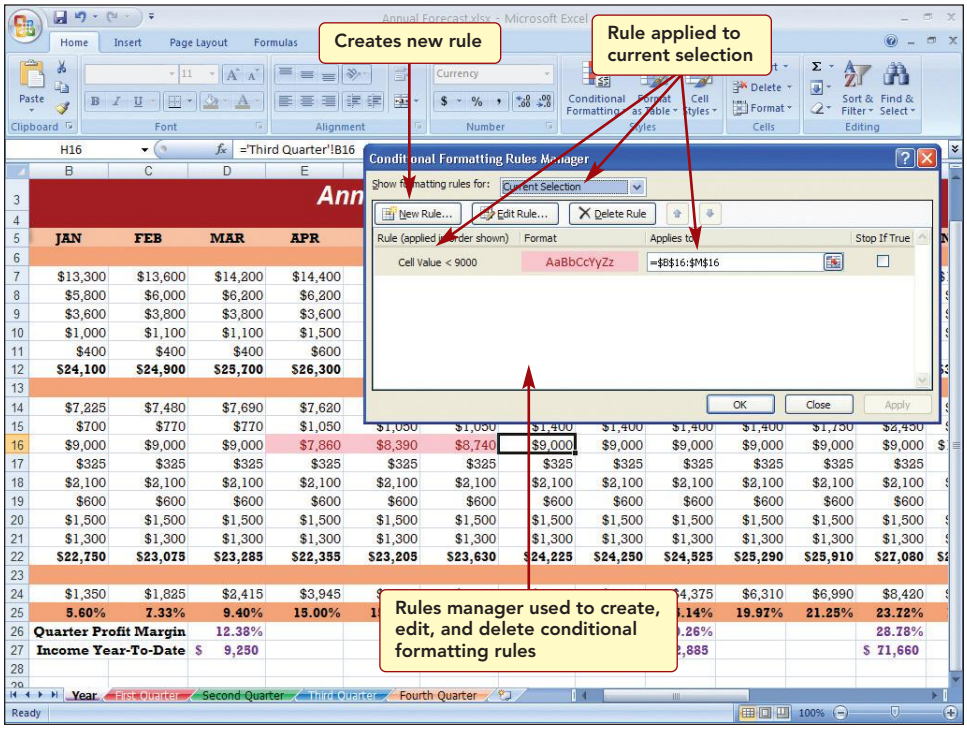


Figure 3.52

MORE ABOUT

To learn how to allow more than one rule to be true, see 4.3 Apply Conditional Formatting in the More About appendix.

The cell rule you just created is listed in the dialog box. The order in which rules appear in the list determines the order in which they are applied in the worksheet. New rules are always added to the top of the list and take precedence over any rules that are below it. You will create a new rule to highlight the 15 percent profit margin values.

2. Click New Rule... .

Choose Format only cells that contain from the Select a Rule Type list.

Your screen should be similar to Figure 3.53

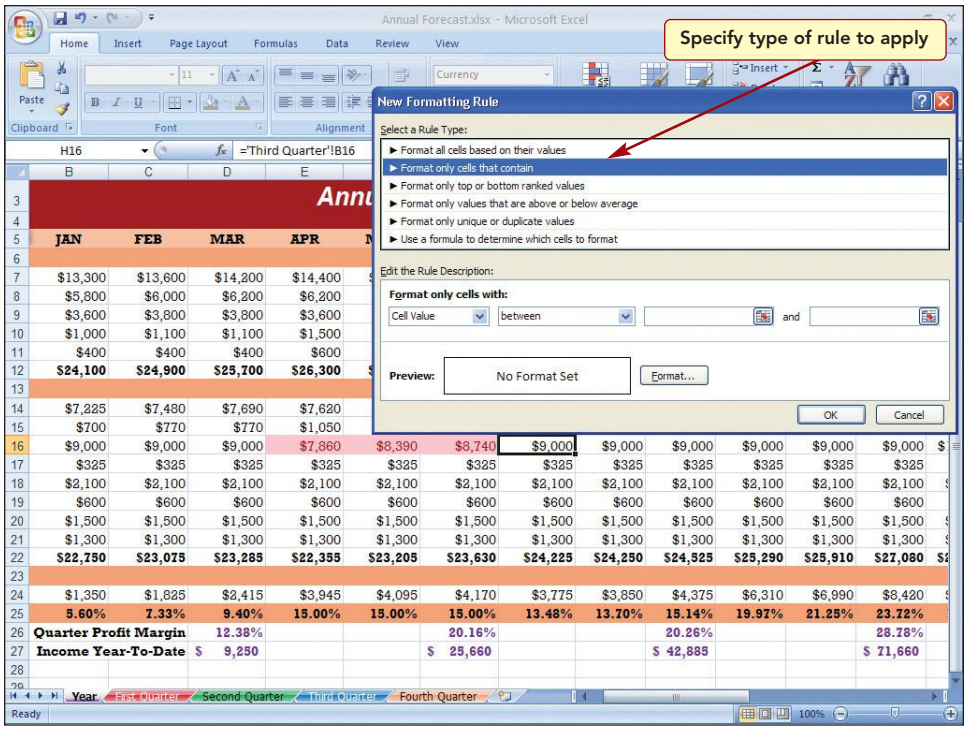


Figure 3.53

In the Edit the Rule Description area of the dialog box, you specify the type of rule to use and the condition value. You can enter a value or select it from the worksheet.

3. Choose Equal To from the condition type list box.

Type 15.00% in the value area.

Click Format... and select the Turquoise, Accent 1 font color.

Click OK .

Your screen should be similar to Figure 3.54

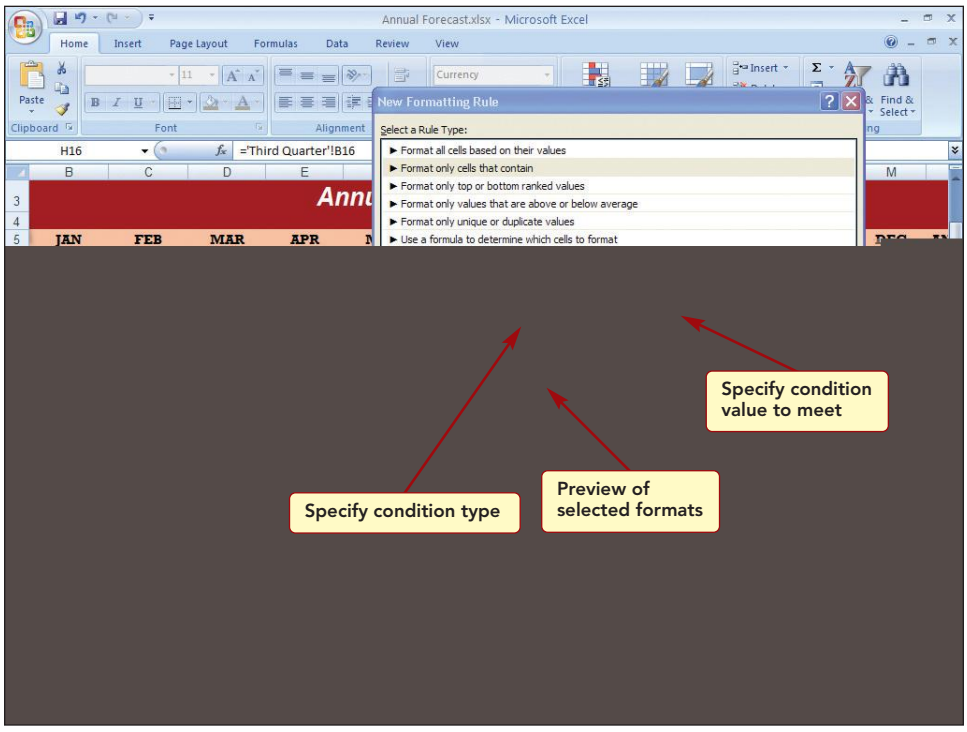


Figure 3.54

When the rule conditions are met, these cells will be formatted in blue font color. The last item you need to specify is the range.

4. Click OK.
- Click Collapse Dialog in the Applies to box to temporarily hide the dialog box and allow you to select the range.
- Select B25:N25.
- Click Expand Dialog to display the dialog box again.
- Click Apply.
- Choose This Worksheet from the Show formatting rules drop-down list to display all the formatting rules in the worksheet.

Your screen should be similar to Figure 3.55

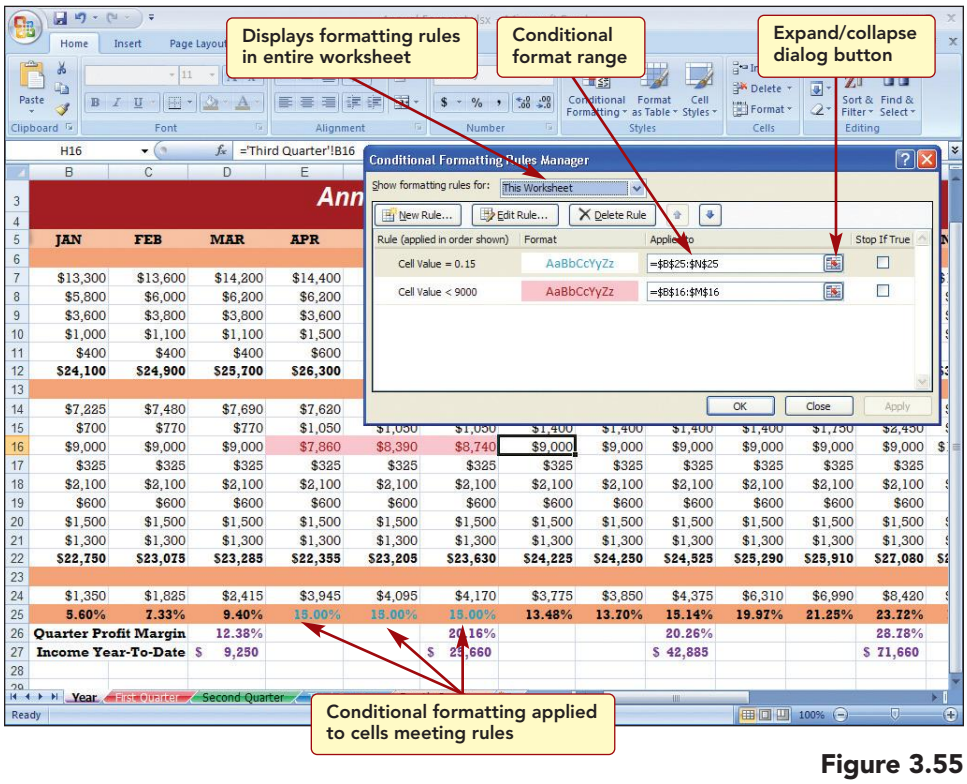


Figure 3.55

Additional Information
You can remove a rule by selecting it and clicking Delete Rule.

Only those cells whose profit margin value is exactly 15 percent are formatted in blue. You decide it would be more informational to highlight all months that have a profit margin of 15 percent or greater. To do this, you can edit the rule.

5. **Select the first cell rule in the list (Cell Value = 0.15) and click** Edit Rule... **.**

- **Change the rule type to Greater than or equal to.**
- **Click** OK **and click** Apply **.**

Your screen should be similar to Figure 3.56

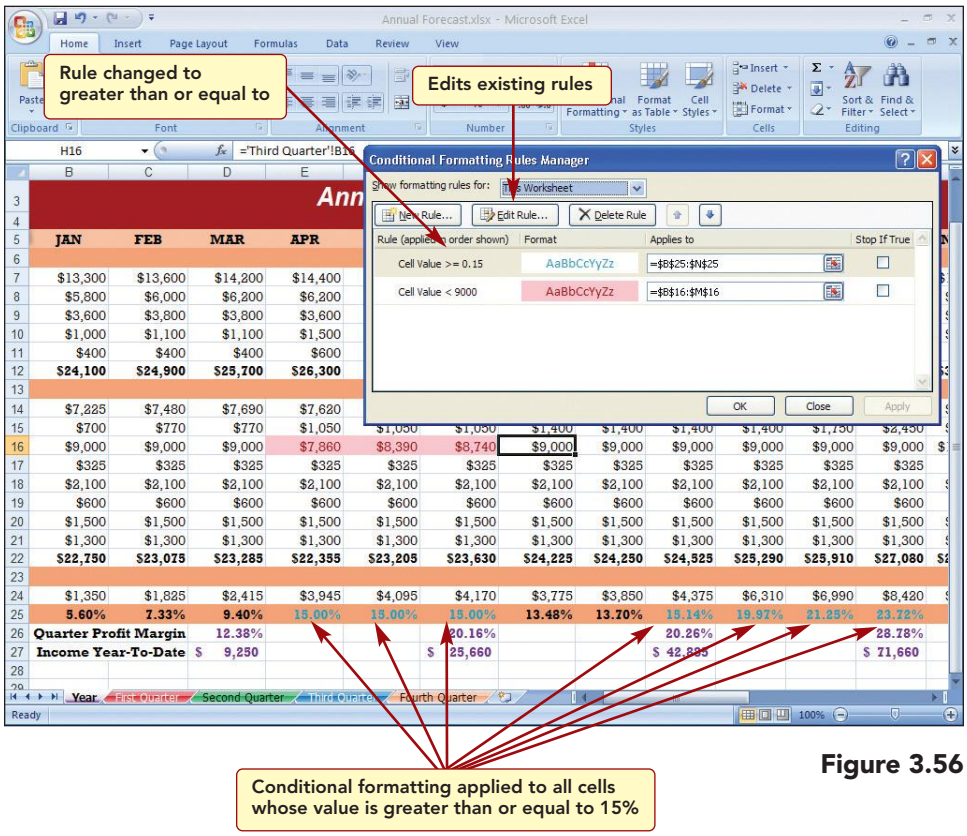


Figure 3.56

Now all profit margin values that are 15 percent or greater are formatted.

MORE ABOUT

To learn how to add top and bottom rules, color scales, and icon set conditional formatting, see 4.3 Apply Conditional Formatting in the More About appendix.

Creating Data Bars

The next area you want to emphasize is the income year-to-date values. For this, you will apply the data bars conditional formatting. This option displays colored bars similar to a bar chart within each cell to show the relative values of the cell.

1. Click Close to close the dialog box.
2. Select D27 through M27.
3. Click Conditional Formatting.
4. Select Data Bars and point to the different data bar colors to see the live preview.
5. Choose the Light Blue Data Bar color.

Your screen should be similar to Figure 3.57

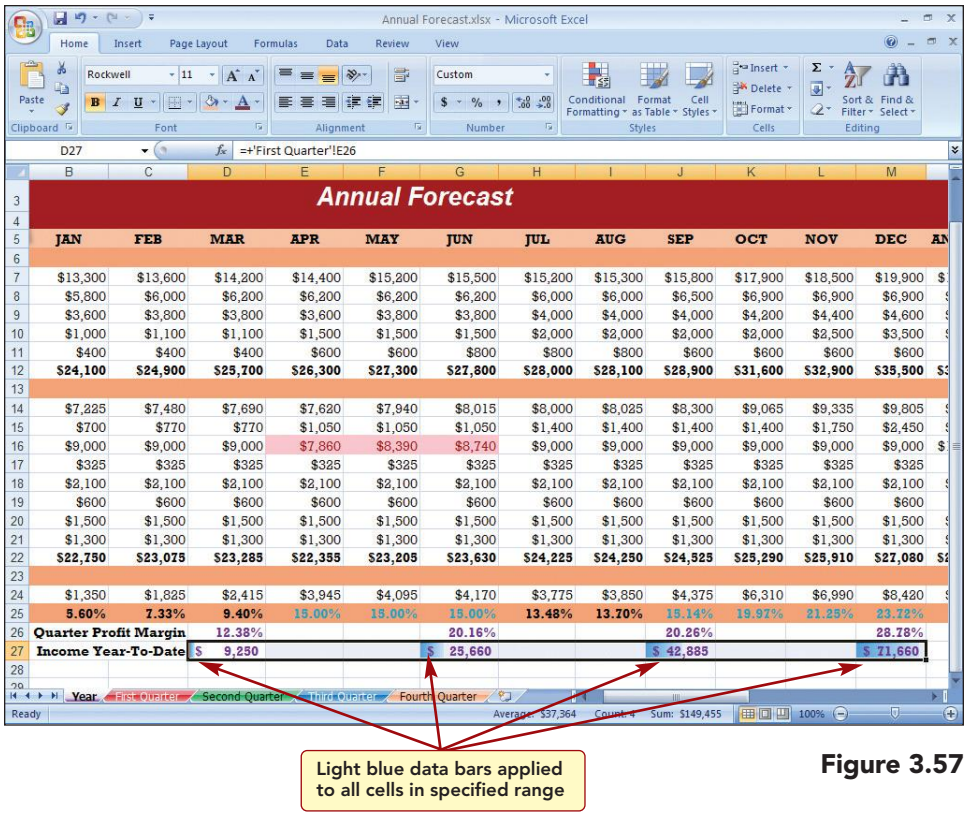


Figure 3.57

Color bars appear in each cell containing a number. The size of the number determines the length of the bar; the larger the value, the longer the bar. Because you do not feel this adds much to the worksheet, you will delete the rule.

2. Click Conditional Formatting and select Clear Rules.
3. Choose Clear Rules from Selected Cells.
4. Clear the selection and save the workbook.

Your screen should be similar to Figure 3.58

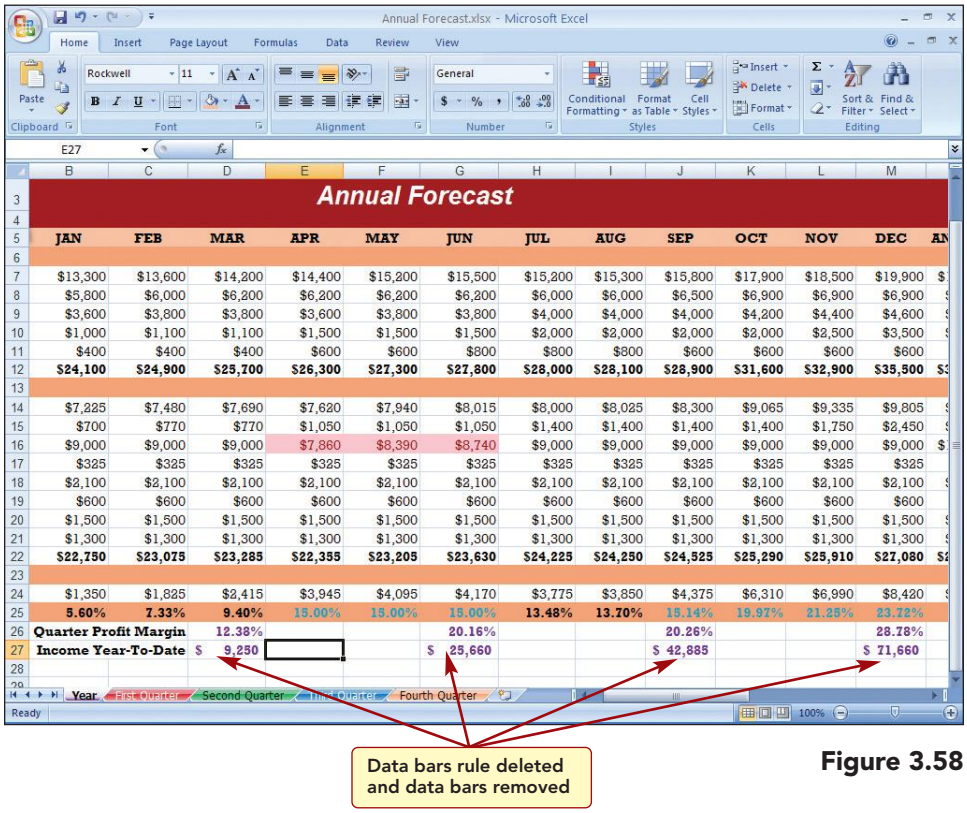


Figure 3.58

The data bar formatting is removed and the rule is deleted.

Customizing Print Settings

Now you are ready to print the workbook. Just because your worksheet looks great on the screen, this does not mean it will look good when printed. Many times you will want to change the default print and layout settings to improve the appearance of the output. Customizing the print settings by controlling page breaks, changing the orientation of the page, centering the worksheet on the page, hiding gridlines, and adding custom header and footer information are just a few of the ways you can make your printed output look more professional.

Controlling Page Breaks

First you want to preview the Year sheet.

1. **Display the Year sheet in Print Preview.**
   - **Click** Next Page **.**

Your screen should be similar to Figure 3.59

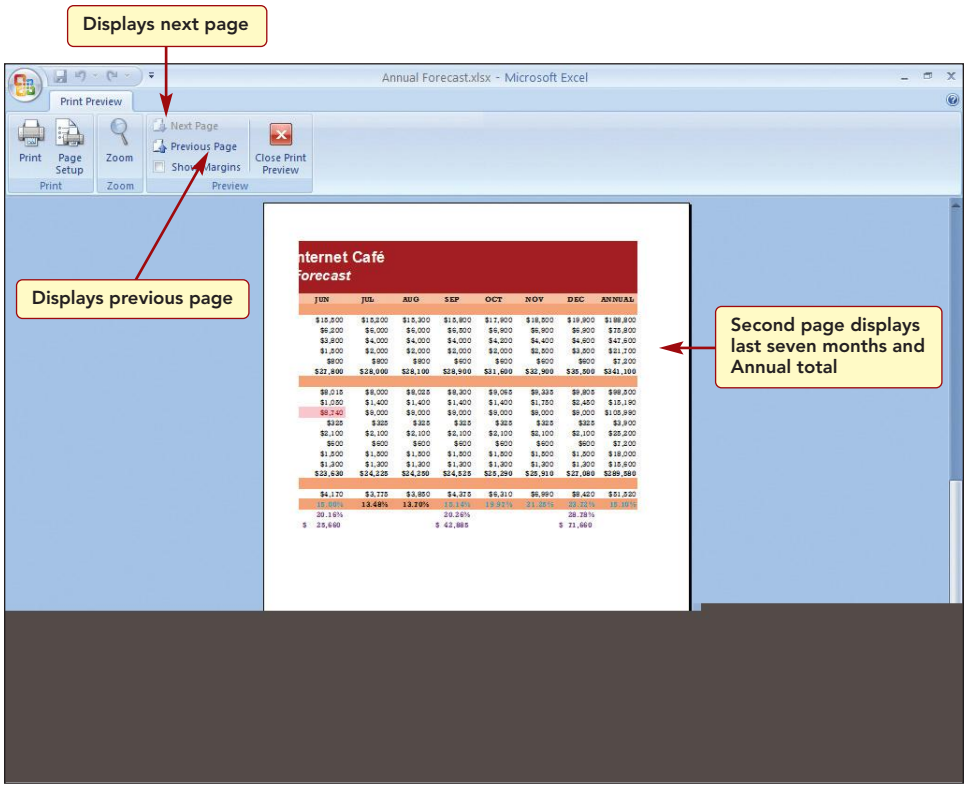


Figure 3.59

The first page of the Year worksheet displays the first five months, and the second page, the remaining months and the annual total. Although you could change the orientation to landscape and use the Fit To feature to compress the worksheet to a single page, this would make the data small and difficult to read. Instead, you decide to leave the printout as two pages, but you want the second six months to appear on the second page.

To do this, you will change the location of the **page break,** the place where one printed page ends and another starts. Excel inserts automatic page breaks based on the paper size, margin settings, and orientation

when the worksheet exceeds the width of a page. You can change the location of the automatic page break by inserting a manual page break location. To help you do this, Page Break Preview is used to adjust the location of page breaks.

2 **Close Print Preview.**

- **Open the View tab.**
- **Click** Page Break Preview **in the Workbook Views group.**

Another Method

You also could click in the status bar to change to Page Break Preview.

- **If a Welcome to Page Break Preview box appears, click** OK **.**
- **Change the zoom to 80% and scroll the window horizontally to see the entire sheet.**

Your screen should be similar to Figure 3.60

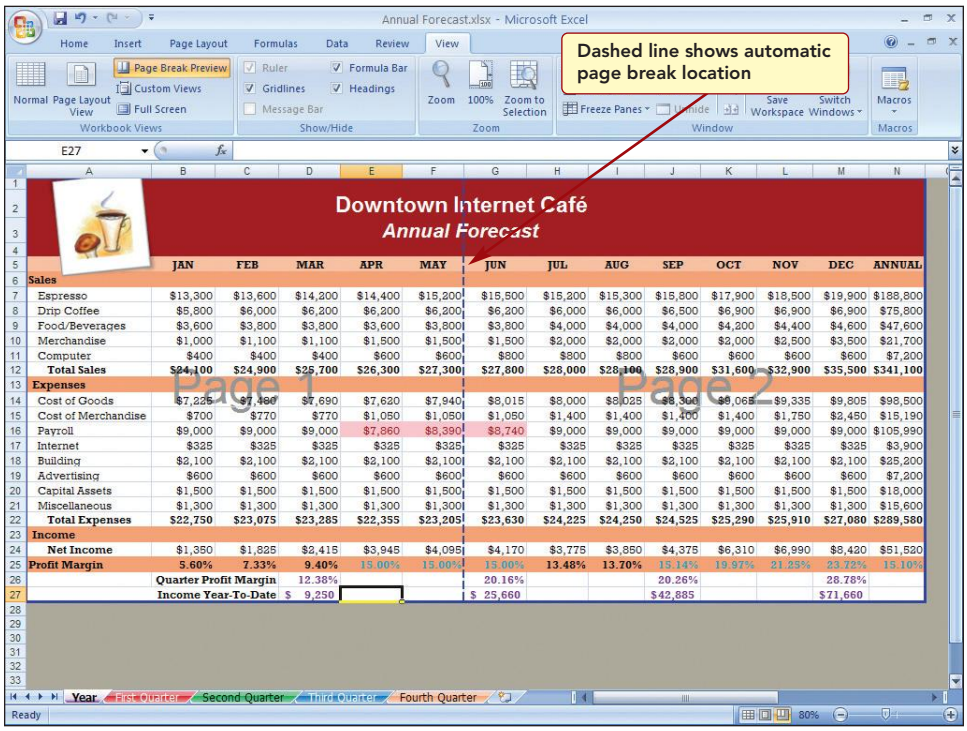


Figure 3.60

Additional Information

You can work in Page Break Preview just like in Normal view.

Now you can easily see the page break location. The dashed line indicates the location of the automatic page break. You can change the location by dragging the page break line. When you move an automatic page break location to another location, the page break line changes to a solid line, indicating it is a manual page break. Additionally, you realize that even when you move the page break location to column H, the worksheet title will be split between the two pages. You will fix this by unmerging the cells and moving the title to the left on page 1 and copying the title to page 2.

3. **Point to the page break line and when the mouse pointer is ↔, drag the line to the right between columns G and H.**

Another Method

You also can insert page breaks by moving to the column location in the worksheet where you want the break inserted and using /Insert Page Break in the Page Layout tab.

- **Select the two merged cells.**
- **Open the Home tab.**
- **Open the Merge and Center drop-down menu and choose Unmerge Cells.**
- **Copy the contents of D2:D3 to K2:K3.**
- **Press Esc to clear the selection and move to cell K4.**

Your screen should be similar to Figure 3.61

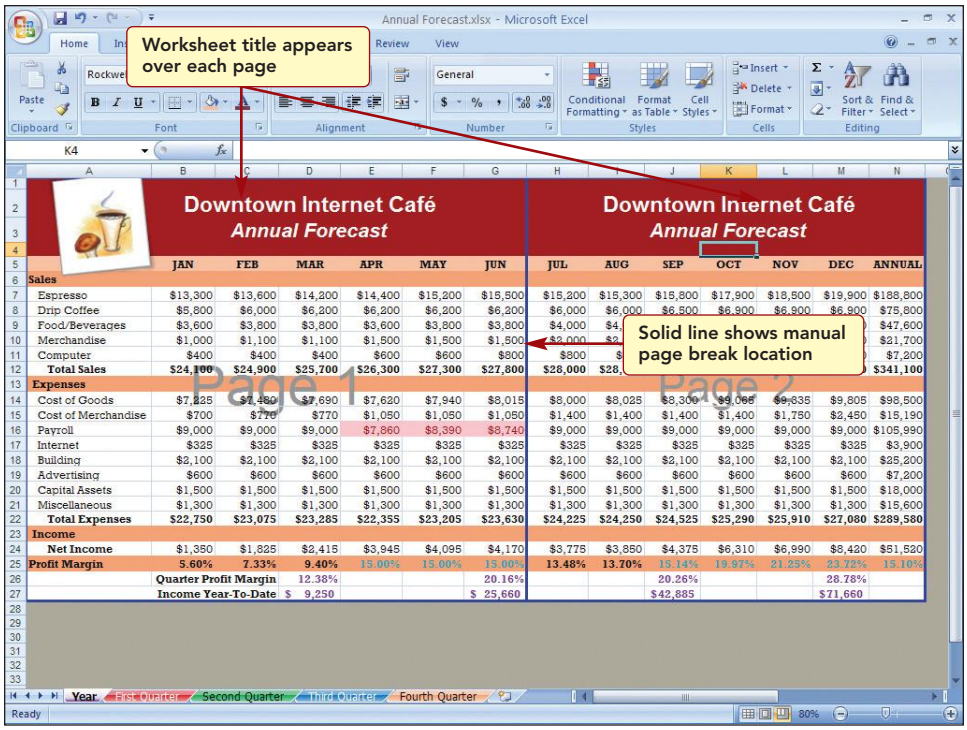


Figure 3.61

Unmerging the cells split the merged cell into its original cells and moved the contents into the upper-left cell of the range of split cells. The center formatting was not removed.

Adding a Custom Header and Footer

You also would like to add a custom header to this sheet. You will do this in Page Layout view because you can add the header simply by clicking on the header area of the page and typing the header text.

Additional Information

You also can add a custom footer by clicking in the footer area of the page.

1 **Switch to Page Layout view at 70% zoom.**

Click on the left end of the header area of page 1.

Your screen should be similar to Figure 3.62

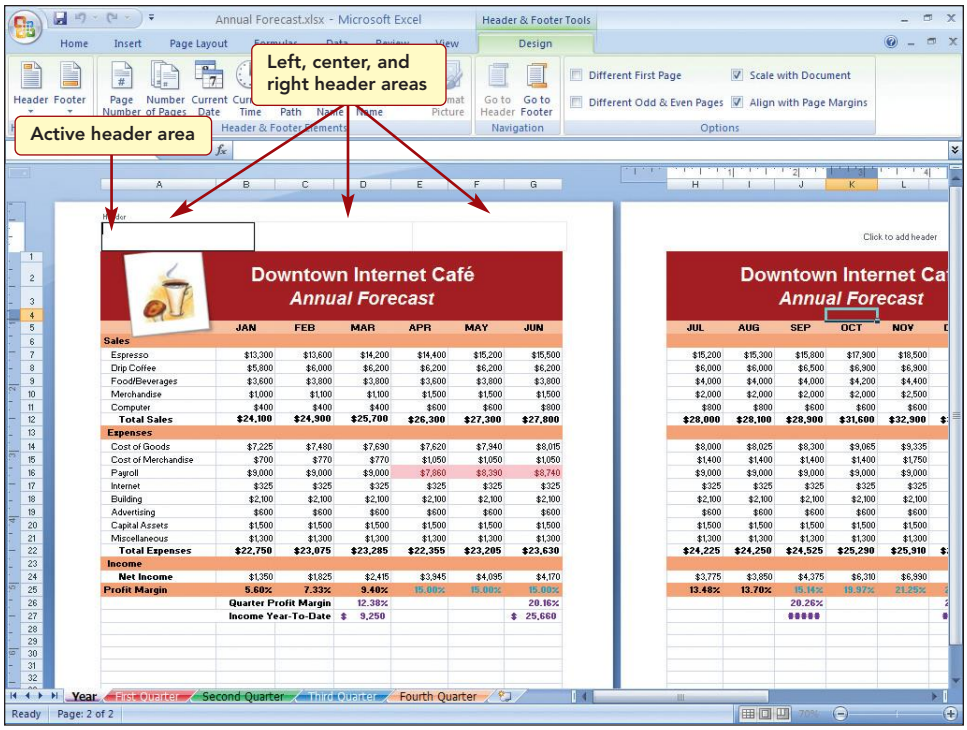


Figure 3.62

The header area is divided into three sections. The left section text box will display the text you enter aligned with the left margin; the center section will center the text; and the right section will right-align the text. You want to enter your name in the left section, class in the center, and the date in the right section. You will enter your name and class information by typing it directly in the box. You will enter the current date using the Current Date feature on the Header & Footer Tools Design tab.

2. Type **Created by your name.**

- Press Tab.

Another Method
You also could click on the section to move to it.

- **Enter the name of your class and the section or time.**
- Press Tab.
- Click Current Date **in the Header & Footer Elements group.**

Your screen should be similar to Figure 3.63

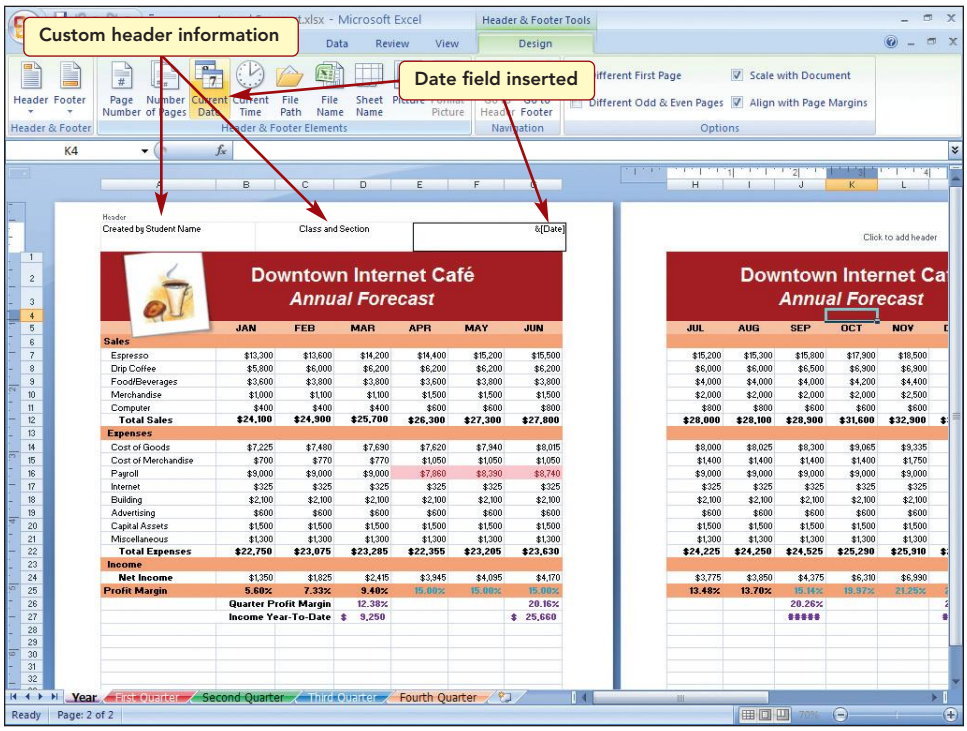


Figure 3.63

Additional Information
Custom headers and footers also can be added using the Header/Footer tab of the Page Setup dialog box.

Additional Information
Be careful when making changes to multiple sheets as these changes may replace data on other sheets.

The Date field is entered in the header. It will enter the current date whenever the worksheet is opened. The actual date will display when you leave the header area.

Next, you want to add footers to the quarter sheets. It is faster to add the footer to all sheets at the same time. If you make changes to the active sheet when multiple sheets are selected, the changes are made to all other selected sheets.

3. **Display the First Quarter sheet.**
- **Select the four quarter sheets.**
- **Open the Page Layout tab.**
- **Open the Page Setup dialog box.**
- **Open the Header/Footer tab.**
- **Click** Custom Footer... .

Additional Information

The quarter sheets are displayed in Normal view. The view you are using applies only to the individual sheet.

Your screen should be similar to Figure 3.64

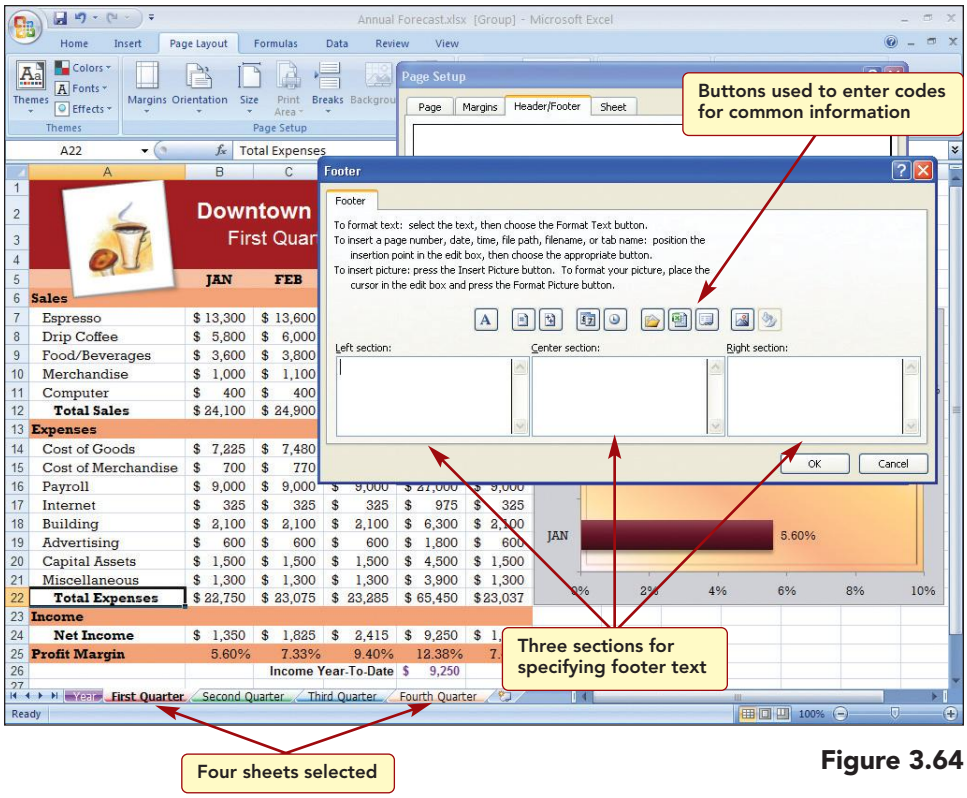


Figure 3.64

Just like in Page Layout view, the footer area consists of three sections. The buttons above the section boxes are used to enter the codes for common header and footer information. The insertion point is currently positioned in the Left Section text box.

You will enter your name in the left section, the file name in the middle section, and the date in the right section.

4. **Type your name.**
- **Press Tab.**
- **Click Insert File Name.**
- **Press Tab.**
- **Click Insert Date.**

Your screen should be similar to Figure 3.65

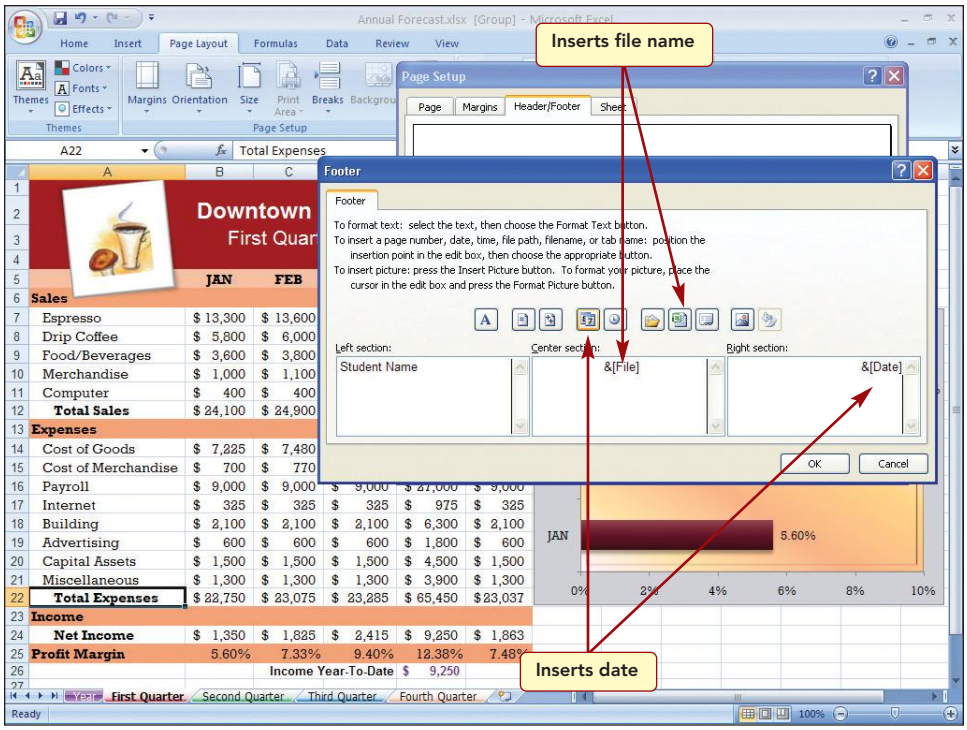


Figure 3.65

Next you will change the orientation of the four sheets to landscape, change the margins to 0.5 inch, and scale the sheets to fit the page. Then you want to make one final check to see how the worksheets will look before printing the workbook.

5 Click OK.

- Open the Page tab and choose Landscape.
- Choose Fit to, to scale the sheets to one page.
- Open the Margins tab and reduce the left and right margins to 0.5 inch.

Having Trouble?
Use the scroll buttons to increase or decrease the margin size.

- Click Print Preview.
- Look at the four sheets to confirm that the footer and orientation changes were added to them as well.

Your screen should be similar to Figure 3.66

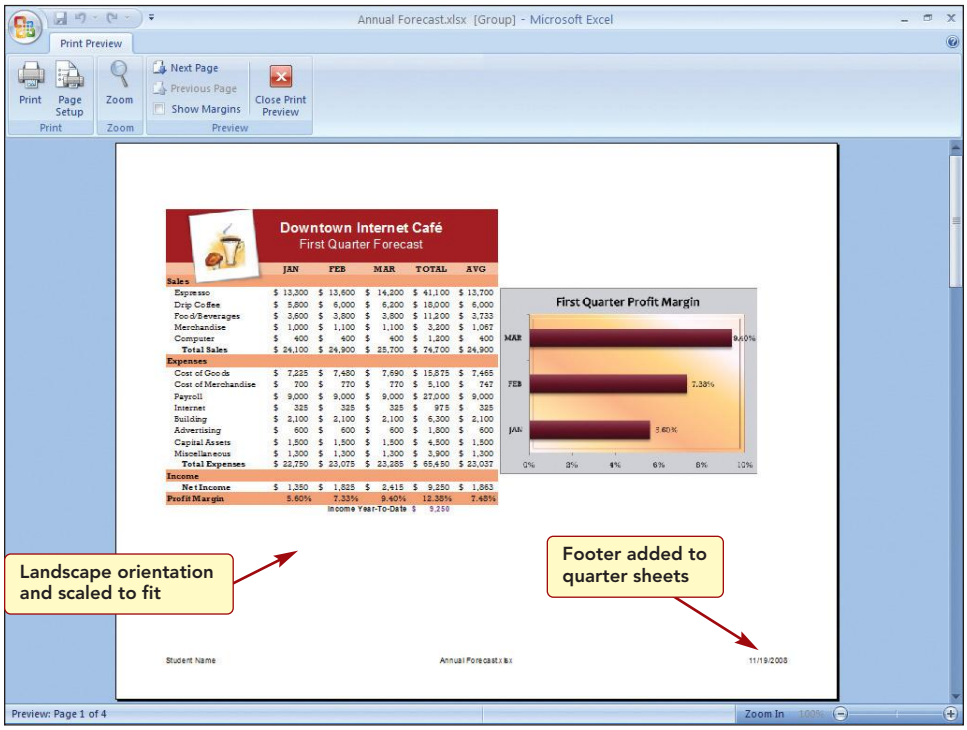


Figure 3.66

Additional Information
You also could drag the right or left border of the margin area in the ruler while in Page Layout view to adjust the size of the margins.

The footer as you entered it appears on all selected worksheets and the page layout changes were made as well.

Printing Selected Sheets

You want to print the Year and Second Quarter worksheets only. Because the Annual worksheet is large, you also feel the worksheet may be easier to read if the row and column gridlines were printed. Although gridlines are displayed in Page Layout View and Normal view, they do not print unless you turn on this feature.

1. **Close the Print Preview window.**
2. **Right-click on a sheet tab and choose Ungroup Sheets.**
3. **Make the Year sheet active.**
4. **Select Print in the Gridlines section of the Sheet Options group in the Page Layout tab.**

Another Method
You also can print gridlines by choosing Gridlines from the Page Setup dialog box.

Additional Information
The gridlines appear slightly darker when they are set to print.

5. **Save the workbook again.**
6. **Hold down Ctrl and click the Second Quarter sheet tab to add it to the selection of sheets to print.**
7. **Preview and then print the worksheets.**

Having Trouble?
If you do not need to specify print settings that are different from the default settings on your system, use Office Button and choose Quick Print to print the worksheet.

Your printed output should look like that shown in the Case Study at the beginning of the lab.

Printing Selected Areas

You are finished printing the Year and Second Quarter sheets and you have the information Evan requested. However, you think Evan also would like a printout of the First Quarter worksheet without the chart displayed. To print a selected area, you first select the cell range that you want to print.

1. **Select the First Quarter sheet.**
2. **Select cells A1 through F25.**
3. **Click**  **in the Page Setup group and choose Set Print Area.**

Your screen should be similar to Figure 3.67

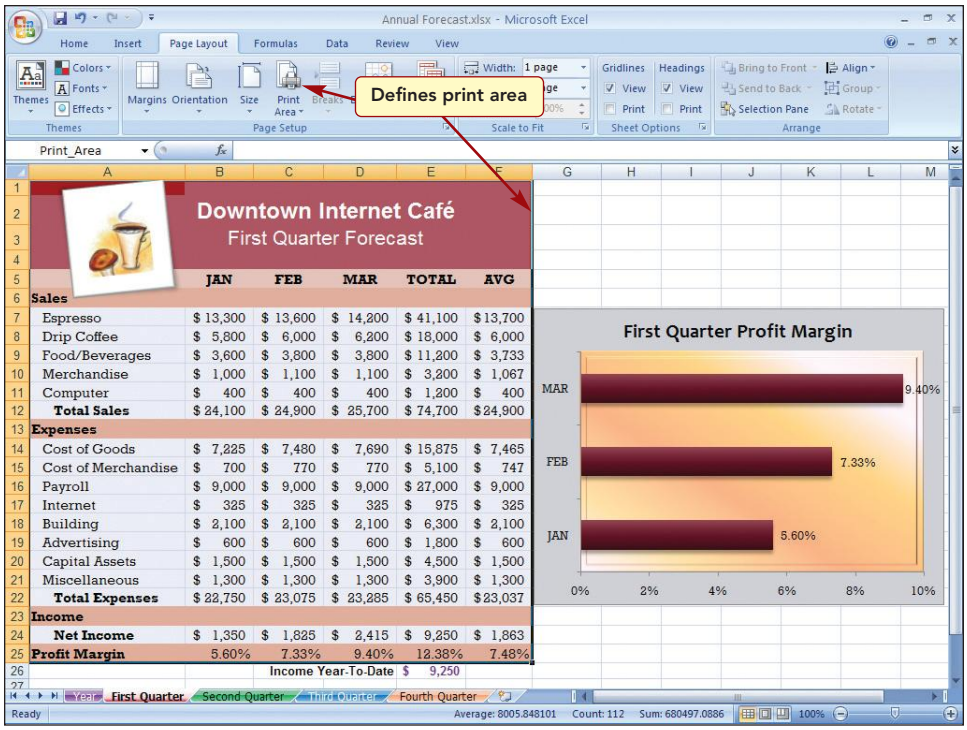


Figure 3.67

The area you selected, called the **print area**, is surrounded with a heavy line that identifies the area.

2. **Display the Print Preview window.**

Your screen should be similar to Figure 3.68

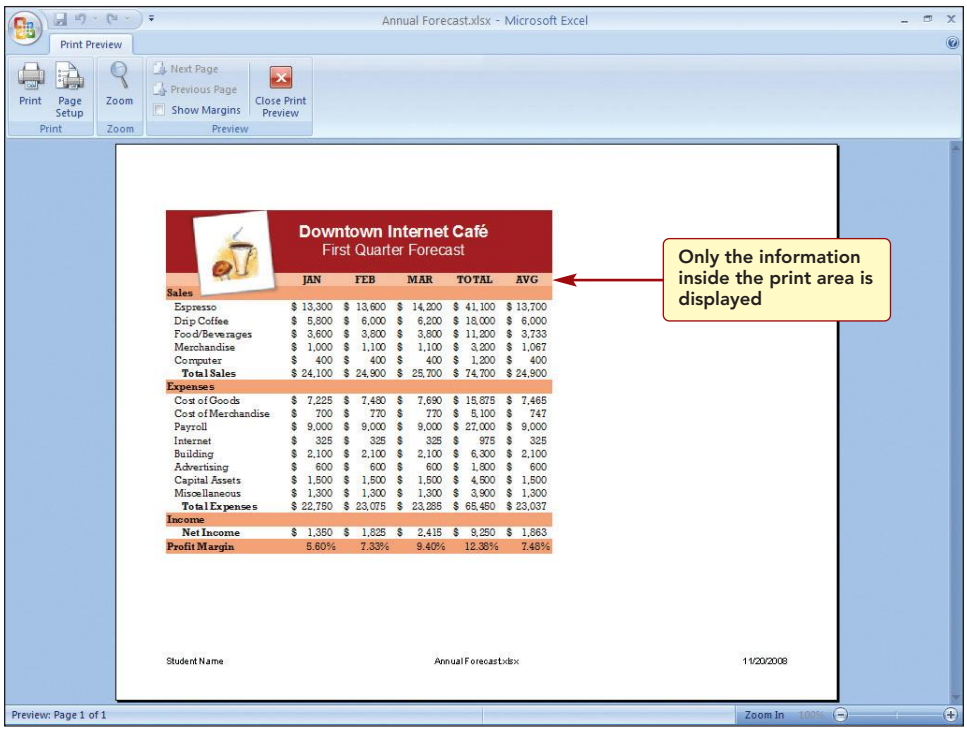


Figure 3.68

The Print Preview window displays only the information contained in the defined print area. The print area is saved with the worksheet and will be used automatically whenever you print the worksheet. It can be cleared using Clear Print Area in the Print Area menu.

3. **Click Print.**

- **Specify any print settings and click OK.**
- **Close and save the workbook and exit Excel.**



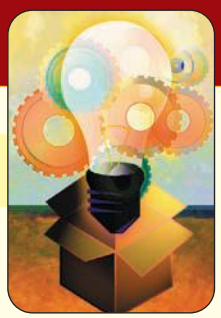
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Medical Sales Accountant

Medical sales accountants visit doctors and clinics to promote the pharmaceuticals and supplies made by the company they represent. The accountants usually specialize in a few pharmaceuticals or products so that they can help the doctor understand the benefits and risks associated with their products. Medical sales accountants must keep careful and complete records of the samples they have in inventory and what they have delivered to doctors. An Excel workbook is a useful tool to keep track of the many doctors and deliveries made. A career as a medical sales accountant can start with a salary of $35,000 and go up to over $90,000 plus car and travel benefits.

Concept Summary

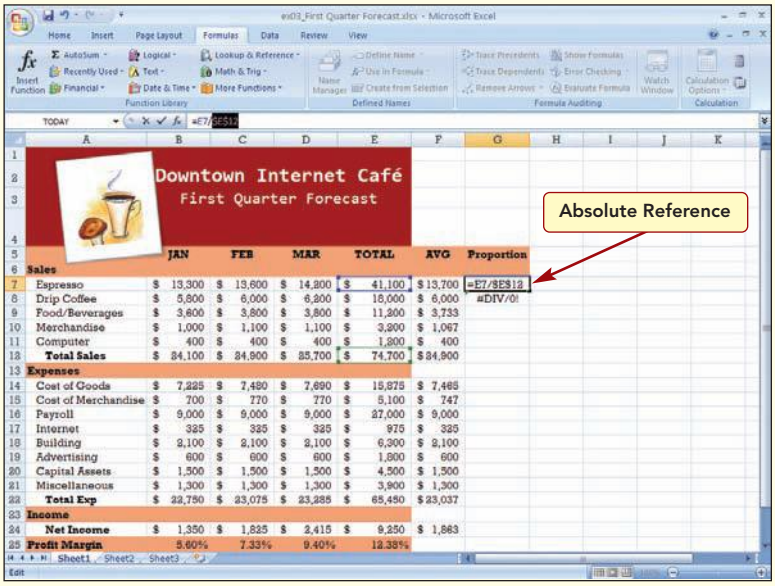


LAB 3

Managing and Analyzing a Workbook

Absolute Reference (EX3.13)

An absolute reference is a cell or range reference in a formula whose location does not change when the formula is copied.

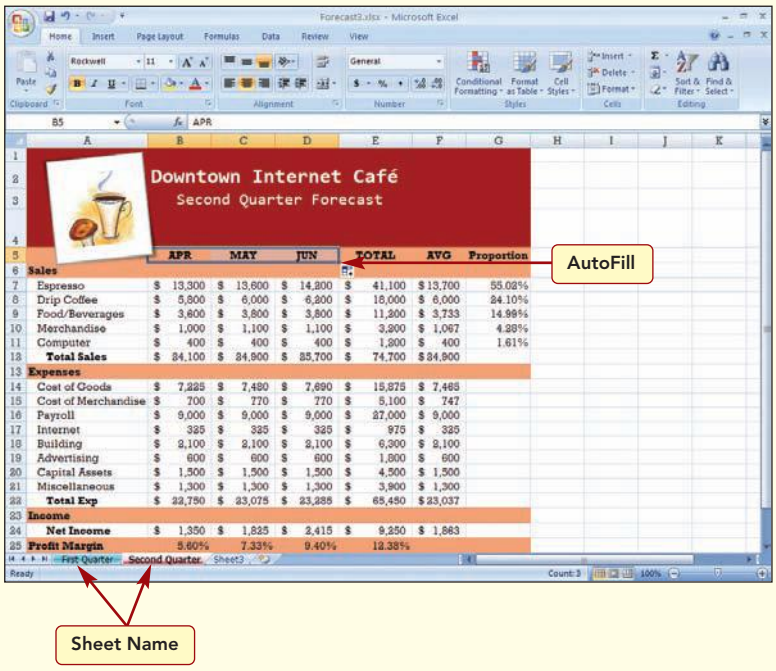


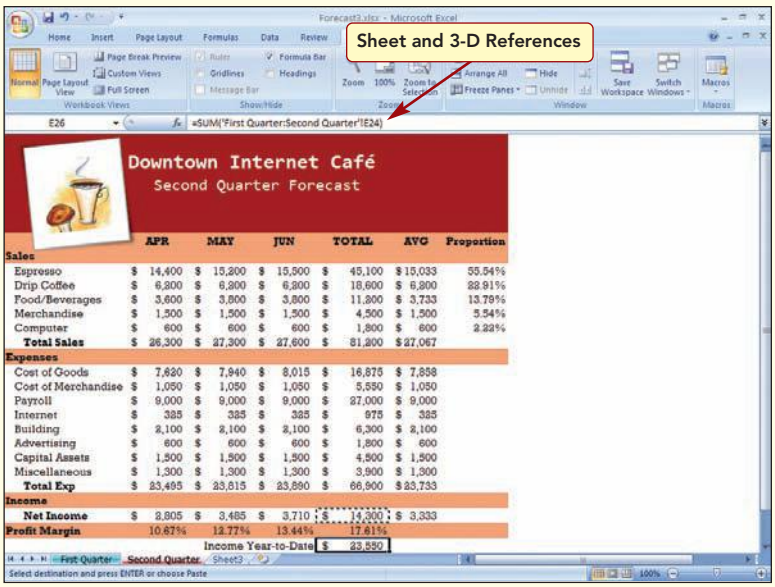
Sheet Name (EX3.18)

Each sheet in a workbook can be assigned a descriptive sheet name to help identify the contents of the sheet.

AutoFill (EX3.20)

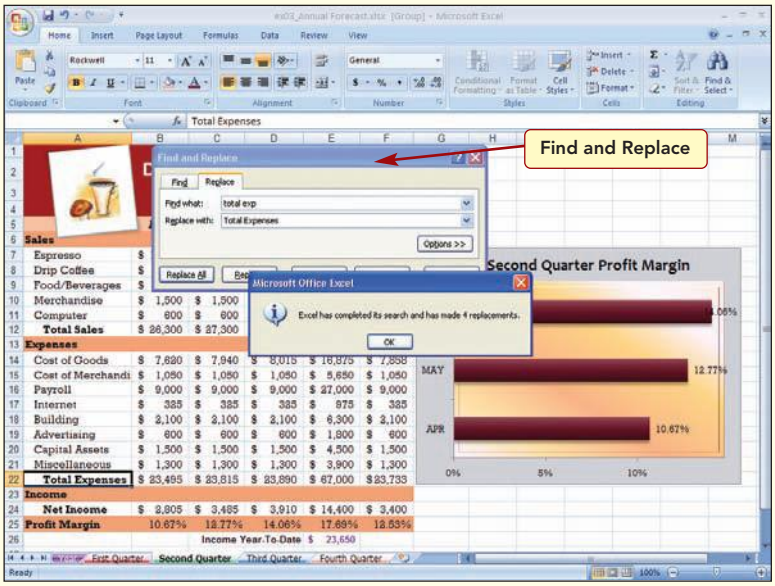
The AutoFill feature makes entering a series of headings easier by logically repeating and extending the series. AutoFill recognizes trends and automatically extends data and alphanumeric headings as far as you specify.





Sheet and 3-D References (EX3.23)

A formula that contains references to cells in other sheets of a workbook allows you to use data from multiple sheets and to calculate new values based on this data. The formula contains a sheet reference consisting of the name of the sheet, followed by an exclamation point and the cell or range reference.



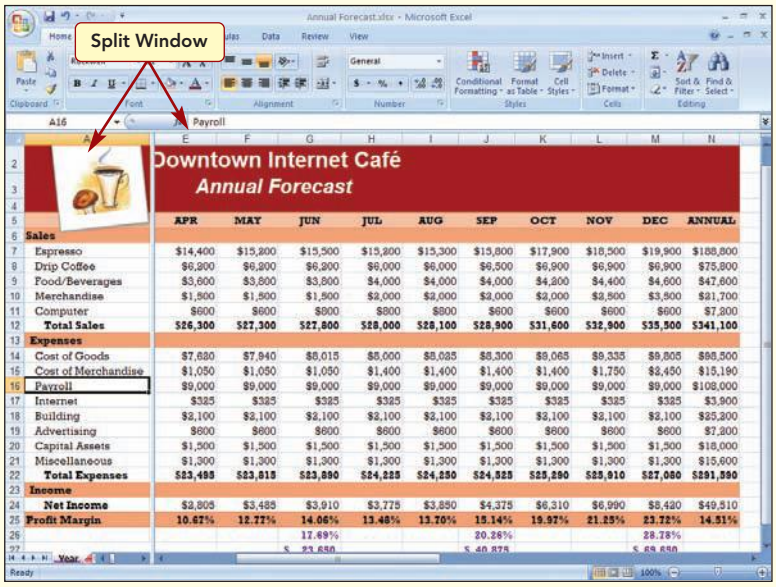
Find and Replace (EX3.29)

The Find and Replace feature helps you quickly find specific information and automatically replace it with new information.

Concept Summary

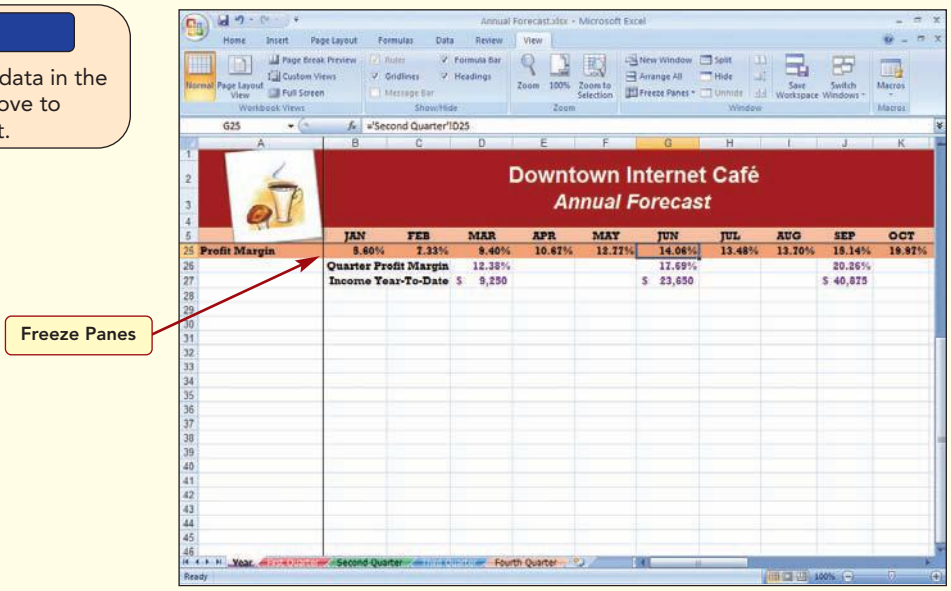
Split Window (EX3.38)

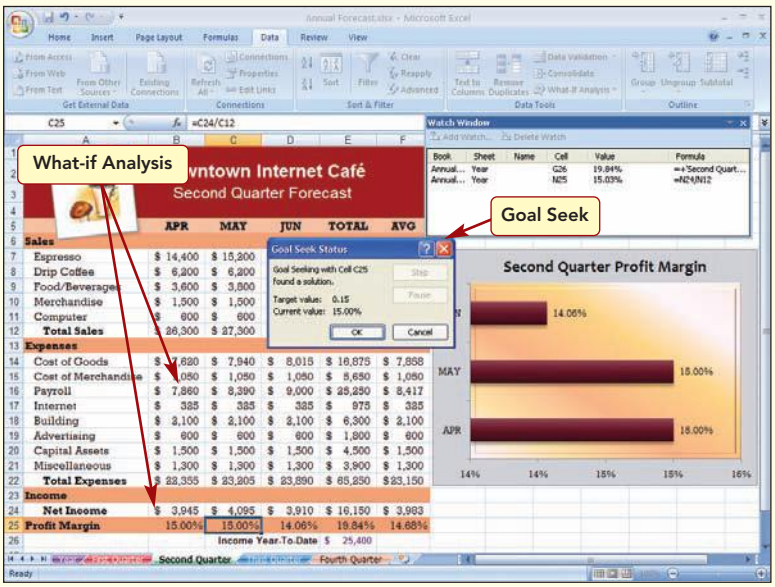
The split window feature allows you to divide a worksheet window into sections, making it easier to view different parts of the worksheet at the same time.



Freeze Panes (EX3.41)

Freezing panes prevents the data in the pane from scrolling as you move to different areas in a worksheet.



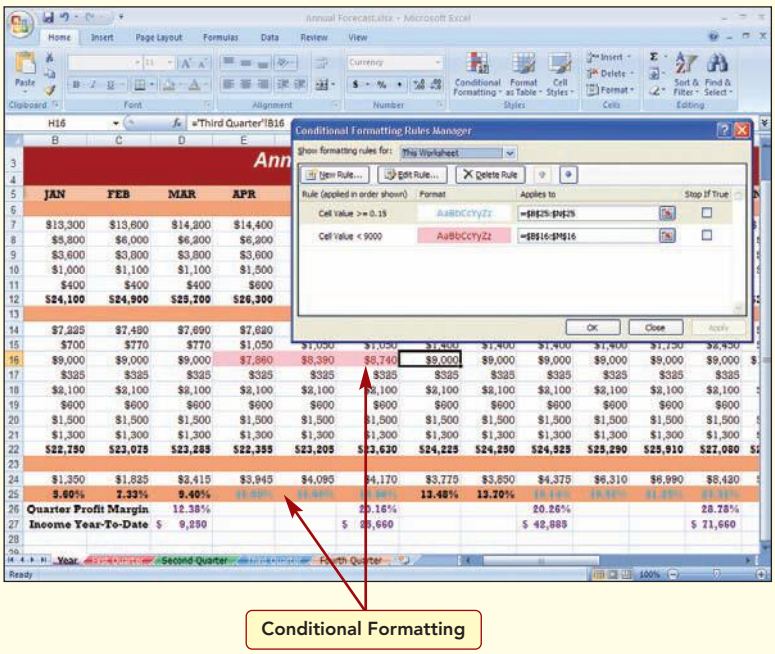


What-If Analysis (EX3.45)

What-if analysis is a technique used to evaluate the effects of changing selected factors in a worksheet.

Goal Seek (EX3.47)

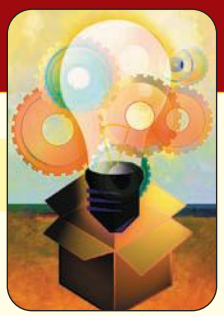
The Goal Seek tool is used to find the value needed in one cell to attain a result you want in another cell.



Conditional Formatting (EX3.50)

Conditional formatting changes the appearance of a range of cells based on a condition that you specify.

Lab Review



LAB 3

Managing and Analyzing a Workbook

key terms

3-D reference EX3.23
absolute reference EX3.13
AutoFill EX3.20
conditional formatting EX3.50
Find and Replace EX3.29
freeze panes EX3.41
Goal Seek EX3.47
mixed reference EX3.13
page break EX3.57
pane EX3.38
print area EX3.66
sheet name EX3.18
sheet reference EX3.23
split window EX3.38
what-if analysis EX3.45

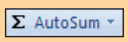
MCAS skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2 MCAS Certification Guide for a complete list of the skills that were covered in Lab 3.

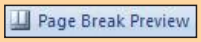
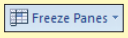
command summary

Command	Shortcut	Action
File menu		
Print/Quick Print		Prints document using the default printer settings
Home tab		
Styles group		
Conditional Formatting/Highlight Cells Rules		Applies Data Bars, Color Scales, and Icons Sets to selected cells based on criteria
Conditional Formatting/Manage Rules		Opens Rules Manager to create, edit, and delete cell rules
Cells group		
Delete/Delete Sheet		Deletes entire sheet
Format/Rename Sheet		Renames sheet
Format/Move or Copy Sheet		Moves or copies selected sheet
Format/Tab Color		Changes color of sheet tabs
Editing group		
Find & Select/Find	Ctrl + F	Locates specified text, numbers, and/or formats
Find & Select/Replace	Ctrl + H	Locates specified characters or formats and replaces them with specified replacement characters or format
Find & Select/Go To	Ctrl + G	Goes to a specified cell location in worksheet

command summary

Command	Shortcut	Action
Page Layout tab		
Page Setup group		
 /Narrow		Changes margin settings
 /Custom Margins/Horizontally		Centers worksheet horizontally on page
 /Custom Margins/Vertically		Centers worksheet vertically on page
 /Set Print Area		Sets print area to selected cells
 /Insert Page Break		Inserts page break at cell pointer location
 /Remove Page Break		Removes page break at cell pointer location
 /Reset all Page Breaks		Restores automatic page breaks
Scale to Fit group		
 /1 page		Scales worksheet vertically to fit one page
Sheet Options group		
Print Gridlines		Displays/hides gridlines for printing
Formulas tab		
Function Library group		
		Enters Sum, Average, Minimum, Maximum, or Count function
Formula Auditing group		
		Checks worksheet for formula errors
		Opens Watch Window toolbar
Data tab		
Data Tools group		
 /Goal Seek		Adjusts value in specified cell until a formula dependent on that cell reaches specified result

command summary

Command	Shortcut	Action
View tab		
Workbook Views group		
		Changes worksheet view to Normal
		Displays worksheet as it will appear when printed
		Displays where pages will break when a worksheet is printed
Show/Hide group		
		Turns on/off display of gridlines
		Turns on/off display of row and column headings
Zoom group		
		Changes magnification of window
Window group		
 /Freeze Panes		Freezes top and/or leftmost panes
 /Unfreeze Panes		Unfreezes window panes
		Divides window into four panes at active cell or removes split



matching

Match the lettered item on the right with the numbered item on the left.

1. 'Second Quarter'!A13	_____	**a.**	applies formatting based on cell rules
2. Goal Seek	_____	**b.**	3-D reference
3. Sheet1:Sheet3!H3:K5	_____	**c.**	sheet reference
4. freezing panes	_____	**d.**	the sections of a divided window
5. conditional formatting	_____	**e.**	mixed cell reference
6. panes	_____	**f.**	pane that contains the cell selector
7. active pane	_____	**g.**	prevents data in pane from scrolling
8. M34	_____	**h.**	a what-if analysis tool
9. $B12	_____	**i.**	absolute cell reference
10. #DIV/0!	_____	**j.**	indicates division by zero error

true/false

Circle the correct answer to the following questions.

1. Dragging the sizing handle activates the AutoFill feature and recognizes the cell entry as one that can be incremented.	True	False
2. If you hold down Ctrl while you drag the fill handle, the entries will not be incremented.	True	False
3. You can freeze the information in the top and right panes of a window only.	True	False
4. The sheet reference consists of the name of the sheet separated from the cell reference by a question mark.	True	False
5. =SUM(Sheet15:Sheet50!H6) averages the values in cell H6 of sheets 15 and 50.	True	False
6. To create two horizontal panes with the left pane frozen, move the cell selector in the top row of the window and select the column to the right of where you want the split to appear.	True	False
7. Color bars apply a two- or three-color graduated scale to compare values in a range.	True	False
8. $G8 is an absolute reference.	True	False

9. What-if analysis varies the value in the cell you specify until a formula that is dependent on that cell returns the desired result. True False

10. A relative reference is a cell or range reference in a formula whose location does not change when the formula is copied. True False

fill-in

Complete the following statements by filling in the blanks with the correct key terms.

1. A $ character in front of either the column or the row reference in a formula creates a(n) _____ reference.
2. A(n) _____ reference is created when the reference is to the same cell or range on multiple sheets in the same workbook.
3. _____ formatting changes the appearance of a range of cells based on a set of conditions you specify.
4. When specified rows and columns are _____, they are fixed when you scroll.
5. A worksheet window can be divided into _____, either horizontal or vertical, through which different areas of the worksheet can be viewed at the same time.
6. The _____ feature logically repeats and extends a series.
7. The _____ is used to create, edit, and delete cell rules.
8. _____ consist of the name of the sheet enclosed in quotes, and are separated from the cell reference by an exclamation point.
9. The _____ tool is used to find the value needed in one cell to attain a result you want in another cell.
10. A technique used to evaluate what effect changing one or more values in formulas has on other values in the worksheet is called _____.

multiple choice

Circle the correct response to the questions below.

1. The number 32534 displayed with the Currency style would appear as _____ in a cell.
   a. $32534
   b. 32,534
   c. $32,534
   d. $32,534.00
2. The _____ function key will change a selected cell reference to absolute.
   a. F4
   b. F7
   c. F3
   d. F10

3. The _____ error value indicates that the wrong type of argument or operand was used.
   a. #####
   b. #DIV/0
   c. #N/A
   d. #VALUE!

4. The cell reference to adjust row 8 without adjusting column E is
   a. E8
   b. E8
   c. $E8
   d. E$8

5. Which of the following is NOT a valid sheet name?
   a. Second Quarter
   b. Qtr 1
   c. 3/12/04
   d. Week 8 - 10

6. The _____ feature enters a series of headings by logically repeating and extending the series.
   a. ExtendSelect
   b. AutoFill
   c. AutoRepeat
   d. ExtendFill

7. The information in the worksheet can be _____ in the top and left panes of a window only.
   a. fixed
   b. frozen
   c. aligned
   d. adjusted

8. A division of the worksheet window that allows different areas of the worksheet to be viewed at the same time is called a
   a. part
   b. pane
   c. window
   d. section

9. A cell address that is part absolute and part relative is a(n) _____
   a. absolute reference
   b. frozen cell
   c. mixed reference
   d. relative reference

10. _____ is used to evaluate the effects of changing selected factors in a worksheet.
    a. Value analysis
    b. AutoCalculate
    c. What-if analysis
    d. AutoFill

Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Juice Bar Sales Forecast ★

1. Marjon Brady owns seven Juice Bar franchises. She has created a worksheet to record each store's first-quarter sales. Now she would like to create a second worksheet in the workbook to record the projected second-quarter sales for each store. The completed worksheets should be similar to those shown here.

Student Name - 11/24/2008

Juice Bar
First Quarter Sales

Location	Jan	Feb	Mar	Total
The Arboretum	$ 7,600	$ 7,850	$ 8,100	$ 23,550
South Congress	$ 14,400	$ 14,350	$ 13,950	$ 42,700
The Triangle	$ 10,100	$ 10,300	$ 10,100	$ 30,500
Barton Springs Mall	$ 12,300	$ 12,600	$ 12,940	$ 37,840
Lakeland Mall	$ 4,600	$ 3,850	$ 4,250	$ 12,700
Brodie Oaks	$ 5,400	$ 5,450	$ 5,100	$ 15,950
Lamar Place	$ 10,100	$ 10,600	$ 9,850	$ 30,550
Total	**$ 64,500**	**$ 65,000**	**$ 64,290**	**$ 193,790**

Student Name - 11/24/2008

Juice Bar
Second Quarter Sales
(Projected)

Location	Apr	May	Jun	Total
The Arboretum	$ 9,600	$ 10,560	$ 12,144	$ 32,304
South Congress	$ 14,350	$ 15,785	$ 18,153	$ 48,288
The Triangle	$ 13,100	$ 14,410	$ 16,572	$ 44,082
Barton Springs Mall	$ 14,100	$ 15,510	$ 17,837	$ 47,447
Lakeland Mall	$ 5,350	$ 5,885	$ 6,768	$ 18,003
Brodie Oaks	$ 3,600	$ 3,960	$ 4,554	$ 12,114
Lamar Place	$ 7,900	$ 8,690	$ 9,994	$ 26,584
Total	**$ 68,000**	**$ 74,800**	**$ 86,020**	**$ 228,820**
			Sales Year-To-Date:	$ 422,610

   a. Open the workbook ex03_Juice Bar.
   b. Calculate the total sales for each location and for each month. Adjust column widths as needed.
   c. Copy the worksheet data from Sheet1 to Sheet2 and maintain the column width settings. Rename the Sheet1 tab to **1st Quarter Sales** and rename the Sheet2 tab to **2nd Quarter Sales**. Add color to the tabs. Delete Sheet3.
   d. In the 2nd Quarter Sales sheet, change the monthly labels to Apr, May, and June using AutoFill. Change the subtitle line to **Second Qtr Sales**. Enter and bold the heading **(Projected)** in cell A4. Merge and center the heading between columns A through E.
   e. Enter the following projected April sales figures:

Location	Number
The Arboretum	**9600**
South Congress	**14350**
The Triangle	**13100**
Barton Springs Mall	**14100**
Lakeland Mall	**5350**
Brodie Oaks	**3600**
Lamar Place	**7900**

f. A new advertising campaign for May and June is expected to increase monthly sales. May sales for each location are expected to be 10 percent more than April sales, and June sales are expected to be 15 percent more than May. Enter formulas to calculate May and June sales for the "The Arboretum" location and then copy these formulas into the other appropriate cells.

g. Select both sheets and make the following changes:

- Add a thick bottom border below the headings in row 5.
- Apply the Total cell style to the Total row heading and Total row values.
- Use the Find and Replace command to change "Qtr" to "Quarter."
- Reduce the font size of the subtitle line to 14 points.

h. In the Second Quarter sheet, enter, bold, italicize, and right-align the heading **Sales Year-To-Date:** in cell D14. In cell E14, enter a formula to calculate the total sales for the first six months by summing cells E13 on both sheets. Remove the fill color from cell E14.

i. Document the workbook to include your name as the author.

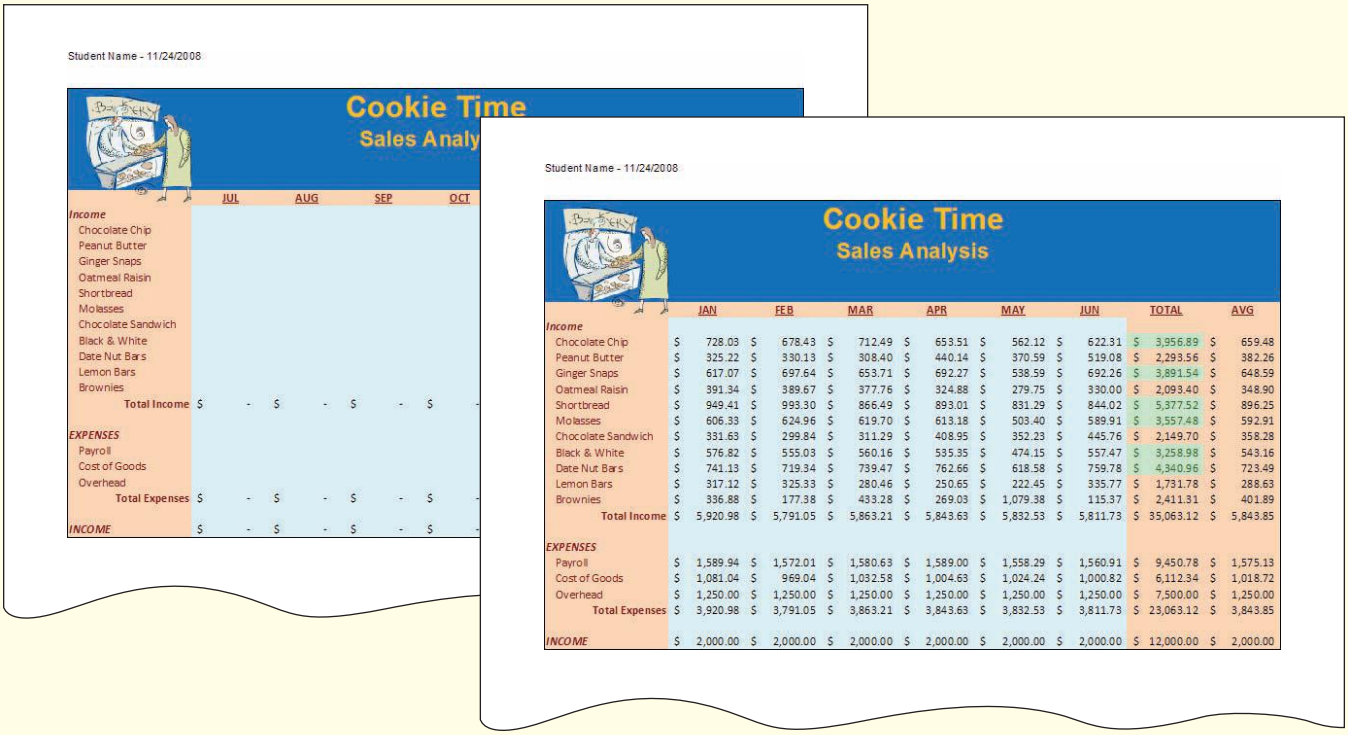
j. In Page Layout view, add a custom header with your name and the date right-aligned to both worksheets.

k. Preview the workbook. Print the 2nd Quarter Sales worksheet.

l. Save the workbook as Juice Bar.

Forecasting Sales ★★

2. The Cookie Time bakery has decided to add brownies to their offerings and wants to know the impact on sales. You are in the process of creating a worksheet of the cookie sales for the last six months. In addition, you want to add brownies to the items for sale and project how much of this item you would need to sell to increase the net income to $2,000 a month. Then, you want to set up a second sheet that you will use to enter the sales information for the second six months when it is available. When you are done, your completed worksheets should be similar to those shown here.



Student Name - 11/24/2008

Cookie Time
Sales Analy

	JUL	AUG	SEP	OCT
Income				
Chocolate Chip				
Peanut Butter				
Ginger Snaps				
Oatmeal Raisin				
Shortbread				
Molasses				
Chocolate Sandwich				
Black & White				
Date Nut Bars				
Lemon Bars				
Brownies				
Total Income	$ -	$ -	$ -	$ -
EXPENSES				
Payroll				
Cost of Goods				
Overhead				
Total Expenses	$ -	$ -	$ -	$ -
INCOME	$ -	$ -	$ -	$ -

Student Name - 11/24/2008

Cookie Time
Sales Analysis

	JAN	FEB	MAR	APR	MAY	JUN	TOTAL	AVG
Income								
Chocolate Chip	$ 728.03	$ 678.43	$ 712.49	$ 653.51	$ 562.12	$ 622.31	$ 3,956.89	$ 659.48
Peanut Butter	$ 325.22	$ 330.13	$ 308.40	$ 440.14	$ 370.59	$ 519.08	$ 2,293.56	$ 382.26
Ginger Snaps	$ 617.07	$ 697.64	$ 653.71	$ 692.27	$ 538.59	$ 692.26	$ 3,891.54	$ 648.59
Oatmeal Raisin	$ 391.34	$ 389.67	$ 377.76	$ 324.88	$ 279.75	$ 330.00	$ 2,093.40	$ 348.90
Shortbread	$ 949.41	$ 993.30	$ 866.49	$ 893.01	$ 831.29	$ 844.02	$ 5,377.52	$ 896.25
Molasses	$ 606.33	$ 624.96	$ 619.70	$ 613.18	$ 503.40	$ 589.91	$ 3,557.48	$ 592.91
Chocolate Sandwich	$ 331.63	$ 299.84	$ 311.29	$ 408.95	$ 352.23	$ 445.76	$ 2,149.70	$ 358.28
Black & White	$ 576.82	$ 555.03	$ 560.16	$ 535.35	$ 474.15	$ 557.47	$ 3,258.98	$ 543.16
Date Nut Bars	$ 741.13	$ 719.34	$ 739.47	$ 762.66	$ 618.58	$ 759.78	$ 4,340.96	$ 723.49
Lemon Bars	$ 317.12	$ 325.33	$ 280.46	$ 250.65	$ 222.45	$ 335.77	$ 1,731.78	$ 288.63
Brownies	$ 336.88	$ 177.38	$ 433.28	$ 269.03	$ 1,079.38	$ 115.37	$ 2,411.31	$ 401.89
Total Income	$ 5,920.98	$ 5,791.05	$ 5,863.21	$ 5,843.63	$ 5,832.53	$ 5,811.73	$ 35,063.12	$ 5,843.85
EXPENSES								
Payroll	$ 1,589.94	$ 1,572.01	$ 1,580.63	$ 1,589.00	$ 1,558.29	$ 1,560.91	$ 9,450.78	$ 1,575.13
Cost of Goods	$ 1,081.04	$ 969.04	$ 1,032.58	$ 1,004.63	$ 1,024.24	$ 1,000.82	$ 6,112.34	$ 1,018.72
Overhead	$ 1,250.00	$ 1,250.00	$ 1,250.00	$ 1,250.00	$ 1,250.00	$ 1,250.00	$ 7,500.00	$ 1,250.00
Total Expenses	$ 3,920.98	$ 3,791.05	$ 3,863.21	$ 3,843.63	$ 3,832.53	$ 3,811.73	$ 23,063.12	$ 3,843.85
INCOME	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 12,000.00	$ 2,000.00

a. Open the workbook ex03_ Cookie Time. Use AutoFill to complete the month headings. Save the workbook as Cookie Time.
b. Add a blank row below row 15 for brownies. Add the row heading **Brownies** in A16.
c. Edit the formula in B17 to include B16 and copy it across the row through column G.
d. Increase the cost of goods by 12 percent for each month to account for the added goods needed to make the brownies.
e. Enter the formulas to calculate the Total Expenses in row 23.
f. Correct all the formula errors in row 25.
g. Enter the functions to calculate the Total and Average values in row 6. Copy the functions down the columns through row 25. Clear the formulas from all cells that reference blank cells, except for row 16.
h. Freeze the window with the titles in column A and above row 5 frozen so you can scroll to see the Income values in row 25 while working on the brownie sales next.
i. Assuming other cookie sales remain the same, you want to know how much brownie sales would be necessary to generate a monthly net income of $2,000. Use Goal Seek to answer these questions and calculate the brownie sales figures. (Hint: Net income is displayed in row 25.)
j. Unfreeze the window.
k. Using conditional formatting, create a cell rule that will highlight those cookies that have total sales greater than $3,000. Use a highlight color of your choice.
l. You will soon be working on the sales figures for the second six months and want to set up a second sheet to hold this information when it is available. Copy the entire worksheet from Sheet1 to Sheet2, retaining the original column widths. Increase the row height of row 3 to 35.25 points. Change the month headings using AutoFill for the second six months (JUL to DEC).
m. Rename Sheet1 to **January-June Sales**. Rename Sheet2 to **July-December Sales**. Add tab colors of your choice. Delete the extra sheet in the workbook.
n. In the July-December Sales sheet, delete the contents only in cells B6:G16 and B20:G22. In cell H6, enter a formula that adds the total from January through June with the monthly figures from July through December. Copy the formula down the column. Change the average formula to average the 12 months. Clear the formula from all cells that reference blank cells. Clear the conditional formatting from all cells in the July-December Sales sheet. Check the formulas by entering (and then removing) some sample data. Change the label in H4 to **Annual TOTAL** and I4 to **Annual AVG**. Best fit both columns.
o. Add a custom header with your name and the date left-aligned to both sheets. Use the Find and Replace command to change "bars" to "Bars" in both sheets.
p. Preview the workbook. Change the print orientation to landscape. Print both worksheets.
q. Add workbook documentation and save the workbook.

Paris Tour Cost Analysis ★★

3. Colleen, a travel analyst for Adventure Travel Tours, is evaluating the profitability of a planned Paris Tour package. She has researched competing tours and has determined that a price of $5,900 is appropriate. Colleen has determined the following costs for the package.

Item	Cost
Air transport	$1,800 per person
Ground transportation	$460 per person
Lodging	$1,475 per person
Food	$900 per person
Tour guides	$3,000
Administrative	$1,200
Miscellaneous	$2,000

She has started a worksheet to evaluate the revenues and costs for the Paris Tour. She wants to know how many travelers are needed to break even (revenues equal costs), how many are needed to make $5,000, and how many are needed to make $10,000. When completed your Break Even and $10,000 Profit worksheets should be similar to those shown here.

a. Open the workbook ex03_Paris Tour. Notice that Alice has already entered the tour price and an estimated number of travelers.

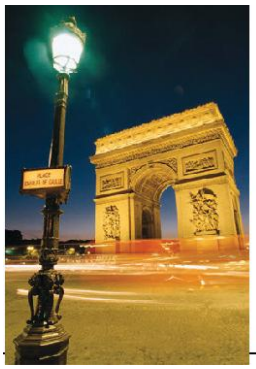
b. Revenue from reservations is calculated by multiplying the tour price times the number of travelers. Enter this formula into C9. Save the workbook as Paris Tour in a folder named Tour Analysis.

c. Based on Alice's cost information, air transportation is $1,800 times the number of travelers. Enter this formula into C12. Enter formulas into C13, C14, and C15 for the other expenses (see table above) related to the number of travelers.



ADVENTURE TRAVEL TOURS
Paris Tour
Break Even Analysis

Assumptions	
Tour Price	$5,900
Number of Travelers	5
Revenue	
Reservations	$28,917
Costs	
Transportation	
Air	$ 8,822
Ground	$ 2,255
Lodging	$ 7,229
Food	$ 4,411
Tour Guides	$ 3,000
Administrative	$ 1,200
Miscellaneous	$ 2,000
Total Costs	$ 28,917
Income	
Net Revenue	$0



ADVENTURE TRAVEL TOURS
Paris Tour
$10,000 Profit

Assumptions	
Tour Price	$5,900
Number of Travelers	13
Revenue	
Reservations	$75,557
Costs	
Transportation	
Air	$ 23,051
Ground	$ 5,891
Lodging	$ 18,889
Food	$ 11,526
Tour Guides	$ 3,000
Administrative	$ 1,200
Miscellaneous	$ 2,000
Total Costs	$ 65,557
Income	
Net Revenue	$10,000

d. Enter the remaining expenses into cells C16, C17, and C18.

e. Calculate total costs in cell C19. Net revenue is the difference between revenue from reservations and total costs. Enter this formula into cell C21.

f. Format the currency values in the worksheet to Accounting with no decimal places.

g. Use Goal Seek to determine the number of travelers needed to just break even (net revenue equals zero).

h. Rename the Sheet1 tab to **Break Even**. Copy the data in the Break Even sheet to Sheet2, preserving column width settings. Rename the Sheet2 tab **$5,000**. Add color to both sheet tabs.

i. In the $5000 sheet, change the title in B3 to **$5,000 Profit**. Use Goal Seek to determine the number of travelers needed to attain net revenues of $5,000.

j. Copy the $5000 sheet data to Sheet3 and rename the tab of the copy to **$10,000**. Change the tab color. Change the title in B3 to **$10,000 Profit**. Use Goal Seek to determine the number of travelers needed to attain net revenues of $10,000.

k. Use the Find and Replace command to change Trip Guides to Tour Guides in all sheets.

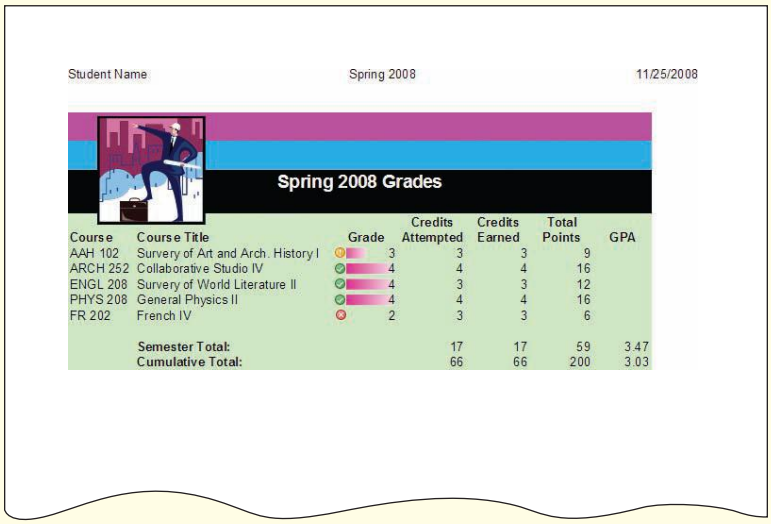
l. Select all three sheets and change the page layout to landscape. Change the left and right margins to 0.5 inch and scale the worksheet to fit on one printed page. Add a custom footer to the three sheets with your name and the date center-aligned.

m. Preview the worksheets. Adjust the picture size if needed.

n. Save the workbook. Print the Break Even sheet and the $10,000 sheet.

Calculating Total Points and GPA ★★★

4. Ray Schultz is a college student who has just completed the first two years of his undergraduate program as an architecture major. He has decided to create a worksheet that will calculate semester and cumulative totals and GPA for each semester. The completed Spring 2008 worksheet should be similar to the one shown here.



Student Name | Spring 2008 | 11/25/2008

Spring 2008 Grades

Course	Course Title	Grade	Credits Attempted	Credits Earned	Total Points	GPA
AAH 102	Survery of Art and Arch. History I	3	3	3	9	
ARCH 252	Collaborative Studio IV	4	4	4	16	
ENGL 208	Survery of World Literature II	4	3	3	12	
PHYS 208	General Physics II	4	4	4	16	
FR 202	French IV	2	3	3	6	
	Semester Total:		17	17	59	3.47
	Cumulative Total:		66	66	200	3.03

a. Open the workbook ex03_Grade Report. Look at the four sheets. Rename the sheet tabs **Fall 2006**, **Spring 2007**, **Fall 2007**, and **Spring 2008**. Add color to the tabs. Save the workbook as Grade Report in a folder named Grade Analysis.

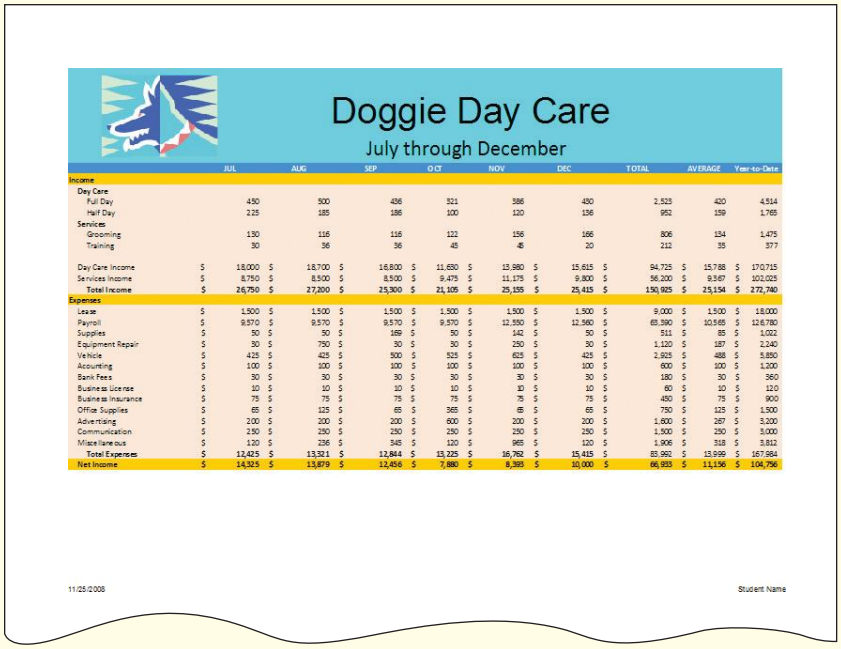
b. You need to enter the formulas to calculate the Total Points and GPA for the four semesters. You will do this for all four sheets at the same time. Select the four sheets. In the Fall 2006 sheet, multiply the Grade by the Credits Earned to calculate Total Points for Collaborative Studio I. Copy that formula down the column. Sum the Credits Attempted, Credits Earned, and Total Points columns and display the results in the Semester Total row.

c. In cell G13, divide the Semester Total's Total Points by the Semester Total's Credits Earned to calculate the GPA for the semester. Format the GPA to two decimal places. Ungroup the sheets.

d. Use what-if analysis to see the grade Ray would have had to earn in Western Civilization to get an overall 3.0 GPA for the Fall 2006 semester. Change the grade back to a 2.
e. Look at each sheet to see that the formulas were entered and the calculations performed.
f. Go to cell D14 in the Fall 2006 sheet. Enter the reference formula =D13 to copy the Semester Total Credits Attempted number to the Cumulative Total row. Copy the formula to cells E14 and F14 to calculate Credits Earned and Total Points.
g. Go to the Spring 2007 sheet and calculate a Cumulative Total for Credits Attempted by summing the Spring 2007 and Fall 2006 Semester Totals. (Hint: You can use pointing to enter the Cumulative Totals formula.)
h. Copy that formula to the adjacent cells to calculate Cumulative Totals for Credits Earned and Total Points. Repeat this procedure on the Fall 2007 and Spring 2008 sheets.
i. Go to the Fall 2006 sheet. Select all four sheets. In cell G14, calculate the GPA for the Cumulative Total. Format the Cumulative Total GPA to display two decimals. Look at each sheet to see the cumulative GPA for each semester. (Hint: Roy's cumulative GPA at the end of the Spring 2008 semester is 3.03.)
j. In each sheet, you want to highlight the information in the grade earned column. In the Fall 2006 sheet, apply a Color Scale conditional formatting to the grade column. In the Spring 2007 sheet, apply a Data Bars conditional formatting to the grade column. In the Fall 2007 sheet, apply the 5 Arrows (Colored) Icon Set to the grade column. In the Spring 2008 sheet, apply the 3 Symbols (Circled) Icon Set and a Data Bars conditional formatting to the grade column.
k. Add a custom header with your name left-aligned, the sheet name centered, and the date right-aligned to all sheets.
l. Save the workbook. Print the Spring 2008 sheet.

Year-to-Date Sales Analysis ★★★

5. Jin Lee is the owner of the Doggie Day Care Center, which offers full- and half-day care for dogs as well as grooming and training services. She has been asked to prepare a report on the year-to-date accounting totals. She has already entered the figures for January through June. Next, she will create a worksheet for the July through December data and compile the year's totals. Your completed worksheet should be similar to that shown here.



Doggie Day Care
July through December

	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVERAGE	Year-to-Date
Income									
Day Care:									
Full Day	450	500	456	321	386	450	2,523	420	4,514
Half Day	225	185	186	100	120	136	952	159	1,765
Services:									
Grooming	130	116	116	122	156	166	806	134	1,475
Training	30	36	36	48	48	20	212	35	377
Day Care Income	$ 18,000	$ 18,700	$ 16,800	$ 11,630	$ 13,980	$ 15,615	$ 94,725	$ 15,788	$ 170,715
Services Income	$ 8,750	$ 8,500	$ 8,500	$ 9,475	$ 11,175	$ 9,800	$ 56,200	$ 9,367	$ 102,025
Total Income	$ 26,750	$ 27,200	$ 25,300	$ 21,105	$ 25,155	$ 25,415	$ 150,925	$ 25,154	$ 272,740
Expenses									
Lease	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 9,000	$ 1,500	$ 18,000
Payroll	$ 9,570	$ 9,570	$ 9,570	$ 9,570	$ 12,550	$ 12,560	$ 63,390	$ 10,565	$ 126,780
Supplies	$ 50	$ 50	$ 189	$ 50	$ 142	$ 50	$ 511	$ 85	$ 1,022
Equipment Repair	$ 30	$ 750	$ 30	$ 30	$ 250	$ 30	$ 1,120	$ 187	$ 2,240
Vehicle	$ 425	$ 425	$ 500	$ 525	$ 625	$ 425	$ 2,925	$ 488	$ 5,850
Accounting	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 600	$ 100	$ 1,200
Bank Fees	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 180	$ 30	$ 360
Business License	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 60	$ 10	$ 120
Business Insurance	$ 75	$ 75	$ 75	$ 75	$ 75	$ 75	$ 450	$ 75	$ 900
Office Supplies	$ 65	$ 125	$ 65	$ 365	$ 65	$ 65	$ 750	$ 125	$ 1,500
Advertising	$ 200	$ 200	$ 200	$ 600	$ 200	$ 200	$ 1,600	$ 267	$ 3,200
Communication	$ 250	$ 250	$ 250	$ 250	$ 250	$ 250	$ 1,500	$ 250	$ 3,000
Miscellaneous	$ 120	$ 236	$ 345	$ 120	$ 985	$ 120	$ 1,906	$ 318	$ 3,812
Total Expenses	$ 12,425	$ 13,321	$ 12,844	$ 13,225	$ 16,762	$ 15,415	$ 83,992	$ 13,999	$ 167,984
Net Income	$ 14,325	$ 13,879	$ 12,456	$ 7,880	$ 8,393	$ 10,000	$ 66,933	$ 11,156	$ 104,756

11/25/2008 Student Name

a. Open the file ex03_Doggie Day Care. Adjust the zoom to display all the data. Correct the formula errors. Save the workbook as Doggie Day Care.

b. Enter formulas in cells H9 and H10 to calculate the services totals.

c. Enter the following formula in cell B12 to calculate the income from day care for January: **=(B6*B32)+(B7*B33)**. Copy the formula across the row to calculate the Day Care income. Enter the appropriate formulas in the Total column to calculate the total income figures.

d. Enter formulas in cells H16 through H28 to calculate the total expenses. In cell H29, total the expenses.

e. In cell B30 enter a formula that subtracts the Total Expenses from the Total Income. Copy the formula across the row.

f. Enter the heading **AVERAGE** in cell I3. Adjust the formatting of the new column to match the other columns in the sheet. Enter a formula to calculate the average number of full-day dogs in cell I6. Copy the formula down the column. Delete the division by zero errors. Adjust the formatting of the sheet as needed.

g. Select the range A1:I30 and copy it to Sheet2, maintaining the original column widths. Adjust the graphic size and the row height to accommodate the graphic. Rename the new sheet **Jul-Dec**. Add tab colors to both sheets.

h. Change the title in the Jul-Dec sheet to **July through December**. Change the month heading in cell B3 to **JUL**. Use AutoFill to change the remaining month headings.

i. Adjust the references in the formulas of rows 12 and 13 by adding the sheet reference.

j. Select cells I14 and I30 and use Watch Window to view the changes made when you enter the following values in the specified cells:

	Jul	Aug	Sep	Oct	Nov	Dec
Full Day	450	500	436	321	386	402
Half Day	225	247	185	100	120	136
Grooming	130	142	116	122	156	166
Training	30	36	36	45	45	20

k. Delete the watch cells and close the Watch Window. Move to cell J3 and enter the heading **Year-to-Date**. In cell J6, enter a formula to compute the total full-day care in the first and second six-month periods. Copy the formula down the column to find the year-to-date totals for all of the rows. Adjust the formatting in column J to match the others in the sheet.

l. Delete Sheet3. Use Find and Replace to change the Marketing labels to **Advertising** in both sheets.

m. Use Goal Seek to calculate the number of full-day dogs needed to increase the Net Income for December to $10,000.

n. Add a custom footer with your name and the date to both sheets. Save the workbook.

o. Print the Jul-Dec sheet on one page.

on your own

Expanding Budget Projections ★



1. In On Your Own exercise 2 of Lab 1, you created a Personal Budget workbook for a three-month budget. Extend the worksheet to add three more months for a total of six months. Add two additional sheets. One sheet will contain a budget for the next six months. The final sheet will present a full year's summary using 3-D references to the values in the appropriate sheets. You need to budget for a vacation. On a separate line below the total balance in the summary sheet, enter the amount you would need. Subtract this value from the total balance. If this value is negative, reevaluate your expenses and adjust them appropriately. Format the sheets using the features you have learned in the first three labs. Add your name in a custom header on all sheets. Preview, print, and save the workbook as Personal Budget2.

Company Expense Comparisons ★

2. Using the Internet or the library, obtain yearly income and expense data for three companies in a related business. In a workbook, record each company's data in a separate sheet. In a fourth sheet, calculate the total income, total expenses, and net income for each company. Also in this sheet, calculate the overall totals for income, expense, and net income. Format the sheets using the features you have learned in the first three labs. Add your name in a custom header on all sheets. Preview, print, and save the workbook as Company Expenses in a folder named Business.

House Analysis ★★

3. Select three cities in which you would consider living after you graduate. Using the Internet or the library, select one price point of housing and determine each house's asking price, square footage, acreage, number of bedrooms, and number of bathrooms. In a workbook containing four sheets, record each city's housing prices and statistics in separate worksheets. In a fourth sheet, calculate the average, standard deviation, and maximum and minimum for each city. Also, in the final sheet, chart the average data for the three cities. Format the sheets using the features you have learned in the first three labs. Add your name in a custom header on all sheets. Preview, print, and save the workbook as House Analysis in a folder named Housing.

Inventory Tracking ★★★

4. It's a good idea to have an inventory of your personal items for safe keeping. Design a worksheet that will keep track of your personal items divided by category; for example: living room, dining room, bedroom, and so forth. Each category may have as many detail lines as needed to represent

the items. For example: sofa, vases, art, and so on. The worksheet should keep track of the number of items; the price paid for each item; the extended price (items * price), if applicable; and the replacement value. Determine the percentage increase in replacement value. Sum the price paid and replacement value in each category and the total value. Format the sheet using the features you have learned in the first three labs. Add your name in a custom header on all sheets. Change the worksheet orientation if necessary; preview, print, and save the workbook as Inventory Tracking.

Start Your Own Business ★★★

5. Owning and managing a small business is a dream of many college students. Do some research on the Web or in the library and choose a business that interests you. Create a projected worksheet for four quarters in separate worksheets. In a fifth sheet, show the total for the year. Include a year-to-date value in each quarterly sheet. In the last-quarter sheet, depending on the business you select, determine how many customers or sales you need in the last quarter to break even and to end the year with a 10 percent profit. Format the sheets using the features you have learned in the first three labs. Add your name in a custom header on all sheets. Preview, print, and save the workbook as My Business.

Working Together 1: Linking and Embedding between Word 2007 and Excel 2007

Case Study

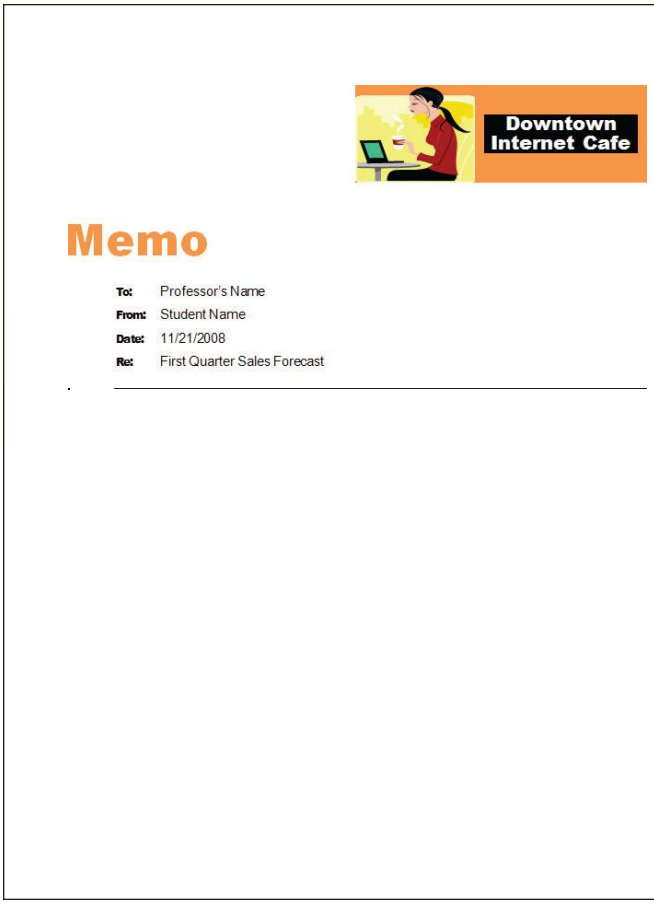
Downtown Internet Café

Your analysis of the sales data for the first quarter of operations for the Downtown Internet Café projects a small, steady increase in sales each month. If an advertising campaign promoting the new Internet aspect of the Café is mounted, you forecast that coffee and food sales in that quarter will increase sharply.

Evan, the Cafe owner, is still trying to decide if he should advertise and has asked you to send him a memo containing the worksheet data showing the expected sales without an advertising campaign and the chart showing the projected sales with an advertising campaign. Additionally, Evan wants a copy of the second-quarter forecast showing the 15 percent profit margins for each month. He also wants a copy of the workbook file so that he can play with the sales values to see their effects on the profit margin.

You will learn how to share information between applications while you create these memos. Your completed documents will look like those shown below.

Note: This lab assumes that you know how to use Word 2007 and that you have completed Labs 2 and 3 of Excel 2007.



Downtown Internet Cafe

Memo

To: Professor's Name
From: Student Name
Date: 11/21/2008
Re: First Quarter Sales Forecast

Espresso	$ 14,400	$ 15,200	$ 15,500	$ 45,100	$ 15,033
Drip Coffee	$ 6,200	$ 6,200	$ 6,200	$ 18,600	$ 6,200
Food/Beverages	$ 3,600	$ 3,800	$ 3,800	$ 11,200	$ 3,733
Merchandise	$ 1,500	$ 1,500	$ 1,500	$ 4,500	$ 1,500
Computer	$ 600	$ 600	$ 800	$ 2,000	$ 667
Total Sales	$ 26,300	$ 27,300	$ 27,800	$ 81,400	$ 27,133
Expenses					
Cost of Goods	$ 7,620	$ 7,940	$ 8,015	$ 16,875	$ 7,858
Cost of Merchandise	$ 1,050	$ 1,050	$ 1,050	$ 5,650	$ 1,050
Payroll	$ 7,860	$ 8,390	$ 8,740	$ 24,990	$ 8,330
Internet	$ 325	$ 325	$ 325	$ 975	$ 325
Building	$ 2,100	$ 2,100	$ 2,100	$ 6,300	$ 2,100
Advertising	$ 600	$ 600	$ 600	$ 1,800	$ 600
Capital Assets	$ 1,500	$ 1,500	$ 1,500	$ 4,500	$ 1,500
Miscellaneous	$ 1,300	$ 1,300	$ 1,300	$ 3,900	$ 1,300
Total Expenses	$ 22,355	$ 23,205	$ 23,630	$ 64,990	$ 23,063
Income					
Net Income	$ 3,945	$ 4,095	$ 4,170	$ 16,410	$ 4,070
Profit Margin	15.00%	15.00%	15.00%	20.16%	15.00%

This workbook is embedded in this document and can be edited by double-clicking on the worksheet.

Sharing Information between Applications

All Microsoft Office 2007 applications have a common user interface such as similar Ribbon commands and galleries. In addition to these obvious features, they have been designed to work together, making it easy to share and exchange information between applications. For example, the same commands and procedures to copy information within an Office Excel 2007 worksheet are used to copy information to other Office 2007 applications such as Word. The information can be pasted in many different formats such as a worksheet object, a bitmap, a picture, a linked object, or an embedded object. How you decide to paste the object depends on what you want to be able to do with the data once it is inserted in the Word document.

Copying between Excel and Word

The memo to Evan about the analysis of the sales data has already been created using Word 2007 and saved as a document file.

1. **Start Office Word 2007 and open the document** exwt1_Sales Forecast Memo.docx**.**
2. **In the memo header, replace [Professor's Name] with your instructor's name and Student Name with your name.**
3. **Save the file as** Sales Forecast Memo**.**

Your screen should be similar to Figure 1

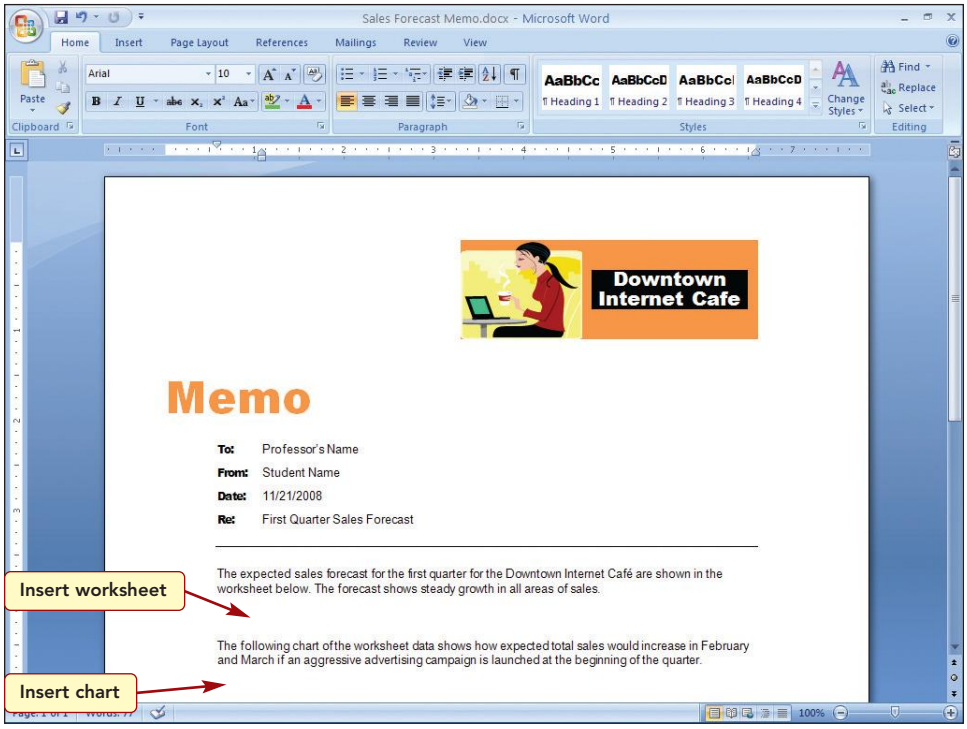


Figure 1

As you can see, you still need to add the Excel worksheet data and chart to the memo. To insert the information from the Excel workbook file into the Word memo, you need to open the workbook. You will then tile the two open application windows to make it easier to see and work with both files.

2 **Start Excel and open the workbook** exwt1_Sales Charts**.**

Your screen should be similar to Figure 2

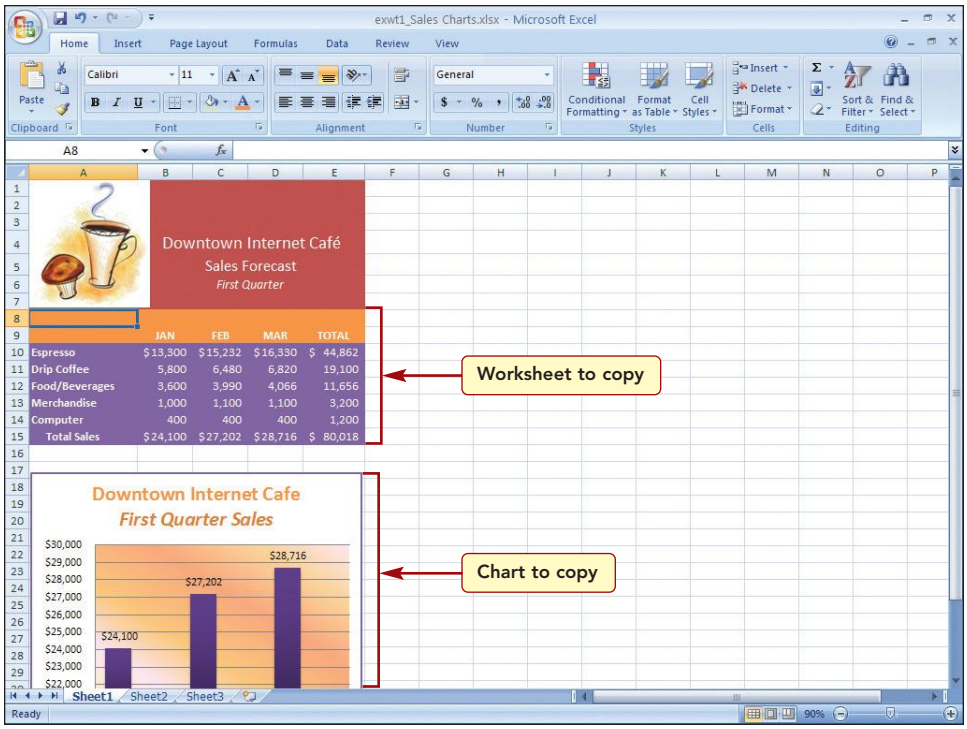


Figure 2

There are now two open applications, Word and Excel. You will insert the worksheet data of the first-quarter sales forecast below the first paragraph. Below the second paragraph, you will display the chart.

You will begin by copying the chart from Excel into the Word document. While using Excel, you have learned how to use cut, copy, and paste to move or copy information within and between worksheets. You also can perform these operations between files in the same application and between files in different Office applications. You want to insert the chart as a picture object that can be edited using the Picture Tools commands in Word.

3. **Select the column chart.**

- **Click Copy to copy the selected chart object to the Clipboard.**
- **Switch to the Word document.**

Having Trouble?
Click the Word document button in the taskbar.

- **Move the insertion point to the second blank line below the last paragraph of the memo.**
- **Click Paste to copy the contents from the Clipboard into the memo.**
- **Open the Paste Options menu and choose Paste as Picture.**
- **Open the Picture Tools Format tab.**
- **Click Text Wrapping and choose Top and Bottom.**
- **Adjust the size of the chart and position it as in Figure 3.**

Your screen should be similar to Figure 3

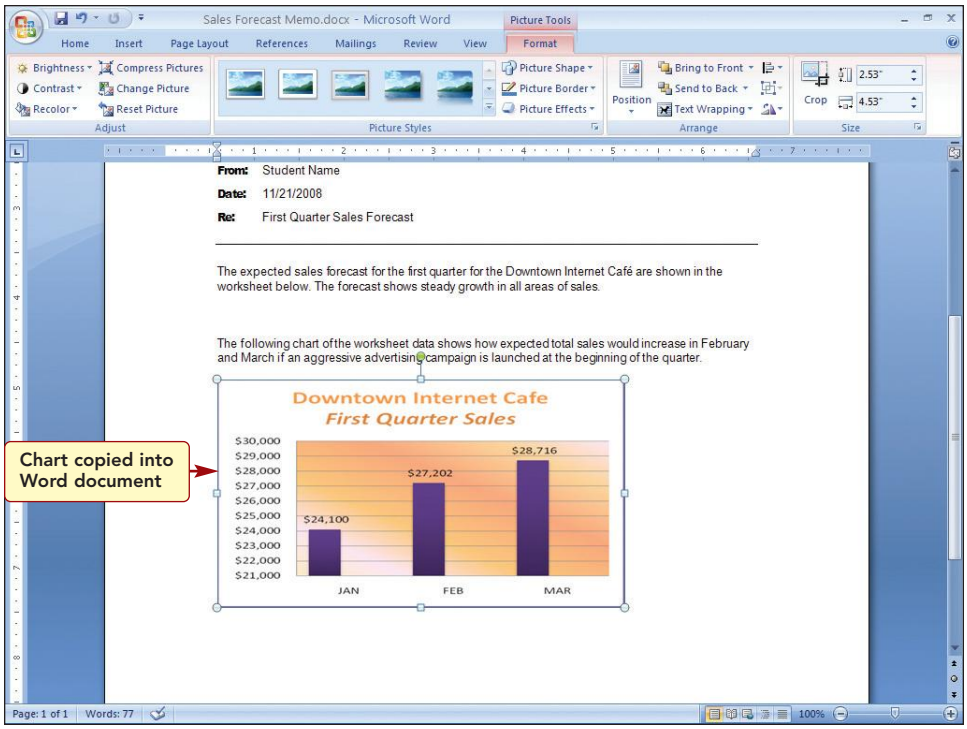


Figure 3

A copy of the chart has been inserted as a picture object into the Word document. It can be formatted, sized, and moved like any other picture object.

Linking between Applications

Next, you want to copy the worksheet showing the sales trends to below the first paragraph in the memo. You will insert the worksheet into the memo as a **linked object**. Information created in one application also can be inserted as a linked object into a document created by another application. When an object is linked, the data is stored in the **source file** (the document in which it was created). A graphic representation or picture of the data is displayed in the **destination file** (the document in which the object is inserted). A connection between the information in the destination file to the source file is established by the creation of an **external reference**, also called a **link**. The link contains references to the location of the source file and the selection within the document that is linked to the destination file.

When changes are made in the source file that affect the linked object, the changes are reflected automatically in the destination file when it is opened. This is called a **live link**. When you create linked objects, the date and time on your machine should be accurate. This is because the program refers to the date of the source file to determine whether updates are needed when you open the destination file.

You will copy the worksheet as a linked object so that it will be updated automatically if the source file is edited. To make it easier to work with the two applications, you will tile the two open application windows.

1. **Right-click on a blank area of the taskbar and choose Tile Windows Vertically from the shortcut menu.**
- **Click in the Excel window and select cells A9 through E15.**
- **Click Copy.**
- **Click in the Word document and move to the center blank line between the paragraphs of the memo.**
- **Open the Paste menu and choose Paste Special.**
- **Choose Paste link from the Paste Special dialog box.**

Your screen should be similar to Figure 4

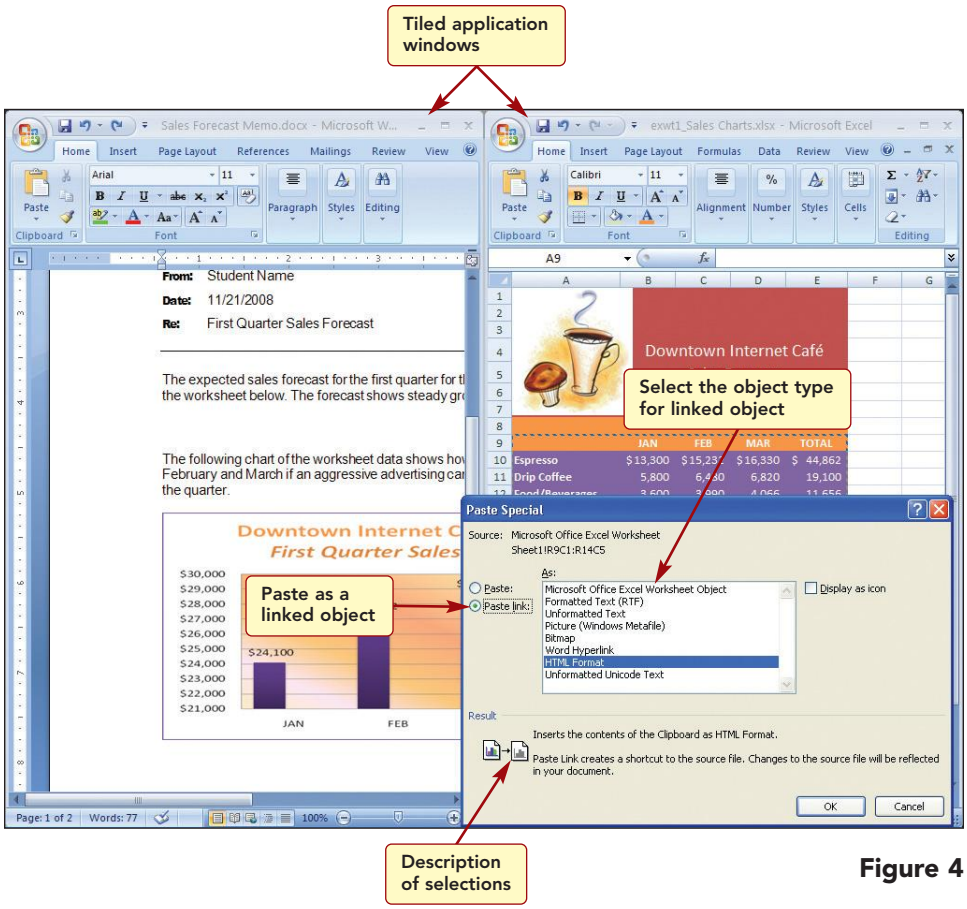


Figure 4

The Paste Special dialog box displays the type of object contained in the Clipboard and its location in the Source area. From the As list box, you select the type of format for the object you want inserted into the destination file. There are many different object types from which you can select. It is important to select the appropriate object format so that the link works correctly when inserted in the destination. In this case, you want to use the Microsoft Office Excel Worksheet Object format.

The Result area describes the effect of your selections. In this case, the object will be inserted as a picture, and a link will be created to the chart in the source file. Selecting the Display as Icon option changes the display of the object in the destination file from a picture to an icon. When inserted in this manner, double-clicking the icon displays the object picture.

2 **Choose Microsoft Office Excel Worksheet Object.**

Click OK **.**

Your screen should be similar to Figure 5

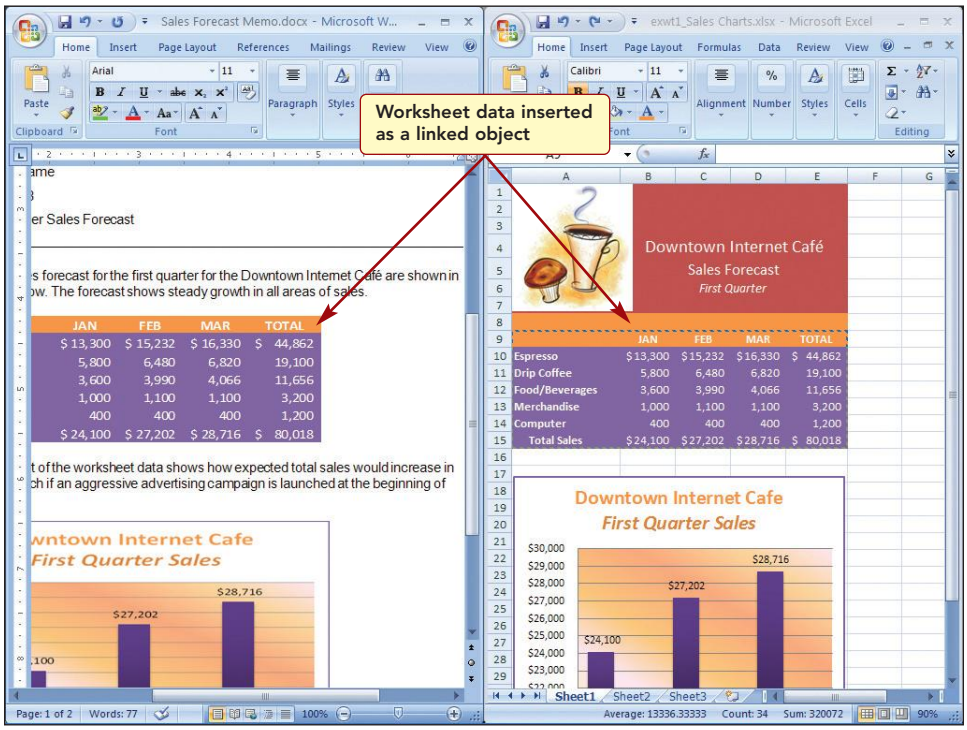


Figure 5

The worksheet data has been copied into the Word document as an object that can be sized and moved like any other object.

Updating a Linked Object

Next, you want to return the sales data in the Excel worksheet to the original forecasted values assuming an aggressive marketing campaign is not mounted.

1. **Switch to the Excel window.**
2. **Press Esc to clear the moving border.**
3. **Change the entry in C10 to 13600 (you are removing the formula).**
4. **In the same manner, change the formulas in the following cells to the values shown.**

Cell	Value
D10	14,200
C11	6,000
D11	6,200
C12	3,800
D12	3,800

Your screen should be similar to Figure 6

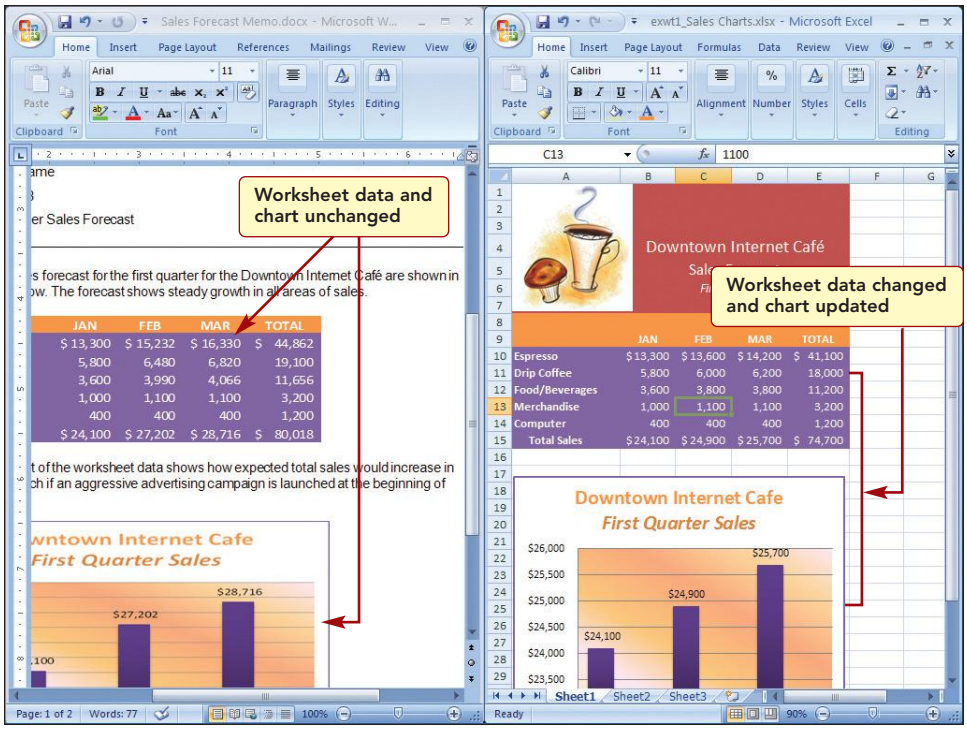


Figure 6

The Excel worksheet and chart have been updated; however, the worksheet data and chart in the Word document still reflect the original values. You will update the worksheet in the Word document next.

2. **Switch to the Word window.**

- **Select the worksheet object.**
- **Press F9 to update the linked object.**

Another Method

You also can choose Update Link from the linked object's shortcut menu.

Your screen should be similar to Figure 7

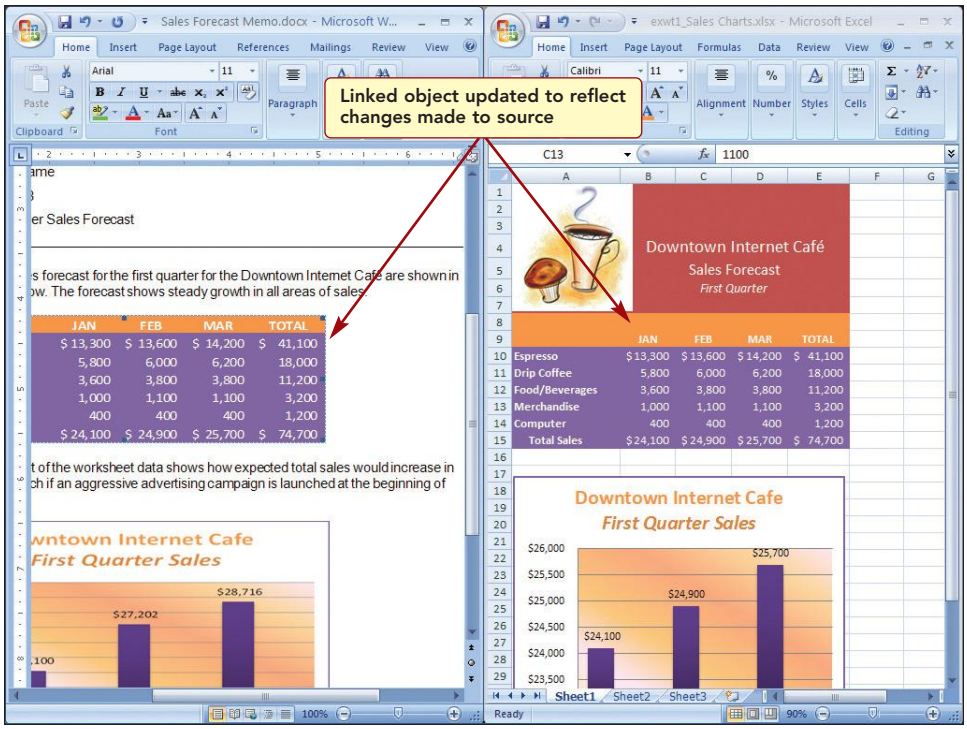


Figure 7

The linked worksheet object in the memo now reflects the changes you made in Excel for the sales data. This is because any changes you make in Excel will be reflected in the linked object in the Word document. Next, you will see if the chart has been updated also.

3. **If necessary, scroll the memo to see the entire chart.**

- **Click on the chart and press F9.**
- **Deselect the chart.**

Additional Information

The chart may have moved to the next page when the worksheet data was inserted. If this happened, reduce the size of the chart object.

Your screen should be similar to Figure 8

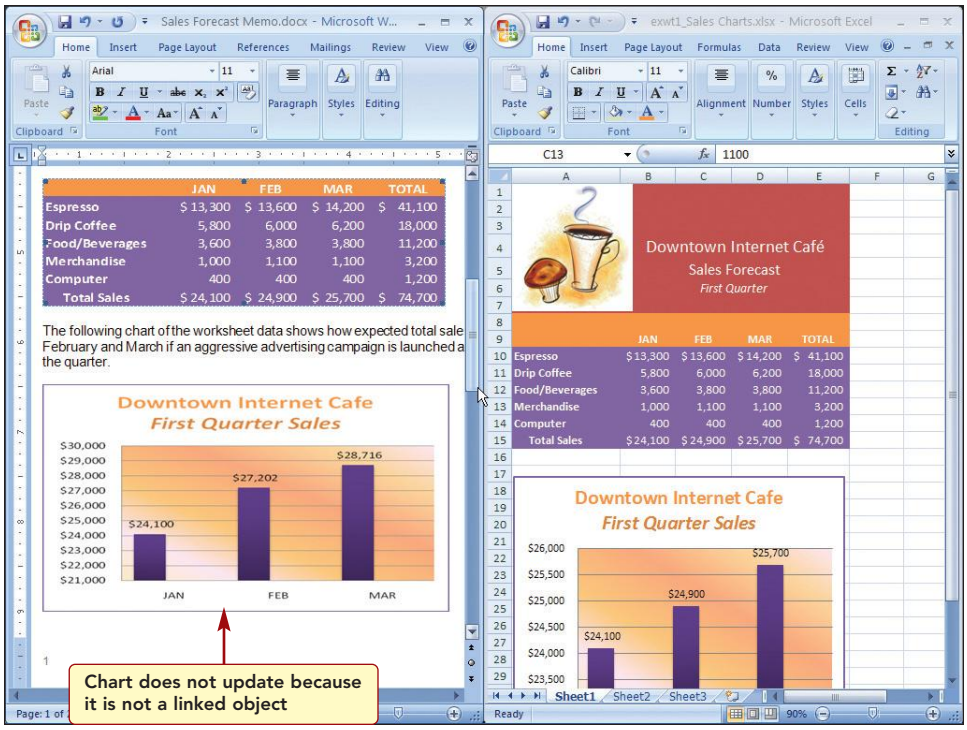


Figure 8

Because the chart in the Word document is not a linked object, it does not update to reflect the changes in data that you made in Excel.

Editing Links

When a document is opened that contains links, the application looks for the source file and automatically updates the linked objects. If the document contains many links, updating can take a lot of time. Additionally, if you move the source file to another location or perform other operations that may interfere with the link, your link will not work. To help with situations like these, you can edit the settings associated with links. You will look at the links to the worksheet data created in the Word document.

1. **Maximize the Word window.**
2. **If necessary, adjust the size of the chart to the same width as the worksheet object.**
3. **Right-click the worksheet object and select Linked Worksheet Object.**
4. **Choose Links from the submenu.**

Your screen should be similar to Figure 9

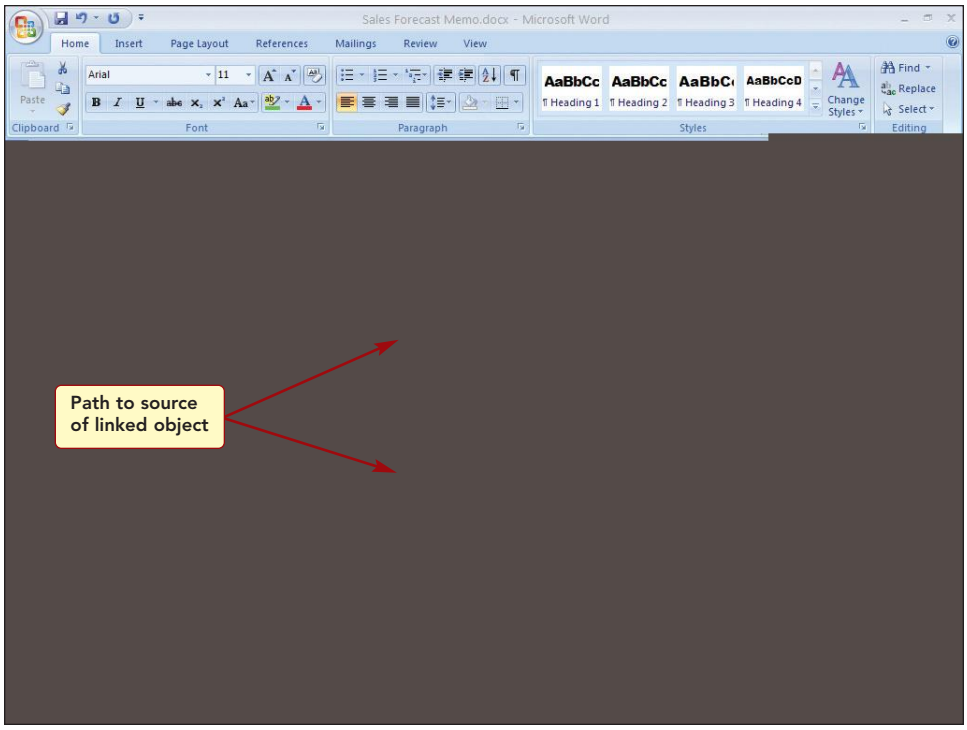


Figure 9

The Links dialog box displays the object path for all links in the document in the list box. The field code specifies the path and name of the source file, the range of linked cells or object name, the type of file, and the update status. Below the list box, the details for the selected link are displayed.

The other options in this dialog box are described in the table below.

Option	Effect
Automatic update	Updates the linked object whenever the destination document is opened or the source file changes. This is the default.
Manual update	The destination document is not automatically updated and you must use the Update Now command button to update the link.
Locked	Prevents a linked object from being updated.
Open Source	Opens the source document for the selected link.
Change Source	Used to modify the path to the source document.
Break Link	Breaks the connection between the source document and the active document.

The links in the Word document are to the exwt1_Sales Charts workbook file. Now that the memo is complete, you will save the documents. Then you will recheck the link settings.

2. **Click** Cancel.

- **Switch to the Excel window.**
- **Maximize the window.**
- **Save the Excel workbook as** Sales Forecast Linked.
- **Close the workbook file.**
- **Switch to the Word window.**

Having Trouble?
Click the application taskbar button to switch between windows.

- **From the worksheet object's shortcut menu, choose Linked Worksheet Object/Links.**

Your screen should be similar to Figure 10

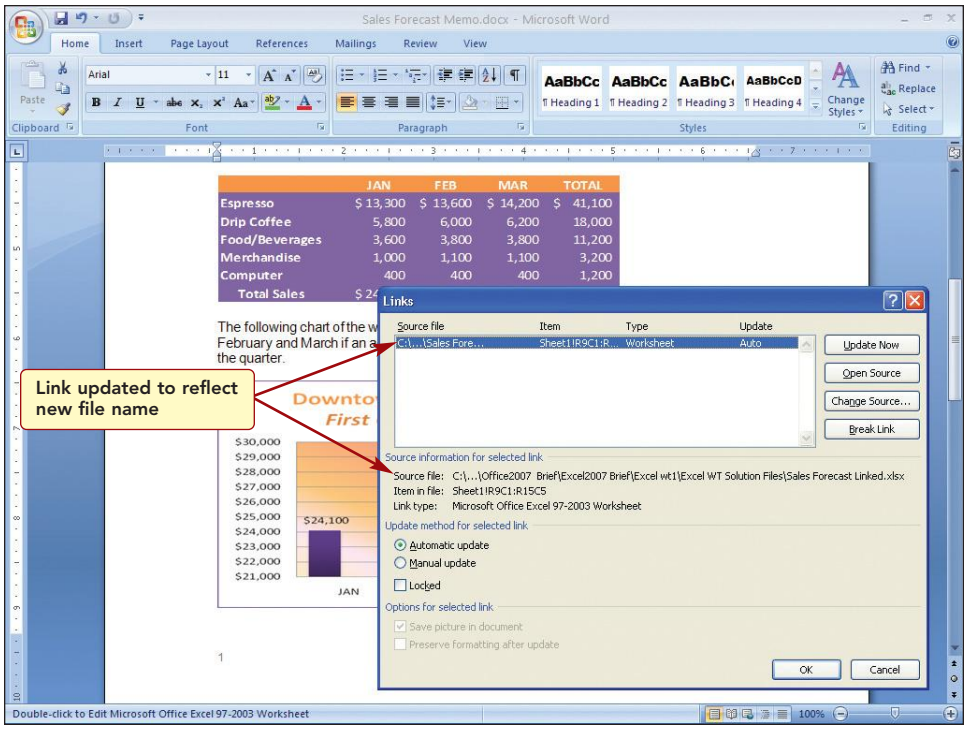


Figure 10

You can now see that the link has been edited to reflect the new workbook file name.

3. **Click** Cancel.

- **Preview the document and make any needed adjustments to the layout.**
- **Print and then close the document, saving any changes if needed.**

Embedding an Object

Additional Information
The source data is stored in an Excel worksheet that is incorporated in the Word file.

Having Trouble?
Refer to Concept 6: Chart Objects in Lab 2 to review embedded objects.

The last thing you need to send Evan is a memo that describes and shows the second-quarter forecast. To do this, you will open the memo already created for you in Word and embed the sections from the Annual Forecast Revised workbook that Evan wants in the appropriate locations. An **embedded object** is stored in the destination file and becomes part of that document. The entire file, not just the selection that is displayed in the destination file, becomes part of the document. This means that you can modify it without affecting the source document where the original object resides.

1. **Open the Word document** exwt1_Second Quarter Memo.docx**.**
- **In the memo header, replace Student Name with your name.**
- **Save the document as** Second Quarter Memo**.**
- **Switch to Excel and open the workbook file** exwt1_Second Quarter**.**

Your screen should be similar to Figure 11

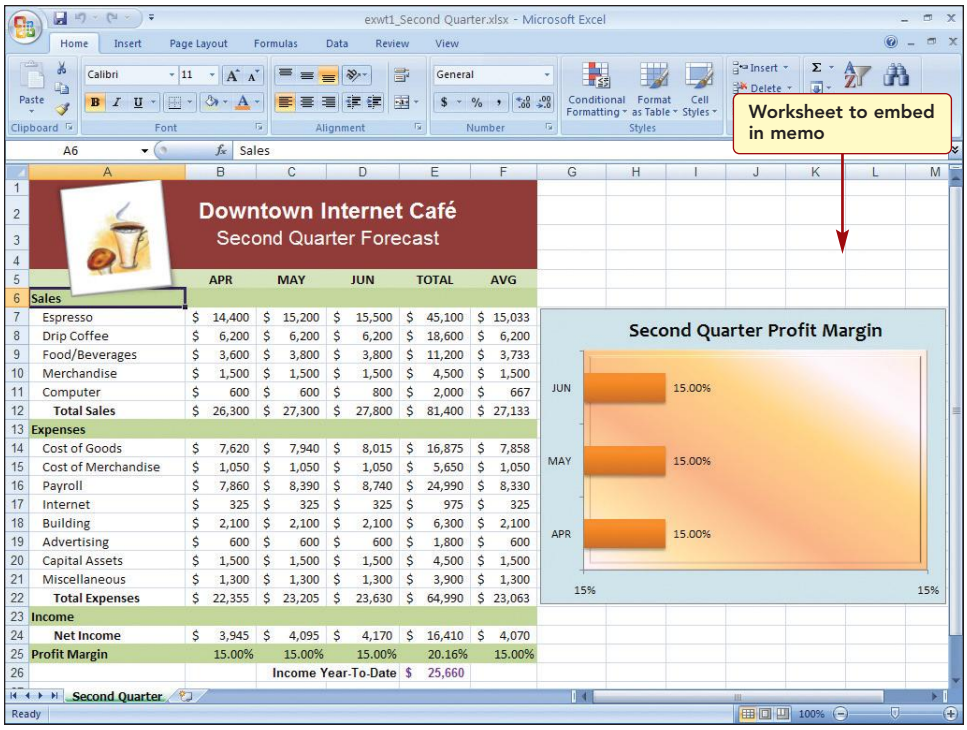


Figure 11

You will embed the second-quarter forecast worksheet in the Word document.

2. **Copy the range A1 through F25.**
- **Switch to the Word window.**
- **Move to the middle blank line below the first paragraph of the memo.**
- **Open the** Paste **menu and choose Paste Special.**

Your screen should be similar to Figure 12

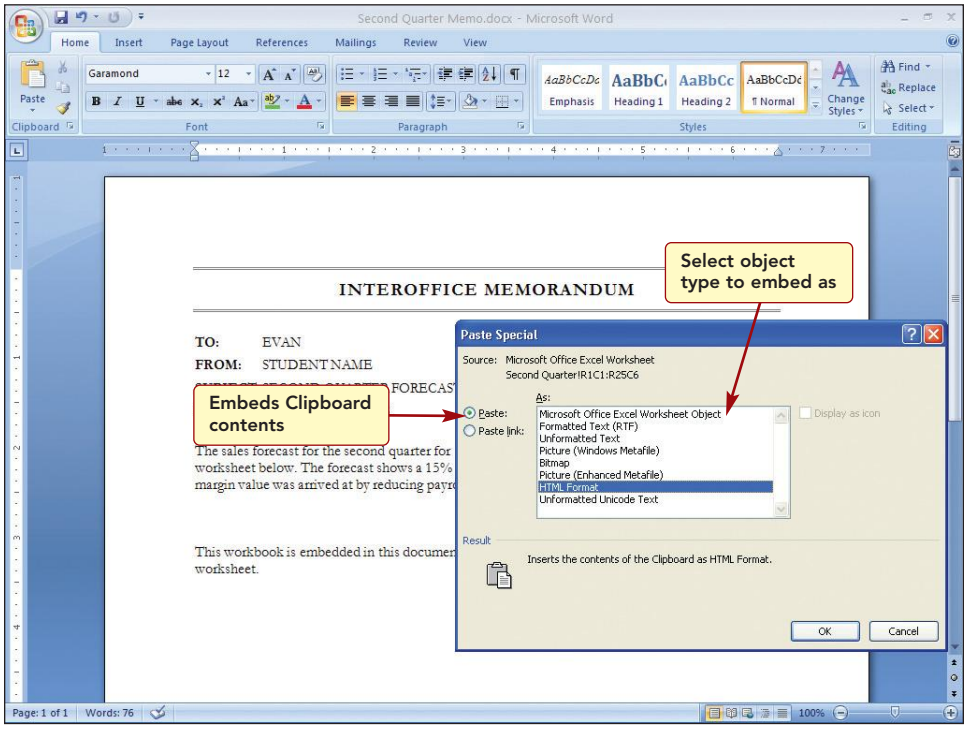


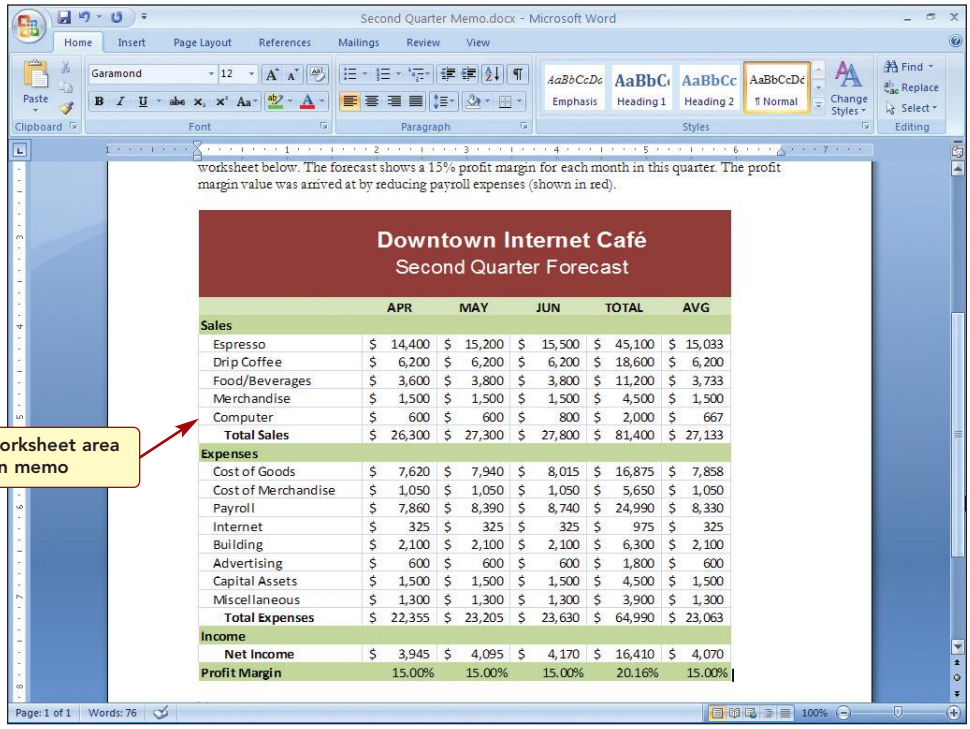
Figure 12

The Paste option inserts or embeds the Clipboard contents in the format you specify from the As list box. To embed the contents of the Clipboard into a document so it can be edited using the source program, select the option that displays the source name, in this case Excel.

3 **Select Microsoft Office Excel Worksheet Object.**

Click OK **.**

Your screen should be similar to Figure 13



	APR	MAY	JUN	TOTAL	AVG
Sales					
Espresso	$ 14,400	$ 15,200	$ 15,500	$ 45,100	$ 15,033
Drip Coffee	$ 6,200	$ 6,200	$ 6,200	$ 18,600	$ 6,200
Food/Beverages	$ 3,600	$ 3,800	$ 3,800	$ 11,200	$ 3,733
Merchandise	$ 1,500	$ 1,500	$ 1,500	$ 4,500	$ 1,500
Computer	$ 600	$ 600	$ 800	$ 2,000	$ 667
Total Sales	$ 26,300	$ 27,300	$ 27,800	$ 81,400	$ 27,133
Expenses					
Cost of Goods	$ 7,620	$ 7,940	$ 8,015	$ 16,875	$ 7,858
Cost of Merchandise	$ 1,050	$ 1,050	$ 1,050	$ 5,650	$ 1,050
Payroll	$ 7,860	$ 8,390	$ 8,740	$ 24,990	$ 8,330
Internet	$ 325	$ 325	$ 325	$ 975	$ 325
Building	$ 2,100	$ 2,100	$ 2,100	$ 6,300	$ 2,100
Advertising	$ 600	$ 600	$ 600	$ 1,800	$ 600
Capital Assets	$ 1,500	$ 1,500	$ 1,500	$ 4,500	$ 1,500
Miscellaneous	$ 1,300	$ 1,300	$ 1,300	$ 3,900	$ 1,300
Total Expenses	$ 22,355	$ 23,205	$ 23,630	$ 64,990	$ 23,063
Income					
Net Income	$ 3,945	$ 4,095	$ 4,170	$ 16,410	$ 4,070
Profit Margin	15.00%	15.00%	15.00%	20.16%	15.00%

Figure 13

The selected portion of the worksheet is displayed in the memo at the location of the insertion point.

Updating an Embedded Object

You want to add color to the payroll range of cells you adjusted to arrive at the 15 percent profit margin. Because the worksheet is embedded, you can do this from within the Word document. The source program is used to edit data in an embedded object. To open the source program and edit the worksheet, you double-click the embedded object.

1 **Double-click the worksheet object in Word.**

Having Trouble?

If the worksheet does not fully display the numbers, click outside the worksheet to return to the document, make the worksheet object larger, and then open the source program again.

Your screen should be similar to Figure 14

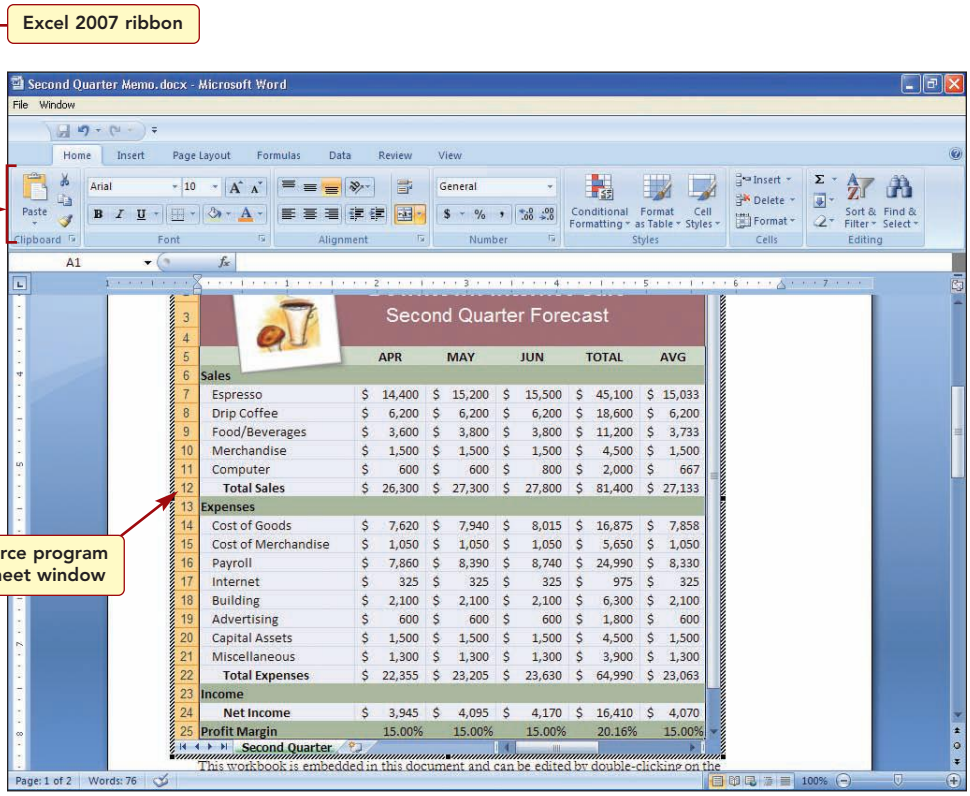


Figure 14

Additional Information

The source program must be installed on the computer system to be able to open and edit the embedded object.

The source program, in this case Excel 2007, is opened. The Excel Ribbon replaces the Word Ribbon and the embedded object is displayed in an editing worksheet window. Now you can use the source program commands to edit the object.

2 **Change the font color of cells B15 through D15 to Red, Accent 2 theme color.**

Close the source program by clicking anywhere outside the object.

Save the document.

Your screen should be similar to Figure 15

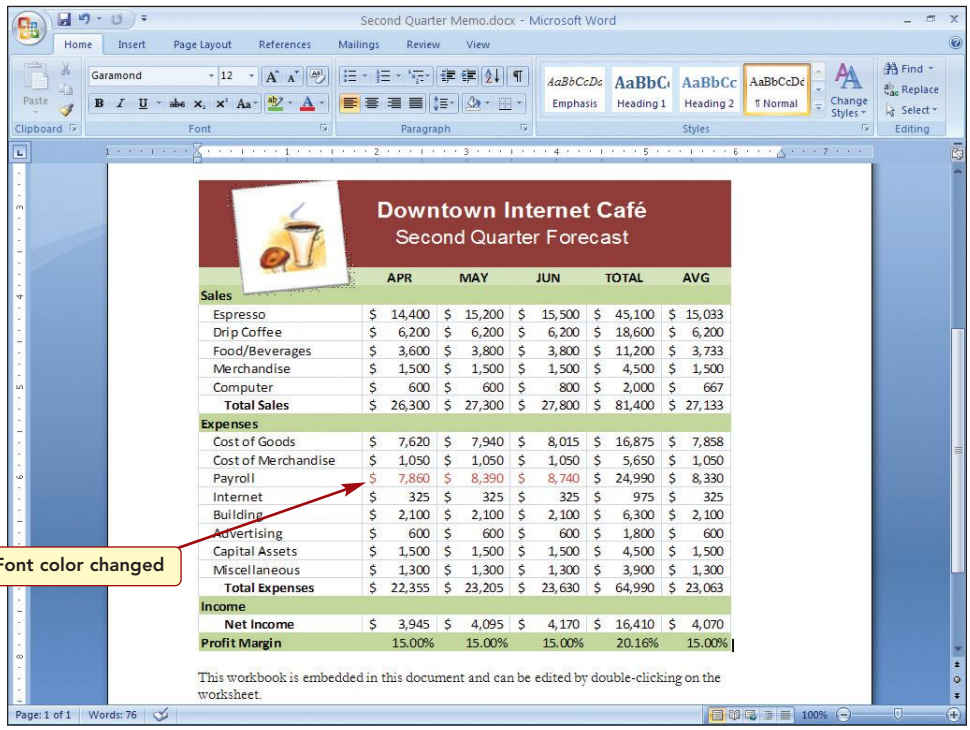


Figure 15

The embedded object in the memo is updated to reflect the changes you made. However, the Excel worksheet is unchanged.

3. **Preview and print the memo.**
4. **Exit Word and Excel.**

Deciding When to Link or Embed Objects

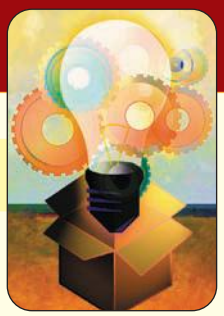
Linking documents is a very handy feature, particularly in documents whose information is updated frequently. If you include a linked object in a document that you are giving to another person, make sure the user has access to the source file and application. Otherwise the links will not operate correctly.

Keep the following in mind when deciding whether to link or embed objects.

Use linking when:	Use embedding when:
File size is important.	File size is not important.
Users have access to the source file and application.	Users have access to the application but not to the source file.
The information is updated frequently.	The data changes infrequently. You do not want the source data to change.

Lab Review

WORKING TOGETHER 1



key terms

destination file EXWT1.4
embedded object EXWT1.11
external reference EXWT1.4
link EXWT1.4
linked object EXWT1.4
live link EXWT1.4
source file EXWT1.4

MCAS Skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2 MCAS Certification Guide for a complete list of the skills that were covered in Working Together 1.

command summary

Command	Shortcut	Action
Home tab		
Clipboard group		
/Paste Special/Paste		Inserts object as an embedded object
/Paste Special/Paste Link		Inserts object as a linked object
Linked Object shortcut menu (Word)		
Update Link	F9	Updates linked object
Linked Worksheet Object/Links		Modifies selected link

Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Rescue Foundation Income Memo ★★

1. The Animal Rescue Foundation's agency director has asked you to provide her with information about income for 2007. She is particularly interested in the two pet show fund-raising and membership drive events that are held in April and October. You will create a memo to her that will include a copy of the worksheet analysis of this data. Your completed memo will be similar to that shown here.

   a. Start Word and open the document exwt1_Rescue Memo.docx.

   b. In the memo header, replace the From placeholder with your name.

   c. Start Excel and open the workbook exwt1_Contributions.

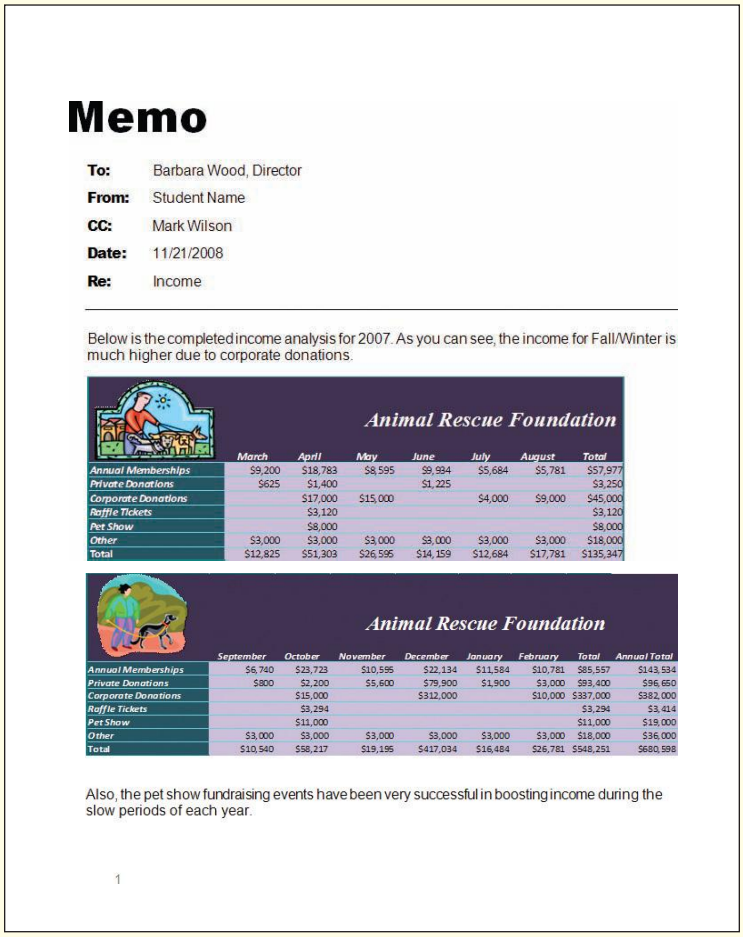
   d. Insert both worksheets as Microsoft Excel Worksheet Object links below the first paragraph in the Word memo. Reduce the size of the worksheets until the memo fits on one page.

   e. You notice the April raffle ticket sales value looks low and after checking your records, you see it was entered incorrectly. In Excel, change the April raffle ticket sales income to **$3,120**.

   f. In the memo, update the linked worksheet.

   g. Save the Excel workbook as Contributions. Exit Excel.

   h. Save the Word document as Rescue Memo Linked. Preview and print the document.



Memo

To: Barbara Wood, Director
From: Student Name
CC: Mark Wilson
Date: 11/21/2008
Re: Income

Below is the completed income analysis for 2007. As you can see, the income for Fall/Winter is much higher due to corporate donations.

Animal Rescue Foundation

	March	April	May	June	July	August	Total
Annual Memberships	$9,200	$18,783	$8,595	$9,984	$5,684	$5,781	$57,977
Private Donations	$625	$1,400		$1,225			$3,250
Corporate Donations		$17,000	$15,000		$4,000	$9,000	$45,000
Raffle Tickets		$3,120					$3,120
Pet Show		$8,000					$8,000
Other	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$18,000
Total	$12,825	$51,303	$26,595	$14,159	$12,684	$17,781	$135,347

Animal Rescue Foundation

	September	October	November	December	January	February	Total	Annual Total
Annual Memberships	$6,740	$23,723	$10,595	$22,134	$11,584	$10,781	$85,557	$143,534
Private Donations	$800	$2,200	$5,600	$79,900	$1,900	$3,000	$93,400	$96,650
Corporate Donations		$15,000		$312,000		$10,000	$337,000	$382,000
Raffle Tickets		$3,294					$3,294	$3,414
Pet Show		$11,000					$11,000	$19,000
Other	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$18,000	$36,000
Total	$10,540	$58,217	$19,195	$417,034	$16,484	$26,781	$548,251	$680,598

Also, the pet show fundraising events have been very successful in boosting income during the slow periods of each year.

1

Tour Status Memo ★★

2. Adventure Travel Tours travel agency sends a monthly status report to all subsidiary offices showing the bookings for the hiking tours. Previously, the worksheet data was printed separately from the memo. Now you want to include the worksheet in the same document as the memo. Your completed memo will be similar to that shown here.

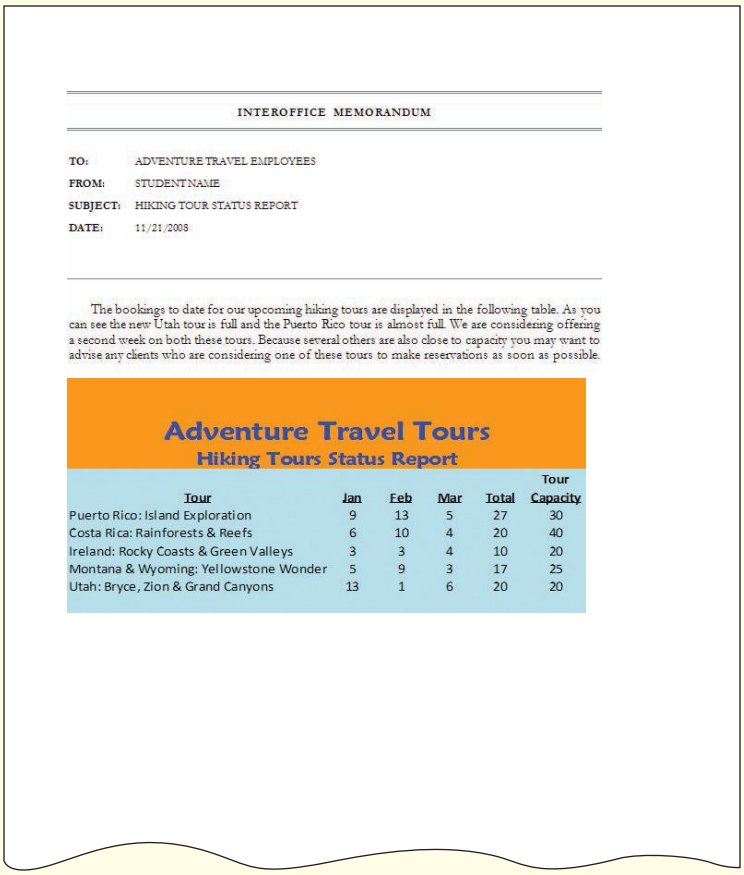
a. Start Word and open the exwt1_Tour Status Report.docx document. Replace Student Name with your name on the From line in the heading.

b. Start Excel and open the exwt1_Adventure Travel Status workbook.

c. Copy the worksheet as a linked object to below the paragraph of the memo.

d. In Excel, enter the data shown below for the March bookings worksheet.

Tour	March Data
Puerto Rico: Island Exploration	5
Costa Rica: Rainforests & Reefs	4
Ireland: Rocky Coasts & Green Valleys	4
Montana & Wyoming: Yellowstone Wonders	3
Utah: Bryce, Zion & Grand Canyons	6



INTEROFFICE MEMORANDUM

TO: ADVENTURE TRAVEL EMPLOYEES
FROM: STUDENT NAME
SUBJECT: HIKING TOUR STATUS REPORT
DATE: 11/21/2008

The bookings to date for our upcoming hiking tours are displayed in the following table. As you can see the new Utah tour is full and the Puerto Rico tour is almost full. We are considering offering a second week on both these tours. Because several others are also close to capacity you may want to advise any clients who are considering one of these tours to make reservations as soon as possible.

Adventure Travel Tours
Hiking Tours Status Report

Tour	Jan	Feb	Mar	Total	Tour Capacity
Puerto Rico: Island Exploration	9	13	5	27	30
Costa Rica: Rainforests & Reefs	6	10	4	20	40
Ireland: Rocky Coasts & Green Valleys	3	3	4	10	20
Montana & Wyoming: Yellowstone Wonder	5	9	3	17	25
Utah: Bryce, Zion & Grand Canyons	13	1	6	20	20

e. Save the workbook as Adventure Travel Status. Exit Excel.

f. Update the linked worksheet object.

g. Save the Word document as March Status Report. Print the memo.

Home Sale Price Memo ★★

3. Jennifer works in the marketing department for a local real estate company. She has recently researched the average home prices and number of days on the market over the last three years for existing homes in the local market area. She has created a worksheet and column charts of the data. Now Jennifer wants to send a memo containing the information to her supervisor. The completed memo will be similar to that shown here.

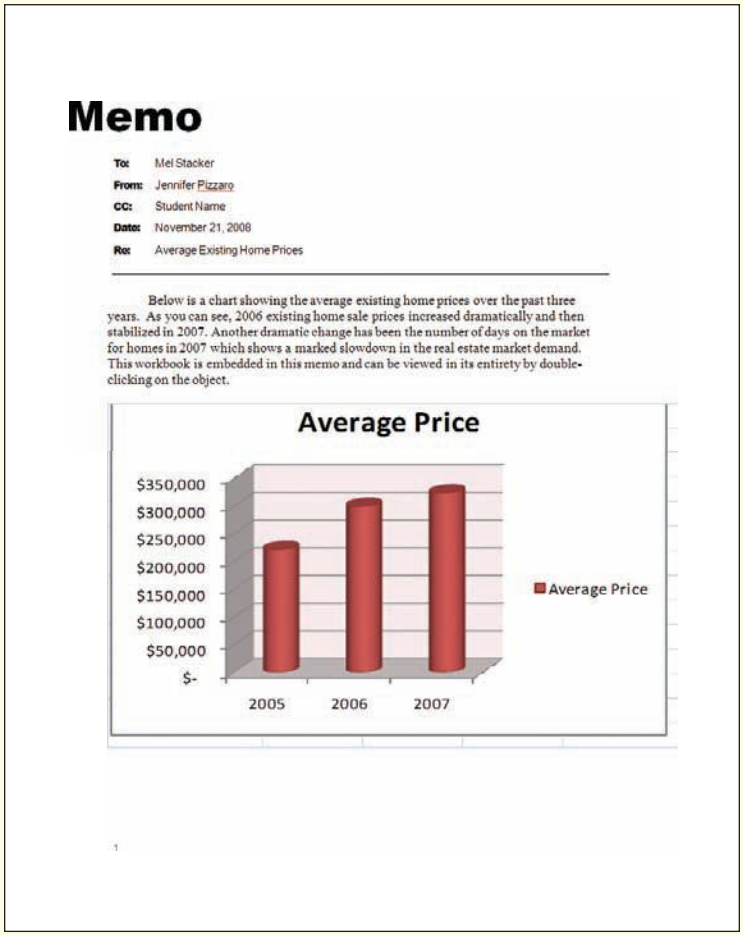
   a. Start Word and open the document exwt1_Home Price Memo.docx.

   b. In the header, replace the CC: placeholder information in brackets with your name.

   c. Start Excel and open the workbook exwt1_Real Estate Prices. Embed the worksheet data including the charts below the paragraph in the Word memo. Exit Excel.

   d. Open the embedded object in Word and scroll to see the column chart of the Average Price. Increase the size of the object to fully display the chart. Change the chart type to a clustered cylinder. Close the embedded object, leaving the chart displayed in the memo.

   e. Save the Word document as Home Price Memo. Preview and print the document.



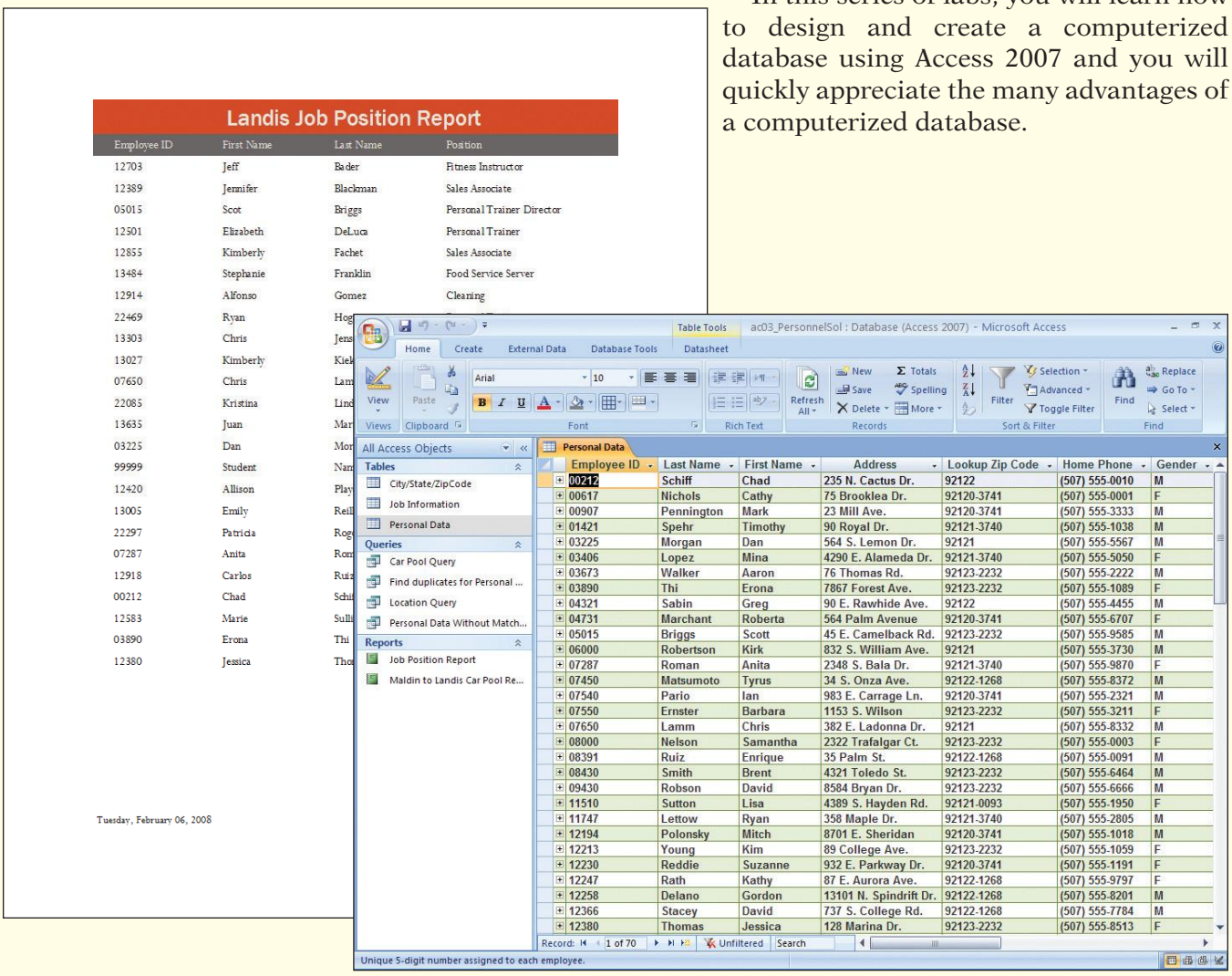
Overview of Microsoft Office Access 2007

What Is a Database?

Somewhere at home, or maybe in your office, you probably have a file cabinet or desk drawer filled with information. Perhaps you have organized the information into drawers of related information, and further categorized that information into file folders. This is a database.

As organized as you might be, it takes time to locate a specific piece of information by manually opening drawers and searching through the folders. You can just imagine how much time would be required for a large company to manually search through its massive amounts of data. These companies use electronic database management systems (DBMS). Now you too can use electronic database management systems to store, organize, access, manipulate, and present information in a variety of ways.

In this series of labs, you will learn how to design and create a computerized database using Access 2007 and you will quickly appreciate the many advantages of a computerized database.



Landis Job Position Report

Employee ID	First Name	Last Name	Position
12703	Jeff	Bader	Fitness Instructor
12389	Jennifer	Blackman	Sales Associate
05015	Scot	Briggs	Personal Trainer Director
12501	Elizabeth	DeLuca	Personal Trainer
12855	Kimberly	Fachet	Sales Associate
13484	Stephanie	Franklin	Food Service Server
12914	Alfonso	Gomez	Cleaning
22469	Ryan	Hog	
13303	Chris	Jens	
13027	Kimberly	Kieb	
07650	Chris	Lam	
22085	Kristina	Lind	
13635	Juan	Mar	
03225	Dan	Mor	
99999	Student	Nan	
12420	Allison	Play	
13005	Emily	Reil	
22297	Patricia	Rog	
07287	Anita	Rom	
12918	Carlos	Ruiz	
00212	Chad	Schi	
12583	Marie	Sull	
03890	Erona	Thi	
12380	Jessica	Tho	

Tuesday, February 06, 2008

ac03_PersonnelSol : Database (Access 2007) - Microsoft Access

Table Tools

Home | Create | External Data | Database Tools | Datasheet

All Access Objects

Tables
- City/State/ZipCode
- Job Information
- Personal Data

Queries
- Car Pool Query
- Find duplicates for Personal ...
- Location Query
- Personal Data Without Match...

Reports
- Job Position Report
- Maldin to Landis Car Pool Re...

Personal Data

Employee ID	Last Name	First Name	Address	Lookup Zip Code	Home Phone	Gender
00212	Schiff	Chad	235 N. Cactus Dr.	92122	(507) 555-0010	M
00617	Nichols	Cathy	75 Brooklea Dr.	92120-3741	(507) 555-0001	F
00907	Pennington	Mark	23 Mill Ave.	92120-3741	(507) 555-3333	M
01421	Spehr	Timothy	90 Royal Dr.	92121-3740	(507) 555-1038	M
03225	Morgan	Dan	564 S. Lemon Dr.	92121	(507) 555-5567	M
03406	Lopez	Mina	4290 E. Alameda Dr.	92121-3740	(507) 555-5050	F
03673	Walker	Aaron	76 Thomas Rd.	92123-2232	(507) 555-2222	M
03890	Thi	Erona	7867 Forest Ave.	92123-2232	(507) 555-1089	F
04321	Sabin	Greg	90 E. Rawhide Ave.	92122	(507) 555-4455	M
04731	Marchant	Roberta	564 Palm Avenue	92120-3741	(507) 555-6707	F
05015	Briggs	Scott	45 E. Camelback Rd.	92123-2232	(507) 555-9585	M
06000	Robertson	Kirk	832 S. William Ave.	92121	(507) 555-3730	M
07287	Roman	Anita	2348 S. Bala Dr.	92121-3740	(507) 555-9870	F
07450	Matsumoto	Tyrus	34 S. Onza Ave.	92122-1268	(507) 555-8372	M
07540	Pario	Ian	983 E. Carrage Ln.	92120-3741	(507) 555-2321	M
07550	Ernster	Barbara	1153 S. Wilson	92123-2232	(507) 555-3211	F
07650	Lamm	Chris	382 E. Ladonna Dr.	92121	(507) 555-8332	M
08000	Nelson	Samantha	2322 Trafalgar Ct.	92123-2232	(507) 555-0003	F
08391	Ruiz	Enrique	35 Palm St.	92122-1268	(507) 555-0091	M
08430	Smith	Brent	4321 Toledo St.	92123-2232	(507) 555-6464	M
09430	Robson	David	8584 Bryan Dr.	92123-2232	(507) 555-6666	M
11510	Sutton	Lisa	4389 S. Hayden Rd.	92121-0093	(507) 555-1950	F
11747	Lettow	Ryan	358 Maple Dr.	92121-3740	(507) 555-2805	M
12194	Polonsky	Mitch	8701 E. Sheridan	92120-3741	(507) 555-1018	M
12213	Young	Kim	89 College Ave.	92123-2232	(507) 555-1059	F
12230	Reddie	Suzanne	932 E. Parkway Dr.	92120-3741	(507) 555-1191	F
12247	Rath	Kathy	87 E. Aurora Ave.	92122-1268	(507) 555-9797	F
12258	Delano	Gordon	13101 N. Spindrift Dr.	92122-1268	(507) 555-8201	M
12366	Stacey	David	737 S. College Rd.	92122-1268	(507) 555-7784	M
12380	Thomas	Jessica	128 Marina Dr.	92123-2232	(507) 555-8513	F

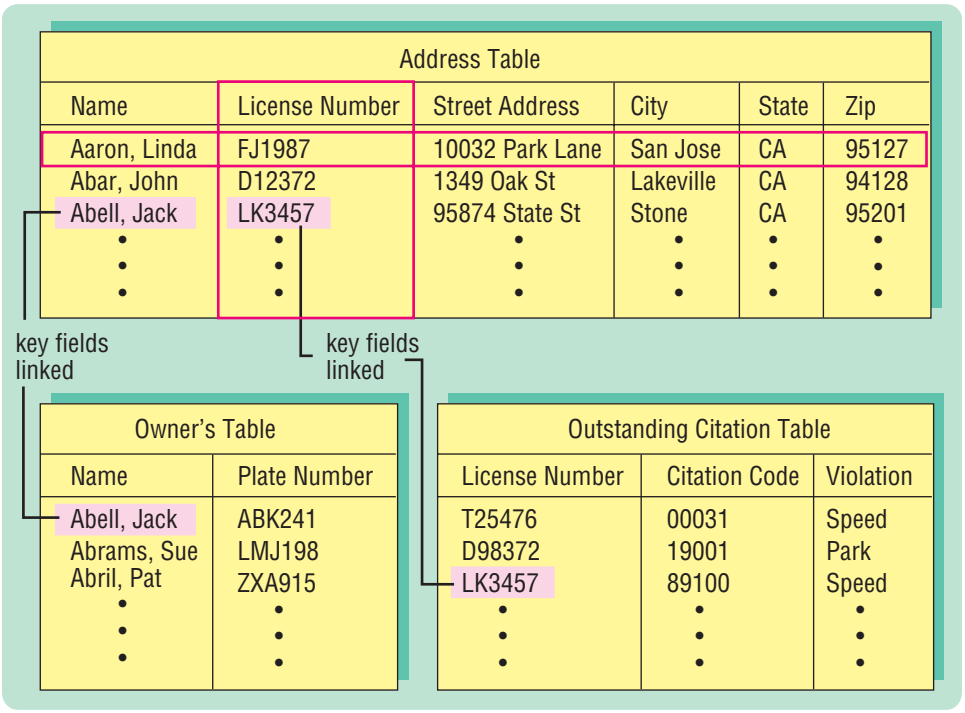
Record: 1 of 70 | Unfiltered | Search

Unique 5-digit number assigned to each employee.

Access 2007 Features

Access 2007 is a relational database management system. In relational database systems, data is organized in tables that are related or linked to one another. Each table consists of rows, called records, and columns, called fields.

For example, a state's motor vehicle department database might have an address table. Each row (record) in the table would contain address information about one individual. Each column (field) would contain just one piece of information, for example, zip codes. The address table would be linked to other tables in the database by common fields. For example, the address table might be linked to a vehicle owner's table by name and linked to an outstanding citation table by license number (see example below).



Access 2007 is a powerful program with numerous easy-to-use features including the ability to quickly locate information; add, delete, modify, and sort records; analyze data; and produce professional-looking reports. Some of the basic Access 2007 features are described next.

Find Information

Once you enter data into the database table, you can quickly search the table to locate a specific record based on the data in a field. In a manual system, you can usually locate a record by knowing one key piece of information. For example, if the records are stored in a file cabinet alphabetically by last name, to quickly find a record, you must know the last name. In a computerized database, even if the records are sorted or organized by last name, you can still quickly locate a record using information in another field.

Add, Delete, and Modify Records

Using Access, it is also easy to add and delete records from the table. Once you locate a record, you can edit the contents of the fields to update the record or delete the record entirely from the table. You also can add new records to a table. When you enter a new record, it is automatically placed in the correct organizational location within the table.

Sort and Filter Records

The capability to arrange or sort records in the table according to different fields can provide more meaningful information. You can organize records by name, department, pay, class, or any other category you need at a particular time. Sorting the records in different ways can provide information to different departments for different purposes.

Additionally, you can isolate and display a subset of records by specifying filter criteria. The criteria specify which records to display based on data in selected fields.

Analyze Data

Using Access, you can analyze the data in a table and perform calculations on different fields of data. Instead of pulling each record from a filing cabinet, recording the piece of data you want to use, and then performing the calculation on the recorded data, you can simply have the database program perform the calculation on all the values in the specified field. Additionally, you can ask questions or query the table to find only certain records that meet specific conditions to be used in the analysis. Information that was once costly and time-consuming to get is now quickly and readily available.

Generate Reports

Access includes many features that help you quickly produce reports ranging from simple listings to complex, professional-looking reports. You can create a simple report by asking for a listing of specified fields of data and restricting the listing to records meeting designated conditions. You can create a more complex professional report using the same restrictions or conditions as the simple report, but you can display the data in different layout styles, or with titles, headings, subtotals, or totals.

Case Study for Office Access 2007 Labs

You have recently accepted a job as employment administrator for Lifestyle Fitness Club. The club has recently purchased Microsoft Access 2007, and you are using it to update their manual system for recording employee information.

Lab 1: You will learn how to design and create the structure for a computerized database and how to enter and edit records in the database. You also will print a simple report of the records you enter in the database file.

Lab 2: You will continue to build, modify, and use the employee database of records. You will learn how to sort the records in a database file to make it easier to locate records. You also will learn about filtering a table to display only the information you need. Additionally, you will create a form to make it easier to enter and edit data in the database file.

Lab 3: You will learn how to query the database to locate specific information. You also will learn how to create a report and link multiple tables.

Working Together: You will learn how to share information between applications by incorporating database information from Access into a Word memo.

Before You Begin

To the Student

The following assumptions have been made:

- Microsoft Access 2007 has been properly installed on your computer system.
- The data files needed to complete the series of labs and practice exercises are supplied by your instructor. These may be supplied by your instructor and are also available at the online learning center Web site found at www.mhhe.com/oleary.
- You are already familiar with how to use Microsoft Windows XP or Vista and a mouse.

To the Instructor

A complete installation of Microsoft Office 2007 is required in which all components are available to students while completing the labs. In several labs, an online connection to the Web is needed to fully access a feature.

Please be aware that the following settings are assumed to be in effect for the Office Access 2007 program. These assumptions are necessary so that the screens and directions in the labs are accurate. These settings are made using Office Button/Access Options in the categories shown below.

Popular

- Always use ClearType is on.
- Show feature descriptions in ScreenTips is on.
- Show shortcut keys in ScreenTips is on.
- The Default file format is Access 2007.
- Default database folder is My Documents.
- New database sort order is General.

Current Database/Application Options

- Display Status Bar is on.
- Tabbed Documents is on.

- Display Document Tabs is on.
- Use Access Special Keys is on.
- Use Windows-themed Controls on Forms is on.
- Enable Layout View for this database is on.
- Enable design changes for tables in Datasheet view is on.
- Check for truncated number fields is on.
- Preserve source image format is on.

Current Database/Navigation

- Display Navigation Pane is on.
- Open objects with double-click is on.

Current Database/Ribbon and Toolbar Options

- Allow Full Menus is on.
- Allow Default Shortcut Menus is on.

Current Database/Name AutoCorrect Options

- Track name AutoCorrect info is on.
- Perform name AutoCorrect is on.

Datasheet/Default Colors

- All default colors are set to Automatic.

Datasheet/Gridlines and cell effects

- Default gridlines showing Horizontal and Vertical are on.
- Default cell effect is flat.
- Default column width is 1 inch.

Datasheet/Default font

- Font is Calibri.
- Font size is 11.
- Weight is Normal.

Object Designers/Table design

- Default field type is Text.
- Default text field size is 255.
- Default number field size is Long Integer.
- Show Property Update Options is on.

Object Designers/Query design

- Show table names is on.
- Enable AutoJoin is on.
- Query design font is Segoe UI with a point size of 8.

Object Designers/Forms/Reports

- Selection behavior is partially enclosed.
- Form and Report templates are Normal.

Object Designers/Error Checking

- All error checking options are on.
- Error indicator color is green.

Proofing

- All AutoCorrect options are on.
- Ignore words in Uppercase is on.
- Ignore words that contain numbers is on.
- Ignore Internet and file addresses is on.
- Flag repeated words is on.

Advanced/Editing

- Move after enter: Next field.
- Behavior entering field: Select entire field.
- Arrow key behavior: Next field.
- Default find/replace behavior: Fast search.
- All Confrim options are on.
- Default direction: Left-to-right.
- General Alignment: Interface mode.
- Cursor Movement: Logical.

Advanced/Display

- Show 9 recent documents.
- Display Status bar.
- Show animations is on.
- Show SmartTags on datasheets is on.
- Show SmartTags on forms and reports is on.

Advanced/Printing

- All margins are set to 0.25 inch.

Advanced/General

- No options are on.

Advanced/Advanced

- Default open mode is Shared.
- Default record locking is No locks.
- Open databases by using record-level locking is on.

Customize

- The Quick Access Toolbar displays the Save, Undo, and Redo buttons.
- Finally, the feature to access Online Help is on. (From the Help window, open the Connection Status menu and choose Show Content from Office Online.)

All figures in the text reflect the use of a display screen set at 1024 by 768 and the Windows XP operating system. If other monitor display settings are used, there may be more or fewer lines of information displayed in the windows than in the figures. If the Windows Vista operating system is used, some features may look slightly different.

Instructional Conventions

Hands-on instructions you are to perform appear as a sequence of numbered steps. Within each step, a series of bullets identifies the specific actions that must be performed. Step numbering begins over within each topic heading throughout the lab. Four types of marginal notes appear throughout the labs. Another Method notes provide alternate ways of performing the same command. Having Trouble? notes provide advice or cautions for steps that may cause problems. Additional Information notes provide more information about a topic. More About notes refer you to the More About appendix for additional information about related features.

Commands

Commands that are initiated using a command button and the mouse appear following the word "Click." The icon (and the icon name if the icon does not include text) is displayed following "Click." If there is another way to perform the same action, it appears in an Another Method margin note when the action is first introduced as shown in Example A.

When a feature has already been covered and you are more familiar with using the application, commands will appear as shown in Example B.

Example A

1. **Open the Home tab.**
   - **Open the**  **drop-down list in the Views group.**
   - **Choose Datasheet view.**

Another Method

You also can click Datasheet View in the status bar.

Example B

1. Click Datasheet View.

OR

1. Change the view to Datasheet View.

File Names and Information to Type

Plain blue text identifies file names you need to select or enter. Information you are asked to type appears in blue and bold. (See Example C.)

Example C

1. Open the database file ac02_Employees.
2. Type 9/23/01 in the Hire Date field.

Office Button Menu

Clicking Office Button opens the File menu of commands. File menu commands that you are to perform appear following the word "Choose." Items that need to be selected will follow the word "Select" and will appear in black text. You can select items with the mouse or directional keys. Initially these commands will appears as in Example A. As you become more familiar with the application, commands will appear as shown in Example B.

Example A

1. Click Office Button.
2. Choose Open.
3. Select My Documents from the Look In drop-down menu.
4. Select ac02_Employees.
5. Click Open.

Example B

1. **Choose**  **Office Button/Open.**
2. **Choose** ac02_Employees**.**

OR

1. **Open the file** ac02_Employees**.**

Creating a Database

LAB 1

Objectives

After completing this lab, you will know how to:

1. Plan, create, and modify a database.
2. Create and save a table structure.
3. Define field names, data types, field properties, and primary key fields.
4. Enter and edit data.
5. Add attachments.
6. Change views.
7. Adjust column widths.
8. Use the Best Fit feature.
9. Create a second table.
10. Create a Lookup field.
11. Delete records.
12. Preview and print a table.
13. Change page orientation.
14. Close and open a table and database.

Case Study

Lifestyle Fitness Club

You have recently accepted a job as a human resources administrator with Lifestyle Fitness Club. Like many fitness centers, Lifestyle Fitness Club includes exercise equipment, free weights, aerobics classes, tanning and massage facilities, swimming pool, steam room and sauna, and child-care facilities. In addition, it promotes a healthy lifestyle by including educational seminars on good nutrition and proper exercise. It also has a small snack bar that serves healthy drinks, sandwiches, and snacks.

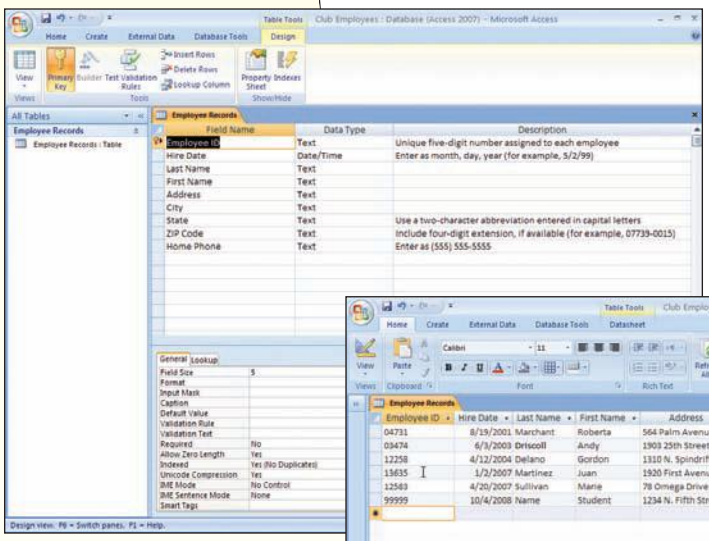


The Lifestyle Fitness Clubs are a franchised chain of clubs that are individually owned. You work at a club owned by Felicity and Ryan Albright, who also own two others in California. Accounting and employment functions for all three clubs are handled centrally at the Landis location.

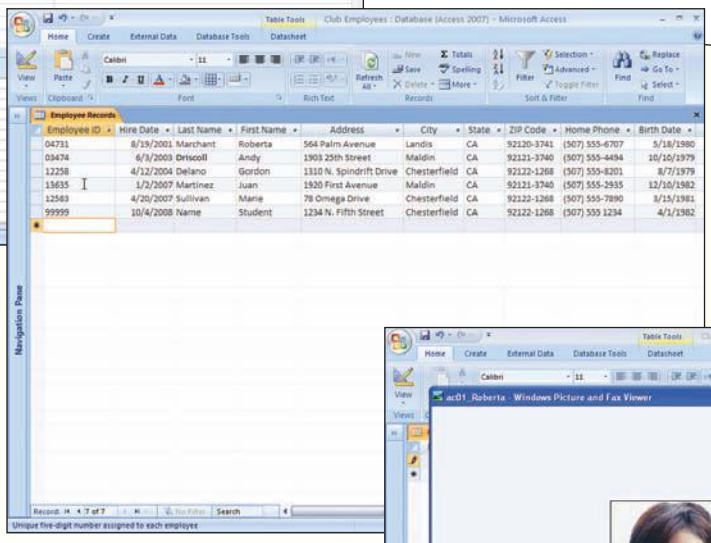
You are responsible for maintaining the employment records for all employees, as well as records for traditional employment activities such as hiring and benefits. Currently the club employment records are maintained on paper forms and are stored in file cabinets organized alphabetically by last name. Although the information is well organized, it still takes time to manually look through the folders to locate the information you need and to compile reports from this data.

The Club has recently purchased new computers, and the owners want to update the employee record-keeping system to an electronic database management system. The software tool you will use to create the database is the database application Office Access 2007. In this lab, you will learn about entering, editing, previewing, and printing information in the database you create for the Club.

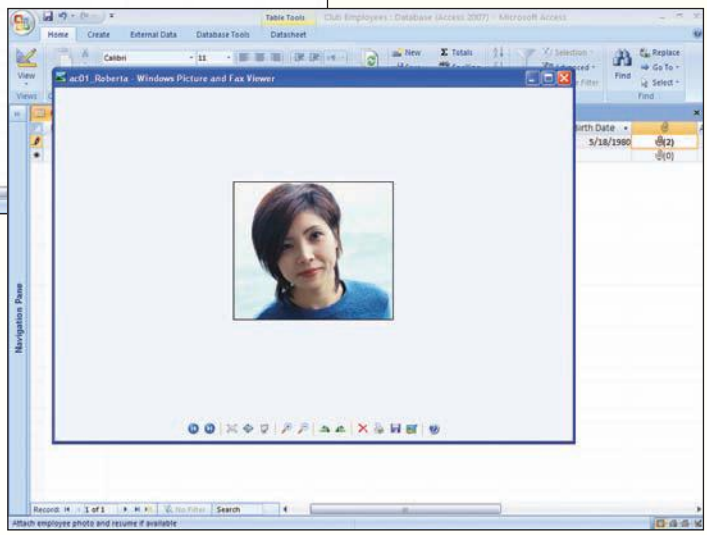
Employee ID	Last Name	First Name	Address	City	State	ZIP Code	Home Phone	Birth Date	
04731	Marchant	Roberta	564 Palm Avenue	Landis	CA	92120-3741	(507) 555-6707	5/18/1980	(2)
12258	Delano	Gordon	1310 N. Spindrift Drive	Chesterfield	CA	92122-1268	(507) 555-8201	8/7/1979	(0)
12583	Sullivan	Marie	78 Omega Drive	Chesterfield	CA	92122-1268	(507) 555-7890	3/15/1981	(0)
13635	Martinez	Juan	1920 First Avenue	Maldin	CA	92121-3740	(507) 555-2935	12/10/1982	(0)
99999	Name	Student	1234 N. Fifth Street	Chesterfield	CA	92122-1268	(507) 555-1234	4/1/1982	(0)



Designing the table structure consists of defining field names, data types, and field properties.



Entering data in a table creates records of information.



Fields can contain attachments, such as pictures or files.

Concept Preview

The following concepts will be introduced in this lab:

1. **Database** A database is an organized collection of related information.
2. **Object** An Access database is made up of several types of objects, such as a table or report, consisting of many elements. An object can be created, selected, and manipulated as a unit.
3. **Data Type** The data type defines the type of data the field will contain. Access uses the data type to ensure that the right kind of data is entered in a field.
4. **Field Property** A field property is a characteristic that helps define the appearance and behavior of a field.
5. **Primary Key** A primary key is a field that uniquely identifies each record.
6. **LookUp Field** A lookup field provides a list of values from which the user can choose to make entering data into that field simpler and more accurate.
7. **Subdatasheet** A subdatasheet is a data table nested in another data table that contains data related or joined to the table where it resides.

Designing a New Database

The Lifestyle Fitness Club recently purchased the 2007 Microsoft Office System software suite. You are very excited about learning to use the Access 2007 database management system to store and maintain the club's records.

Concept 1

Database

1 A **database** is an organized collection of related information. Typically, the information in a database is stored in a **table** consisting of vertical columns and horizontal rows. Each row contains a **record**, which is all the information about one person, thing, or place. Each column is a **field**, which is the smallest unit of information about a record. Access databases can contain multiple tables that can be linked to produce combined output from all tables. This type of database is called a **relational database**. See the "Overview of Microsoft Office Access 2007" for more information about relational databases.

The Lifestyle Fitness Club plans to use Access to maintain several different types of databases. The database you will create will contain information about each club employee. Other plans for using Access include keeping track of members and inventory. To keep the different types of information separate, the club plans to create a database for each group.

Good database design follows two basic principles: do not include duplicate information (also called redundant data) in tables and enter accurate and complete information. Redundant data wastes space, wastes the time that is required to enter the same information multiple times, and consequently increases the possibility of errors and inconsistencies between tables. The information that is stored in a database may be used to make business decisions and if the information is inaccurate, any decisions that are based on the information would be misinformed.

To attain these principles, the database design process is very important and consists of the following steps: plan, design, develop, implement, and refine and review. You will find that you will generally follow these steps in order as you create your database. However, you will probably retrace steps as the final database is developed.

Step	Description
Plan	The first step in the development of a database is to define the purpose of the database in writing. This includes establishing the scope of the database, determining its feasibility, and deciding how you expect to use it and who will use it.
Design	Using the information gathered during the planning step, you can create an implementation plan and document the functional requirements. This includes finding and organizing the information required for the database and deciding how this information should be divided into subject groups. You also need to think about the types of questions you might want the database to answer and determine the types of output you need such as reports and mailings.
Develop	Using the design you created, you are ready to create tables to hold the necessary data. Create separate tables for each of the major subjects to make it easier to locate and modify information. Define fields for each item that you want to store in each table. Determine how each table is related to another and include fields to clarify the relationships as needed. Try not to duplicate information in the different tables.
Implement	After setting up the tables, populate the tables by entering sample data to complete each record. Then work with the data to make sure it is providing the information you need.
Refine and Review	Refine the design by adding or removing fields and tables and continue to test the data and design. Apply the data normalization rules to see if the tables are structured correctly. Periodically review the database to ensure that the initial objectives have been met and to identify required enhancements.

As you develop the employee database for the Lifestyle Fitness Club, you will learn more about the details of the design steps and how to use Access 2007 to create a well-designed and accurate database.

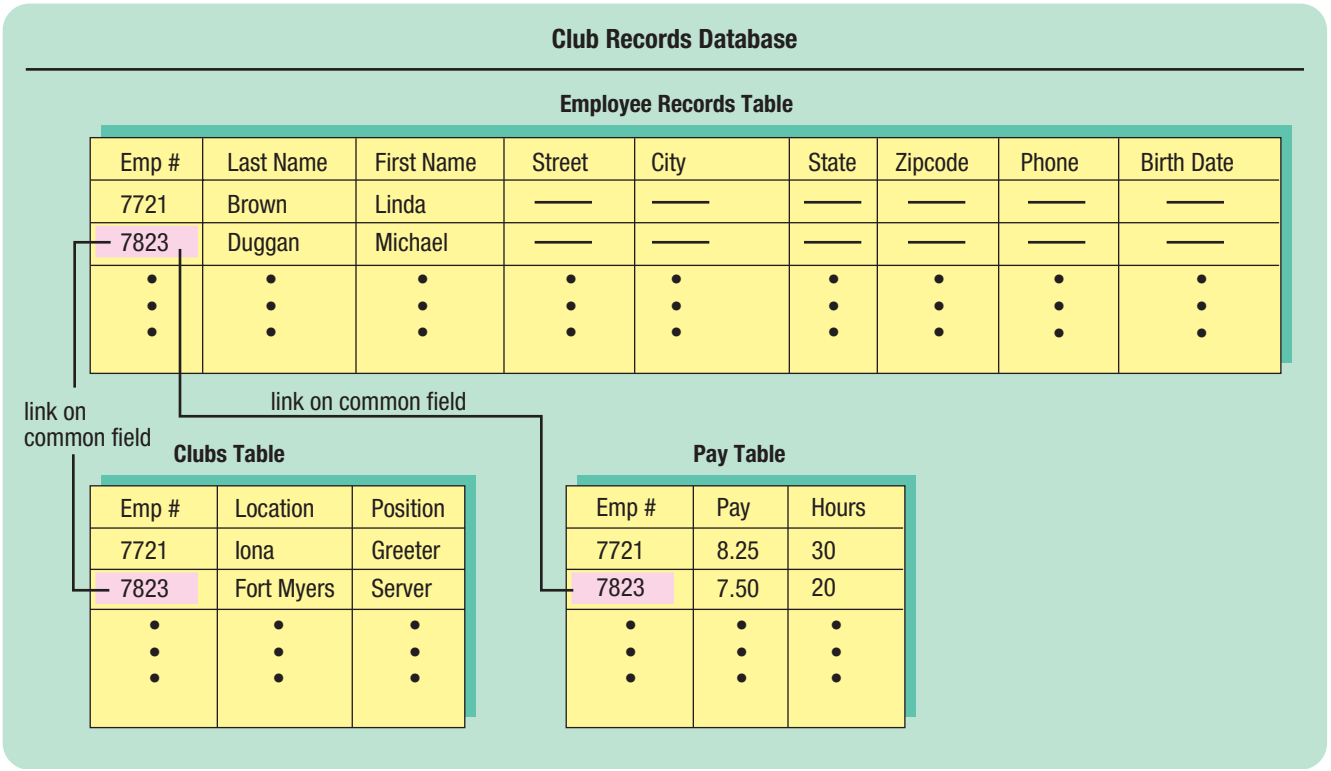
Planning the Club Database

Your first step is to plan the design of your database tables: the number of tables, the data they will contain, and the relationship of the tables. You need to decide what information each table in the employee database should contain and how it should be structured or laid out.

You can obtain this information by analyzing the current record-keeping procedures used in the company. You need to understand the existing procedures so that your database tables will reflect the information that is maintained by different departments. You should be aware of the forms that are the basis for the data entered into the department records and of the information that is taken from the records to produce periodic reports. You also need to determine the information that the department heads would like to be able to obtain from the database that may be too difficult to generate with current procedures.

After looking over the existing record-keeping procedures and the reports that are created from the information, you decide to create several separate tables of data in the database file. Each table should only contain information about the subject of the table. Additionally, try not to duplicate information in different tables. If this occurs, create a separate table for this information. Creating several smaller tables of related data rather than one large table makes it easier to use the tables and faster to process data. This is because you can join several tables together as needed.

The main table will include the employee's basic information, such as employee number, name, birth date, and address. Another will contain the employee's job title and work location only. A third will contain data on pay rate and hours worked each week. To clarify the organization of the database, you sketched the structure for the employee database as shown below.



Creating and Naming the Database File

Now that you have decided on the information you want to include in the tables, you are ready to create a new database for the employee information using the Microsoft Office Access 2007 database management program.

1 **Start the Office Access 2007 application.**

Having Trouble?

See "Introduction to 2007 Microsoft Office System" for information about starting the application and for a discussion of features that are common to all Office 2007 applications.

Your screen should be similar to Figure 1.1

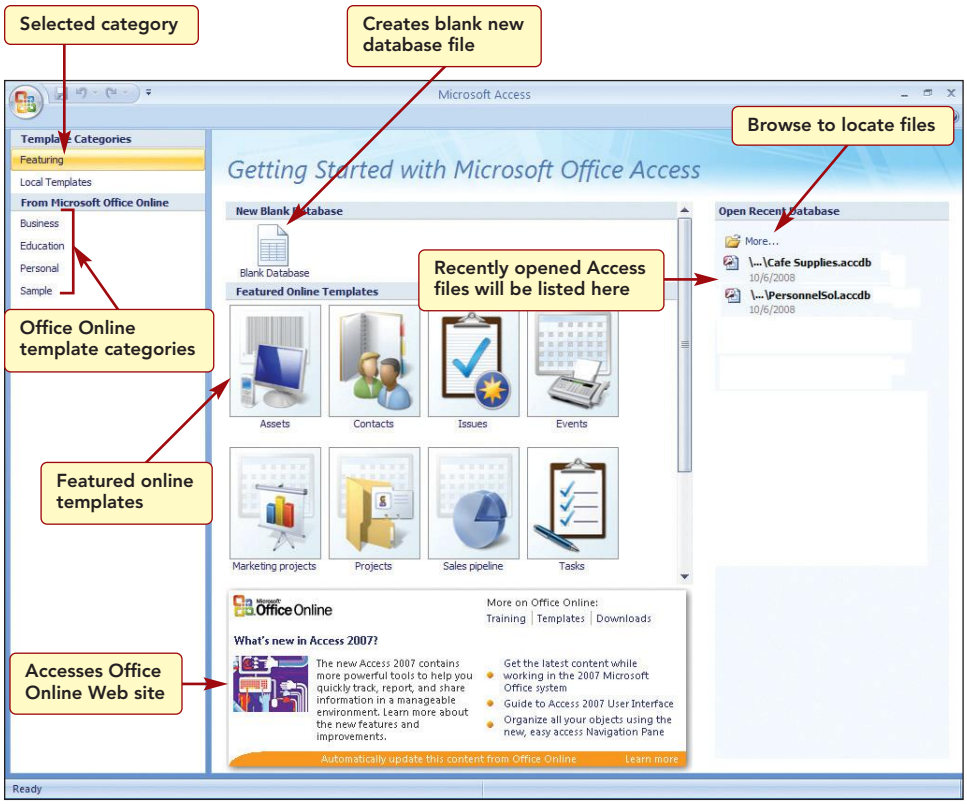


Figure 1.1

The Getting Started with Microsoft Office Access page is displayed. It is divided into several areas that provide a starting point for working with Access. It can be used to create a new database, open an existing database file, or access the Microsoft Office Online Web site. You want to create a new database.

Several methods can be used to create a new database. One method is to use one of the many templates that are provided by Microsoft as the basis for your new database. A **template** is a ready-to-use database that includes the data structure for the selected type of database. Another method is to start with a blank database that contains the basic database objects and then add your own content. A third is to copy or import data from another source into an Access database file. Finally, you can use a custom template that you created and saved as the basis for your new database.

Using the Getting Started with Microsoft Office Access page, you can create a new database by selecting a template design. The left side of the page displays the template categories. Currently, the Featuring category is selected and displays graphics of the featured templates in the middle of the page. Clicking on a different category in the list displays templates associated with that category. Although using a template is sometimes the fastest way to create a database, it often requires a lot of work to adapt the template to suit the needs of the existing data.

The Featuring category also provides access to the Blank Database template that includes the basic structure for a database file, but does not include a data structure that is specific to a type of database. You decide to create the club database from a blank database file.

2 Click 

in the New Blank Database section of the Getting Started window.

Your screen should be similar to Figure 1.2

Additional Information
Depending on your Windows settings, your screens may not display file extensions.

Additional Information
Windows files can have up to 255 characters in the file name. Names can contain letters, numbers, and spaces; the symbols \, /, ?, :, *, ", <, and > cannot be used. The file name can be entered in either uppercase or lowercase letters and will appear exactly as you type it.

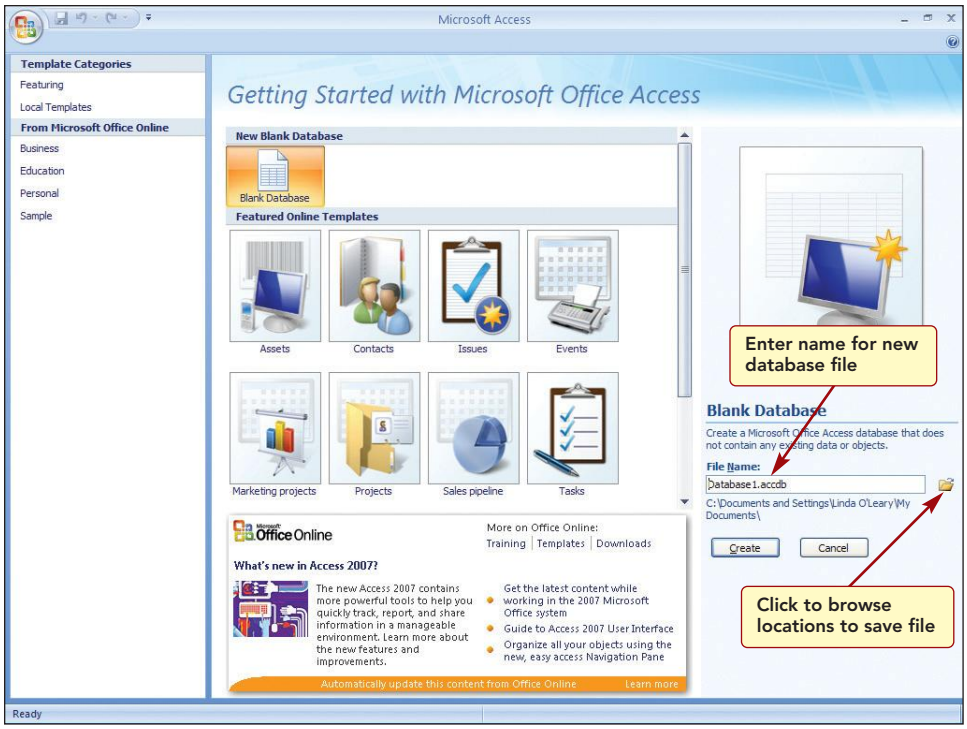


Figure 1.2

In the Blank Database section of the page, you need to enter a file name and specify the location on your computer where you want it saved. The File Name box displays Database1.accdb, the default database file name. The file extension .accdb identifies the file as an Access 2007 database.

3 Replace the text in the File Name text box with **Club Employees**.

Having Trouble?
If the default file name is not highlighted, triple-click on it to select the entire file name.

Additional Information
You do not need to type the file extension as Access will add it automatically for you.

Click  to browse locations.

Your screen should be similar to Figure 1.3

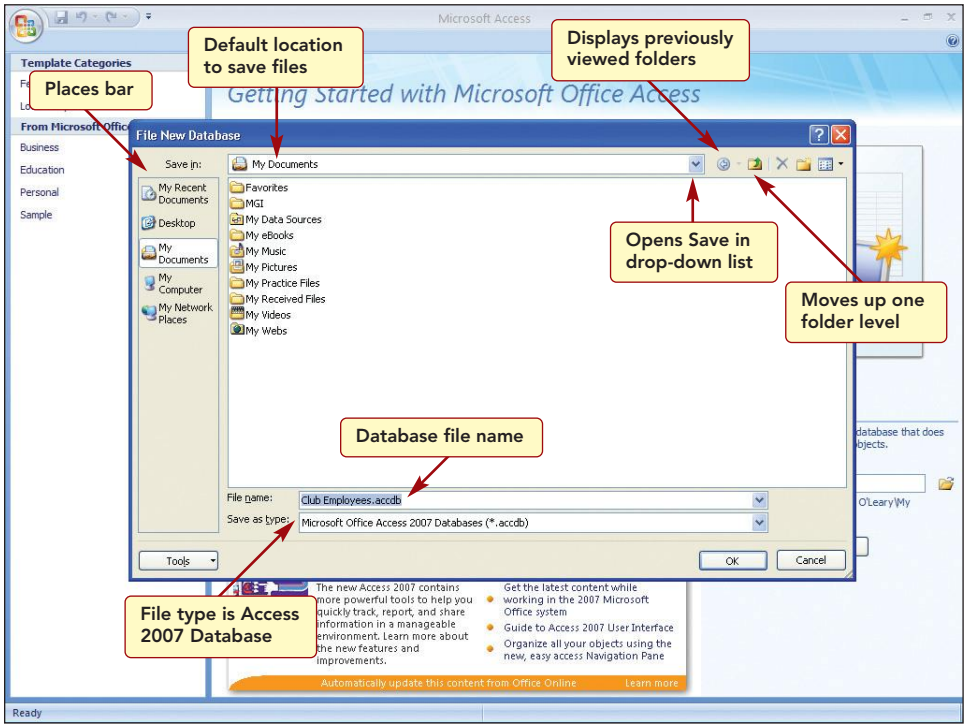


Figure 1.3

Having Trouble?
The default location, folders, and files displayed on your screen may be different from those shown here.

Having Trouble?
If you are using Windows Vista, the buttons in your dialog box will be different than those shown here.

In the File New Database dialog box, you need to select the location where you want the database file saved. The Save in drop-down list box displays the default folder, My Documents, as the location where the file will be saved. You can use this drop-down list to specify another location. You also can select the location to save from the Places bar along the left side of the dialog box. The icons bring up a list of recently accessed files and folders (History), the contents of the My Documents and Favorites folders, items on the Windows desktop, and the locations on a network. You also can click the Back button in the toolbar to return to folders that were previously opened and Up One Level to move up a level in the folder hierarchy.

The file list section of the dialog box displays the names of folders and database files in the default location. Only Access 2007 database (.accdb) file names are displayed because this is the selected file type in the Save As Type text box. In addition to the .accdb file type, Access database files also can be saved in several different file formats that have different file extensions. The file type you select determines the file extension that will be automatically added to the file name when the file is saved. The new file name you specified appears in the File Name text box.

More About

To learn how to save an Access database in another format, see "6 Managing and Maintaining Databases" in the More About appendix.

4 **Open the Save in drop-down list.**

Select the appropriate drive and folder where you will save your database files (check with your instructor if you are not sure).

Click OK **.**

Click Create **.**

Your screen should be similar to Figure 1.4

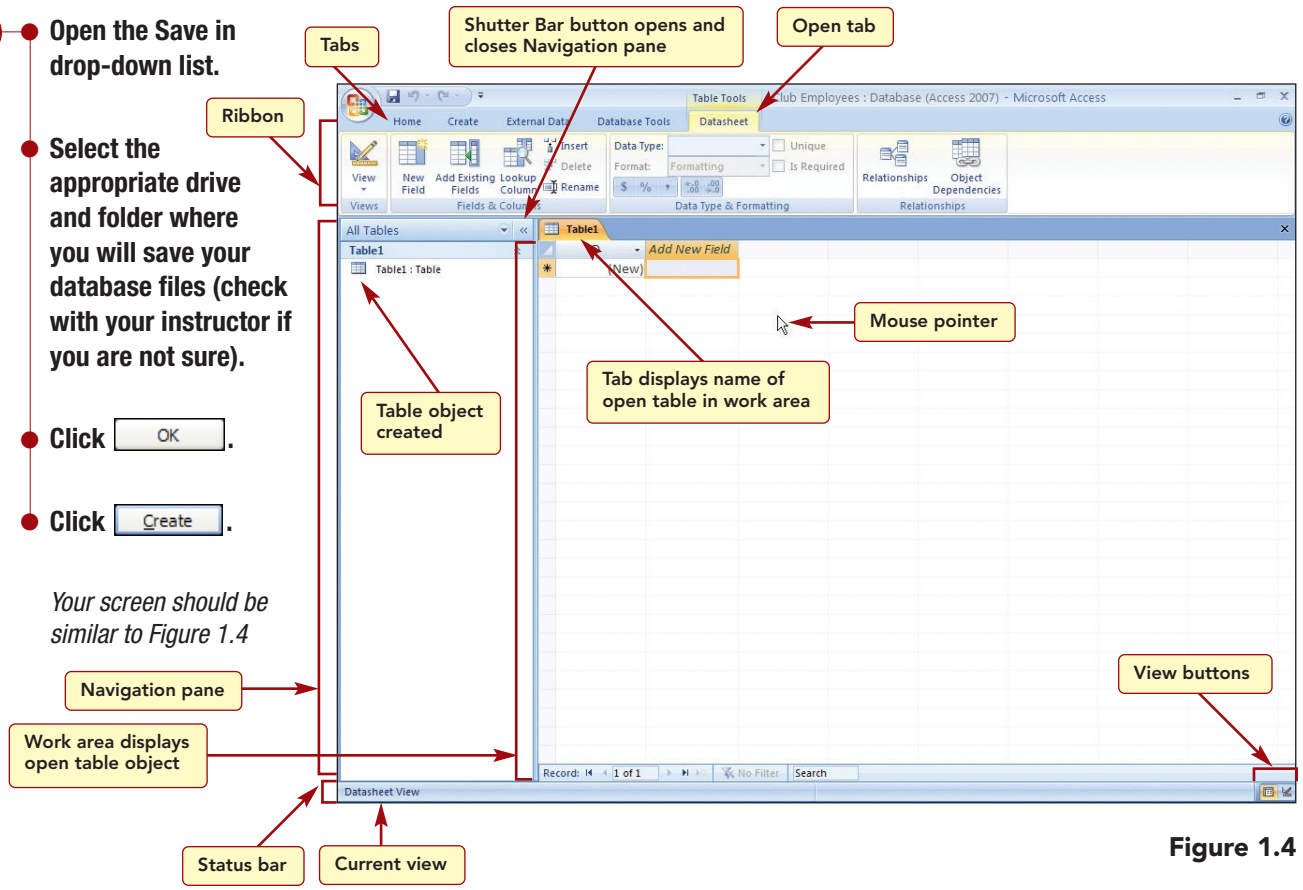


Figure 1.4

Having Trouble?
If your screen looks slightly different, this is because Access remembers settings that were on when the program was last used.

The blank database file is opened in the Access application window. The name of the database, Club Employees, followed by the application name appears in the window title bar.

Additional Information
Read "Common Office 2007 Interface Features" in the Introduction for more information about the File menu, Ribbon, galleries, and other features that are common to all Office applications.

Exploring the Access Window

The Access 2007 Ribbon, located below the title bar, currently consists of five tabs. These tabs contain the commands and features you will use to create and modify a database. Most tabs appear automatically as you perform different tasks and open different windows. The Table Tools Datasheet tab is open and contains buttons that are used to access basic database features.

The mouse pointer appears as on your screen. The mouse pointer changes shape depending upon the task you are performing or where the pointer is located in the window.

The large area below the Ribbon is the work area where different Access components are displayed as you are using the program. When the new database file is created, it includes one empty table named Table1. A table is one of several different database components or objects that can be included in the database file.

Concept 2

Object

2 An Access database is made up of several types of objects, such as a table or report, consisting of many elements. An **object** can be created, selected, and manipulated as a unit. The basic database objects are described below.

Object	Use
Table	Store data
Query	Find and display selected data
Form	View, add, and update data in tables
Report	Analyze and print data in a specific layout

The table object is the basic unit of a database and must be created first, before any other types of objects are created. Access displays each different type of object in its own window. You can open multiple objects from the same database file in the work area; however, you cannot open more than one database file at a time in a single instance of Access. To open a second database file, you need to start another instance of Access and open the database file in it.

The work area displays a tab containing the table name for the open table. It is used to switch between open objects in the work area. There is only one tab because only one object is open.

Additional Information
You will learn more about tables and the different database views shortly.

Just below the work area, the status bar provides information about the task you are working on and about the current Access operation. Currently, the left end of the status bar displays Datasheet view and the right end displays two buttons that are used to change the view. In addition, the status bar displays messages such as instructions to help you use the program more efficiently.

Additional Information
The items in the Navigation pane can be organized differently by using the menu at the top of the pane.

More About
To learn how to prevent the Navigation pane from appearing when you start Access, see "6 Managing and Maintaining Databases" in the More About appendix.

Using the Navigation Pane

The **Navigation pane** along the left edge of the work area displays all the objects in the database and is used to open and manage the objects. Because your database only contains one object, Table1, it is the only object listed in the pane. When there are many different objects, the pane organizes the objects into categories and groups within each category. It is used to quickly access the different objects.

The Navigation pane is always displayed, but can be collapsed to a bar to provide more space in the work area. The Shutter Bar close button «, located in the upper-right corner of the pane, is used to show or hide the pane.

1. Click « to close the Navigation pane.

Another Method
You also can press F11 to open/close the Navigation pane.

Your screen should be similar to Figure 1.5

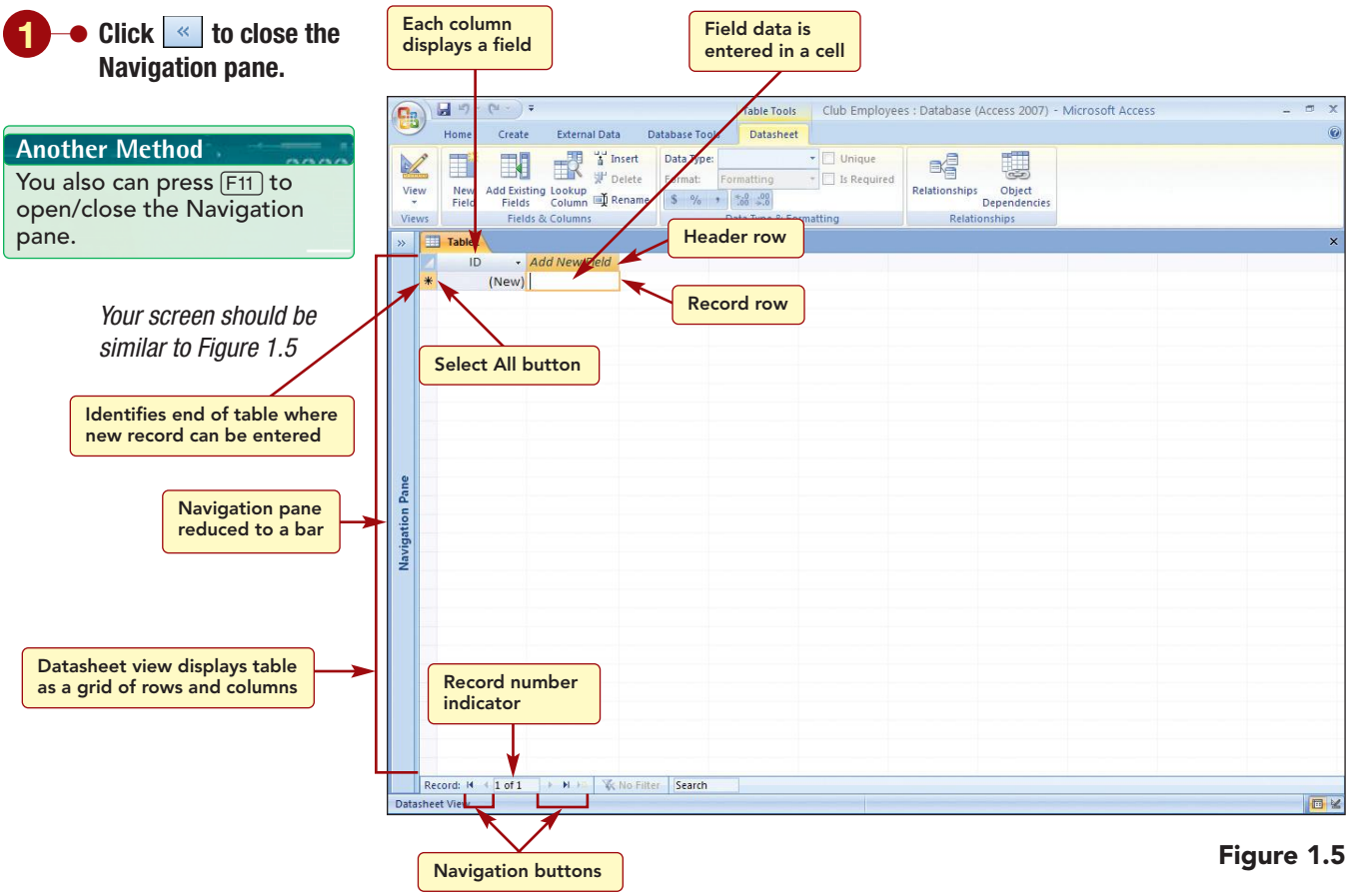


Figure 1.5

The Navigation pane is reduced to a bar along the left side of the window and the work area expands to fill the space. The pane can be easily displayed again by clicking ». You will learn more about using the Navigation pane throughout the labs.

Using Datasheet View

In anticipation of your entering information in the table, Access displays the blank table in Datasheet view, one of several different window formats, called **views,** that are used to display and work with the objects in a database. Each view includes its own Ribbon tab that includes commands that are designed to work with the object in that view. The available views change according to the type of object you are using. The basic views are described in the following table.

View	Purpose
Datasheet view	Provides a row-and-column view of the data in tables or query results.
Form view	Displays the records in a form.
Report view	Displays the table data in a report layout.
Design view	Used to create a table, form, query, or report. Displays the underlying design structure, not the data.
Layout view	Displays the object's data while in the process of designing the object.
Print Preview	Displays a form, report, table, or query as it will appear when printed.

Datasheet view is a visual representation of the data that is contained in a database table. It consists of a grid of rows and columns that is used to display each field of a table in a column and each record in a row. The field names are displayed in the **header row** at the top of the datasheet.

Below the header row is a blank row. The intersection of the row and column creates a **cell** where you will enter the data for the record. The square to the left of each row is the **Select All button.** It is used to select an entire record and appears colored to identify the **current record,** the record containing the insertion point and that will be affected by your next action. The * in the Select All button identifies the end of the table or where a new record can be entered.

Additional Information
Entering information in Datasheet view is very similar to working in a Microsoft Excel worksheet.

The bottom of the work area displays a record number indicator and navigation buttons. The **record number indicator** shows the number of the current record as well as the total number of records in the table. Because the table does not yet contain records, the indicator displays "Record: 1 of 1" in anticipation of your first entry. On both sides of the record number are the **navigation buttons,** which are used to move through records with a mouse. In addition, two buttons that are used to filter and search for data in a table are displayed. You will learn about using all these features throughout the text.

Defining Fields

Now you are ready to begin defining the fields for the table. You have already decided that the main table in this database will include the employee's basic information such as employee number, name, birth date, and address. Next, you need to determine what information you want to appear in each column (field) about the subject recorded in the table. For example, you know you want to include the employee's name. However, should the entire name be in a single column or should it appear as two separate columns: first name and last name? Because you may want to sort or search for information based on the employee's name, it is better to store the information in separate columns. Similarly, the address actually consists of four separate parts—address, city, state, and zip code—and it also makes sense to store them in separate columns.

Generally when deciding how to store the information about a subject in a table, break down the information into its smallest logical parts. If you combine more than one kind of information in a field, it is difficult to retrieve individual facts later.

A second factor that should be considered when adding fields to a table is to store only raw data, not the result of calculations, in the table. This is because you can have Access quickly perform the calculations when you want to see the result. This saves both time and space.

After looking at the information currently maintained in the personnel folder on each employee, you have decided to include the following fields in the table: Employee #, Hire Date, Last Name, First Name, Address, City, State, Zip, Home Phone, Birth Date, and Photo. The data for the first employee record you will enter is shown below.

Field Name	Data
Employee #	04731
Hire Date	August 19, 2001
Last Name	Marchant
First Name	Roberta
Address	564 Palm Avenue
City	Landis
State	CA
Zip	92120–3741
Home Phone	(507) 555–6707
Birth Date	May 18, 1980
Photo	Roberta.jpg

Entering Data

Notice that the first field in the table, ID, is already defined. This field is automatically included in each table when it is created. It automatically assigns a number to each record as it is added to a table and is useful for maintaining record order. The second column header displays Add New Field and is used to define a new field in the table.

In Datasheet view, you can enter data for a record and create a new field at the same time. The first field of data you will enter is the employee number, which is assigned to each employee when hired. Each new employee is given the next consecutive number, so that no two employees can have the same number. It is a maximum of five digits.

When you enter data in a record, it should be entered accurately and consistently. The data you enter in a field should be typed exactly as you want it to appear. This is important because any printouts of the data will display the information exactly as entered. It is also important to enter data in a consistent form. For example, if you decide to abbreviate the word "Avenue" as "Ave." in the Address field, then it should be abbreviated the same way in every record where it appears. Also be careful not to enter a blank space before or after a field entry. This can cause problems when using the table to locate information.

As you type, the insertion point shows your location in the entry. If you make a typing error, use the Backspace key to delete the characters back to the error and retype the entry.

1. **Click in the blank cell below the Add New Field column header.**
2. **Type 04731.**
3. **Press ↵Enter.**

Your screen should be similar to Figure 1.6

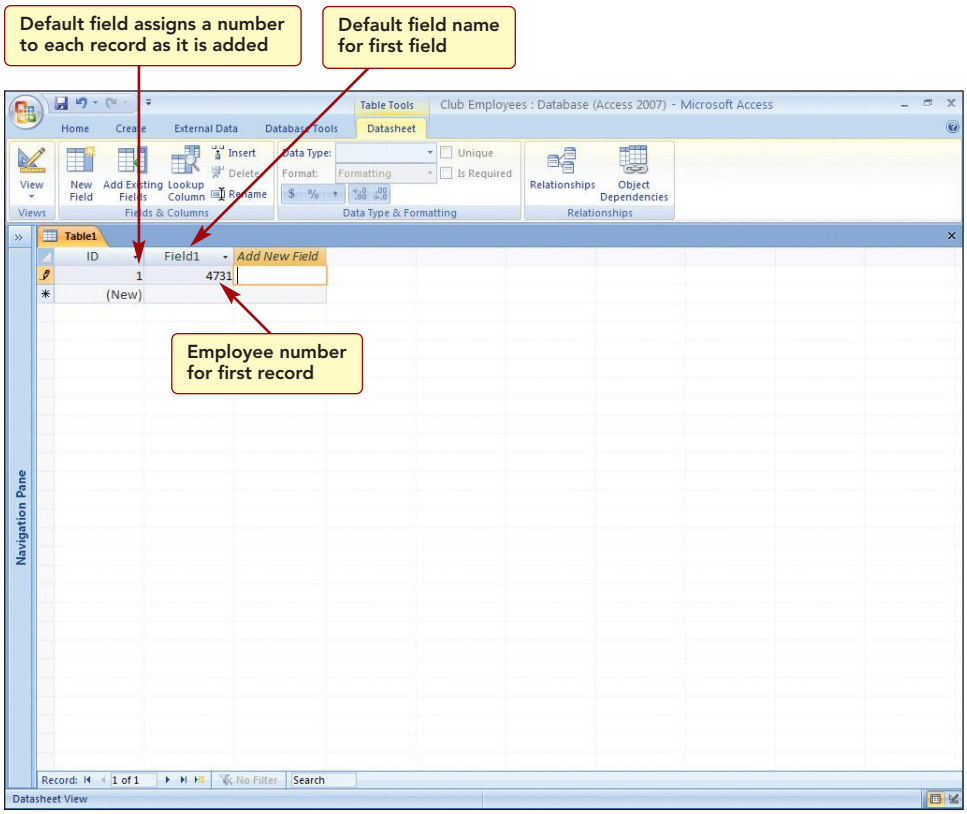


Figure 1.6

The employee number for the first record is entered in the table and Access is ready for you to enter the data for the next field. However, the number does not display the leading zero. You will learn the reason for this and how to correct it shortly.

The new field has been assigned the default field name of Field1. Also notice that the ID field displays the number 1 for the first record entered in the table.

Changing Field Names

Before entering more data, you want to replace the default field name with a more descriptive field name. A **field name** is used to identify the data stored in the field. A field name should describe the contents of the data to be entered in the field. It can be up to 64 characters long and can consist of letters, numbers, spaces, and special characters, except a period, an exclamation point, an accent grave (`), and brackets ([]). You also cannot start a field name with a space. It is best to use short field names to make the tables easier to manage.

1. **Double-click on the Field1 column header.**
2. **Type Employee # (be sure to include a space before the #).**

Another Method

You also can choose Rename Column from the column header's shortcut menu.

Additional Information

The field name can be typed in uppercase or lowercase letters. It will be displayed in your database table exactly as you enter it.

Your screen should be similar to Figure 1.7

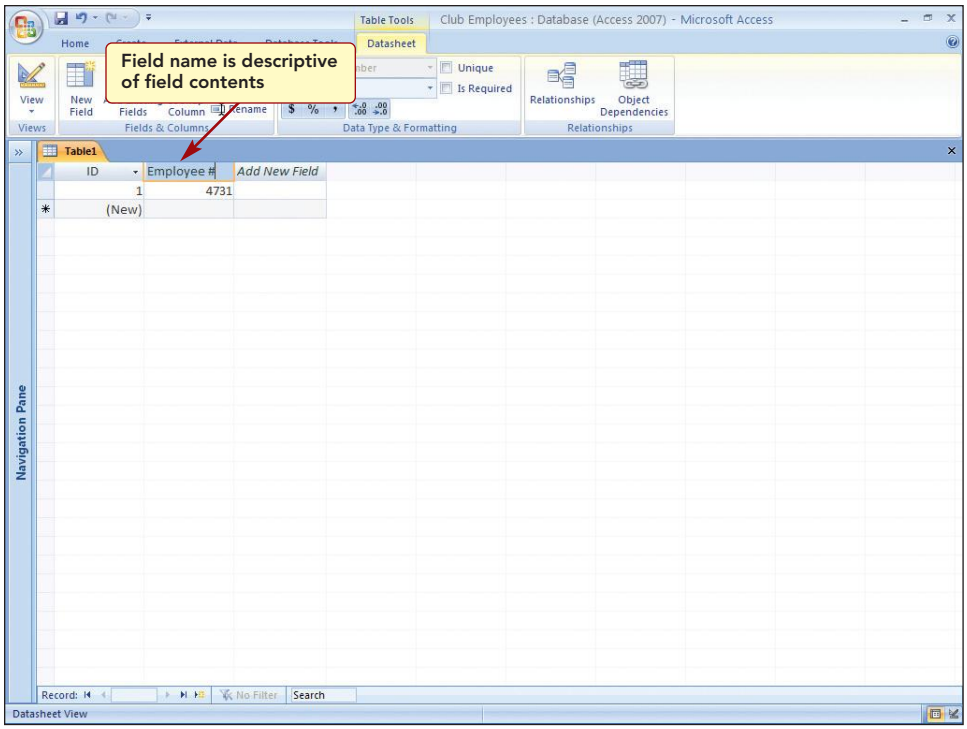


Figure 1.7

The highlighted text is deleted and replaced by the new field name you typed. You realize that "Employee ID" is the more common term used on company forms, so you decide to use this as the field name instead.

Editing Entries

As you enter text, you are bound to make typing errors that need to be corrected. Other types of changes you may want to make are to edit or update information. In this case, you want to edit the field name entry you are currently working on. When editing, you need to position the insertion point in the entry at the location where you want to make the change. To position the insertion point using the mouse, simply click at the location where you want it to appear.

Additionally, the keyboard keys shown in the table below also can be used to move the insertion point in an entry.

Key	Movement
→	One character to right
←	One character to left
↑	Up to current field in previous record
↓	Down to next line
Ctrl + →	One word to right
Ctrl + ←	One word to left
Home	Beginning of field in single-line field
End	End of field in single-line field
Ctrl + Home	Beginning of field in multiple-line field
Ctrl + End	End of field in multiple-line field

Additional Information

You can use the directional keys on the numeric keypad or on the dedicated directional keypad area. If using the numeric keypad, make sure the Num Lock feature is off; otherwise, numbers will be entered in the document. The Num Lock indicator light above the keypad is lit when on. Press Num Lock to turn it off.

Additional Information

These same key and mouse movement procedures can be used in all Access views.

Holding down a directional key or key combination moves the insertion point quickly in the direction indicated, saving multiple presses of the key. Many of the insertion point movement keys can be held down to execute multiple moves.

Depending on what you are doing, one method may be more efficient than another. For example, if your hands are already on the keyboard as you are typing, it may be quicker to use the keyboard rather than take your hands off to use the mouse.

Once the insertion point is in the correct position, you can use the Backspace or Delete key to remove text. The Backspace key removes a character or space to the left of the insertion point. The Delete key removes the character or space to the right of the insertion point.

In this case, the insertion point is already in the correct position and you just need to delete the character to the left of it.

1. **Press Backspace to delete the # symbol.**
2. **Type ID.**
3. **Press ↵Enter.**
4. **Click in the cell containing the Employee ID number.**

Your screen should be similar to Figure 1.8

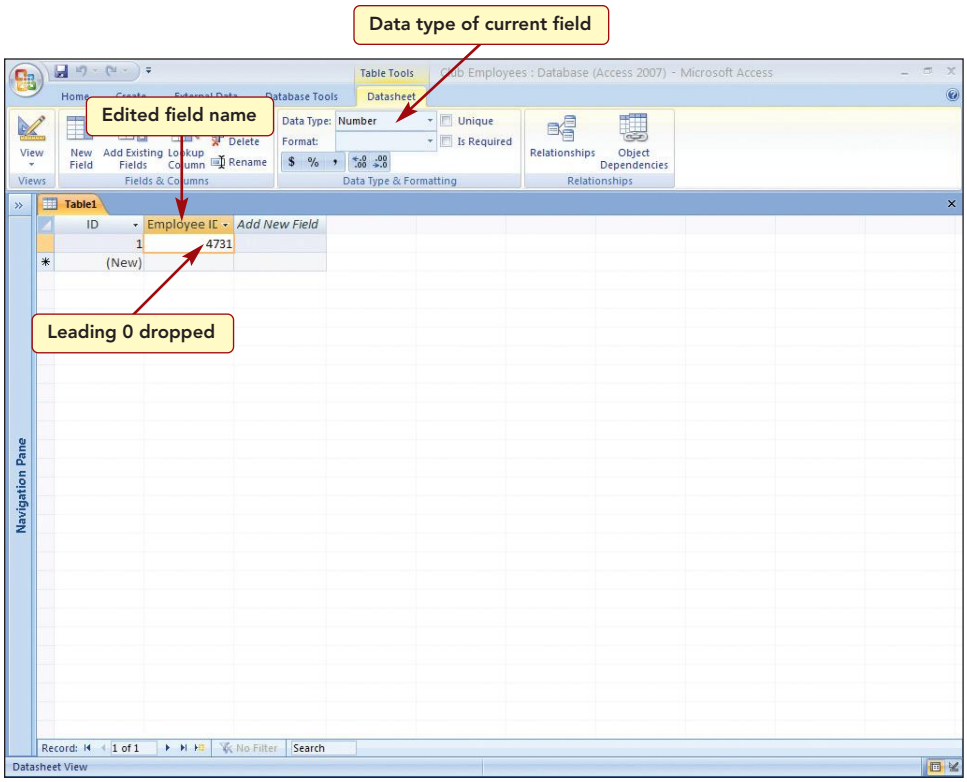


Figure 1.8

The field name has been completed and it is now easy to know what the data in that column represents.

Defining Data Type

Notice the leading 0 of the Employee ID number has been dropped. This is because Access automatically detects and assigns a data type to each field based upon the data that is entered. In this case, the field entry consisted of numbers only, and Access assigned the field a Number data type. This data type drops any leading zeros.

Concept 3

Data Type

3 The **data type** defines the type of data the field will contain. Access uses the data type to ensure that the right kind of data is entered in a field. It is important to choose the right data type for a field before you start entering data in the table. You can change a data type after the field contains data, but if the data types are not compatible, such as a text entry in a field whose data type accepts numbers only, you may lose data. The data types are described in the following table.

Data Type	Purpose
Text	Use in fields that contain alphanumeric data (words, combinations of words and numbers, and numbers that are not used in calculations). Text field entries can be up to 255 characters in length. Names and phone numbers are examples of Text field entries. Text is the default data type.
Memo	Use in fields where you want to store more than 255 characters of alphanumeric data. A memo field holds up to 1GB of characters or 2GB of storage, of which 65,535 characters can be displayed. Text in this field can be formatted.
Number	Use in fields that contain numeric data only and that will be used to perform calculations on the values in the field. Number of units ordered is an example of a Number field entry. Leading zeros are dropped. Do not use in fields involving money or that require a high degree of accuracy because number fields round to the next highest value. Fields that contain numbers only but will not be used in calculations are usually assigned a Text data type.
Date/Time	Use in fields that will contain dates and times. Access allows dates from AD January 1, 100, to December 31, 9999. Access correctly handles leap years and checks all dates for validity. Even though dates and times are formatted to appear as a date or time, they are stored as **serial values** so that they can be used in calculations. The date serial values are consecutively assigned beginning with 1, which corresponds to the date January 1, 1900, and ending with 2958465, which is December 31, 9999.
Currency	Use in number fields that are monetary values or that you do not want rounded. Numbers are formatted to display decimal places and a currency symbol.
AutoNumber	Use when you need a unique, sequential number that is automatically incremented by one whenever a new record is added to a table. After a number is assigned to a record, it can never be used again, even if the record is deleted.
Yes/No	Use when the field contents can only be a Yes/No, True/False, or On/Off value. Yes values are stored as a 1 and No values as 0 so that they can be used in expressions.
OLE Object	Use in fields to store an object such as a graphic (picture), sound, document, or graph. The object is converted to a bitmap image and displayed in the table field, form, or report. An OLE server program must be on the computer that runs the database in order to render the object. Generally, use the Attachment field type rather than OLE Object because the objects are stored more efficiently and it does not require the supporting program.
Hyperlink	Use when you want the field to store a link to an object, document, Web page, or other destinations.
Attachment	Use to add multiple files of different types to a field. For example, you could add a photograph and set of resumes for each employee. Unlike OLE object fields, the files are not converted to bitmap images and additional software is not needed to view the object, thereby saving space. Attachments also can be opened and edited from within Access in their parent programs.

More About

To learn more about the Memo, Currency, Number, and Yes/No field types, see "2 Creating and Formatting Database Elements" in the More About appendix.

Additional Information

If Access does not have enough information to determine the data type, it sets the data type to Text.

Notice the Data Type box in the Data Type & Formatting group shows the current data type for the field is Number. Access accurately specified this data type because the Employee ID field contains numbers. However, unless the numbers are used in calculations, the field should be assigned the Text data type. This designation allows other characters, such as the parentheses or hyphens in a telephone number, to be included in the entry. Also, by specifying the type as Text, leading zeros will be preserved.

You need to override the data type decision and change the data type for this field to Text.

1. **Open the** Data Type: Number **drop-down list in the Data Type & Formatting group.**
2. **Choose Text.**
3. **Click at the beginning of the Employee ID entry to place the insertion point and type 0.**
4. **Press End to move to the end of the entry.**
5. **Press → to move to the next column.**

Your screen should be similar to Figure 1.9

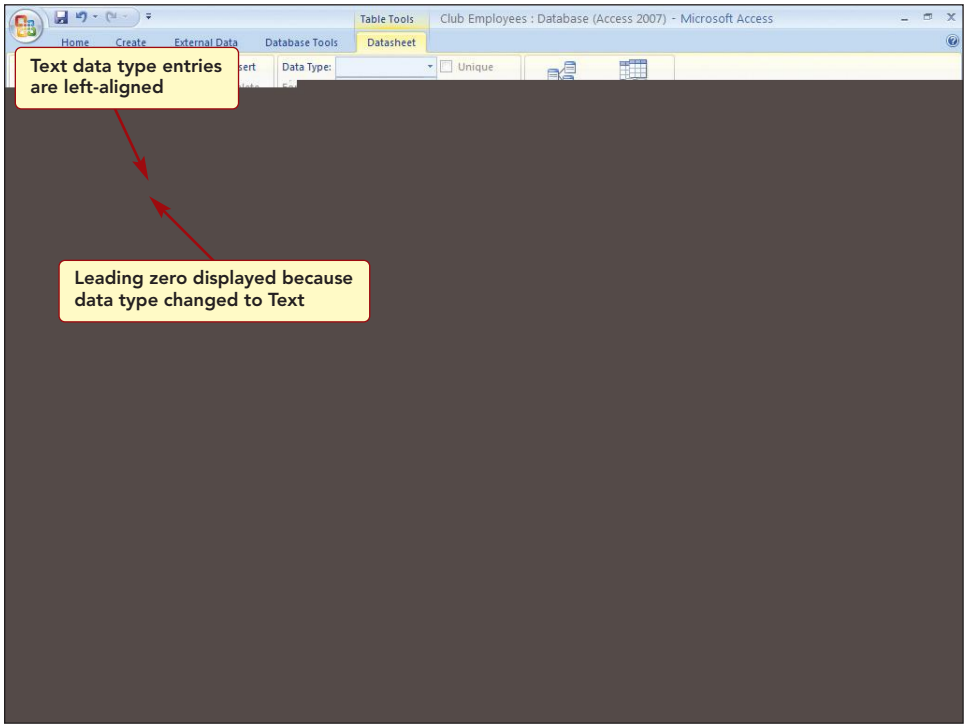


Figure 1.9

Additional Information

The Data Type list also contains a Lookup Wizard option, which is not actually a data type but instead is used to create lookup fields that let you choose from a list of values you enter or that are from another table or query.

The leading zero is now correctly displayed. Also notice that the entry is now left-aligned in the cell space whereas it was right-aligned when the data type was set to Number. Many data types also include formatting settings that control the appearance of the data in the field. In this case, the Text field format is to align the text with the left edge of the cell space. You will learn more about formatting later in the lab.

Now you are ready to enter the data for the next field, Hire Date.

2. **Type Aug 19, 2001.**
3. **Click Rename in the Fields & Columns group.**
4. **Type Hire Date.**
5. **Press Enter.**
6. **Click on the hire date.**

Your screen should be similar to Figure 1.10

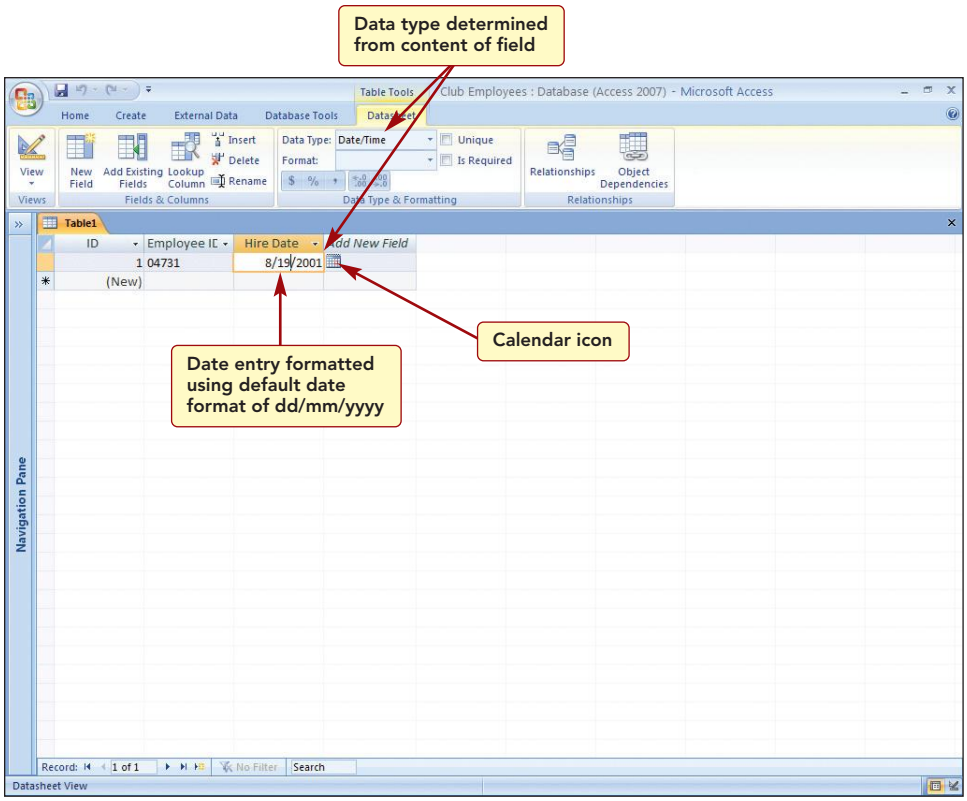


Figure 1.10

Additional Information

The calendar icon displays the month calendar for that date when you click on it.

Access correctly determined that the entry is a Date type and displays the date using the default date format of mm/dd/yyyy.

Using Field Templates

The next few fields you need to enter are for the employee name and address information. Another way you can specify field names is to select them from a list of predefined fields called **field templates.** Each field template definition includes a field name, a data type, and other settings that control the appearance and behavior of the field.

First you will add a field for the employee's last name.

1 Click  in the Fields & Columns group.

Your screen should be similar to Figure 1.11

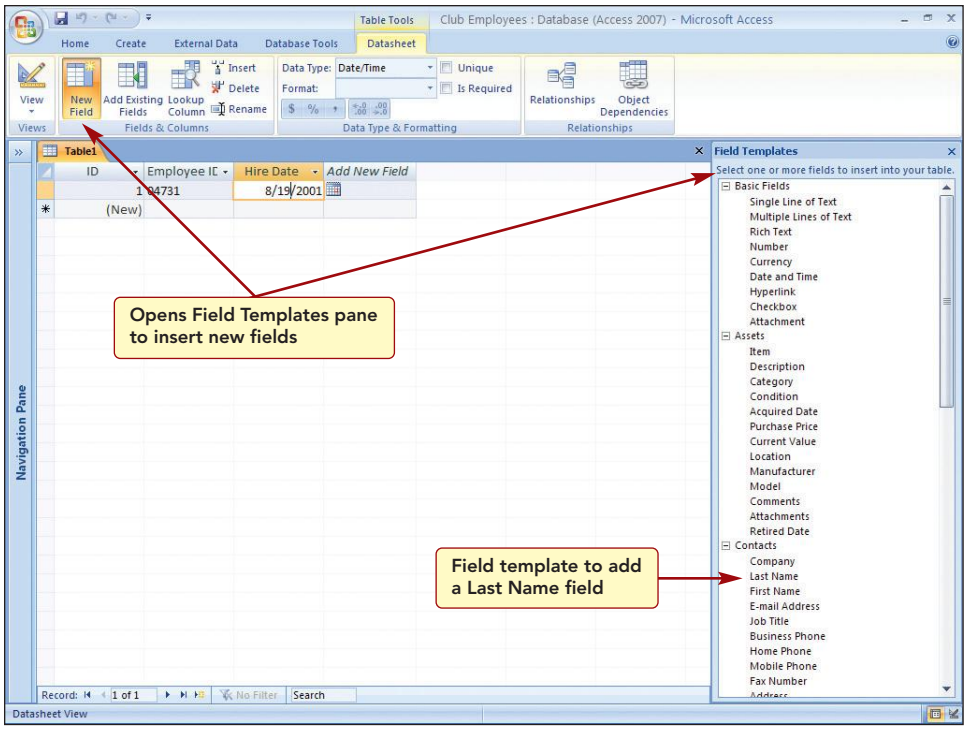


Figure 1.11

From the Field Templates pane, you can select and drag the field name to the table. When the insertion bar appears where you want the new field inserted, drop the field in position. You can also double-click on the field name and it will be inserted in the next empty field column in the datasheet.

2 Double-click Last Name in the Contacts section of the Field Templates list.

Your screen should be similar to Figure 1.12

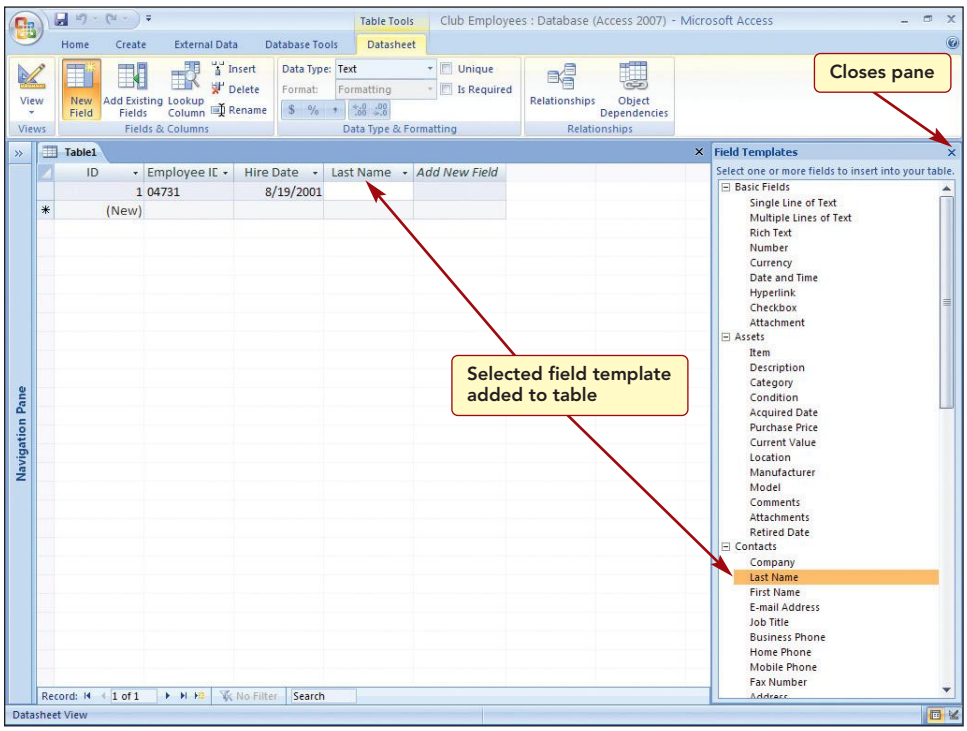


Figure 1.12

The Last Name field was inserted in the datasheet following the last defined field in the datasheet. It has a data type of Text. Next you will add the remaining address fields. Multiple field templates can be selected and inserted into the datasheet at the same time.

3 **Select the First Name, Address, City, State/Province, and Zip/Postal Code field names.**

Having Trouble?
Hold down Ctrl while selecting multiple field templates.

- **Drag them into the datasheet and release the mouse pointer when the insertion bar appears after the Last Name column.**
- **Move to the Add New Field column and double-click the Home Phone field to add it at that location.**
- **Click ✕ in the title bar of the Field Templates pane to close it.**
- **Move the horizontal scroll bar to the left.**

Your screen should be similar to Figure 1.13

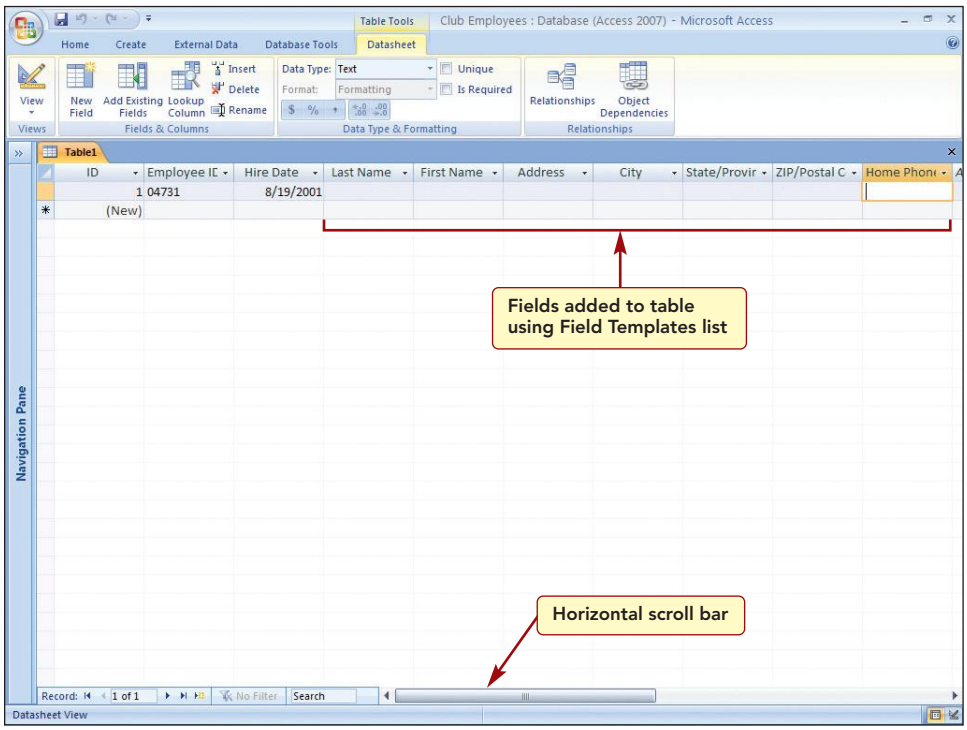


Figure 1.13

Using a field template saves time and provides the basis from which you can start. Once inserted, it can be modified like any other field name. Notice a horizontal scroll bar is displayed at the bottom of the work area. This is because there are more fields in the datasheet than can be viewed in the space. It is used to scroll the datasheet to see fields that are not currently visible.

Switching Views

Next, you will switch to Design view. This view makes it easier to focus on the structure of the table because it displays information about the fields only, not the data in the table.

You can easily switch between views using the button in the Ribbon. The graphic in the button changes to indicate the view that will be displayed when selected. Currently the button displays the graphic for Design view. If the view you want to change to is displayed in the button, you can simply click on the button to change to that view. Otherwise, you can open the View button's drop-down list and select the view you want to use. Before you can change views, you will be asked to save the table.

1. Click » to open the Navigation pane.
2. Click Design View in the Views group.

Another Method

You also can click View to open the View drop-down menu and choose Design View or click Design view in the status bar.

Your screen should be similar to Figure 1.14

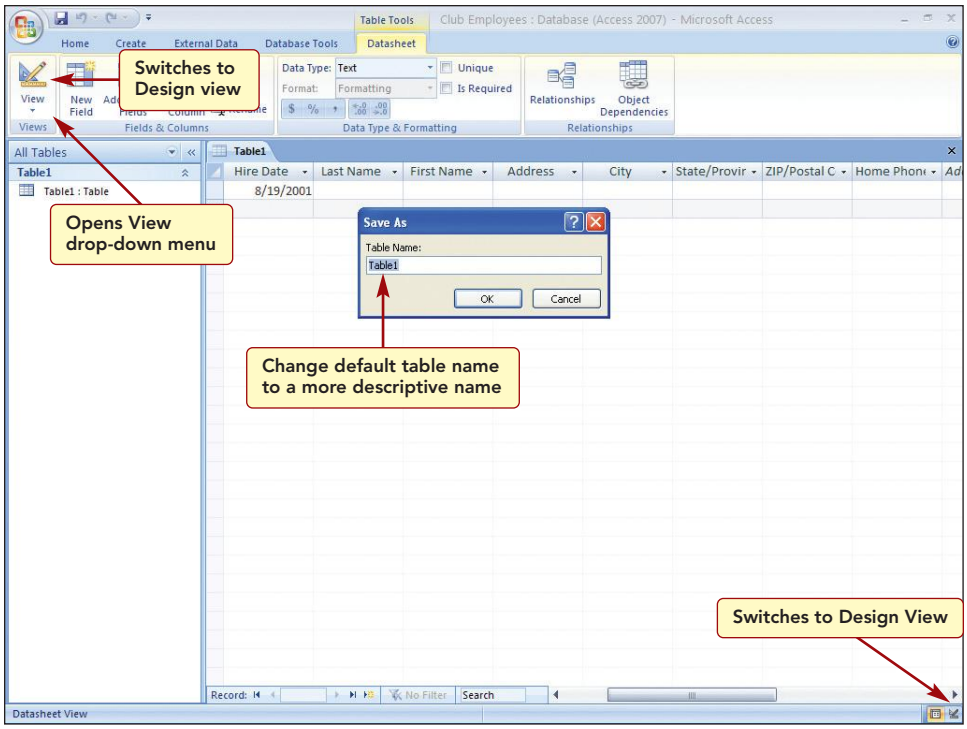


Figure 1.14

Additional Information

You also could click Save in the Records group of the Home tab, or use the keyboard shortcut Shift + Enter, or click Save in the Quick Access Toolbar to save the changes to the table at any time.

The first time you switch views, you are asked to save the table design by naming it. In the Save As dialog box, you want to replace the default name, Table1, with a more descriptive name. A table name follows the same set of standard naming conventions or rules that you use when naming fields. It is acceptable to use the same name for both a table and the database, although each table in a database must have a unique name. You will save the table using the table name Employee Records.

2. Type Employee Records.
3. Click OK.

Your screen should be similar to Figure 1.15

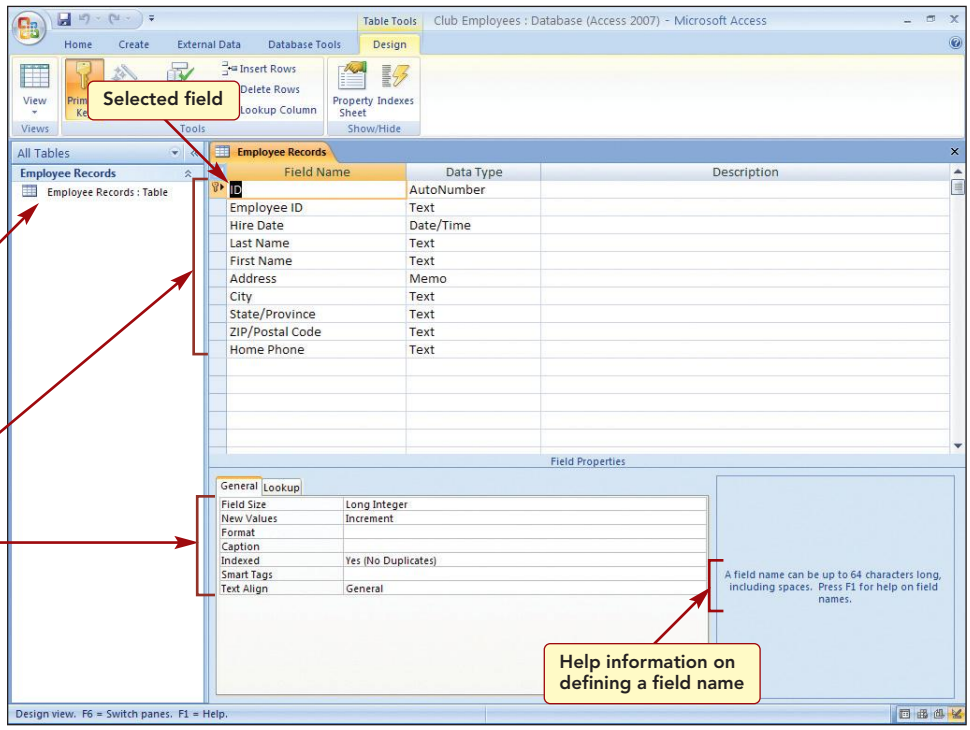


Figure 1.15

The table structure is saved with the database file and the new table name appears in the Navigation pane. You have created a table named Employee Records in the Club Employees database file.

Using Design View

Design view displays the structure of the table, not the table data. Therefore, it is used to make changes to the layout and fields in the table only. The Table Tools Design tab is displayed and open. The upper section consists of a field definition grid that displays the field names, the data type associated with each field, and an area to enter a description of the field. The lower section displays the properties associated with each field and a Help box that provides information about the current task.

Additional Information
You can get more Help information about the current selection by pressing F1 to open Access Help.

Concept 4

Field Property

4 A **field property** is a characteristic that helps define the appearance and behavior of a field. Each field has a set of field properties associated with it, and each data type has a different set of field properties. Setting field properties enhances the way your table works. Some of the more commonly used properties and their functions are described in the following table.

Field Property	Description
Field Size	Sets the maximum number of characters that can be entered in the field.
Format	Specifies the way data displays in a table and prints.
Input Mask	Simplifies data entry by controlling the data that is required in a field and the way the data is to be displayed.
Caption	Specifies a field label other than the field name that is used in queries, forms, and reports.
Default Value	Automatically fills in a certain value for this field in new records as you add to the table. You can override a default value by typing a new value into the field.
Validation Rule	Limits data entered in a field to values that meet certain requirements.
Validation Text	Specifies the message to be displayed when the associated Validation Rule is not satisfied.
Required	Specifies whether a value must be entered in a field.
Allow Zero Length	Specifies whether an entry containing no characters is valid. This property is used to indicate that you know no value exists for a field. A zero-length string is entered as "" with no space between the quotation marks.
Indexed	Sets a field as an index field (a field that controls the order of records). This speeds up searches on fields that are searched frequently.

More About



For information on other field properties, see "2 Creating and Formatting Database Elements" in the More About appendix.

The first field in the field definition grid, ID, is the selected field or **current field** and will be affected by any changes you make. It has a data type of AutoNumber. The properties associated with the current field are displayed in the Field Properties section.

You will look at the properties associated with the first field you added to the table. Positioning the insertion point in any column of the field definition grid will select that field and display the associated field properties.

1 **Select Employee ID.**

Your screen should be similar to Figure 1.16

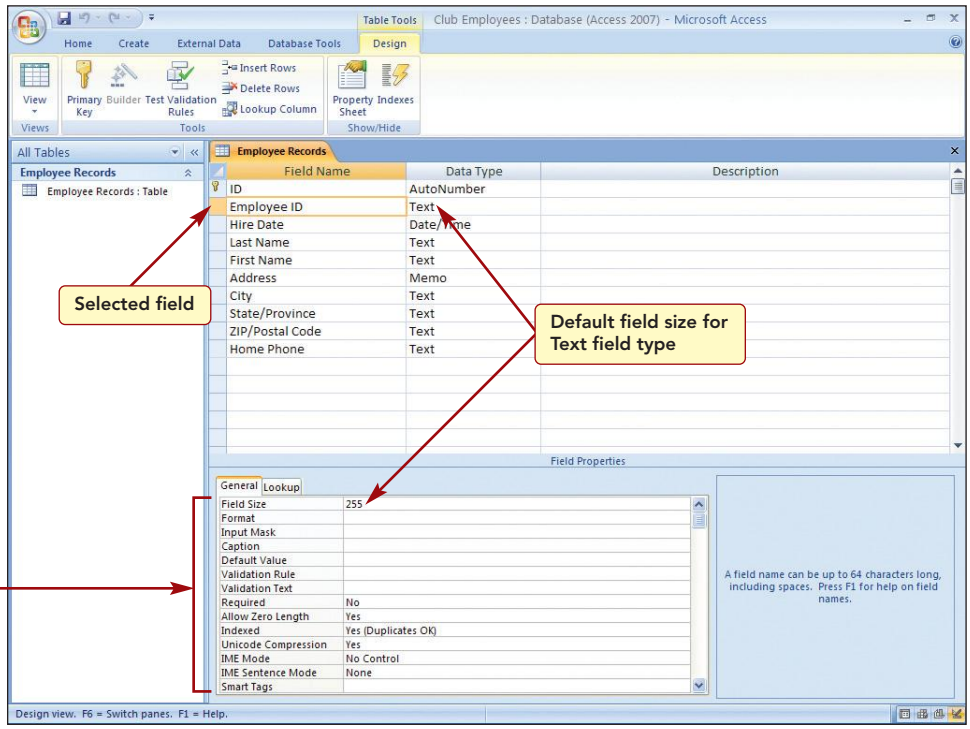


Figure 1.16

The data type of this field is Text and the default properties associated with a Text data type are displayed in the Field Properties area. Although some of the properties are the same as those for the AutoNumber data type, most are different. Access sets the field size for a Text field to 255 characters. It also sets the Required property to no, which allows the field to be blank. The Allow Zero Length property is set to yes, which allows entries with no characters. The Indexed property is also set to yes, meaning indexing is on, and duplicate entries are allowed in the field, as, for example, the same name could be entered in the Name field of multiple records. All these settings seem appropriate, except for the field size, which is much too large.

Modifying Field Properties

Although Access uses only the amount of storage space necessary for the text you actually store in a Text field, setting the field size to the smallest possible size can decrease the processing time required by the program. Additionally, if the field data to be entered is a specific size, setting the field size to that number restricts the entry to the maximum number.

Because the employee number will never be more than five digits long, you will change the field size from the default of 255 to 5. Another way to edit text is to select (highlight by dragging or double-clicking) a character or characters (including complete words and sentences) and press the Delete key to erase the selection.

1 **Click the Field Size property text box.**

Another Method

You also can press the F6 key to switch between the upper and lower areas of the Design window.

- **Double-click 255 to select it.**
- **Type 5 to replace the default entry.**

Additional Information

You can cancel changes you are making in the current field at any time before you move on to the next field. Just press Esc, and the original entry is restored.

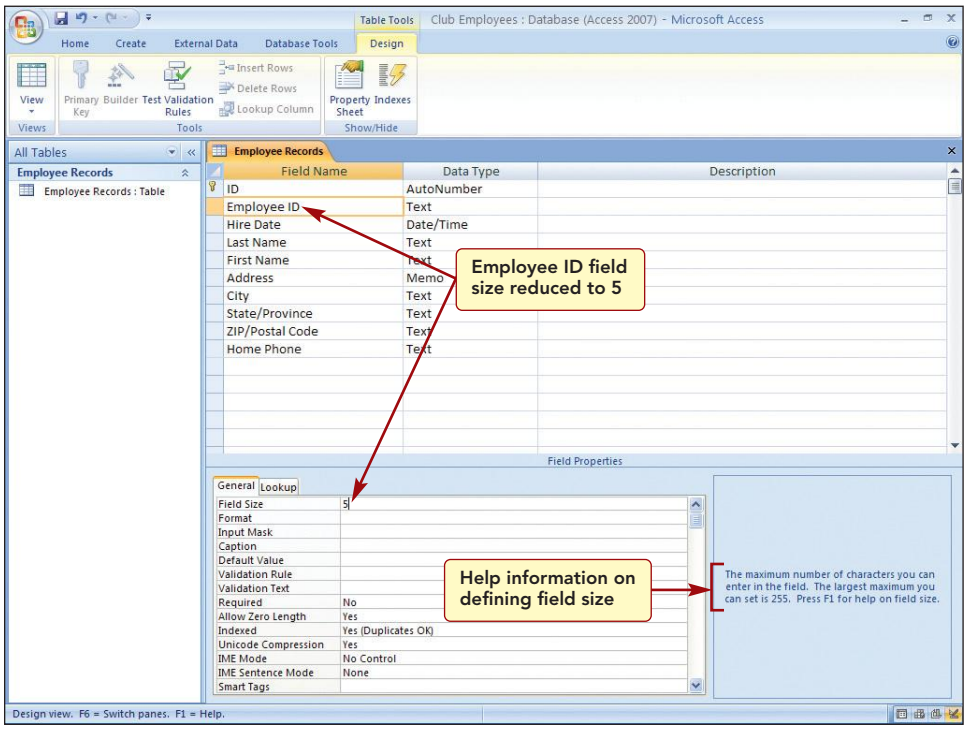


Figure 1.17

Your screen should be similar to Figure 1.17

The maximum number of characters that can be entered in this field is now restricted to 5. Notice the Help box displays a brief description of the selected property.

Likewise, you will adjust the field sizes of several other fields.

2 **Change the field sizes to those shown for the fields in the following table.**

Field	Size
Last Name	25
First Name	25
City	25
ZIP/Postal Code	10
Home Phone	15

Your screen should be similar to Figure 1.18

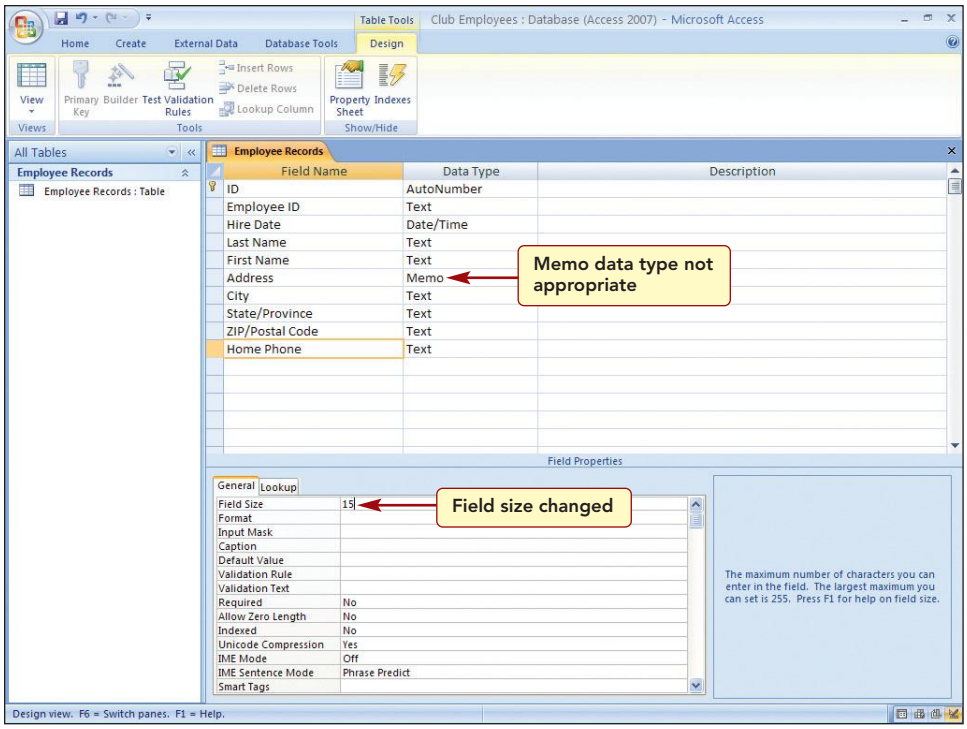


Figure 1.18

Changing Data Type

As you look at the field definitions, you see that the Address field type was set to Memo by the field template. This setting allows text entries longer than 255 characters and lets you add formatting to the text, such as bold or italics. You do not feel this data type is appropriate for the field and will change it to Text with a field size of 50.

1 **Click in the Data Type column for the Address field.**

Click ▼ **to open the drop-down list and choose Text.**

Change the field size to 50.

Your screen should be similar to Figure 1.19

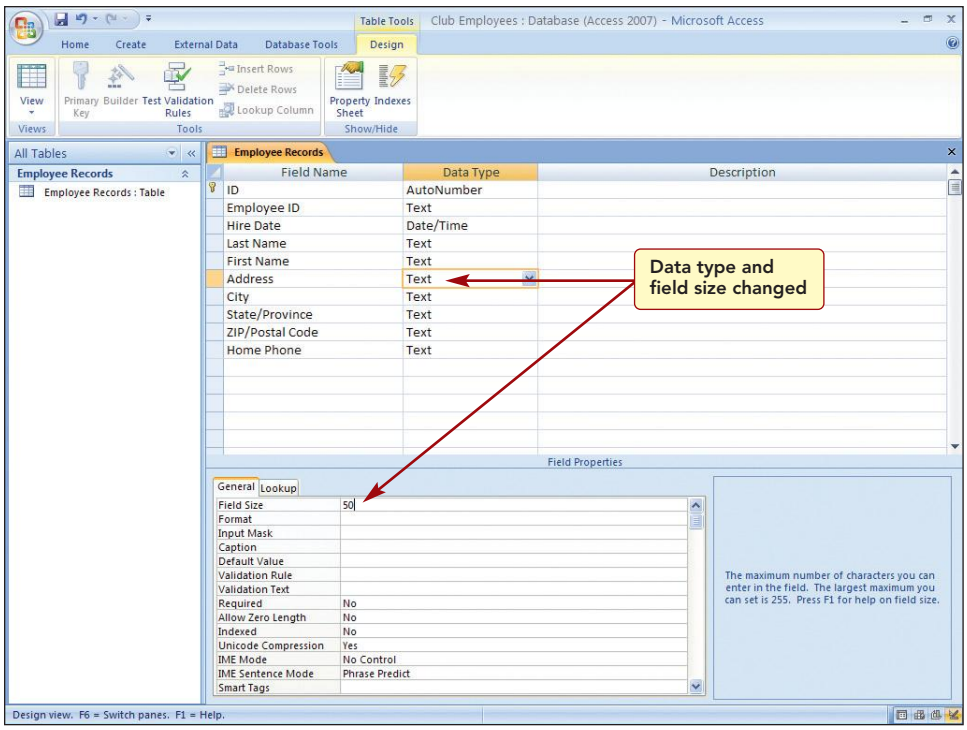


Figure 1.19

Notice that even though this field has a text data type, the property settings are different. For example, the Allow Zero Length and Indexed properties are both set to No. This is because the fields were defined using field templates that included these settings.

Editing Field Names

As you continue to look over the fields, you decide to change several of the field names that were assigned when you selected the field templates.

1. **Change the State/Province field name to State.**
2. **Change the ZIP/Postal Code field name to ZIP Code.**

Having Trouble?
Double-click on the field name to select it.

Your screen should be similar to Figure 1.20

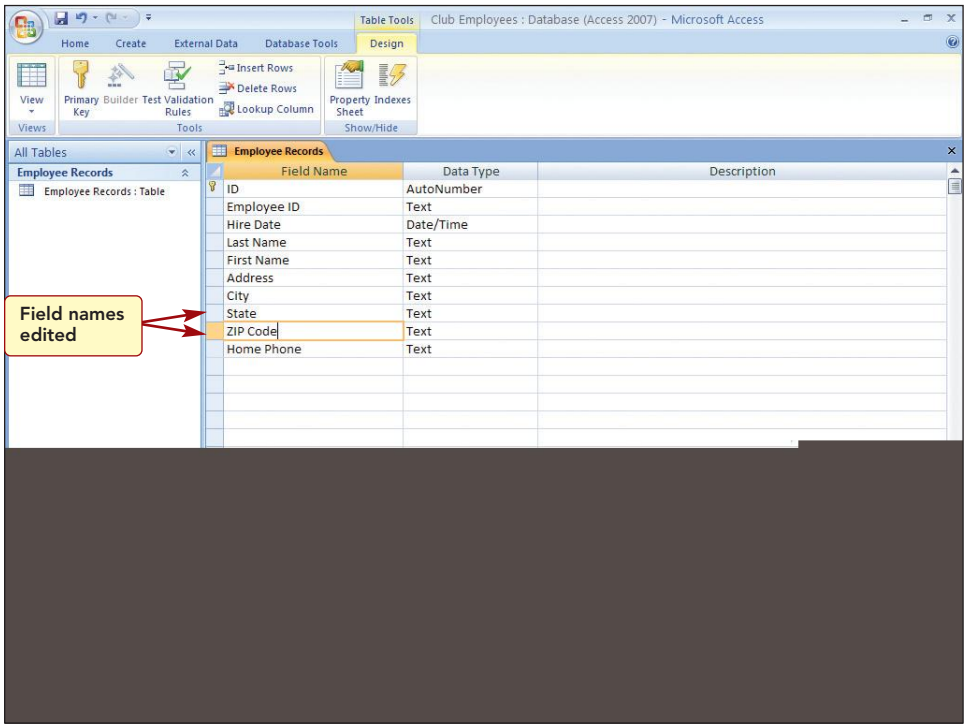


Figure 1.20

Defining a Primary Key Field

The next change you want to make is to define the Employee ID field as a primary key field.

Concept 5

Primary Key

5 A **primary key** is a field that uniquely identifies each record and is used to associate data from multiple tables. To qualify as a primary key field, the data in the field must be unique for each record. For example, a Social Security Number field could be selected as the primary key because the data in that field is unique for each employee. Other examples of a primary key field are parts numbers or catalog numbers. (One example of a field that should not be used as the primary key is a name field, because more than one person can have the same last or first name.) A second requirement is that the field can never be empty or null. A third is that the data in the field never, or rarely, changes.

A primary key prevents duplicate records from being entered in the table and is used to control the order in which records display in the table. This makes it faster for databases to locate records in the table and to process other operations.

Most tables have at least one field that is selected as the primary key. Some tables may use two or more fields that, together, provide the primary key of a table. When a primary key uses more than one field, it is called a **composite key**.

More About



For information about defining multifield primary keys, see "1.3 Add, Set, Change, or Remove Primary Keys" in the More About appendix.

Notice the  icon that is displayed to the left of the ID field. This indicates that this field is a primary key field. You want to define the Employee ID field as the primary key field so that duplicate employee ID numbers will not be allowed.

1 **Click on the Employee ID field name.**

Click  **in the Tools group.**

Your screen should be similar to Figure 1.21

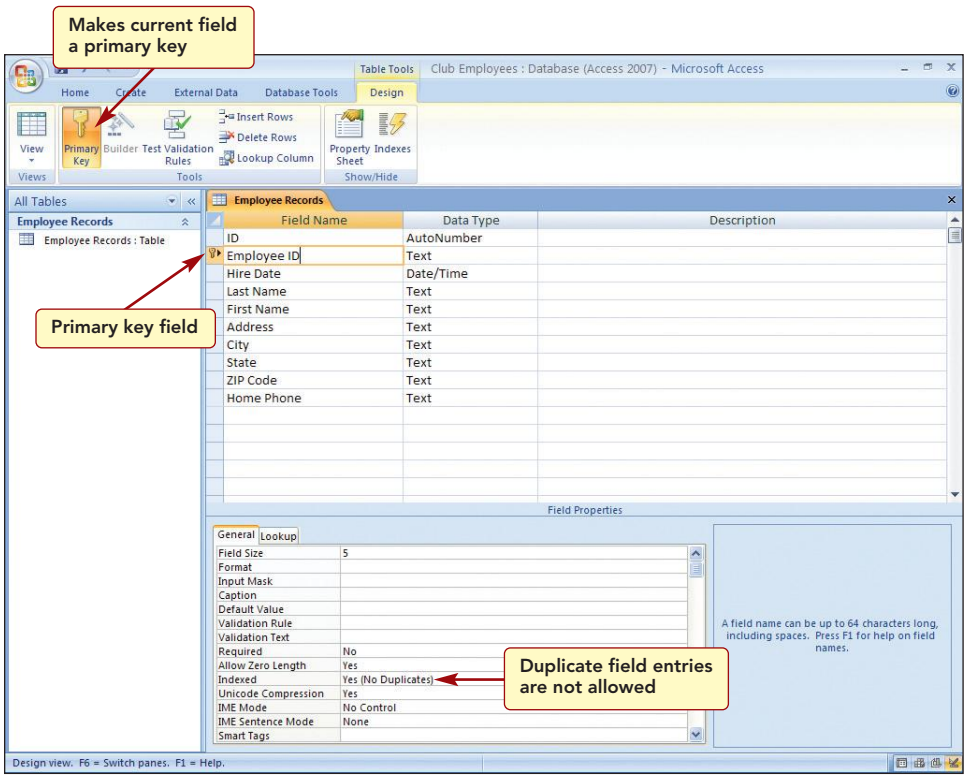


Figure 1.21

Notice the Indexed property setting for this field has changed to Yes (No Duplicates) because the field is defined as the primary key field. This setting prohibits duplicate values in a field. Also, the primary key status has been removed from the default ID field.

Entering a Field Description

To continue defining the Employee ID field, you will enter a brief description of the field. Although it is optional, a field description makes the table easier to understand and update because the description is displayed in the status bar when you enter data into the table.

1. **Click the Description text box for the Employee ID field.**
2. **Type Unique five-digit number assigned to each employee.**

Additional Information

The Description box scrolls horizontally as necessary to accommodate the length of the text entry. The maximum length is 255 characters.

Your screen should be similar to Figure 1.22

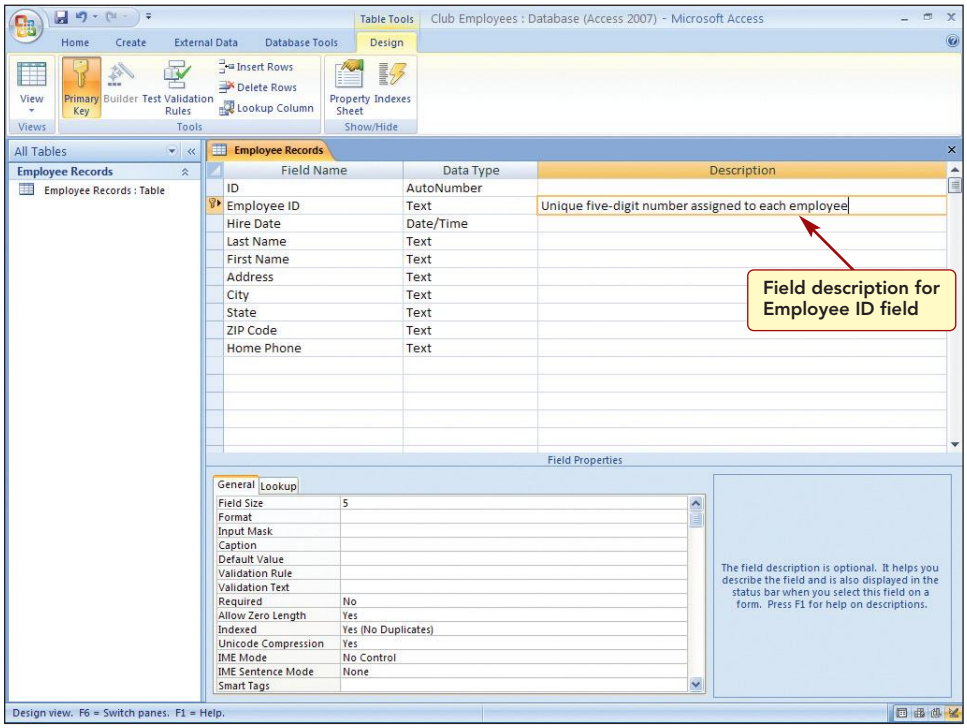


Figure 1.22

You also want to add field descriptions to several other fields. As you do, the Property Update Options button appears. Clicking on this button opens a menu whose option will update the description in the status bar everywhere it is used.

2 **Add descriptions to the fields shown in the table below.**

Your screen should be similar to Figure 1.23

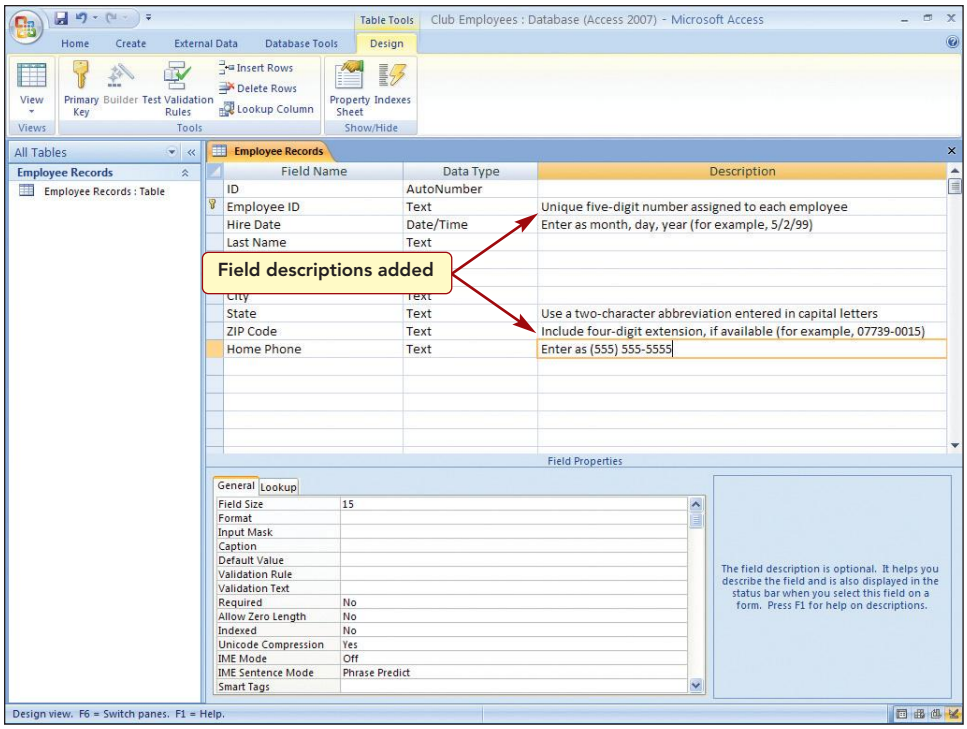


Figure 1.23

Field	Description
Hire Date	Enter as month, day, year (for example, 5/2/99)
State	Use a two-character abbreviation entered in capital letters
ZIP Code	Include four-digit extension, if available (for example, 07739-0015)
Home Phone	Enter as (555) 555-5555

Additional Information

In a table that contains a lot of data, it is a good idea to create a backup copy of the table before you delete a field in case you need to recover the deleted data.

Deleting a Field

Because the ID field essentially duplicates the purpose of the Employee ID field, you will delete the ID field. Deleting a field permanently removes the field column and all the data in the field from the table.

1. **Select the ID field.**
2. **Click Delete Rows in the Tools group.**
3. **Click Yes in response to the advisory messages.**

Your screen should be similar to Figure 1.24

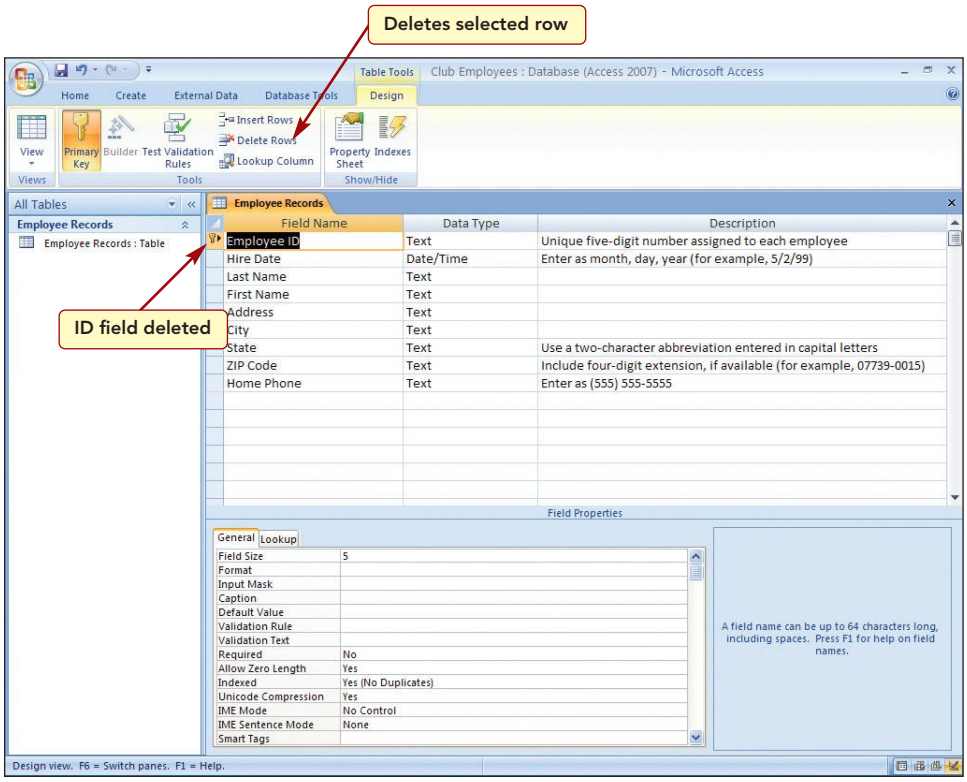


Figure 1.24

Another Method

You also can delete a field in Datasheet view by choosing Delete Column from the shortcut menu or Delete in the Fields & Columns group of the Table Tools Datasheet tab for the column you want to delete.

The field is permanently removed from the table.

Defining Additional Fields

You still need to add two fields to the table: one for the employee's date of birth and the other to display the employee photo. You will add the new fields and define their properties in Design view.

1. **Click in the blank Field Name row below the Home Phone field name.**

- **Type Birth Date.**
- **Press Enter, Tab, or → to move to the Data Type column.**
- **Open the Data Type drop-down list and choose Date/Time.**

Another Method

You also can enter the data type by typing the first character of the type you want to use. For example, if you type D, the Date/Time data type will be automatically selected and displayed in the field.

- **Enter the field description Enter as month, day, year (for example, 5/2/74).**

Your screen should be similar to Figure 1.25

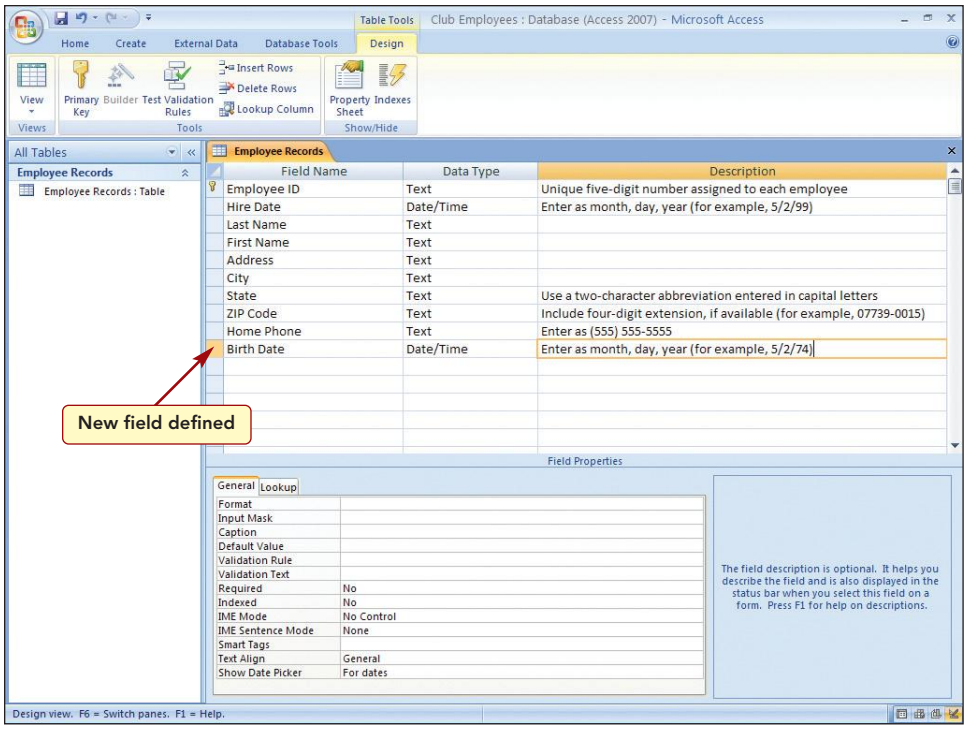


Figure 1.25

The default field properties for the selected data type are displayed. Because the format line is blank, you decide to check the format to make sure that the date will display as you want.

2 **Click in the Format property box.**

Click ▼ **to open the drop-down list of Format options.**

Your screen should be similar to Figure 1.26

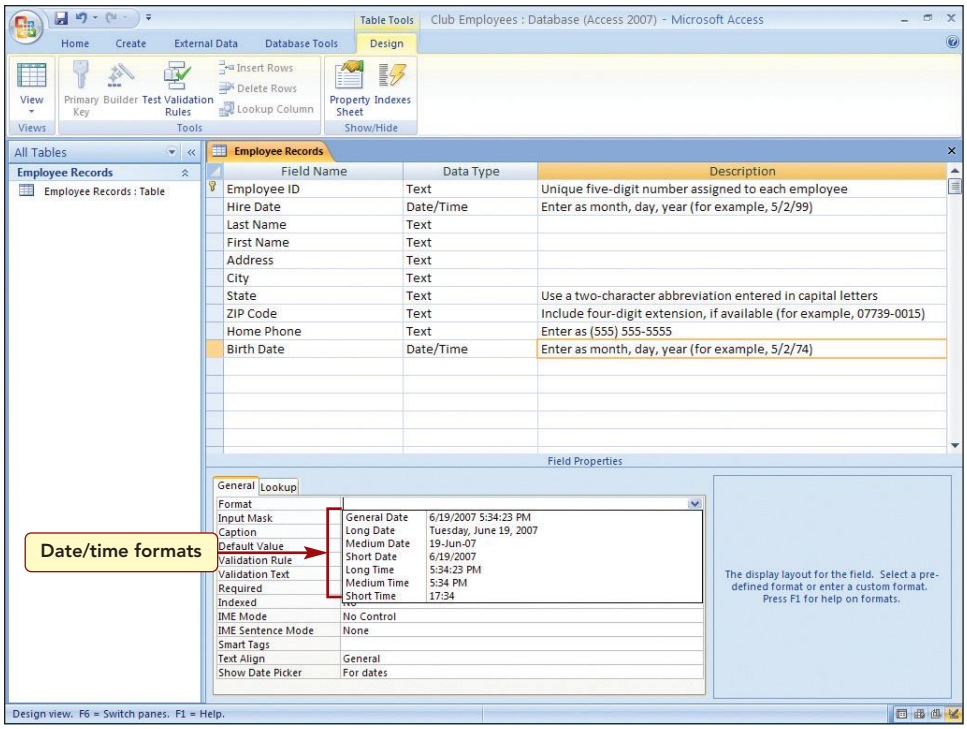


Figure 1.26

The names of the seven predefined layouts for the Date/Time field type are displayed in the list. An example of each layout appears to the right of the name. The General Date format is the default format. It displays dates using the Short Date format. If a time value is entered, it also will display the time in the Long Time format.

3 **Choose General Date.**

Your screen should be similar to Figure 1.27

Additional Information

Access automatically assumes the first two digits of a year entry. If you enter a year that is between /30 and /99, Access reads this as a 20th century date (1930 to 1999). A year entry between /00 and /29 is assumed to be a 21st century date (2000 to 2029).

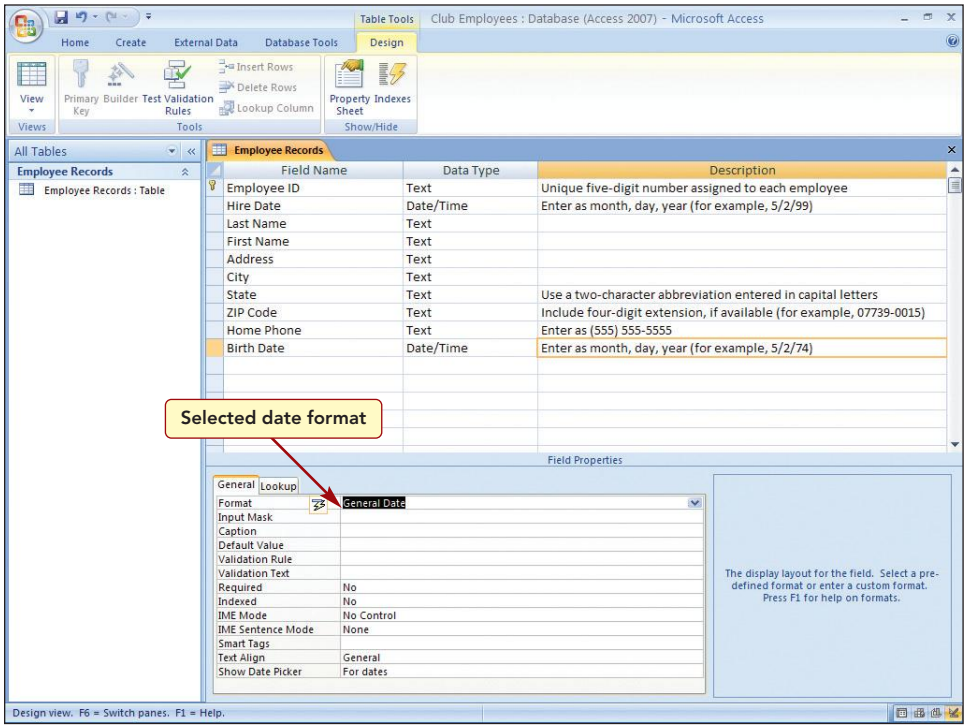


Figure 1.27

The Date property setting is now displayed in the Format text box.

The last field you will enter will display a photo and resume if available of each employee. The data type for this type of input is Attachment. Once a field has been assigned, this data type cannot be changed. You can, however, delete the field and then redefine it if you think you made an error.

4 **In the next blank field name row, enter the field name Photo/Resume with a data type of Attachment.**

Include the description Attach employee photo and resume if available.

Your screen should be similar to Figure 1.28

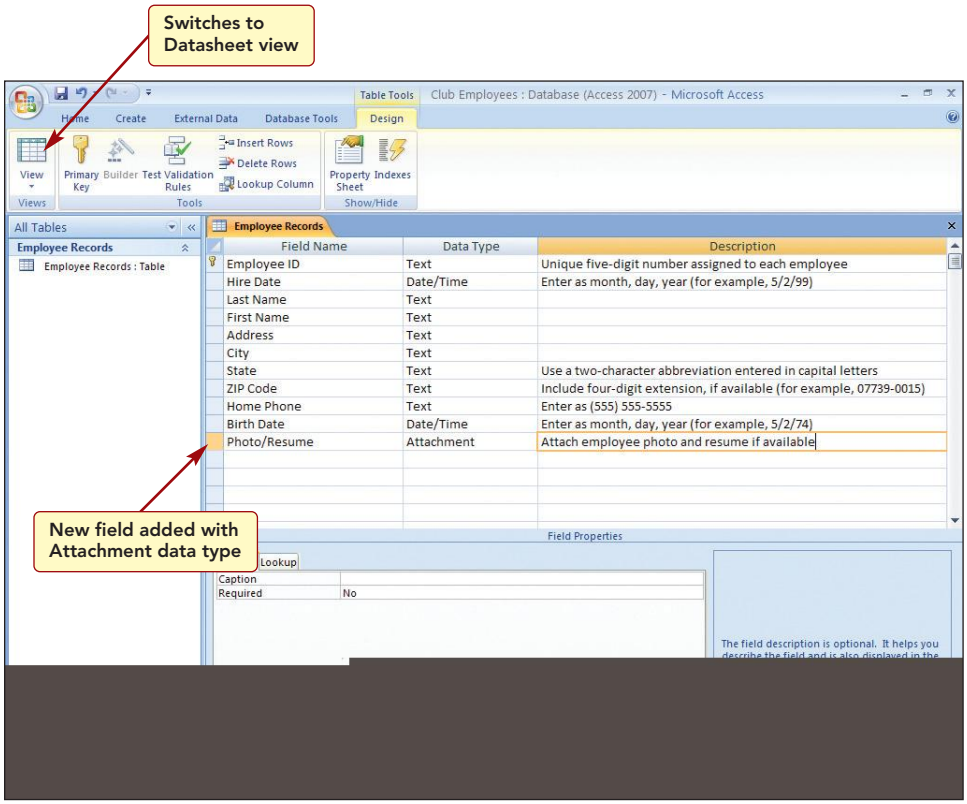


Figure 1.28

Specifying the Attachment data type allows you to store multiple files of different file types in a single field.

Entering and Editing Data

Now that the table structure is complete, you want to continue entering the employee data into the table. To do this, you need to switch back to Datasheet view.

Because you have made many changes to the table design, you will be asked to save the changes before you switch views. You also will be advised that data may be lost because you decreased field sizes in several fields. Since there is very little data in the table, this is not a concern.

1. Click in the View group to switch to the Datasheet View.

Another Method

You also can click Datasheet view in the status bar.

- Click Yes to save the changes.
- Click Yes in response to the data may be lost warning.
- Hide the Navigation pane.
- Click in the Employee ID field for the first record.

Your screen should be similar to Figure 1.29

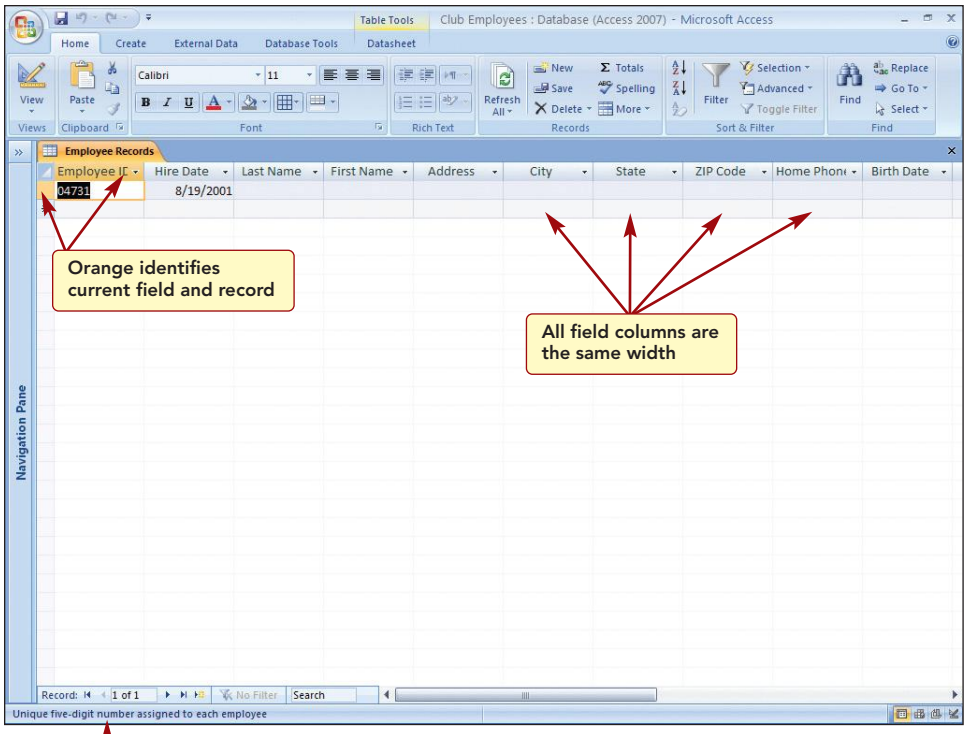


Figure 1.29

Because you deleted the ID field, it is no longer displayed and the new fields you defined are ready for you to enter the remaining data for the first record.

The first field, Employee ID, of the first record is outlined in orange, indicating that the program is ready to accept data in this field. The field name and Select All button also are highlighted in orange to identify the current field and current record. The status bar displays the description you entered for the field.

Notice also in this view that the column widths are all the same, even though you set different field sizes in the Table Design window. This is because the Table Datasheet view has its own default column width setting.

Additional Information

You will learn how to change the column width shortly.

Verifying Data Accuracy and Validity

To see how field properties help ensure data accuracy, you will reenter the employee number for the first record and try to enter a number that is larger than the field size of five that you defined in Table Design view.

1. **If necessary, double-click on the number to select it.**
2. **Type 047310.**

Your screen should be similar to Figure 1.30

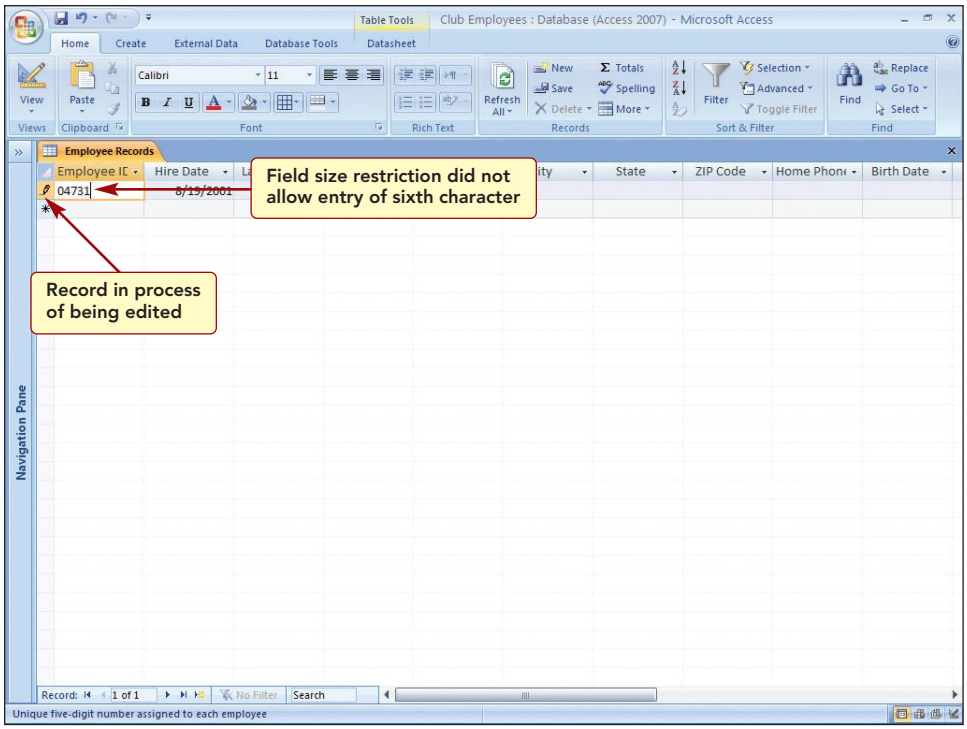


Figure 1.30

The program accepted only the first five digits and would not let you type a sixth. The field size restriction helps control the accuracy of data by not allowing an entry larger than specified. Notice also that the current record symbol has changed to . The pencil symbol means the record is in the process of being entered or edited and has not yet been saved.

Next, you will intentionally enter an invalid date to see what happens.

2. **Press ↵Enter, Tab⇆, or → to move to the Hire Date field.**
3. **Type 8/32/01.**
4. **Press ↵Enter, Tab⇆, or →.**

Your screen should be similar to Figure 1.31

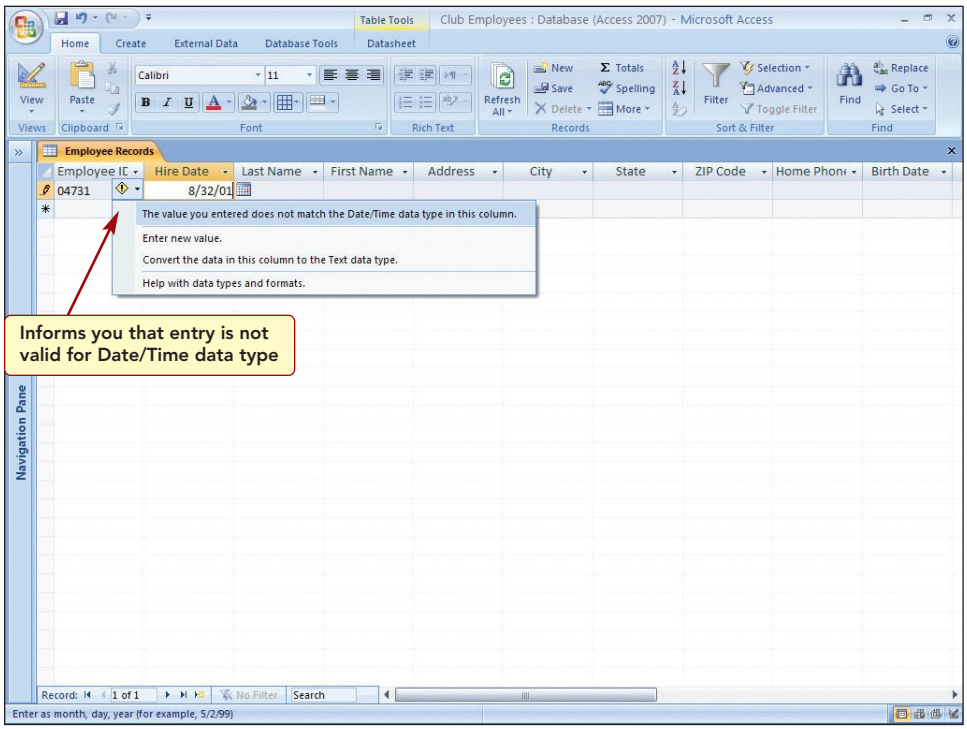


Figure 1.31

An informational message box is displayed advising you that the entry is not valid. In this case, the date entered (8/32/01) could not be correct because a month cannot have 32 days. Access automatically performs some basic checks on the data as it is entered based upon the field type specified in the table design. This is another way that Access helps you control data entry to ensure the accuracy of the data.

You will need to edit the date entry to correct it.

3. **Select Enter new value from the message box.**
- **Double-click on 32 to select it.**
- **Type 19.**
- **Press Tab.**

Your screen should be similar to Figure 1.32

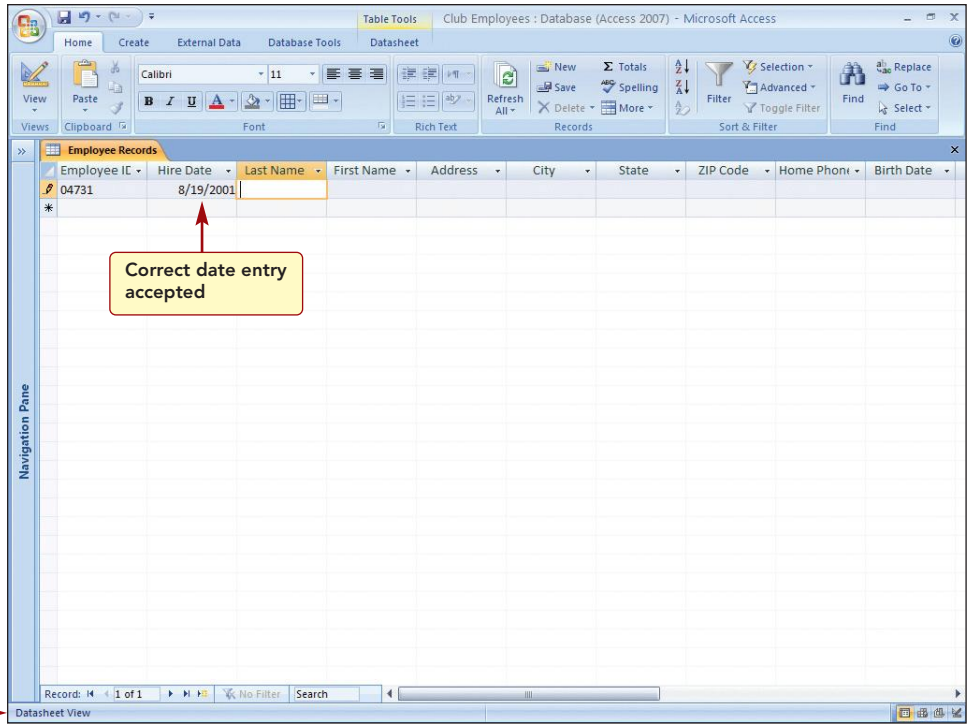


Figure 1.32

The corrected date is accepted, and the insertion point moves to the Last Name field. The year in the date changed to four digits, which reflects the date format you specified in the field's property.

Because you did not enter a description for this field, the status bar displays "Datasheet View," the name of the current view, instead of a field description.

Using AutoCorrect

Now you are ready to continue entering the data for the first record. As you are typing, you may make errors and they may be corrected automatically for you. This is because the AutoCorrect feature automatically corrects

obvious errors such as capitalizing names of days, the first letter of sentences, and other common typing errors and misspellings such as words starting with two initial capital letters. The AutoCorrect Options button will appear next to any text that was corrected. You have the option of undoing the correction or leaving it as is. Most times the typing error is not corrected, and you will need to fix it manually.

To see how this works, you will enter the last name incorrectly by typing the first two letters using capital letters.

1. **Type MArchant.**
2. **Press Tab.**

Your screen should be similar to Figure 1.33

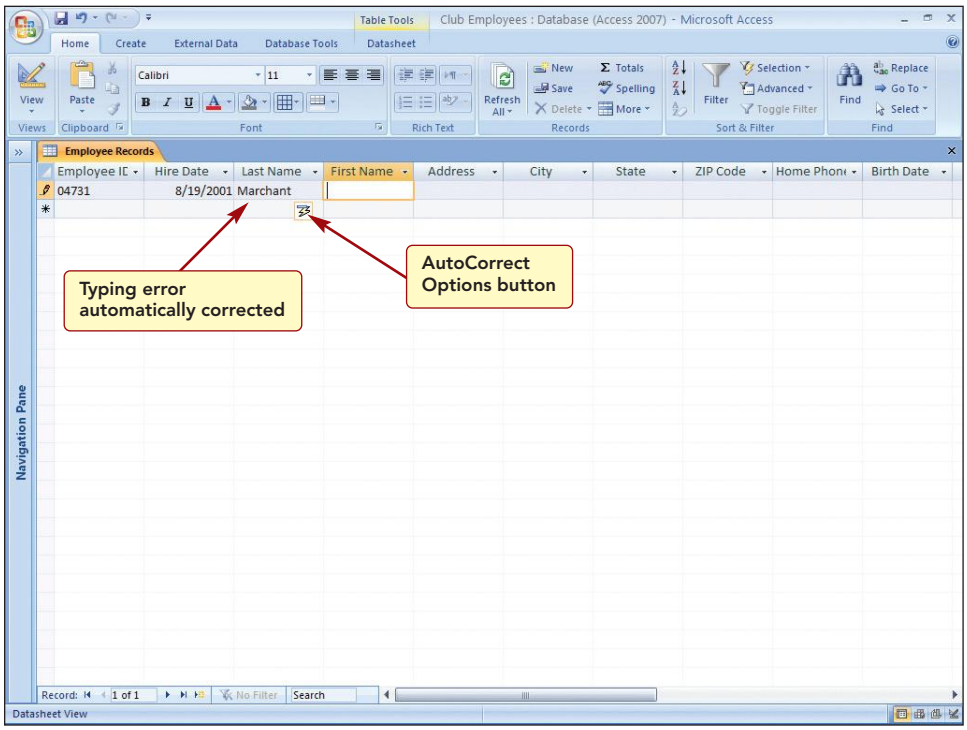


Figure 1.33

The name was automatically corrected and the AutoCorrect Options button appears. You will leave the correction as is and continue to enter data for this record.

2 **Enter the data shown in the table below for the remaining fields, typing the information exactly as it appears.**

Additional Information
The fields will scroll on the screen as you move to the right in the record.

Your screen should be similar to Figure 1.34

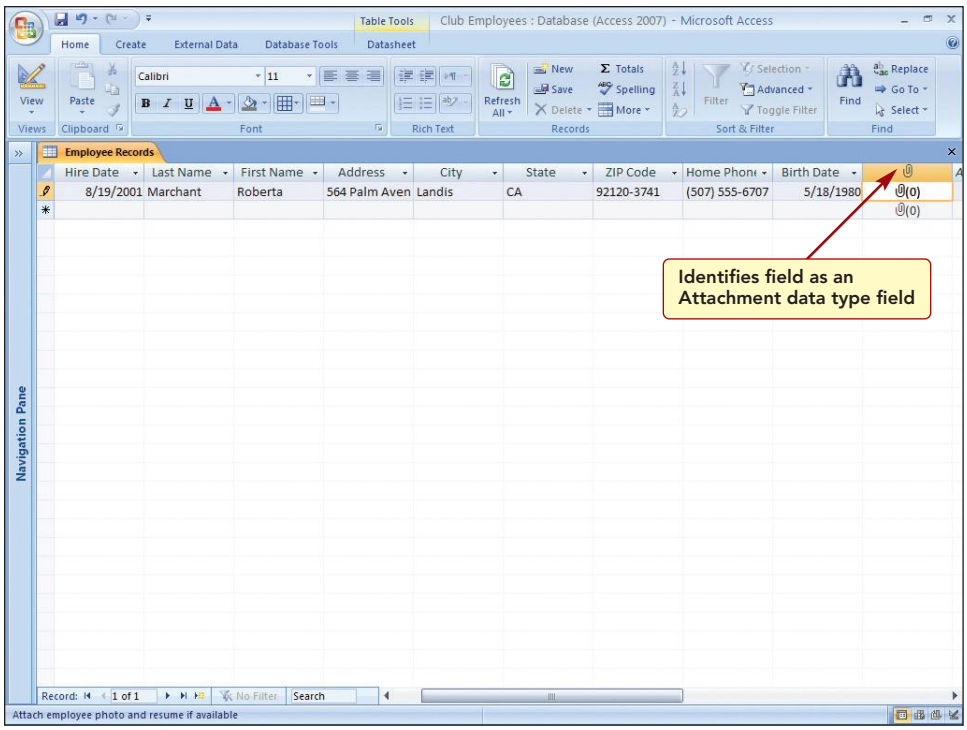


Figure 1.34

Field Name	Data
First Name	**Roberta**
Address	**564 Palm Avenue**
City	**Landis**
State	**CA**
ZIP Code	**92120–3741**
Home Phone	**(507) 555–6707**
Birth Date	**May 18, 1980** (press Tab to complete the entry)

All the information for the first record is now complete, except for the last field for the employee photo and resume.

Attaching a File

Notice the field name in the header for this field is not Photo/Resume, as you defined in Design view. This is because Access does not allow field names for Attachment data types. Instead it displays a paperclip icon in the field header to show that the field has an Attachment data type. The field description that appears in the status bar is particularly important because there is no descriptive field name.

To complete the information for this field, you plan to attach the employee photo and a copy of the employee's resume if it is available. A photo is one of several different types of graphic objects that can be added to a database table. A **graphic** is a nontext element or object. A graphic can be a simple **drawing object** consisting of shapes such as lines and boxes that can be created using a drawing program such as Paint or it can

be a picture. A **picture** is an illustration such as a scanned photograph. A resume is a text document that is typically created using a word processor application.

Because you have not organized all the employees' badge photographs yet, you will only insert the photo for Roberta Marchant to demonstrate this feature to the club owners. You also will attach a sample resume that was created using Word 2007.

1 **Double-click on the Attachment field cell for this record.**

Another Method

You also can choose Manage Attachments from the field's shortcut menu.

Your screen should be similar to Figure 1.35

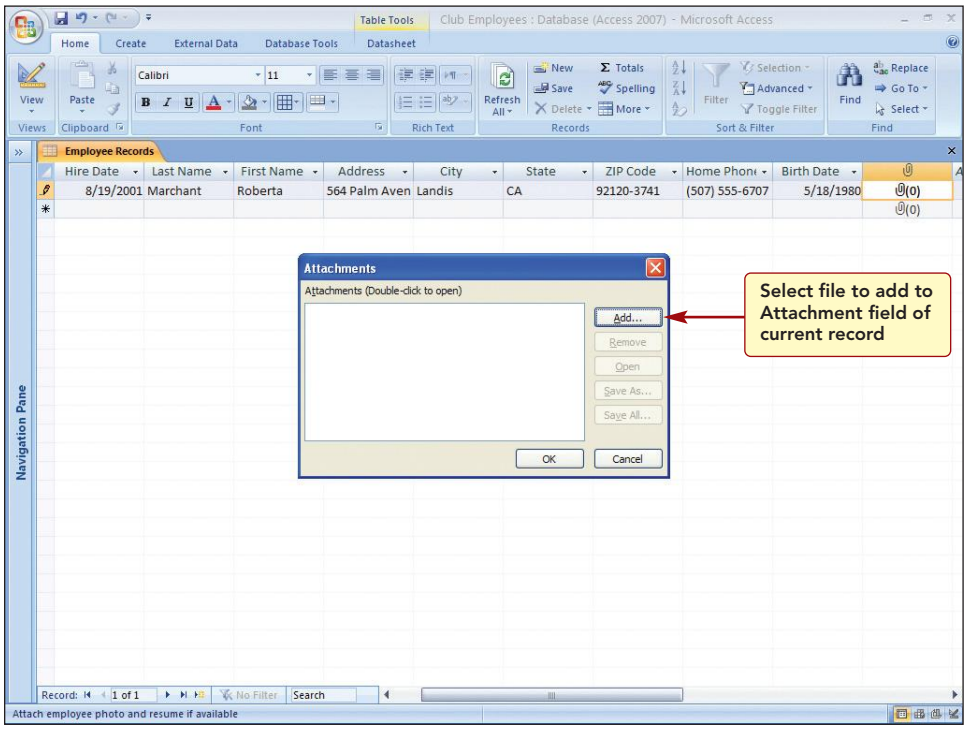


Figure 1.35

The Attachments box is used to manage the items that are in an attachment field. Because there are currently no attachments associated with this field, it is empty. You will select the photo and resume files you want to add to the field.

2 Click Add....

- If necessary, open the Look in drop-down list box and specify the location of your data files.
- Select ac01_Roberta and ac01_Resume from the file list box.

Having Trouble?
Hold down Ctrl while clicking on the file names to select multiple files.

- Click Open.

Your screen should be similar to Figure 1.36

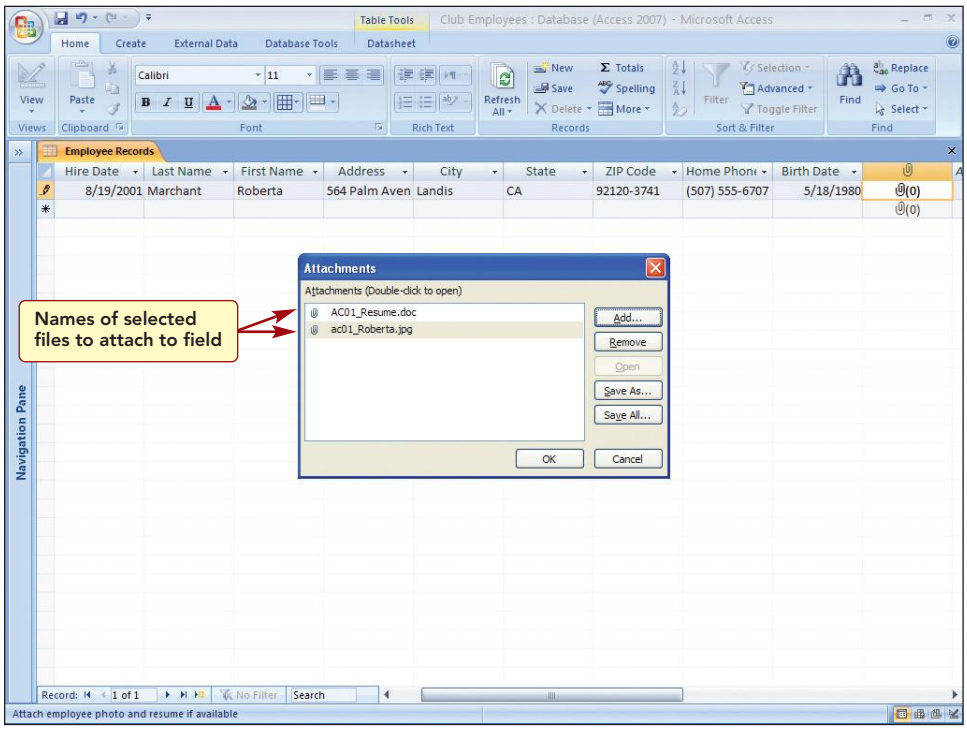


Figure 1.36

Additional Information
To remove a file from the attachment field, select the file name from the list and click Remove.

The Attachments dialog box is displayed again and now displays the names of the selected files.

More About

To learn how to export attachments, see "3 Entering and Modifying Data" in the More About appendix.

3 Click OK.

Your screen should be similar to Figure 1.37

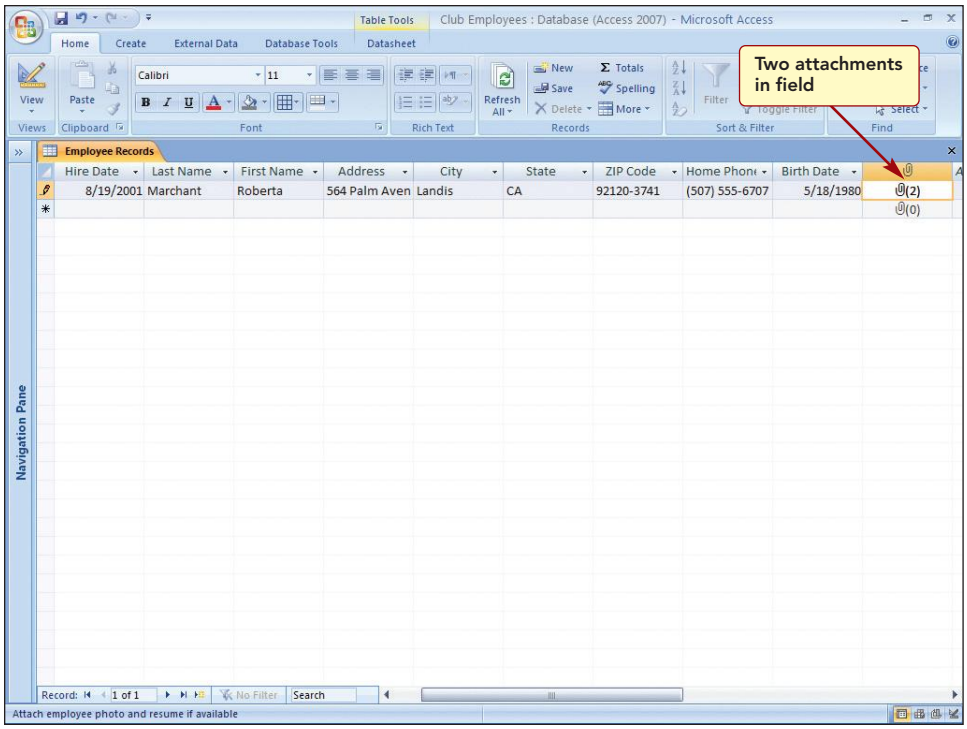


Figure 1.37

The selected files are inserted as attachments and identified with the number 2 in the cell. The number indicates how many attachments have been added to the field. You will now display the photograph from the Attachment field to check that it has been inserted properly.

4 Double-click the cell.

Select the ac01_Roberta file from the Attachments dialog box.

Click Open.

Another Method

You also can double-click the file to both select and open it.

Your screen should be similar to Figure 1.38

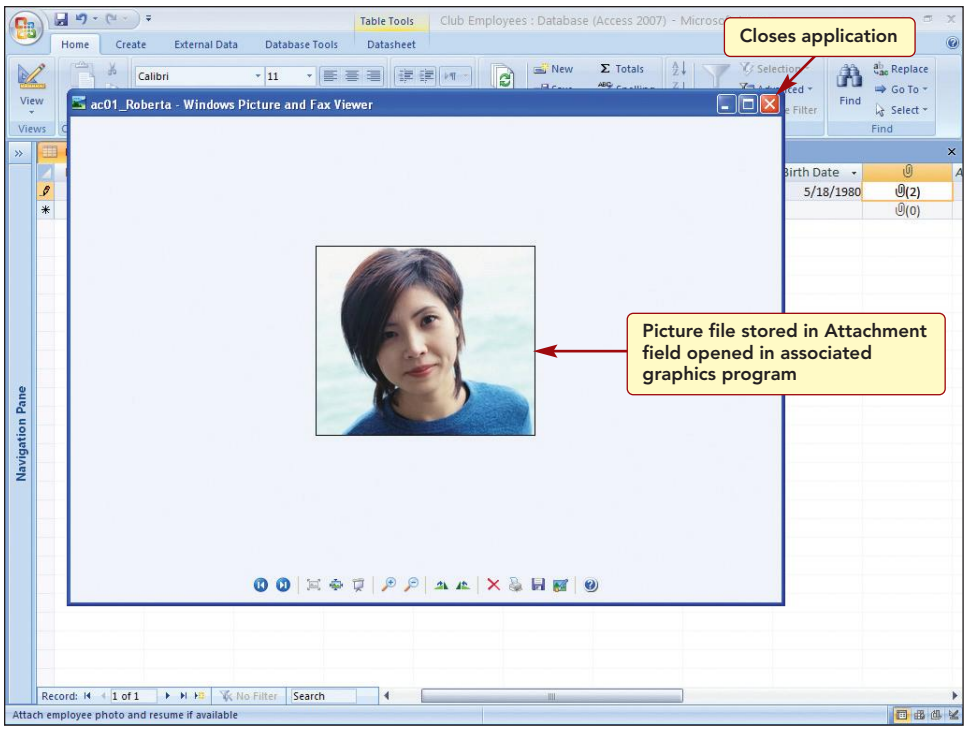


Figure 1.38

Additional Information

Image files that open in Microsoft Picture and Fax Viewer can only be viewed, not edited. If you wanted to edit the image, right-click on the image and choose Edit. The program used to create the file, if available on your computer, is opened.

The picture object is opened and displayed in the graphics program that is associated with this type of file—in this case, Windows Picture and Fax Viewer. Yours may open and display in a different graphics program such as Paint. The application that opens is not necessarily the application in which the file was created. If the application in which it opens includes features that can be used to edit the file, you will be prompted to save any changes before closing the Attachments dialog box. If you do not save them, the changes will be lost.

5 **Click Close in the graphics application window title bar to close the application.**

Select and open the ac01_Resume attachment.

Your screen should be similar to Figure 1.39

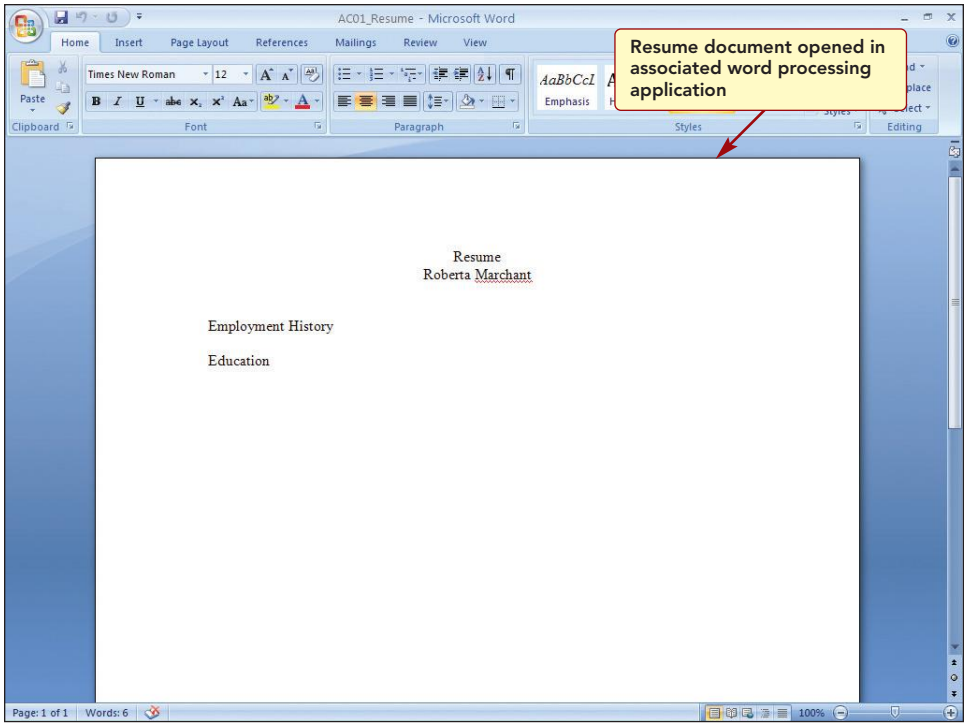


Figure 1.39

The resume is opened and displayed in the associated word processing application program. A copy of the file is placed in a temporary folder. If you change the document, the changes are saved to the temporary copy. Then when you return to Access and close the Attachments dialog box, you are asked if you want to save the attached file again.

6 **Click Close in the application window title bar to close the application.**

Click Close to close the Attachments dialog box.

Press Enter to move to the beginning of the next record.

Your screen should be similar to Figure 1.40

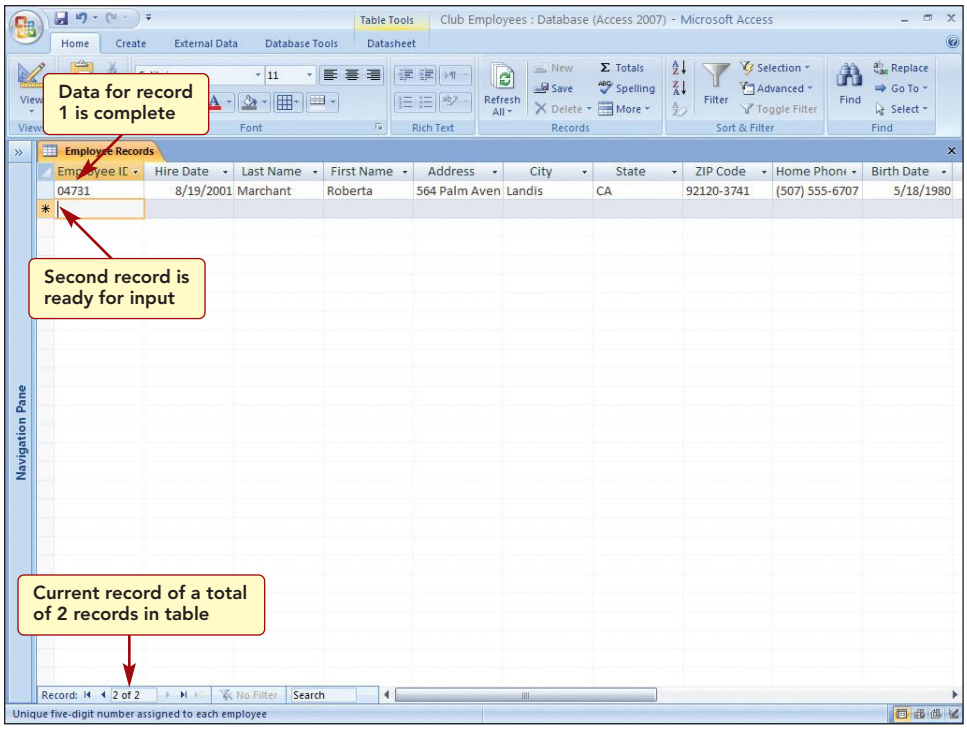


Figure 1.40

The data for the first record is now complete. The insertion point moves to the first field in the next row and waits for input of the employee number for the next record. As soon as the insertion point moves to another record, the data is saved to the table file and the number of the new record appears in the status bar. The second record was automatically assigned the record number 2.

Moving between Fields

Next, you will check the first record for accuracy. To quickly move from one field to another in a record, you can first select (highlight) the entire field contents and then you can use the keyboard keys shown in the following table to move quickly between field columns.

Key	Movement
→ or Tab	Next field
← or Shift + Tab	Previous field
↓	Current field in next record
↑	Current field in previous record
Home	First field in record
End	Last field in record

You will select the Employee ID field for the first record and then move to the Address field to check its contents.

1. **Point to the left end of the Employee ID field for the first record. When the mouse pointer appears as ✚, click the mouse button.**

- **Press → four times.**

Your screen should be similar to Figure 1.41

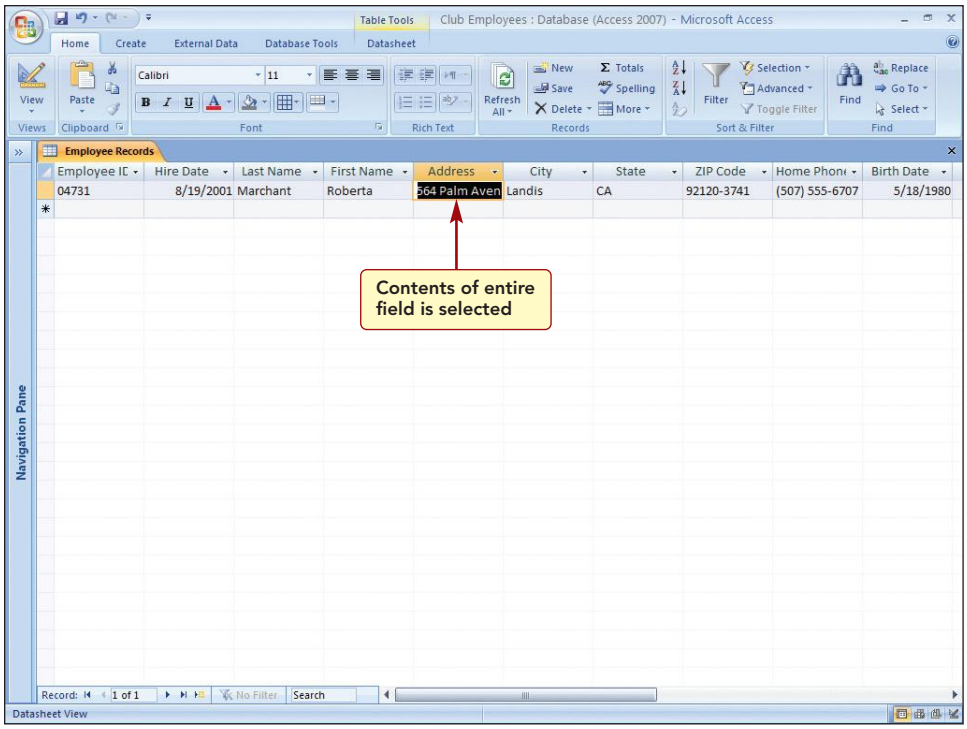


Figure 1.41

Additional Information

If you press Delete or Backspace while the entire field is selected, the entire field contents will be deleted.

Because the entire field contents are selected, you need to be careful that you do not type a character as that will delete the selection and replace it with the new text. To switch back to editing, you need to display the insertion point in the field and then edit the entry.

2. **Click the Address field with the mouse pointer shape as an I-beam.**

Your screen should be similar to Figure 1.42

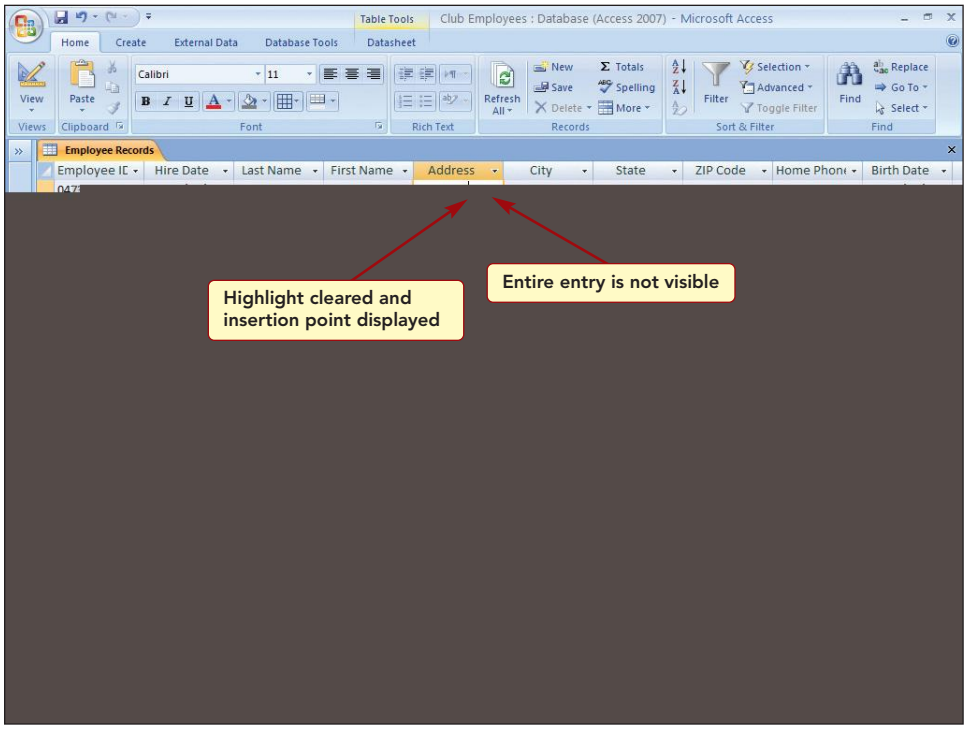


Figure 1.42

Additional Information

You can press F2 to switch between editing an entry (the insertion point is displayed) and navigating (the field is selected) through the datasheet.

The highlight is cleared and the insertion point is visible in the field. Now, using the directional keys moves the insertion point within the field and you can edit the field contents if necessary.

Zooming a Field

The beginning of the field looks fine, but because the column width is too narrow, you cannot see the entire entry. You will move the insertion point to the end of the address so you can check the rest of the entry.

1. **Press End.**

Your screen should be similar to Figure 1.43

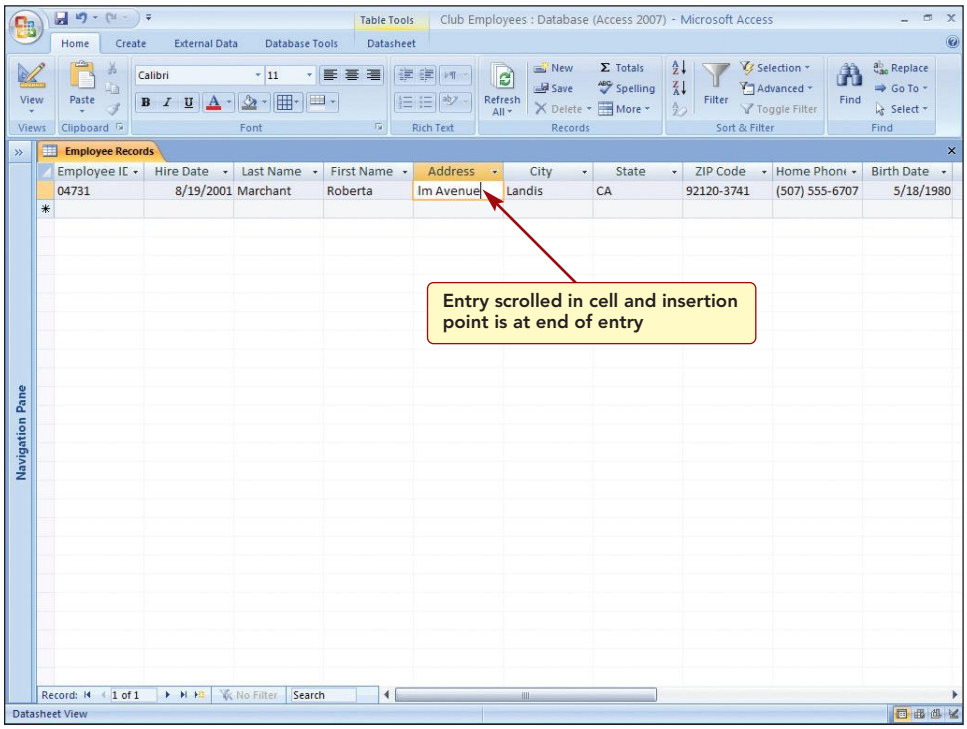


Figure 1.43

The text scrolled in the field, and the insertion point is positioned at the end of the entry. However, now you cannot see the beginning of the entry, which makes it difficult to edit. Another way to view the field's contents is to expand the field.

2 Press Shift + F2.

Your screen should be similar to Figure 1.44

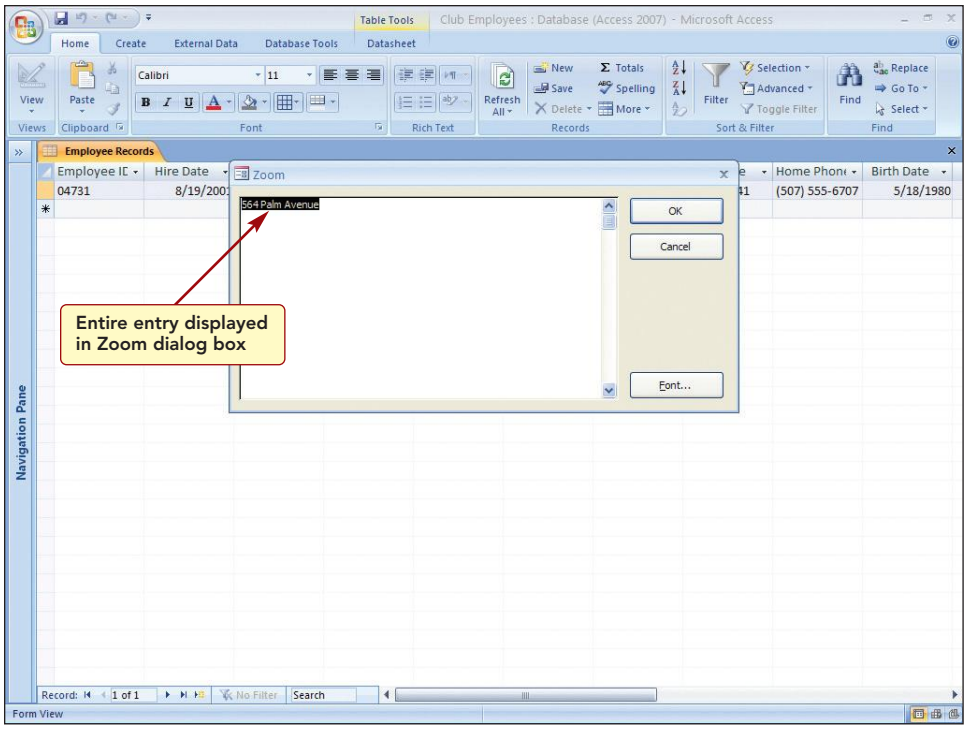


Figure 1.44

The entry is fully displayed in the Zoom dialog box. You can edit in the dialog box just as you can in the field.

3. **If the entry contains an error, correct it.**

- **Click** OK.
- **Press** Tab.

Additional Information

You also can use the horizontal scroll bar to scroll the window and check fields that are not currently visible.

- **Continue to check the first record for accuracy and edit as needed.**
- **Enter the data shown in the table for the second record (you will leave the attachment field empty).**
- **Check the second record for accuracy and edit it if necessary.**
- **Move to the first field of the blank record row.**

Your screen should be similar to Figure 1.45

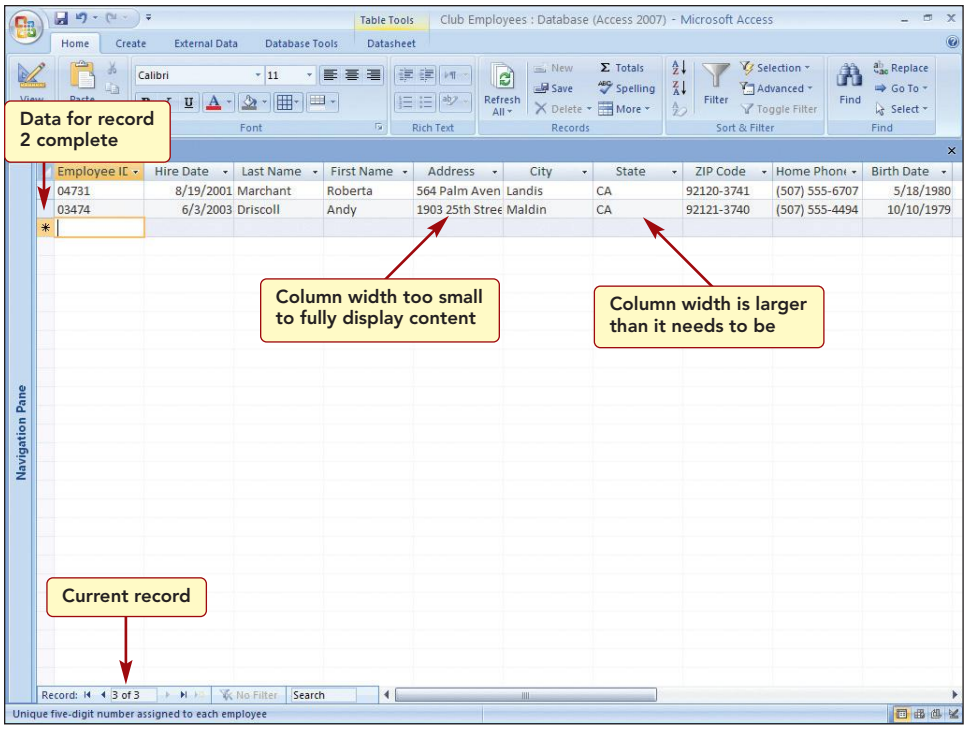


Figure 1.45

Field Name	Data
Employee ID	03474
Hire Date	June 3, 2003
Last Name	Driscoll
First Name	Andy
Address	1903 25th Street
City	Maldin
State	CA
ZIP Code	92121-3740
Home Phone	(507) 555-4494
Birth Date	October 10, 1979

The record indicator in the status bar tells you that record 3 is the current record of a total of three records.

Changing Column Width

As you have noticed, some of the fields (such as the Address field) do not display the entire entry, while other fields (such as the State field) are much larger than the field's column heading or contents. This is because the default width of a column in the datasheet is not the same size as the field sizes you specified in Design view. **Column width** refers to the size of a field column in a datasheet. The column width does not affect the amount of data you can enter into a field, but it does affect the data that you can see.

Additional Information
The default datasheet column width is set to display 15.6667 characters.

You can adjust the column width to change the appearance of the datasheet. Usually you should adjust the column width so that the column is slightly larger than the column heading or longest field contents, whichever is longer. Do not confuse column width with field size. Field size is a property associated with each field; it controls the maximum number of characters that you can enter in the field. If you shorten the field size, you can lose data already entered in the field.

Resizing a Column

The first thing you want to do is make the Address column wider so that you can see each complete field entry without having to move to the field and scroll or expand the field box. There are several ways that you can manipulate the rows and columns of a datasheet so that it is easier to view and work with the table data.

To quickly resize a column, simply drag the right column border line in the field selector in either direction to increase or decrease the column width. The mouse pointer shape is ✢ when you can drag to size the column. As you drag, a column line appears to show you the new column border. When you release the mouse button, the column width will be set. First you will increase the width of the Address field so that the entire address will be visible.

1. **Point to the right column border line in the field selector for the Address field.**

- **When the mouse pointer is ✢, click and drag to the right until you think the column width will be wide enough to display the field contents.**

- **Adjust the column width again if it is too wide or not wide enough.**

Another Method

You also can adjust the column width to a specific number of characters using More in the Records group of the Home tab and choosing Column Width. This command is also on the shortcut menu when an entire column is selected.

Your screen should be similar to Figure 1.46

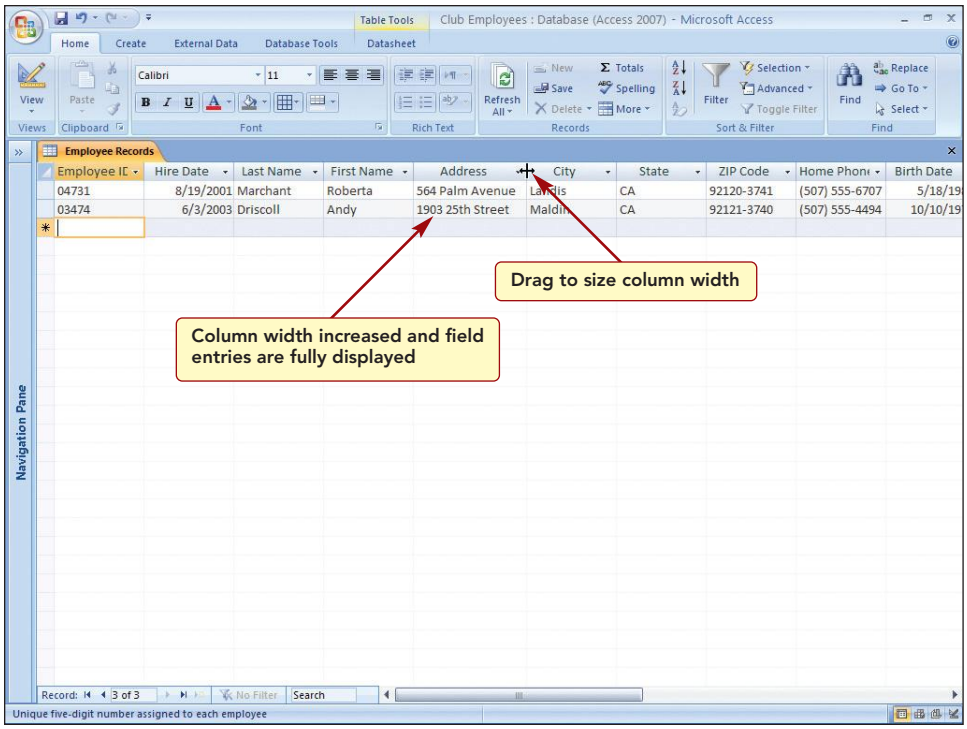


Figure 1.46

Using Best Fit

Rather than change the widths of all the other columns individually, you can select all columns and change their widths at the same time using the **Best Fit** feature. To select multiple columns, point to the column heading in the header row of the first or last column you want to select. Then, when the mouse pointer changes to ↓, click, and without releasing the mouse button, drag in either direction across the column headings.

1 **Click to the left of the first field name to quickly select the entire table.**

Your screen should be similar to Figure 1.47

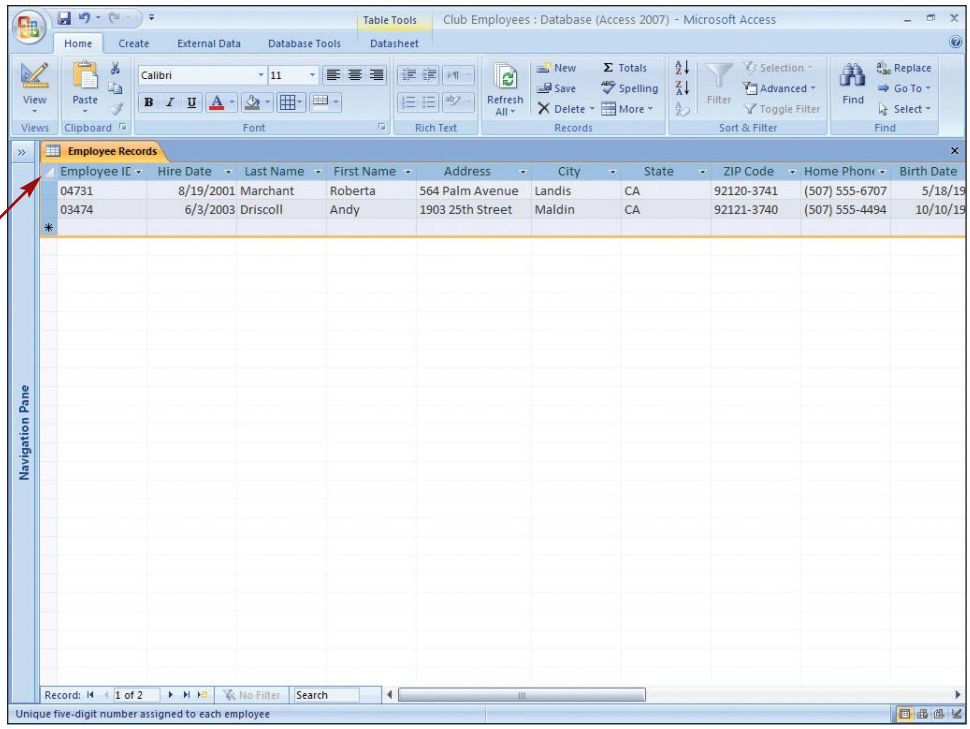


Figure 1.47

All the table columns are highlighted. Now, if you were to drag the column border of any selected column, all the selected columns would change to the same size. However, you want the column widths to be adjusted appropriately to fit the data in each column. To do this, you can double-click the column border to activate the Best Fit feature. The Best Fit feature automatically adjusts the column widths of all selected columns to accommodate the longest entry or column heading in each of the selected columns.

2. **Double-click any column border line (in the field selector row) when the mouse pointer is ↔.**

3. **Click anywhere on the table to deselect the datasheet.**

Another Method

You also can use More in the Records group of the Home tab and choose Column Width/Best Fit.

Your screen should be similar to Figure 1.48

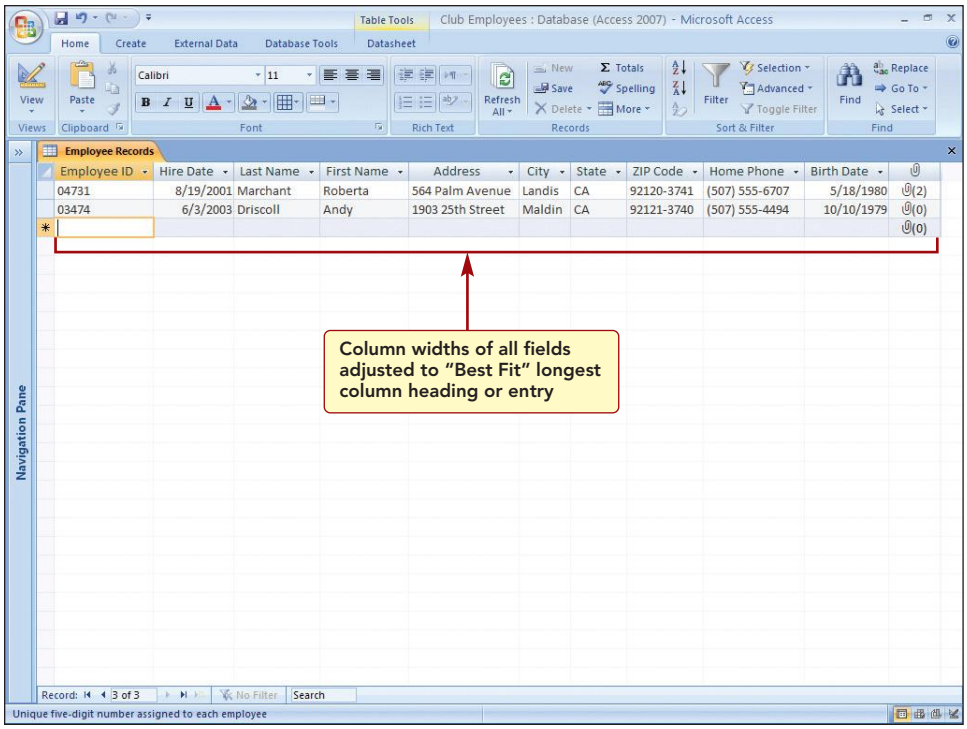


Figure 1.48

The column widths for each field have been sized to accommodate the longest entry or column heading. As you add more records to the table that contain longer field entries, you will need to use Best Fit again to readjust the column widths.

3. **Check each of the records again and edit any entries that are incorrect.**

- **Add the data shown in the following table as record 3.**
- **Press ↵Enter twice to skip the Attachment field and complete the record.**

Your screen should be similar to Figure 1.49

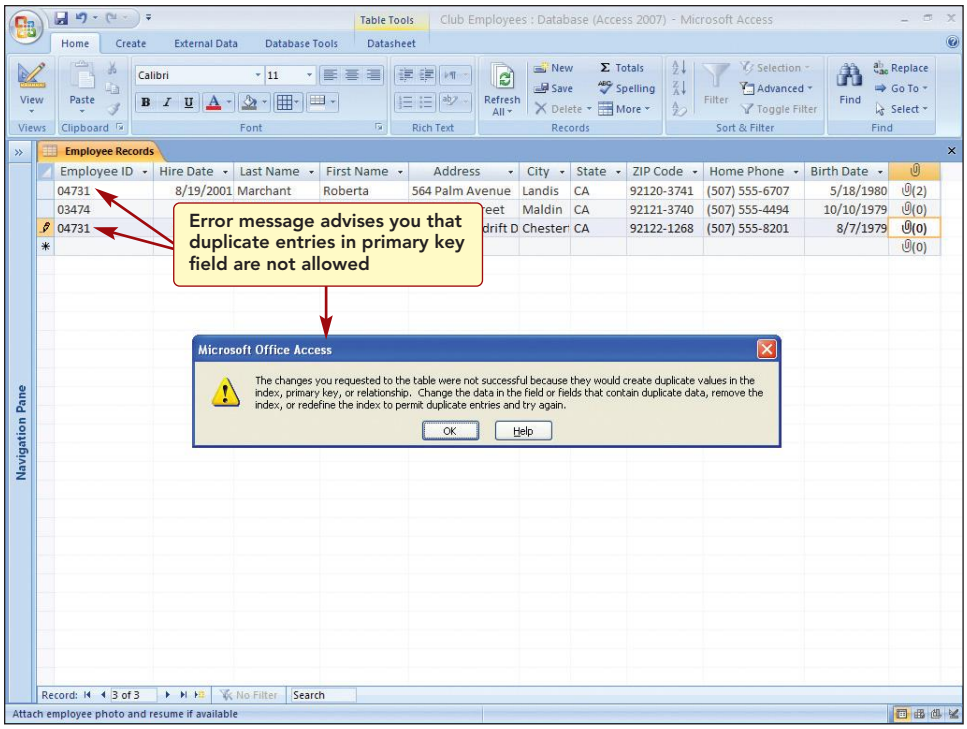


Figure 1.49

Field Name	Data
Employee ID	04731
Hire Date	April 12, 2004
Last Name	Delano
First Name	Gordon
Address	1310 N. Spindrift Drive
City	Chesterfield
State	CA
ZIP Code	92122-1268
Phone	(507) 555-8201
Birth Date	August 7, 1979

As soon as you complete the record, an error message dialog box appears indicating that Access has located a duplicate value in a key field. The key field is Employee ID. You realize you were looking at the employee number from Roberta Marchant's record when you entered the employee number for this record. You need to clear the message and enter the correct number.

4. **Click** OK.

- **Press** Home **to move to the first field.**
- **Change the Employee ID for record 3 to 12258.**
- **Press** ↓.

Your screen should be similar to Figure 1.50

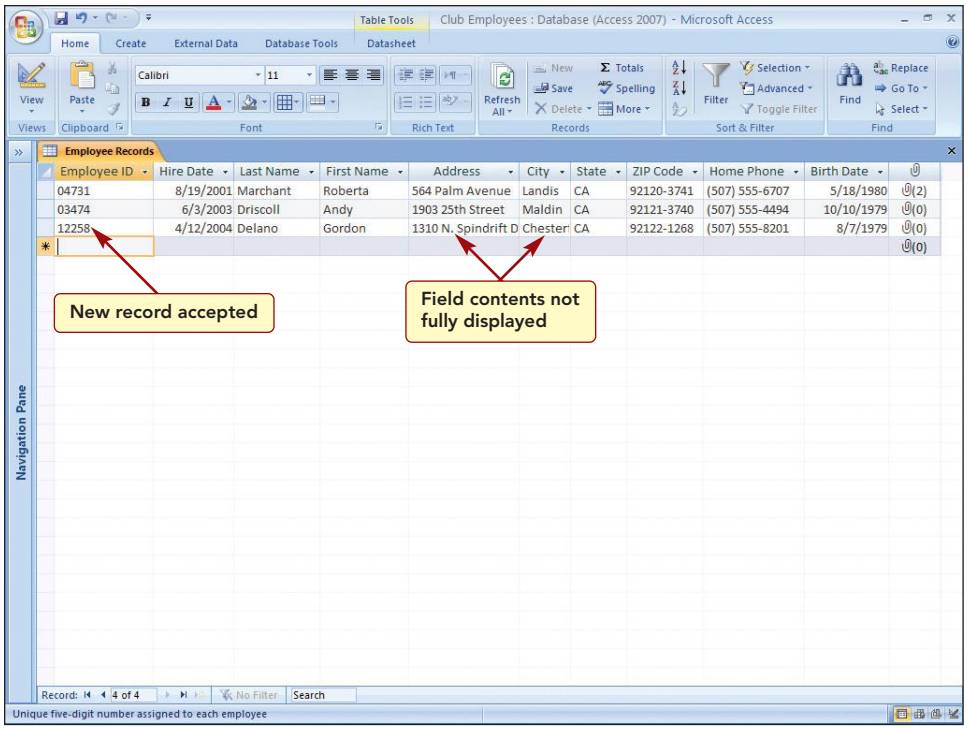


Figure 1.50

The record is accepted with the new employee number. However, you notice that the address and city for this record are not fully displayed in the fields.

5. **Best fit the Address and City fields.**

Your screen should be similar to Figure 1.51

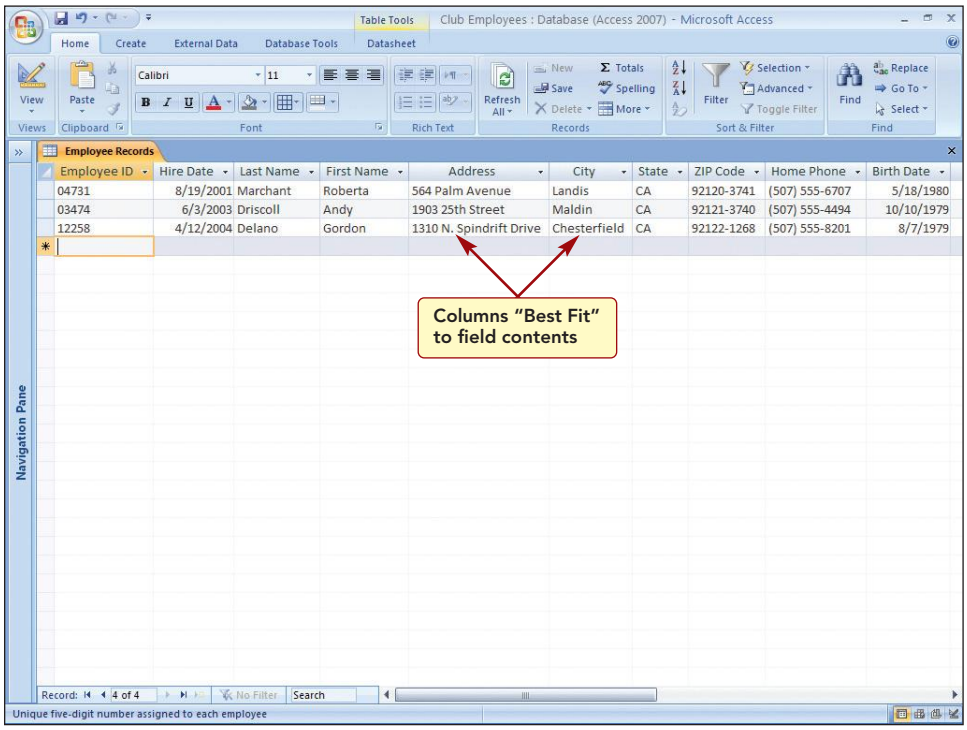


Figure 1.51

When you add new records in a datasheet, the records are displayed in the order you enter them. However, they are stored on disk in order by the primary key field.

You will add three more records to the table. If data for some fields, such as the City, State, or ZIP Code, is the same from record to record, you can save yourself some typing by copying the data from one of the other records. Just select the field contents and click Copy in the Clipboard group. Then move to the field where you want the copy to appear and click Paste in the Clipboard group.

6 **Enter the data for the two records shown in the following table.**

Field	Record 4	Record 5
Employee ID	13635	12583
Hire Date	January 2, 2007	April 20, 2007
Last Name	Martinez	Sullivan
First Name	Juan	Marie
Address	1920 First Avenue	78 Omega Drive
City	Maldin	Chesterfield
State	CA	CA
ZIP Code	92121-3740	92122-1268
Phone	(507) 555-2935	(507) 555-7890
Birth Date	December 10, 1982	March 15, 1981

7. **Enter a final record using your first and last names. Enter 99999 as your employee number and the current date as your date hired. The information you enter in all other fields can be fictitious.**

- **Check each of the records and correct any entry errors.**

Your screen should be similar to Figure 1.52

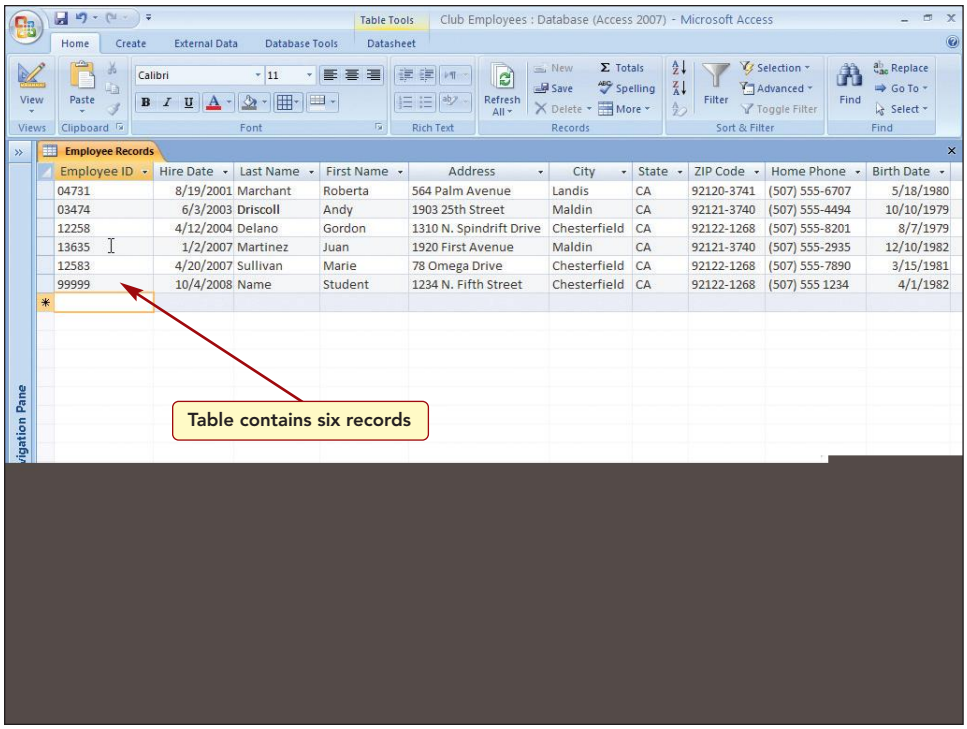


Figure 1.52

There are now a total of six records in the table

Deleting Records

While you are entering the employee records, you find a memo from one of your managers stating that Andy Driscoll is no longer working at the club and asking you to remove his record from the employee files.

You can remove records from a table by selecting the entire record and pressing the Delete key. After pressing Delete, you will be asked to confirm that you really want to delete the selected record. This is because this action cannot be reversed.

Another Method

You also can move to the record and choose Select from the Select drop-down list in the Find group of the Home tab.

Additional Information

You can select multiple noncontiguous records by holding down Ctrl while clicking the Select All button of each record. To select contiguous records, click and drag along the Select All buttons.

1. **Point to the Select All button for record 2 and click when the mouse shape is ➡.**

- **Press Delete.**

Another Method

You also can use Cut in the Clipboard group to delete a selected record.

- **Click Yes to confirm that you want to delete the record.**

Additional Information

Clicking No restores the record.

Your screen should be similar to Figure 1.53

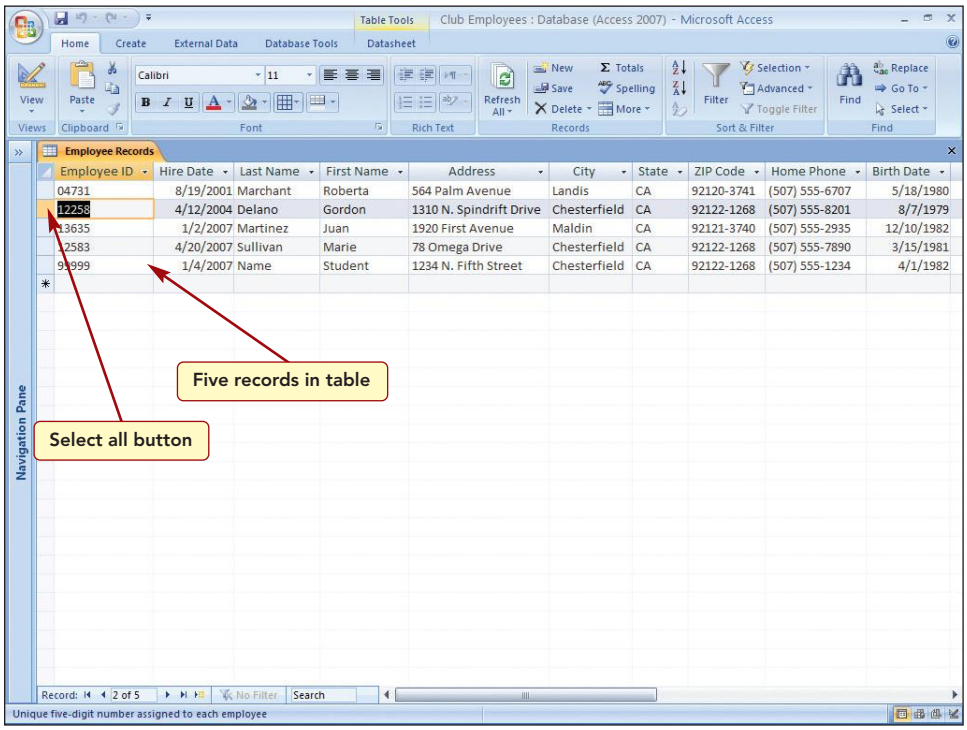


Figure 1.53

The table now consists of five employee records.

Another Method

You also can choose Delete Record from the Delete drop-down list in the Records group of the Home tab. The current record is both selected and deleted at the same time.

Additional Information

A SharePoint list is a list of data that is stored on a SharePoint server and is available to others in an organization.

Creating a Second Table

Following your plan for the employee database, you will add another table to the existing database file. This table will hold information about the employee's work location and job title.

There are several ways to create a new table in an existing database. You can insert a blank table and define the fields in datasheet view as you already did or you can create a table based on a table template. You also can import from or link to data from another source, such as another database, an Excel worksheet, or a SharePoint list. Finally, you can create a new table starting in Design view. You will use this last method to define the two fields in the table, club location and job title.

1. **Open the Create tab and click Table Design in the Tables group.**

2. **Define the fields using the settings shown in the following table.**

Your screen should be similar to Figure 1.54

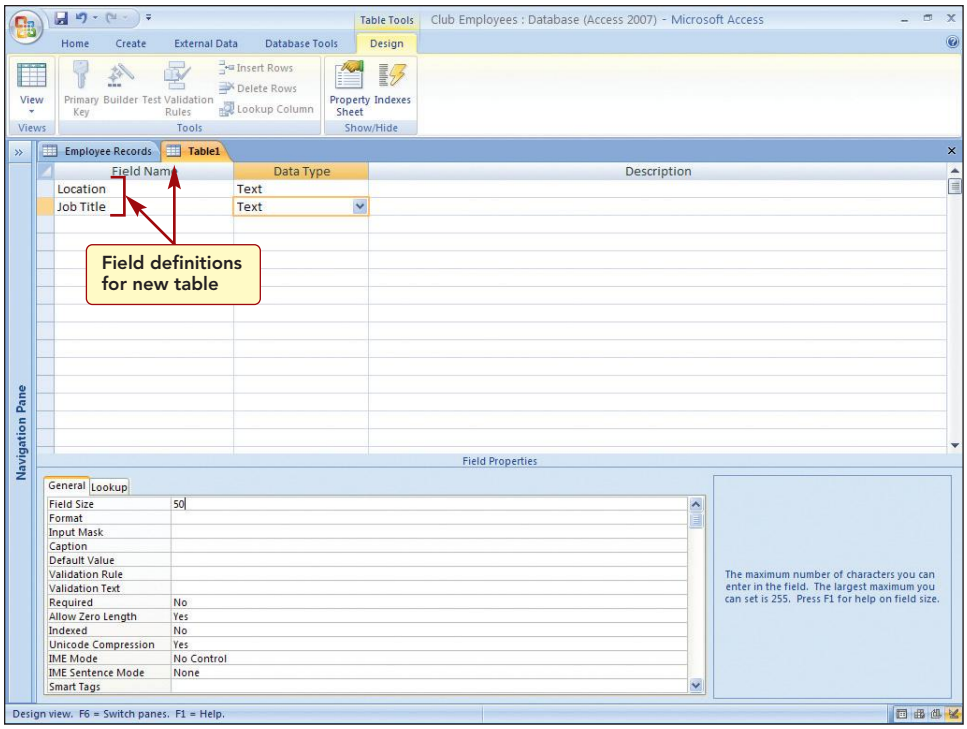


Figure 1.54

Field Name	Data Type	Field Size
Location	Text	20
Job Title	Text	50

The new table has a default table name of Table1 displayed in the table tab.

Adding an Existing Field

As you look at the design, you realize you need to include a field that will be used to refer back to the primary key field of the Employee Records table in order to create an association between the two tables. A field that refers to the primary key field in another table is called a **foreign key** field. The new table will use the same field as the Employee Records table, employee number, as the foreign key field. The field names of these two fields do not have to match, although their data types must be the same. Instead of recreating the field, you will copy it from the Employee Records table into the new table.

1. **Switch to Datasheet view.**
- **Click** Yes **to save the table.**
- **Enter Job as the table name and click** OK **.**
- **Click** No **in response to the prompt to create a primary key.**
- **Display the Navigation pane.**
- **Open the Table Tools Datasheet tab and click** Add Existing Fields **from the Fields & Columns group.**

Your screen should be similar to Figure 1.55

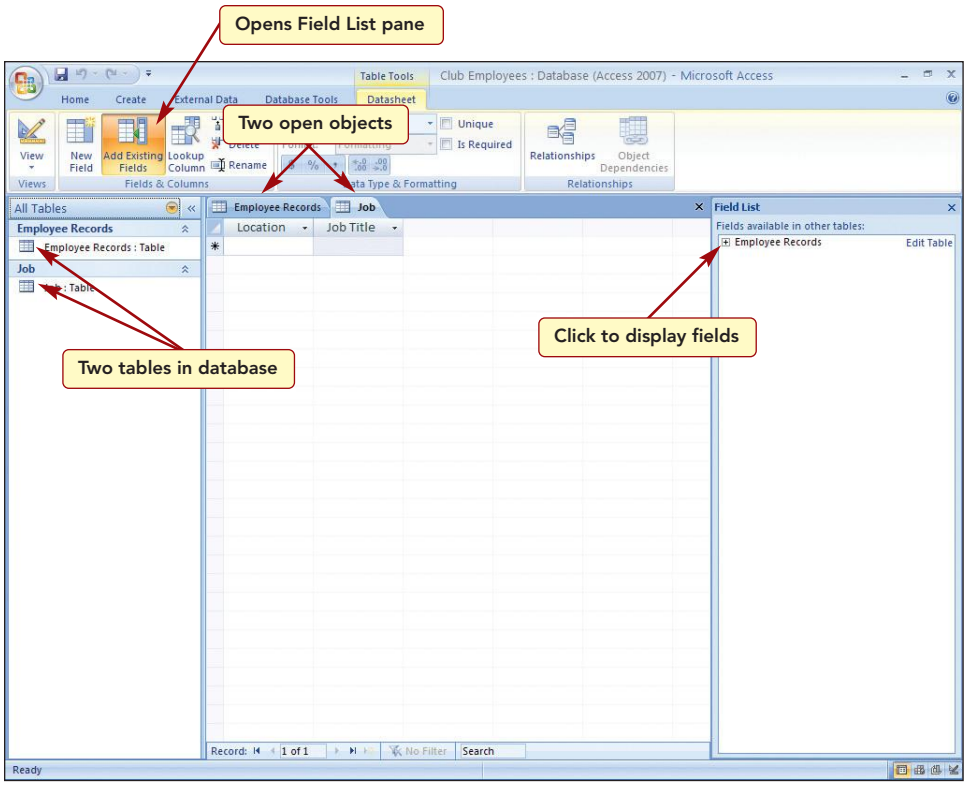


Figure 1.55

The Navigation pane displays the names of both tables in the database and a tab for both open objects appears above the work area. A Field List pane appears on the right side of the work area. It displays the name of the only other table in the database, Employee Records. Clicking the ⊞ next to the table name will display a list of the fields in the table. Then you can select and drag the field name to the new table, much as you did when using the Field Templates pane. When the insertion bar appears where you want the new field inserted, drop the field in position. You also can double-click on the field name and it will be inserted in the next empty field column in the datasheet.

2. **Click ⊞ to display the field names.**

- **Select the Employee ID field.**
- **Drag the field from the pane and drop it to the left of the Location field.**

Your screen should be similar to Figure 1.56

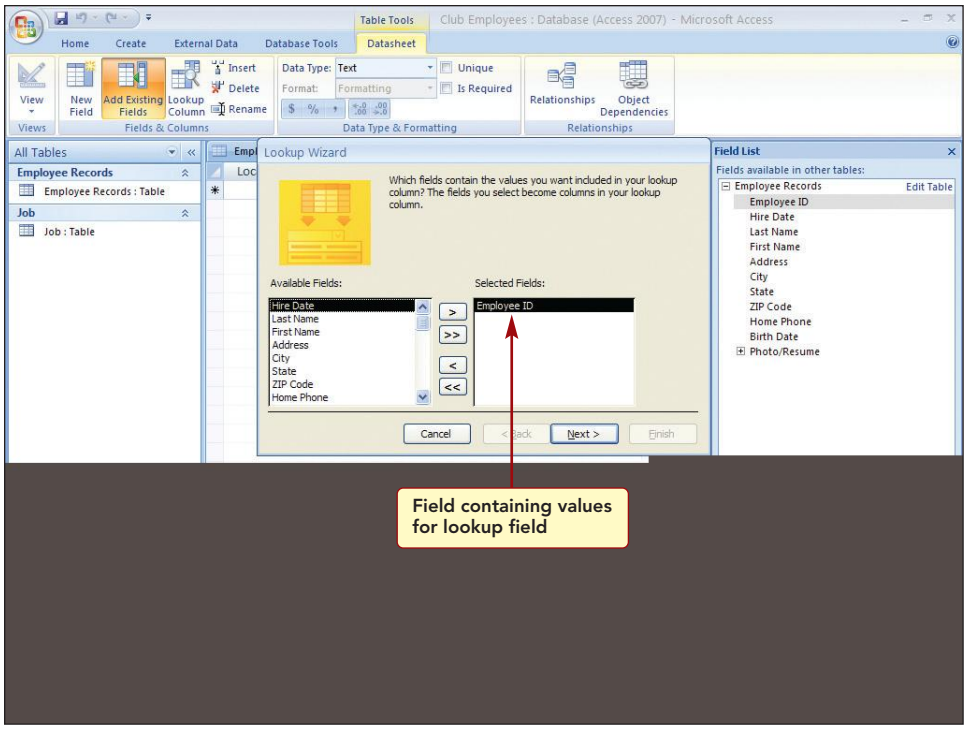


Figure 1.56

Using the Lookup Wizard

The **Lookup Wizard** automatically starts and is used to create a lookup field that will allow you to select from a list of values when entering the employee number into the new table. A **wizard** is a feature that guides you step by step through the process to perform a task.

Concept 6

Lookup Field

6 A **lookup field** provides a list of values from which the user can choose to make entering data into that field simpler and more accurate. The lookup field can get the values from an existing table or a fixed set of values that are defined when the lookup field is created. A lookup field that uses another table as the **source** for values is called a **lookup list**, and one that uses fixed values is called a **value list**.

Lookup List Lookup Field

When the lookup field uses a table for the values it displays, an association is created between the two tables. Picking a value from the lookup list sets the foreign key value in the current record to the primary key value of the corresponding record in the related table. A foreign key is a field in one table that refers to the primary key field in another table and indicates how the tables are related. The field names of these two fields do not have to match, although their data types must be the same.

The related table displays but does not store the data in the record. The foreign key is stored but does not display. For this reason, any updates made to the data in the related table will be reflected in both the list and records in the table containing the lookup field. You must define a lookup list field from the table that will contain the foreign key and display the lookup list.

Value List Lookup Field

A lookup field that uses a fixed list of values looks the same as a lookup field that uses a table, except the fixed set of values is entered when the lookup field is created. A value list should be used only for values that will not change very often and do not need to be stored in a table. For example, a list for a Salutation field containing the abbreviations Mr., Mrs., or Ms. would be a good candidate for a value list. Choosing a value from a value list will store that value in the record—it does not create an association to a related table. For this reason, if you change any of the original values in the value list later, they will not be reflected in records added before this change was made.

Additional Information
You will create a value list lookup field in Lab 2.

In the first Lookup Wizard dialog box, you specify the source for the values for the lookup field. The Employee ID field is already correctly selected.

1 Click Next >.

Your screen should be similar to Figure 1.57

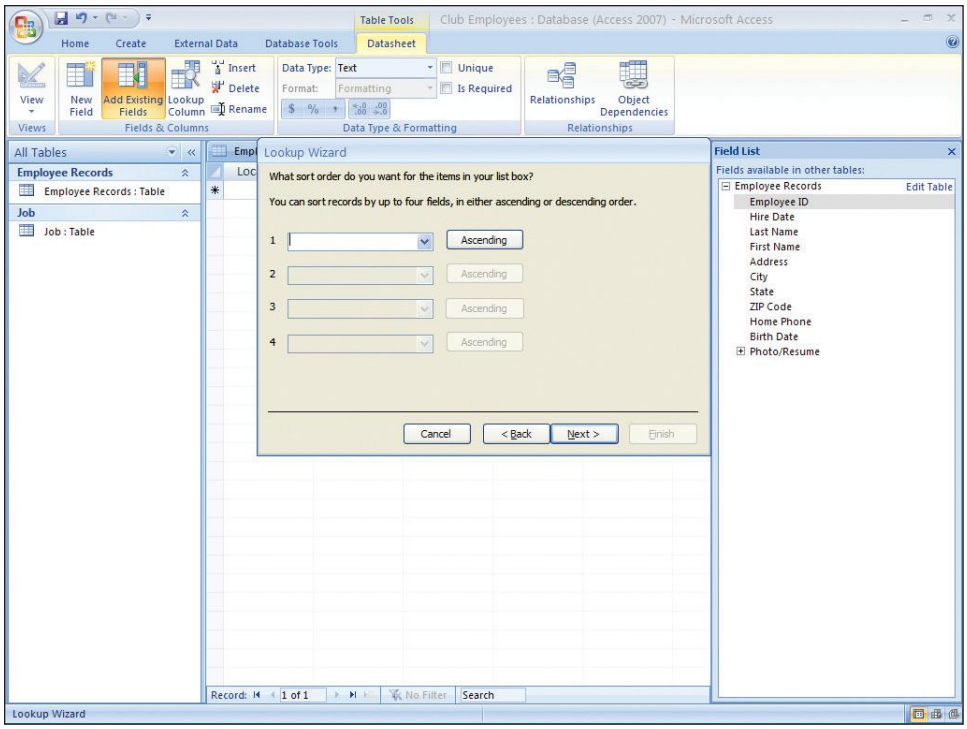


Figure 1.57

The next step is to specify a sort order. Since the items will automatically appear in the same order as in the Employee Records table, you can skip this step and move to the next step to specify the column width. Again, you want to use the same width setting you established in the Employee Records table so you will skip this step as well.

2 Click Next > twice.

Your screen should be similar to Figure 1.58

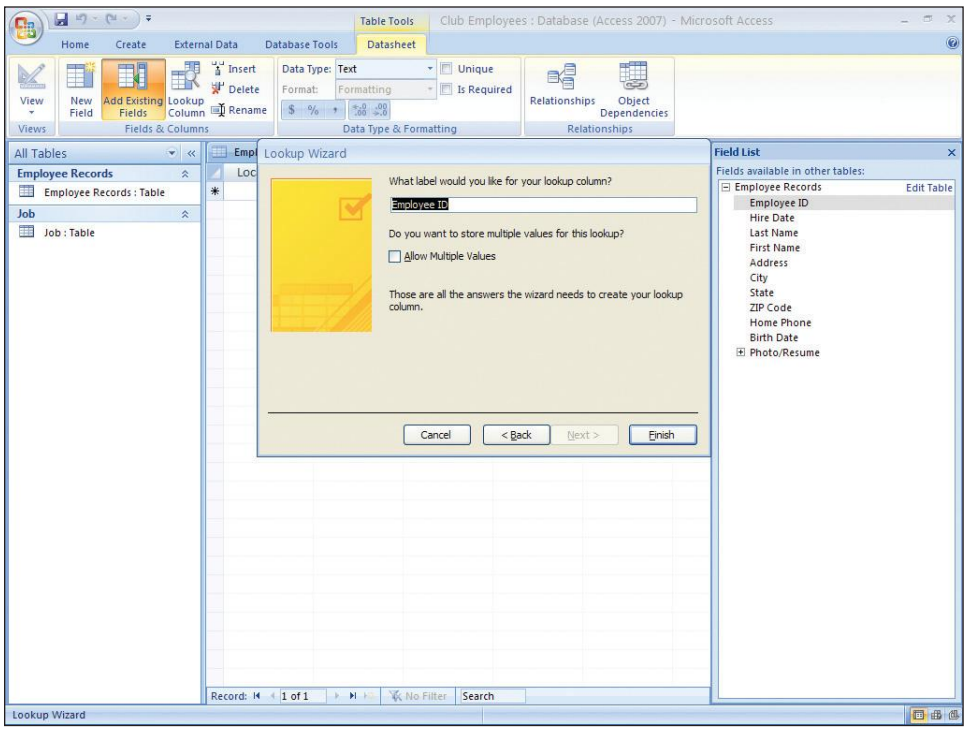


Figure 1.58

Finally, you are asked to specify a field name. You will accept the default name, which is the same as the name used in the Employee Records table.

3. Click Finish.
- Close the Field List pane.
- Switch to Design view.
- Select the Employee ID field.
- Open the Lookup tab in the Field Properties area.

Your screen should be similar to Figure 1.59

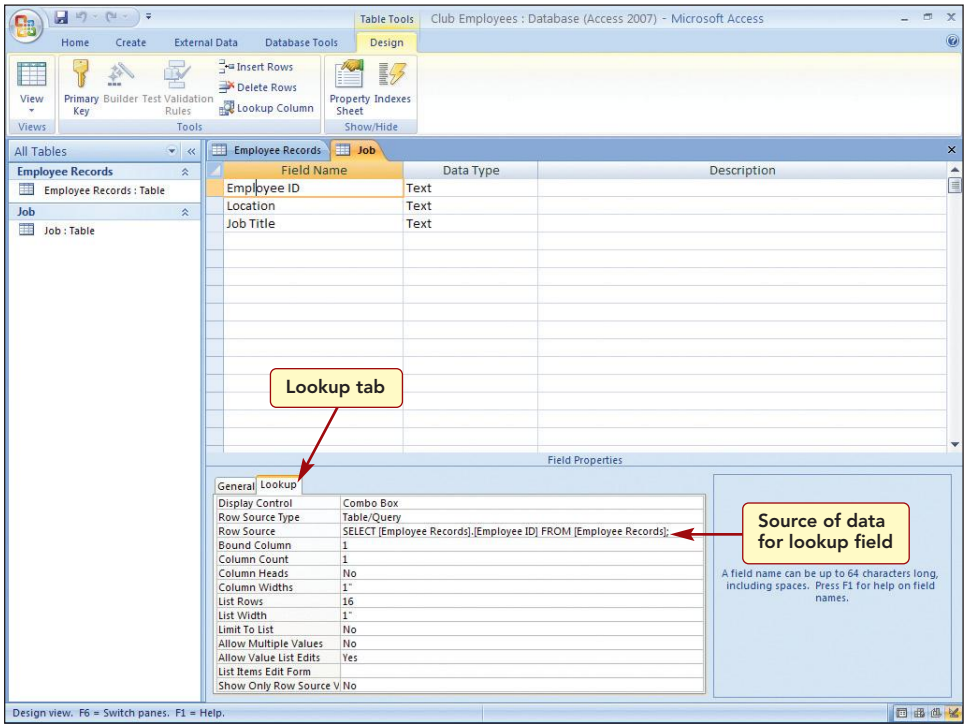


Figure 1.59

The new field has been added to the table and includes the same properties as the Employee ID field in the Employee Records table. It is a primary key field with a field size of 5. In addition, an association between the two tables has been established, as can be seen in the Row Source row of the Lookup properties, which identifies the source of the data for this row as the Employee Records table.

Additional Information
You will learn about table relationships in later labs.

Using a Lookup Field

Next, you will use the Employee ID lookup field to enter the employee numbers for each record. Then you will complete the information for each record.

1. **Switch to Datasheet view.**

2. **If necessary, click in the Employee ID field to make it active.**

3. **Click ▼ at the end of the box to open the drop-down list of options.**

Your screen should be similar to Figure 1.60

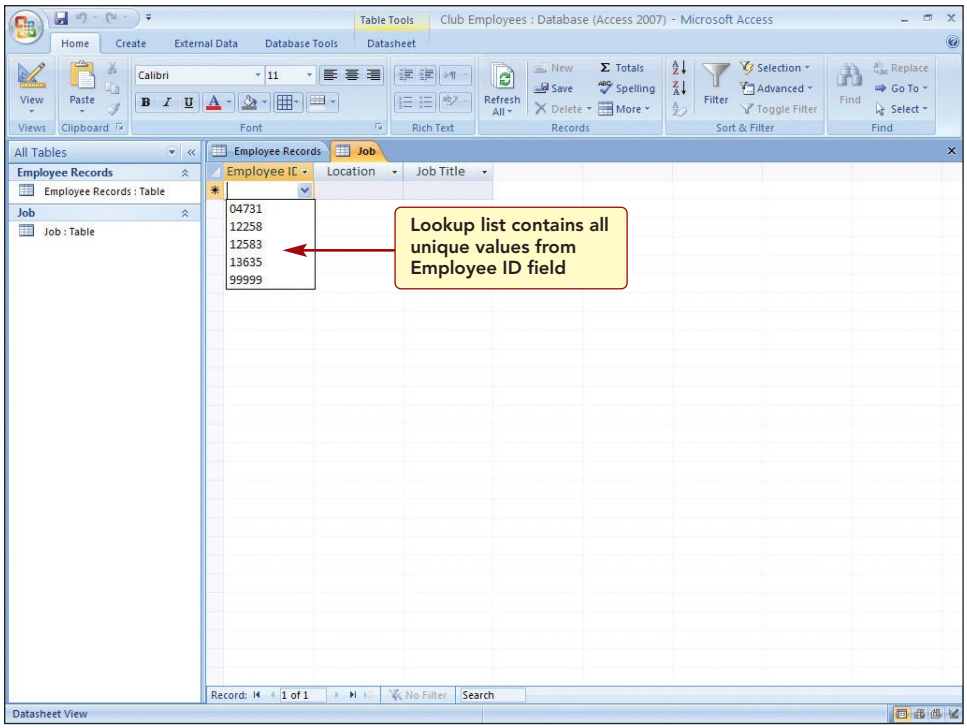


Figure 1.60

The lookup list displays a drop-down list of all the values in the Employee ID field of the Employee Records table. Clicking on an entry in the list inserts it into the field.

2. **Choose 04731 and press ↵Enter to move to the Location field.**

- **Enter River Mist for the location and Fitness Coordinator for the job title.**
- **In a similar manner, add the remaining records (shown below) to the table.**
- **Best fit the columns.**

Your screen should be similar to Figure 1.61

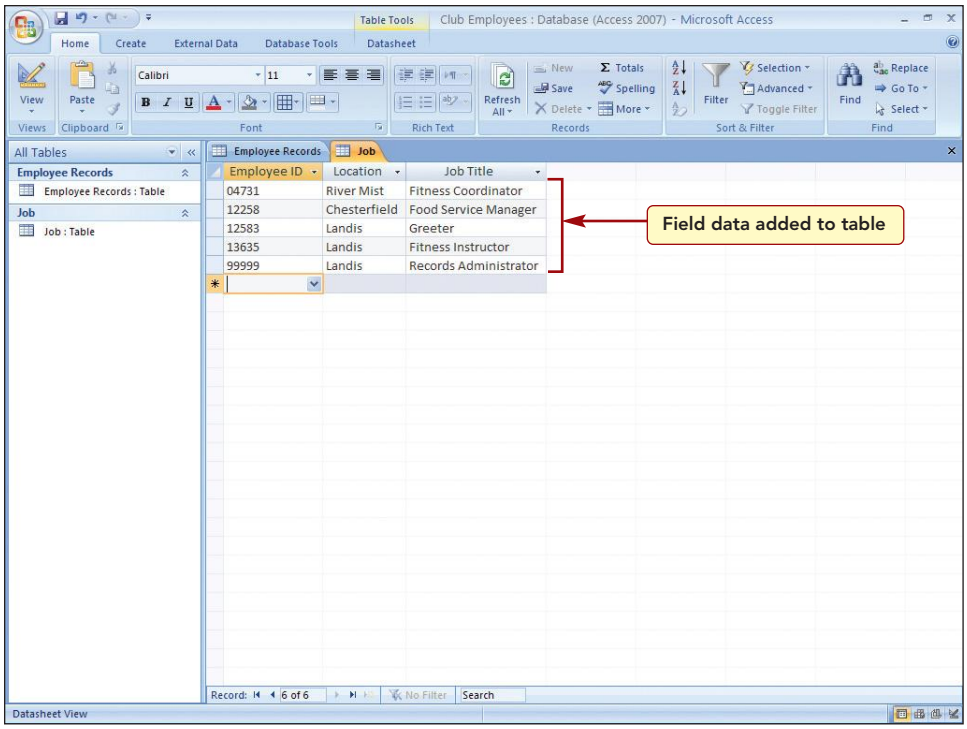


Figure 1.61

ID	Location	Position
12258	Chesterfield	Food Service Manager
12583	Landis	Greeter
13635	Landis	Fitness Instructor
99999	Landis	Records Administrator

The table now includes information on the location and job titles for the same five records as in the Employee Records table.

Inserting a Field

As you consider the contents of the two tables, you realize that the Hire Date information also should be in the Job table because the subject matter is related to the employee's job, not to his or her personal information.

1. **Move to any row in the Location field.**
- **Click** Insert **in the Fields & Columns group of the Table Tools Datasheet tab to insert a blank field column to the left of the current column.**
- **Name the field Hire Date.**
- **Change the data type to Date/Time.**
- **Click** Format: **in the Data Type & Formatting group and choose Short Date.**

Your screen should be similar to Figure 1.62

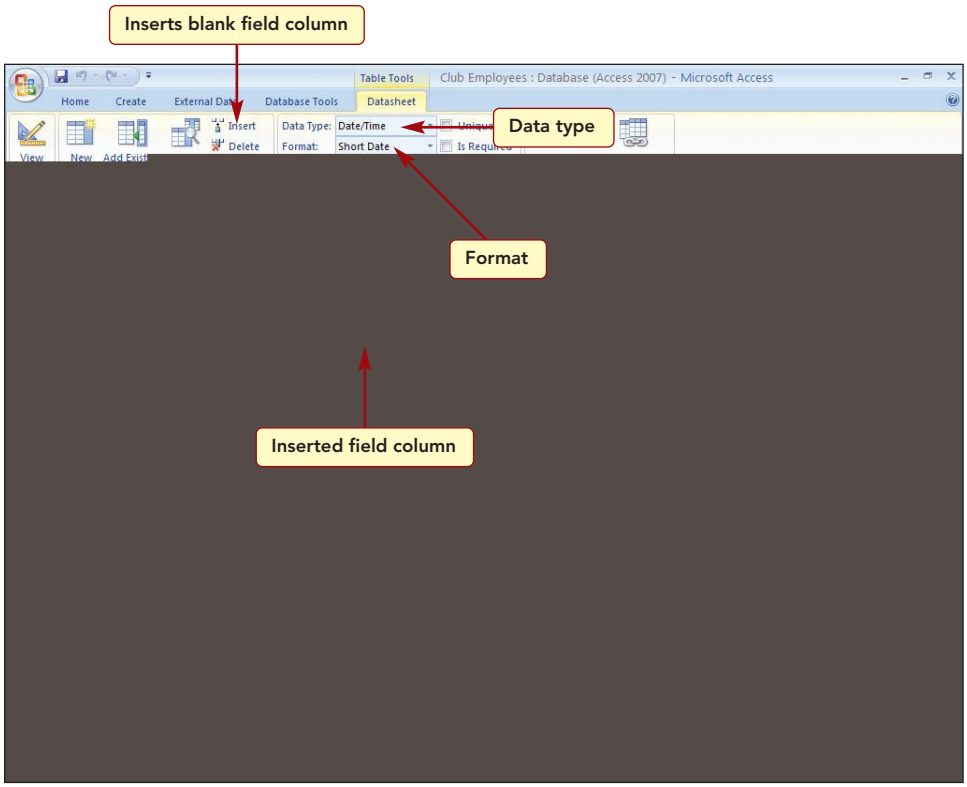


Figure 1.62

The new field has been inserted and defined.

Copying Field Content

Next, you will copy the data from the Hire Date field in the Employee Records table to the new field in the Job table. A selection that is copied creates a duplicate of the original, called the *source,* and stores it in the **Clipboard,** a temporary storage area in memory. Then, to insert the copied data from the Clipboard, you paste it in a new location, called the **destination.**

1. **Click on the Employee Records tab to make the table active.**
- **Select the Hire Date column.**
- **Click Copy in the Clipboard group of the Home tab.**
- **Click on the Job tab to make the table active.**
- **Select the Hire Date column.**
- **Click Paste in the Clipboard group of the Home tab.**
- **Click Yes to confirm the paste operation.**

Your screen should be similar to Figure 1.63

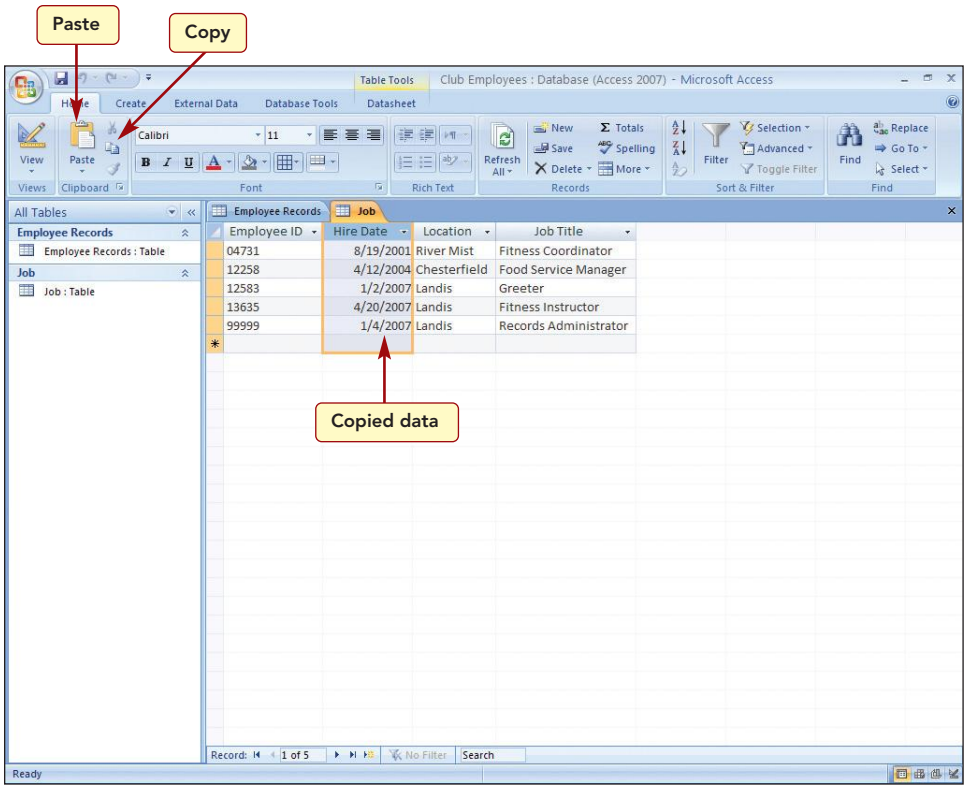


Figure 1.63

The hire date data for each record has been copied into the Hire Date field of the Job table. All you need to do now is delete the Hire Date field in the Employee Records table.

2. **Make the Employee Records table active.**
- **Delete the Hire Date field from the table.**

Now, the Employee Records table only contains the employee's personal information and the Job table contains information about the employee's job.

Previewing and Printing a Table

Now that you have completed designing and entering some sample data in the two tables, you want to print a copy of the tables to get your managers' approval before you begin entering more employee records. Before printing the tables, you will preview them onscreen to see how they will look when printed.

Previewing the Table

Previewing a table displays each page in a reduced size so you can see the layout. Then, if necessary, you can make changes to the layout before printing, to both save time and avoid wasting paper.

1. **Make the Job table active.**
2. **Click Office Button.**
3. **Select Print and choose Print Preview.**
4. **Hide the Navigation pane.**

Your screen should be similar to Figure 1.64

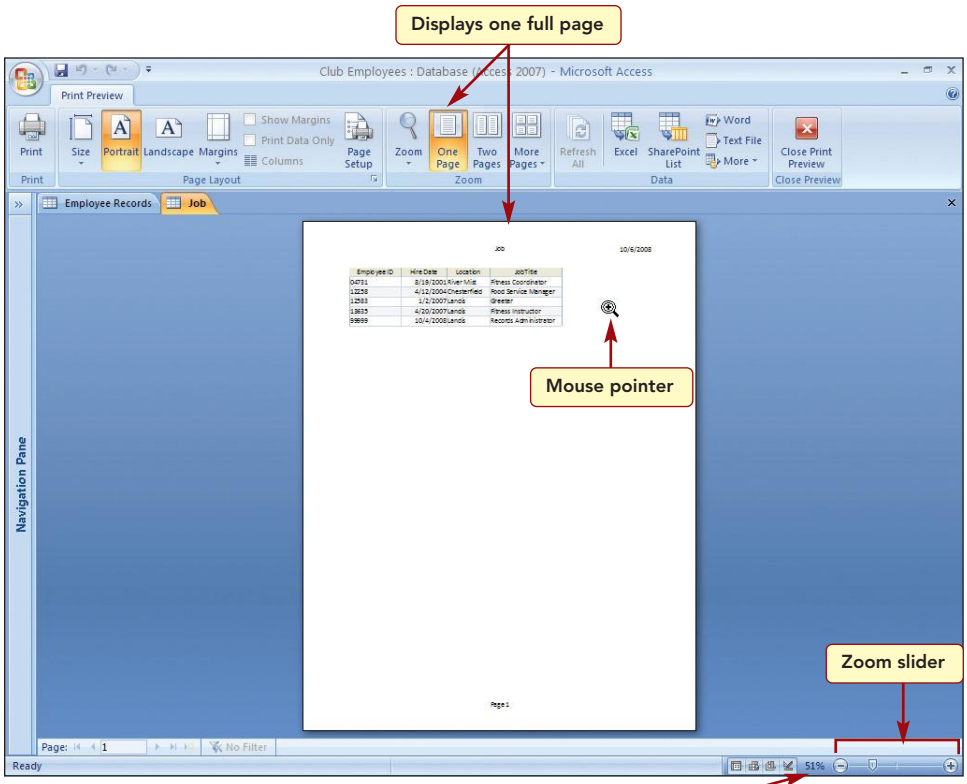


Figure 1.64

The Print Preview window displays how the table will appear when printed. The Print Preview tab is open and includes commands that are used to modify the print settings.

To see the information in the table more clearly, you can change the magnification level of the preview window. The current setting, One Page, adjusts the magnification to display an entire page in the preview window. You can drag the zoom slider in the status bar to increase the onscreen character size up to 10 times the normal display (1000 percent) or reduce the character size to 10 percent. Clicking or on the zoom slider increases or decreases the magnification by 10 percent increments.

Notice that the mouse pointer is a magnifying glass when it is positioned on the page. This indicates that you can click on the page to switch between the One Page setting and the last-used magnification level (initially 100%).

Additional Information

The current magnification level is displayed in the status bar.

2 **Click on the table.**

Additional Information
The location where you click will determine the area that is displayed initially.

Your screen should be similar to Figure 1.65

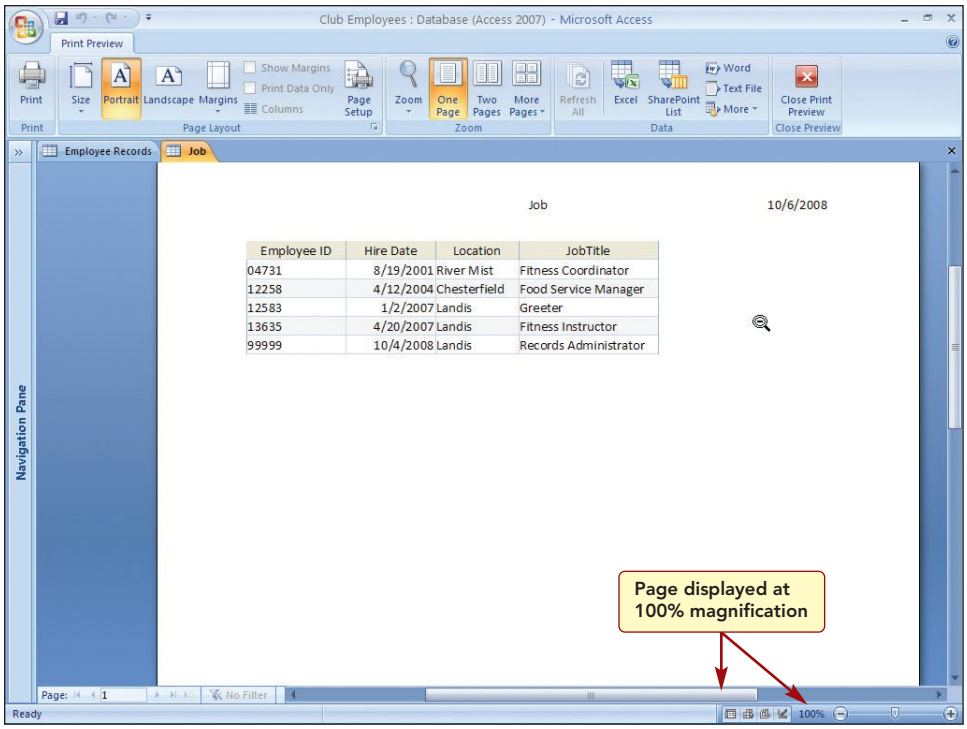


Figure 1.65

The table appears in 100 percent magnification. This is the size it will appear when printed.

Printing a Table

The Print button in the Print group is used to define the printer settings and print the document.

1 **If necessary, make sure your printer is on and ready to print.**

Click Print.

Another Method
The keyboard shortcut is Ctrl + P.

Your screen should be similar to Figure 1.66

Having Trouble?
Please consult your instructor for printing procedures that may differ from the directions given here.

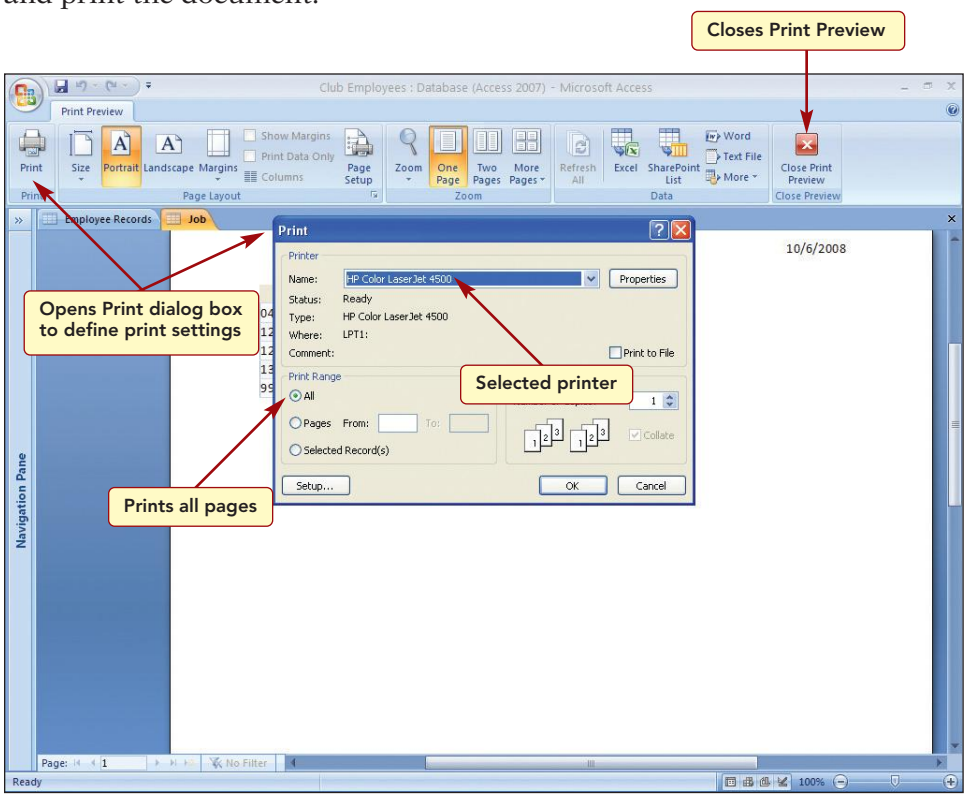


Figure 1.66

From the Print dialog box, you specify the printer you will be using and the document settings. The printer that is currently selected is displayed in the Name drop-down list box in the Printer section of the dialog box.

The Print Range area of the Print dialog box lets you specify the amount of the document you want printed. The range options are described in the following table.

Option	Action
All	Prints the entire document.
Pages	Prints pages you specify by typing page numbers in the text box.
Selected Records	Prints selected records only.

You will print the entire document.

2. **If you need to change the selected printer to another printer, open the Name drop-down list box and select the appropriate printer (your instructor will tell you which printer to select).**

- **Click** OK **.**

A status message box is displayed briefly, informing you that the table is being printed. Your printed copy should be similar to the printout shown in the Case Study at the beginning of the lab.

Changing the Page Orientation and Margins

Next, you will preview and print the Employee Records table.

1. **Click** Close Print Preview **in the Close Preview group.**

- **Make the Employee Records table active.**

- **Click Office Button.**

- **Select Print and choose Print Preview.**

- **Click on the table to zoom the preview.**

Your screen should look similar to Figure 1.67

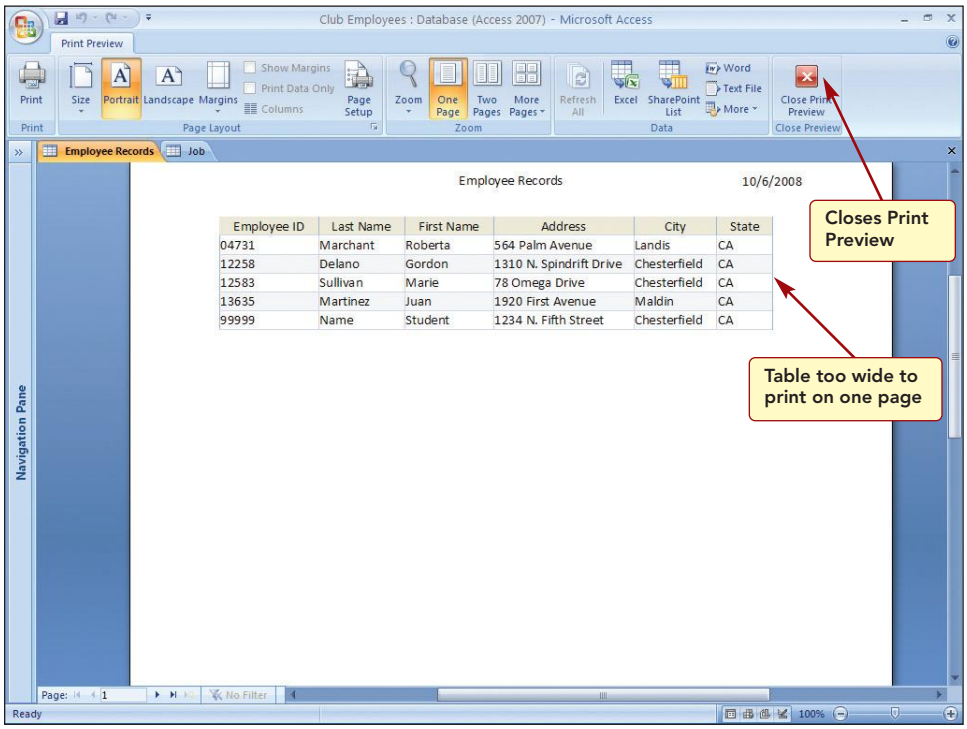


Figure 1.67

Notice that because the table is too wide to fit across the width of a page, only the first six fields are displayed on the page. Tables with multiple columns are typically too wide to fit on an $8^1/_2$ by 11 piece of paper. You would like to see both pages displayed onscreen.

2 Click Two Pages in the Zoom group.

Your screen should be similar to Figure 1.68

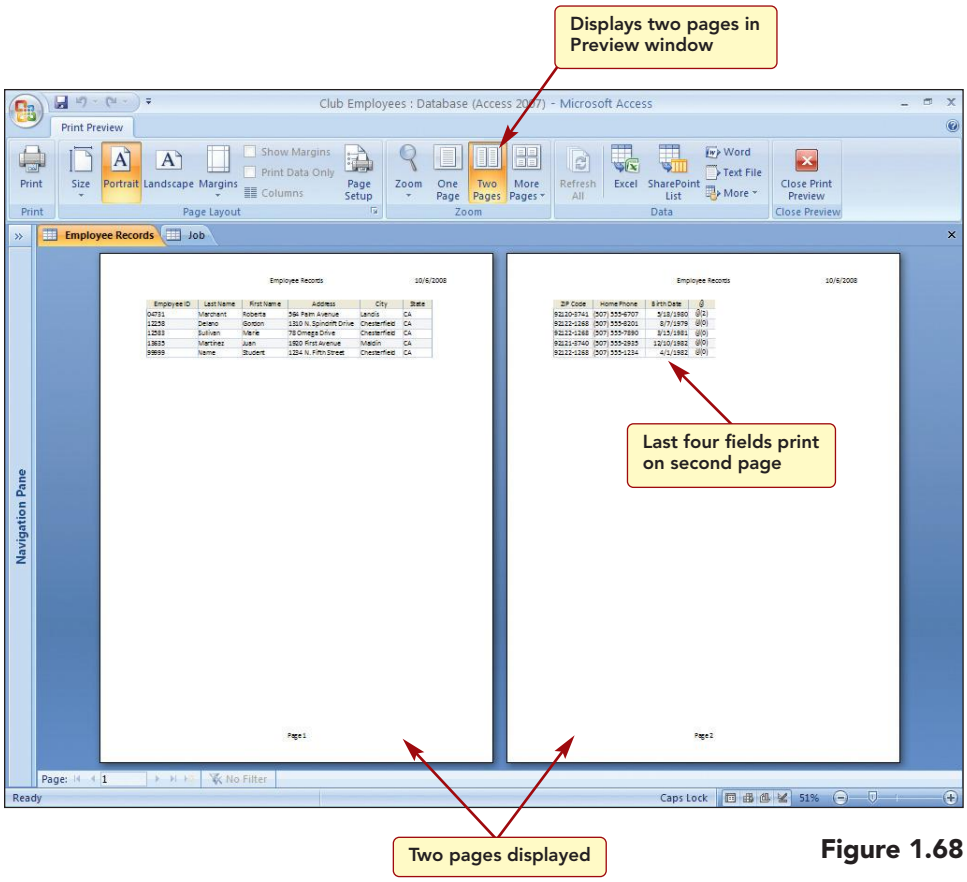


Figure 1.68

Rather than print the table on two pages, you decide to see whether changing the orientation of the table will allow you to print it on one page. **Orientation** refers to the direction that text prints on a page. Normal orientation is to print across the width of an $8^1/_2$-inch page. This is called **portrait orientation.** You can change the orientation to print across the length of the paper. This is called **landscape orientation.**

3 Click Landscape in the Page Layout group.

Additional Information

Clicking Portrait changes the orientation to portrait.

Your screen should be similar to Figure 1.69

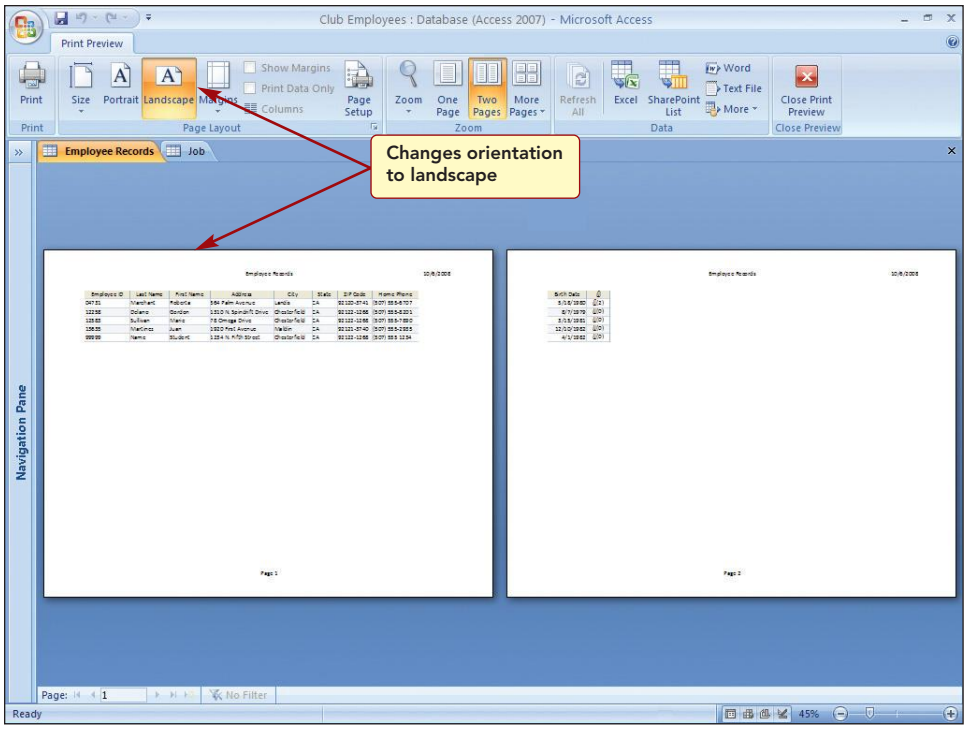


Figure 1.69

Although this helps, there are still two fields that do not fit on the page. To fix this, you will try reducing the size of the page margins. The **margin** is the blank space around the edge of a page. You will decrease the right and left margin settings to 0.25 inch to see if this helps all fields fit on the page.

4 Click Margins in the Page Layout group of the Print Preview tab.

Choose Narrow.

Click One Page.

Increase the magnification to 90%.

Your screen should be similar to Figure 1.70

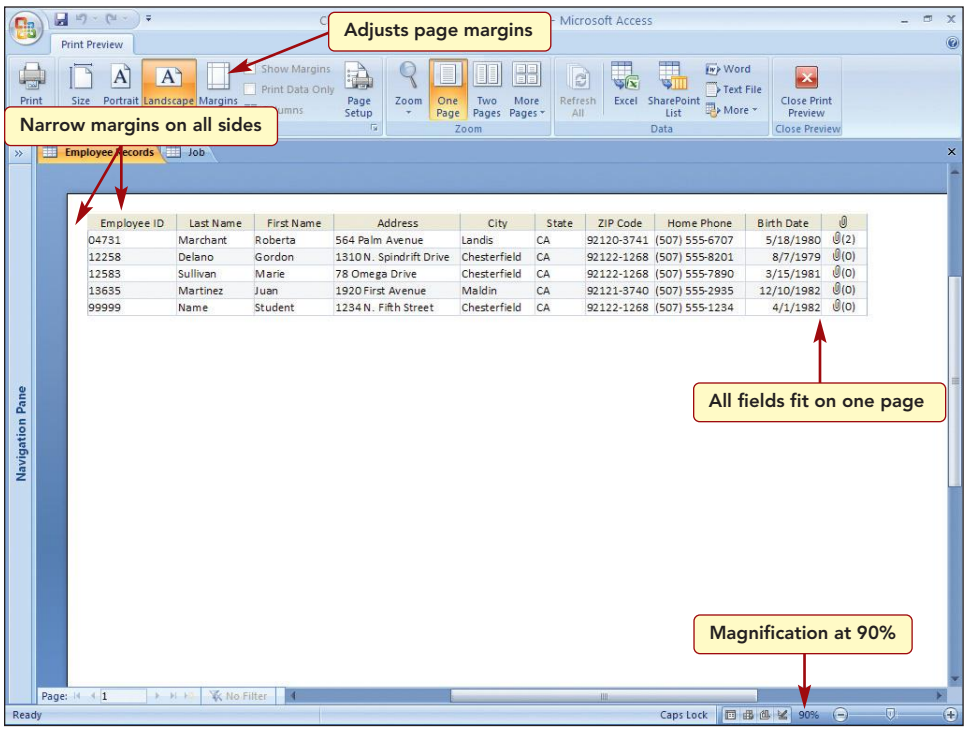


Figure 1.70

You can now see that all the fields will print on one page.

5 **Print the table.**

Close the Print Preview window.

Closing and Opening a Table and Database

You are ready to show the manager your printed table to get approval on the setup of the data. But first you want to close the table and database that you created.

Closing a Table and Database

You close a table by closing its window and saving any layout changes you have made since your last Access session. Because you changed the column widths of the table in Datasheet view, you will be prompted to save the layout changes before the table is closed. If you do not save the table, your column width settings will be lost.

1 **Display the Navigation pane.**

Click Close 'Employee Records' in the datasheet window.

If necessary, click Yes in response to the prompt to save the table.

In a similar manner, close the Job table.

Your screen should be similar to Figure 1.71

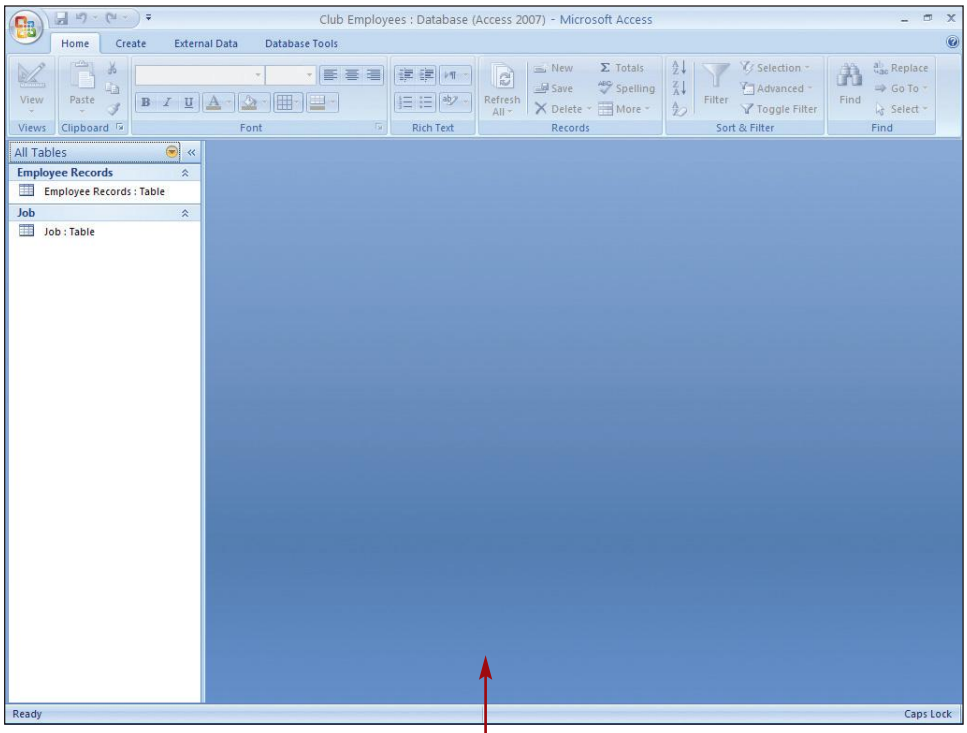


Figure 1.71

The work area is empty because there are no open objects. The Navigation pane still displays the names of the table objects. Next, you will close the database.

2 Click Office Button and choose Close Database.

Another Method

Do not click Close in the Access window title bar as this will exit the application.

Your screen should be similar to Figure 1.72

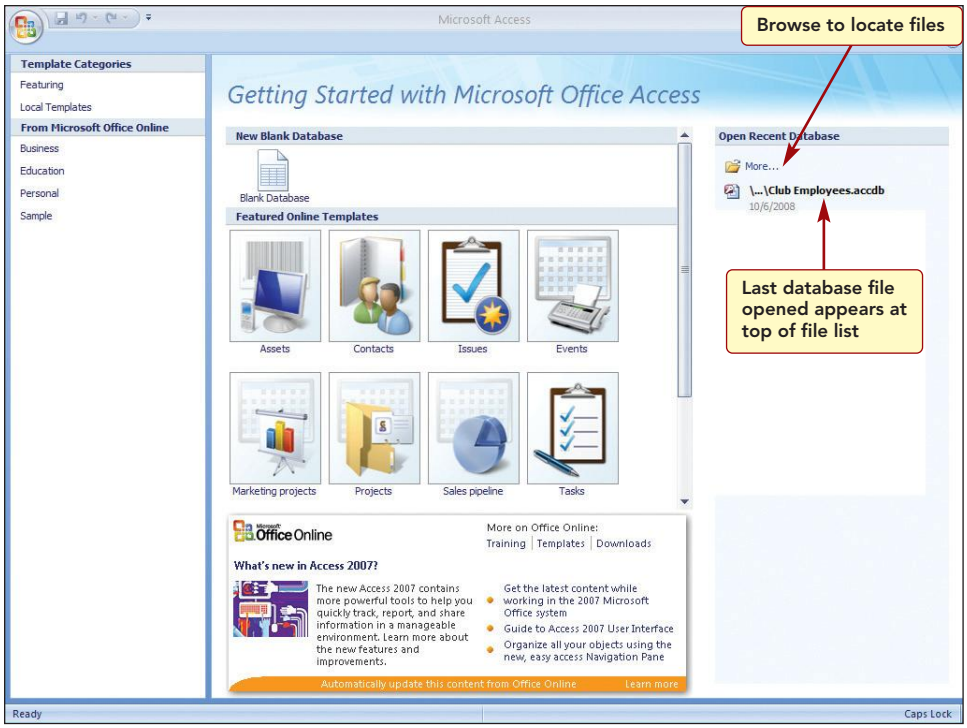


Figure 1.72

The Getting Started window is displayed again so you can open another existing database file or create a new one.

Opening a Table and Database

You want to make sure that you know how to access your table of employee records, so you will reopen it and then close it again. Because opening a file is a very common task, there are many ways to do it. You can select the file name from the Open Recent Database list, which displays the names of the last nine recently used files. If the file name is not listed, you can click More... to browse your computer to locate the file.

You also can open database files that were created in previous versions of Access that used the .mdb file extension. It must be converted to Access 2007 file format, however, if you want to take advantage of the new features in Access 2007. If you plan to share a file with someone using Access 2003 or earlier, you can save the file using the .mdb file type; however, some features may be lost. Otherwise, if you save it as an .accdb file type, the recipient will not be able to open the file.

More About

See "6 Managing and Maintaining Databases" in the More About appendix to learn how to save databases as a previous version.

Another Method

You also can click Office Button and select the file name from the Recent Document list or choose Open to browse your computer to locate the file. You also can use the keyboard shortcut Ctrl + O to browse for files.

Additional Information

The default setting is to display the last nine recently used files. This setting can be changed using Office Button/Access Options/Advanced/Display.

1. **Choose Club Employees from the Open Recent Database list.**

- **Click Options... in the Security Warning bar, select Enable this content, and click OK from the Microsoft Office Security Options dialog box.**

Having Trouble?
Depending upon the security settings on your system, a Security Warning may not be displayed below the Ribbon.

- **Double-click on the Employee Records table.**

Another Method
You also can drag the object from the Navigation pane to the work area to open it.

Your screen should be similar to Figure 1.73

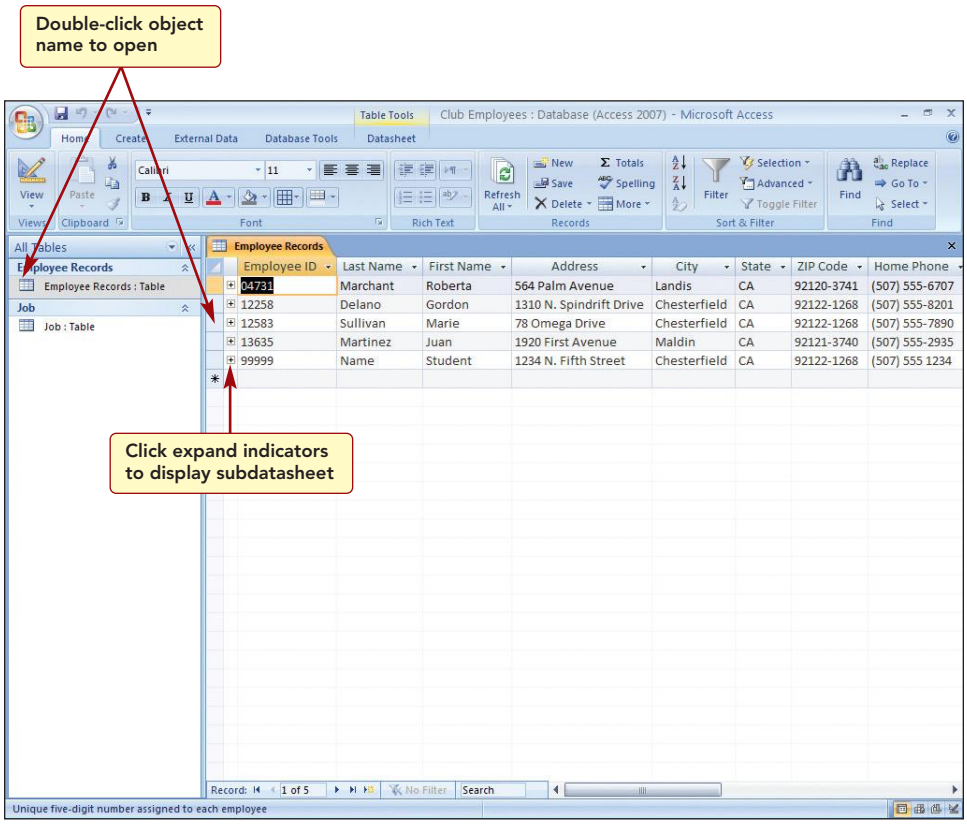


Figure 1.73

The database file is open and the Navigation pane displays the table name. The Employee Records table is open in the work area. Notice the expand indicators ⊞ at the beginning of each row. This indicates there is a subdatasheet linked to the records in this table.

Concept 7

Subdatasheet

7 A **subdatasheet** is a data table nested in another data table that contains data related or joined to the table where it resides. A subdatasheet allows you to easily view and edit related data. Subdatasheets are created automatically whenever relationships are established between tables.

In this case, the subdatasheet is to the Job table. Clicking ⊞ will expand the table to show the information in the subdatasheet table, Job.

2 **Click ⊞ next to the first record.**

Your screen should be similar to Figure 1.74

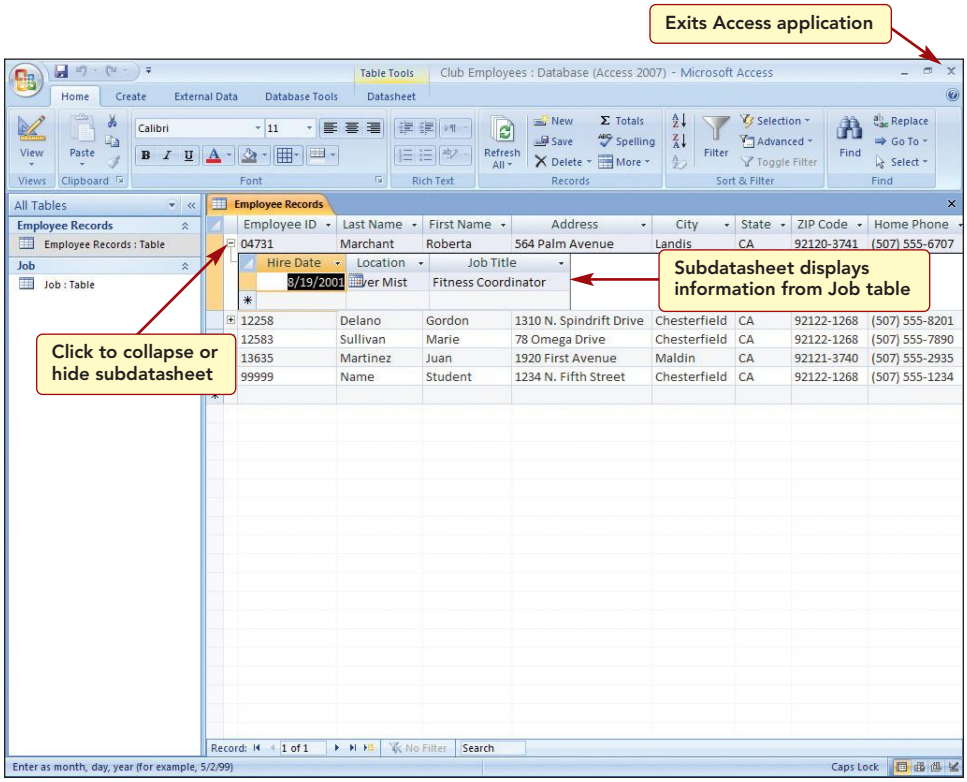


Figure 1.74

Additional Information
You will learn more about relationships and subdatasheets in later labs.

A subdatasheet appears and displays the location and job title information contained in the Job table for Roberta Marchant. Then, to hide or collapse the subdatasheet again, you click the collapse indicator ⊟.

3 **Click ⊟ next to the first record.**

You have created a database file that contains two tables and that follows the two basic principles of database design: do not include redundant information in tables and enter accurate and complete information. Although you may think the employee number is redundant data, it is the only way the information in the two tables can be associated. The database attains the goals of **normalization,** a design technique that identifies and eliminates redundancy by applying a set of rules to your tables to confirm that they are structured properly. These rules ensure that your design meets the **normal form** standards, a set of constraints that must be satisfied. There are five sequential normal form levels; however, meeting the third level, commonly called 3NF, is the level that is required for most database designs. This level requires that every nonkey column be dependent on the primary key and that nonkey columns are independent of each other.

You also have followed the five steps (plan, design, develop, implement, and refine and review) of the database design process while creating the database.

Exiting Access

You will continue to build and use the database of employee records in the next lab. Until then, you can exit Access.

1 **Click Close in the Access window title bar.**

Another Method

You also can click Office Button and choose Exit Access.

Notice that this time you were not prompted to save the table because you did not make any changes to it since last opening it. If you had made changes, you would be prompted to save the file before exiting Access.



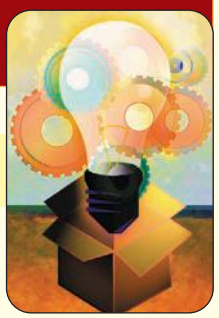
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Admitting Nurse

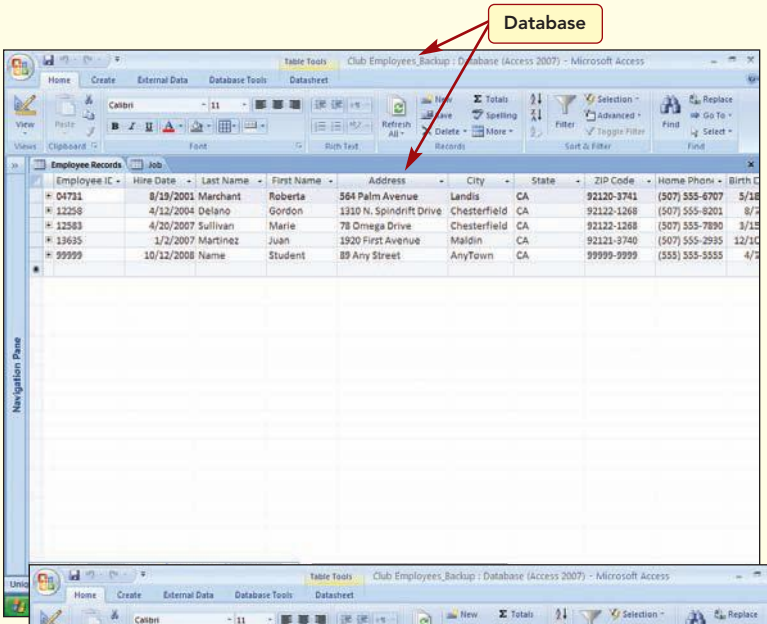
Can you imagine trying to organize the information of hundreds of patients in a busy emergency room? This is the job of an admitting nurse. They have to be able to enter, edit, and format data; add and delete records; and so on. This information is used by all departments of the hospital, from the doctors, to the pharmacy, and to the billing department. Without a proper understanding of database software, a hospital cannot run efficiently. The average salary of an admitting nurse is in the $40,000 to $50,000 range. The demand for nurses is expected to remain high.

Concept Summary



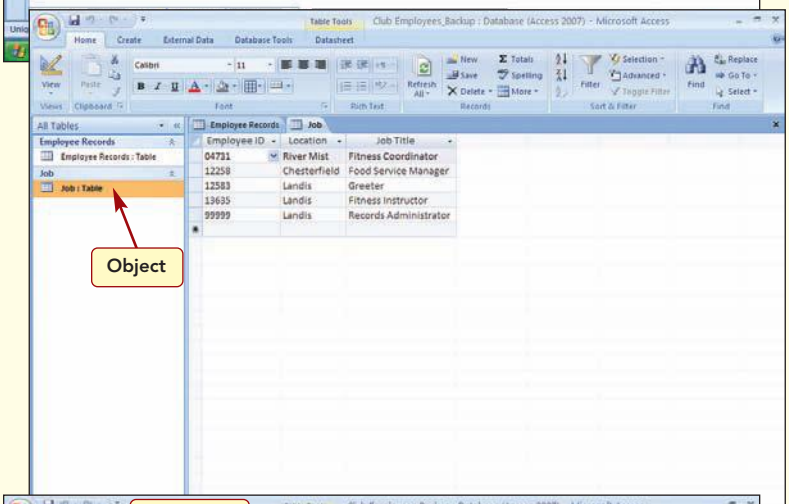
LAB 1

Creating a Database



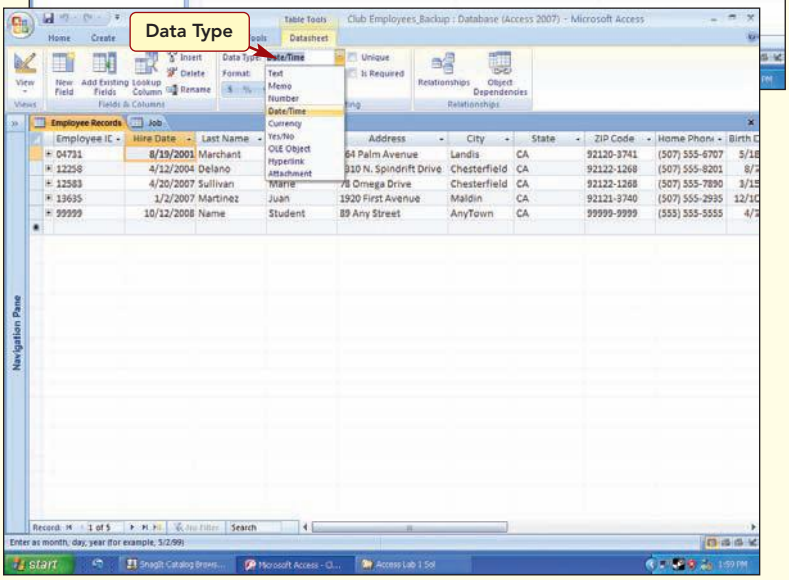
Database (AC1.4)

A database is an organized collection of related information.



Object (AC1.10)

An Access database is made up of several types of objects, such as a table or report, consisting of many elements. An object can be created, selected, and manipulated as a unit.



Data Type (AC1.17)

The data type defines the type of data the field will contain. Access uses the data type to ensure that the right kind of data is entered in a field.

Concept Summary

Field Property (AC1.24)

A field property is a characteristic that helps define a field. A set of field properties is associated with each field.

Primary Key (AC1.29)

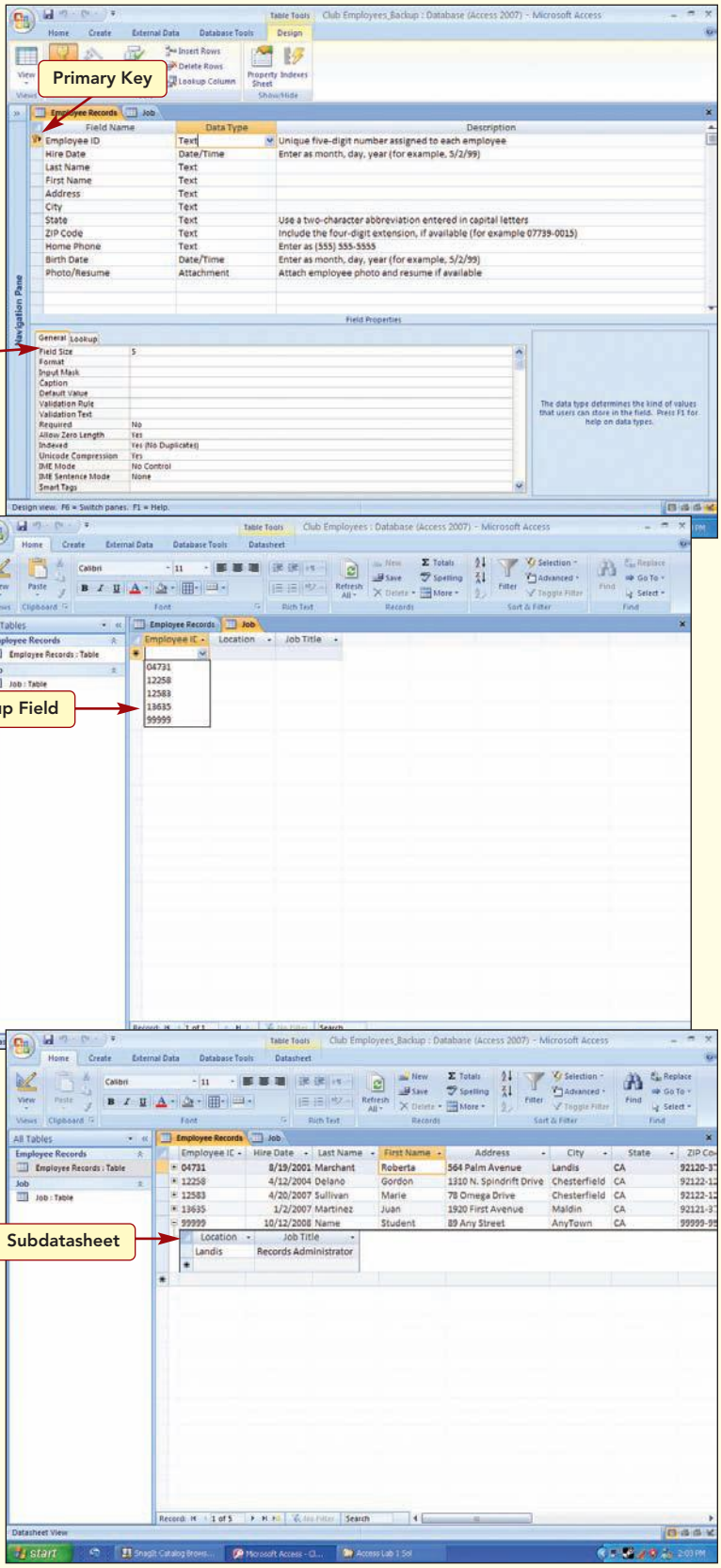
A primary key is a field that uniquely identifies each record.

Lookup Field (AC1.62)

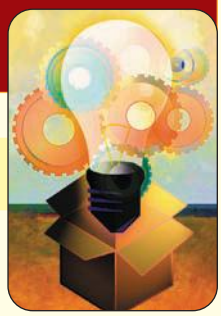
A lookup field provides a list of values from which the user can choose to make entering data into that field simpler and more accurate.

Subdatasheet (AC1.76)

A subdatasheet is a data table nested in another data table that contains data related or joined to the table where it resides.



Lab Review



LAB 1

Creating a Database

key terms

Allow Zero Length property AC1.24
Attachment data type AC1.18
AutoNumber data type AC1.18
Best Fit feature AC1.51
Caption property AC1.24
cell AC1.12
Clipboard AC1.67
column width AC1.50
composite key AC1.29
Currency data type AC1.18
current field AC1.25
current record AC1.12
data type AC1.17
database AC1.4
Datasheet view AC1.12
Date/Time data type AC1.18
Default Value property AC1.24
Design view AC1.12
destination AC1.67
drawing object AC1.40
field AC1.4
field name AC1.14
field property AC1.24
Field Size property AC1.24
field template AC1.20
foreign key AC1.59
form AC1.10
Form view AC1.12
Format property AC1.24
graphic AC1.40
header row AC1.12
Hyperlink data type AC1.18
Indexed property AC1.24
Input Mask property AC1.24
landscape orientation AC1.72
Layout view AC1.12
lookup field AC1.62
lookup list AC1.62
Lookup Wizard AC1.61
margin AC1.73
Memo data type AC1.18
navigation buttons AC1.12
Navigation pane AC1.11
normal form AC1.77
normalization AC1.77
Number data type AC1.18
object AC1.10
OLE Object data type AC1.18
orientation AC1.72
picture AC1.41
portrait orientation AC1.72
primary key AC1.29
Print Preview AC1.12
query AC1.10
record AC1.4
record number indicator AC1.12
relational database AC1.4
report AC1.10
Report view AC1.12
Required property AC1.24
Select All button AC1.12
serial value AC1.18
source AC1.62
subdatasheet AC1.76
table AC1.4
template AC1.7
Text data type AC1.18
Validation Rule property AC1.24
Validation Text property AC1.24
value list AC1.62
view AC1.11
wizard AC1.61
Yes/No data type AC1.18

MCAS Skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2: Microsoft Certified Applications Specialist (MCAS) for a complete list of the skills that were covered in Lab 1.

command summary

Command	Shortcut	Action
Office Button		
New		Opens a new blank database
Open	Ctrl + O	Opens an existing database
Save	Ctrl + S	Saves database object
Print/Print	Ctrl + P	Specifies print settings and prints current database object
Print/Print Preview		Displays file as it will appear when printed
Close Database		Closes open window
Exit Access		Closes Access
Home tab		
Views group Design View		Displays object in Design view
Datasheet View		Displays object in Datasheet view
Clipboard group Cut	Ctrl + X	Removes selected item and copies it to the Clipboard
Copy	Ctrl + C	Duplicates selected item and copies to the Clipboard
Paste	Ctrl + V	Inserts copy of item from Clipboard
Records group Delete	Delete	Deletes current record
More/Column Width		Adjusts width of selected column
Find group Select/Select		Selects current record
Table Tools Datasheet tab		
Views group Design View		Displays table in Design view
Datasheet View		Displays table in Datasheet view
Fields & Columns group New Field		Inserts a new field
Delete		Removes selected field column

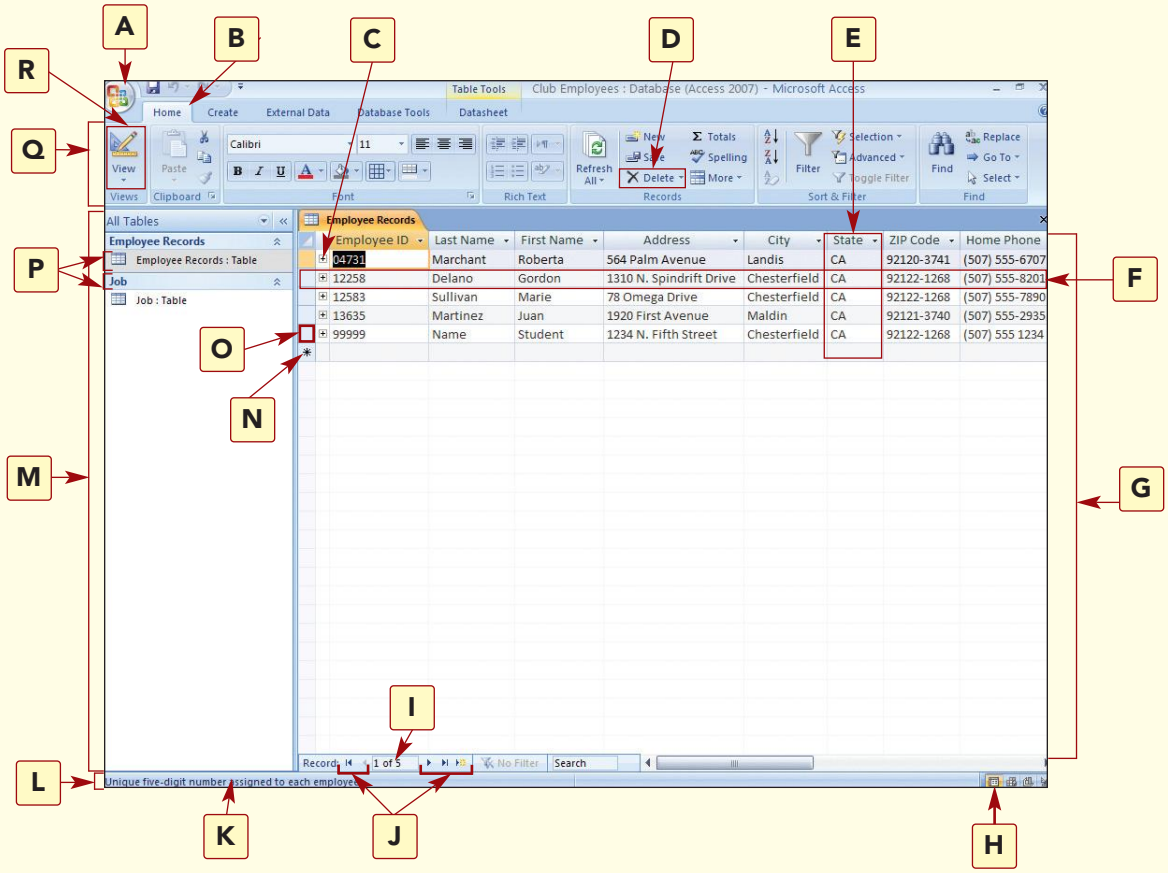
command summary

Command	Shortcut	Action
Rename		Renames selected field
Data Type & Formatting group Data Type: Text		Changes the data type for current field
Format: Formatting		Sets the display format of the selected field
Table Tools Design Tab		
Views group Design View		Displays table in Design view
Datasheet View		Displays table in Datasheet view
Tools group Primary Key		Makes current field a primary key field
Delete Rows		Deletes selected field row
Print Preview Tab		
Print group Print		Prints displayed object
Page Layout group Portrait		Changes print orientation to portrait
Landscape		Changes print orientation to landscape
Zoom group One Page		Displays one entire page in Print Preview
Two Pages		Displays two entire pages in Print Preview
Close Preview group Close Print Preview		Closes Print Preview window



screen identification

1. In the following Access screen, several items are identified by letters. Enter the correct term for each item in the spaces provided.



Possible answers for the screen identification are:

Design view
Cell
Record number indicator
Field name
Work area
Ribbon
Object
Field description
End of table indicator
Open tab
Select All button
Primary key indicator
Navigation buttons
Datasheet View button
Status bar
Tabs
Delete record
Field
Navigation pane
Record
File menu

A. _____ **J.** _____
B. _____ **K.** _____
C. _____ **L.** _____
D. _____ **M.** _____
E. _____ **N.** _____
F. _____ **O.** _____
G. _____ **P.** _____
H. _____ **Q.** _____
I. _____ **R.** _____

matching

Match the numbered item with the correct lettered description.

1. primary key	_____	**a.**	collection of related fields
2. Navigation pane	_____	**b.**	a unit of a database
3. Datasheet view	_____	**c.**	contains multiple tables linked by a common field
4. Attachment	_____	**d.**	used to define the table structure
5. Design view	_____	**e.**	used to open and manage database objects
6. field size	_____	**f.**	a data type that stores multiple files of different file types in a single field
7. data type	_____	**g.**	field that uniquely identifies each record
8. object	_____	**h.**	displays table in row and column format
9. record	_____	**i.**	defines the type of data the field will contain
10. relational database	_____	**j.**	controls the maximum number of characters that can be entered in a field

fill-in

Complete the following statements by filling in the blanks with the correct terms.

1. You use the _____ located at the left of the work area to select the type of object you want to work with.
2. The _____ field property specifies how data displays in a table.
3. A field name is used to identify the _____ stored in a field.
4. The _____ data type restricts data to digits only.
5. Using _____ orientation prints across the length of the paper.
6. The field property that limits a text data type to a certain size is called a(n) _____.
7. A _____ is a data table nested in another data table that contains data related or joined to the table where it resides.
8. An Access database is made up of several types of _____.
9. The _____ is a field that uniquely identifies each record.
10. The _____ data type can be used to store a graphic file in a field.

true/false

Circle the correct answer to the following statements.

1. A field description is a required part of the field definition. True False
2. Interactive databases define relationships between tables by having common data in the tables. True False
3. A field contains information about one person, thing, or place. True False
4. The data type defines the information that can be entered in a field. True False
5. You can format the text in a Memo field. True False
6. A foreign key is a field in one table that refers to the primary key field in another table and indicates how the tables are related. True False
7. Tables and queries are two types of database objects. True False
8. A lookup field that uses another table as the source for values is called a value list. True False
9. A table is a required object in a database. True False
10. Changing the column width in the datasheet changes the field size. True False

multiple choice

Circle the letter of the correct response.

1. The last step of database development is _____.
   a. design
   b. develop
   c. review
   d. plan
2. _____ is a design technique that identifies and eliminates redundancy by applying a set of rules to your tables.
   a. Database development
   b. Normalization
   c. Validation
   d. Orientation
3. A _____ is often used as the primary key.
   a. phone number
   b. catalog number
   c. last name
   d. first name

4. You may lose data if your data and _____ are incompatible.
   a. field name
   b. data type
   c. default value
   d. field size

5. _____ affects the amount of data that you can enter into a field.
   a. Column width
   b. Field size
   c. Format
   d. Description size

6. A _____ is a field in one table that refers to the primary key field in another table and indicates how the tables are related.
   a. foreign key
   b. common key
   c. related key
   d. data key

7. A(n) _____ provides a list of values from which the user can choose.
   a. value field
   b. lookup field
   c. related field
   d. attachment field

8. Graphics can be inserted into a field that has a(n) _____ data type.
   a. graphic
   b. text
   c. attachment
   d. memo

9. The basic database objects are _____.
   a. panes, tables, queries, and reports
   b. tables, queries, forms, and reports
   c. forms, reports, data, and files
   d. portraits, keys, tables, and views

10. _____ view is only used to modify the table structure.
    a. Design
    b. Report
    c. Datasheet
    d. Query

Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Oak Ridge School Parent Contact Database ★

CONTINUING EXERCISES

1. Oak Ridge Elementary School has decided to set up a database with the contact information for all students. As a parent, you have volunteered to do the initial database creation and teach the secretary at the school to maintain it. The database table you create will have the following information: student's last name, student's first name, guardian's name, home address, and home phone number. When you have finished, a printout of your completed database table should look similar to the one shown here.

ID	Student Last Name	Student First Name	Guardian	Street Address	City	State	ZIP Cod	Home Phone	Alternate Phone
1	Roderick	Smithy	Shannon Roderick	1293 Hillview Rd.	Oak Ridge	UT	22301	(802) 555-0914	
3	Salazar	Gloria	Betha Salazar	103 Oak Ave.	Oak Ridge	UT	22301	(802) 555-8411	
4	Name	Student	Ricardo Ramirez	107 Oak Ave.	Oak Ridge	UT	22301	(802) 555-8632	(802) 555-9711

a. Create a blank database named **Oak Ridge School.** Design a table in Design view named Students using the following field information. Make the ID field the primary key field.

Field Name	Data Type	Description	Field Size
ID	AutoNumber		Long Integer
Student Last Name	Text	Student's legal last name	25
Student First Name	Text	Include student's nickname in parentheses	25
Guardian	Text	First and last name of primary guardian	55
Street Address	Text		75
City	Text		20
State	Text	Two-letter abbreviation	2
ZIP Code	Text		5
Home Phone	Text		15

b. Enter the following records into the table, using Copy and Paste for fields that have the same data (such as the city):

Record 1	Record 2	Record 3
Roderick	Avery	Salazar
Smithy	Wilson	Gloria
Shannon Roderick	Rita Avery-Montoya	Betha Salazar
1293 Hillview Rd.	102 4th Street	103 Oak Ave.
Oak Ridge	Oak Ridge	Oak Ridge
UT	UT	UT
22301	22301	22301
(802) 555-0914	(802) 555-3375	(802) 555-8411

c. Adjust the column widths appropriately.
d. Delete record 2. Add another record with the following data:

[Your last name]
[Your first name]
Ricardo Ramirez
107 Oak Ave.
Oak Ridge
UT
22301
(802) 555-8632

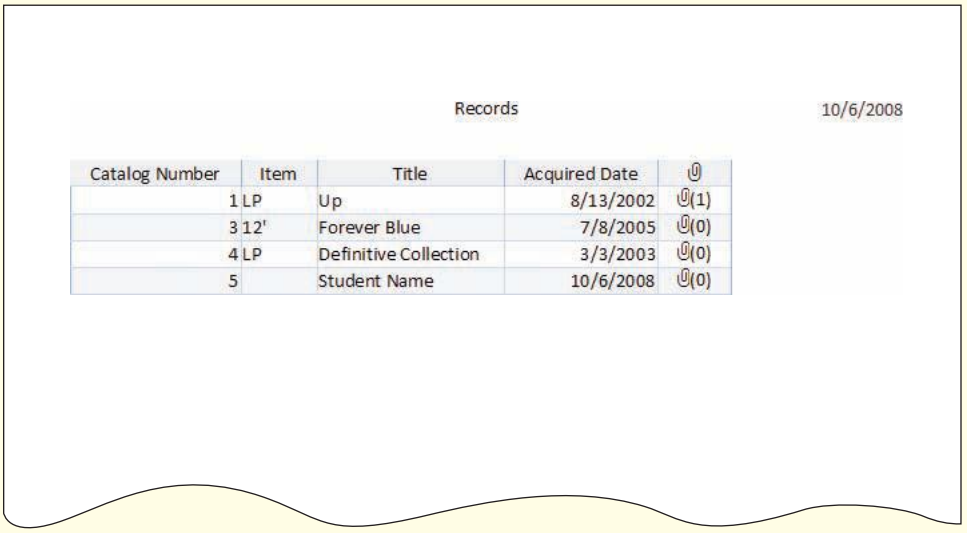
e. Add a new field after the Home Phone field with the following definitions:

Field Name: **Alternate Phone**
Data Type: Text
Field Size: **15**

f. Change the ZIP Code field size to **10**.
g. Enter the Alternate Phone number of **(802) 555-9711** and the ZIP Code of **22301-4459** for the record with ID number 4.
h. Best fit all columns.
i. View the table in Print Preview; change the page orientation to landscape and margins to Narrow.
j. Print, save, and close the table.

EchoPlex Records Database ★★

2. Your record collection has expanded beyond a hobby into an online business. In order to meet the needs of your expanding client base, you need to get your inventory cataloged. When you are finished, your printed database table should be similar to the one shown here.



Records 10/6/2008

Catalog Number	Item	Title	Acquired Date	
1	LP	Up	8/13/2002	(1)
3	12'	Forever Blue	7/8/2005	(0)
4	LP	Definitive Collection	3/3/2003	(0)
5		Student Name	10/6/2008	(0)

a. Create a blank database named EchoPlex.
b. From the Assets Field Templates list, add the following fields to the table:

Item

Description

Acquired Date

Attachments

c. Switch to Design view. Save the table as **Records**.
d. Change the ID Field Name to **Catalog Number**. Change the Description Field Name to **Title**.
e. Change the Field Size of the Item field to **4**.
f. Return to Datasheet view. Add the following records to the table:

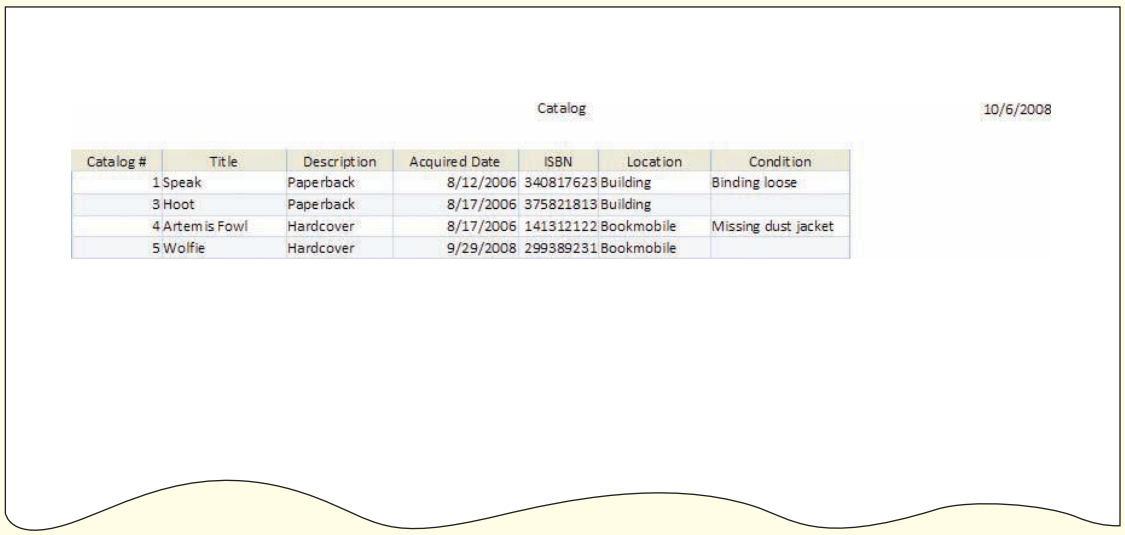
Item	LP	12"	12"	LP
Title	Up	Rank	Forever Blue	Definitive Collection
Acquired Date	8/13/2002	4/1/2006	7/8/2005	3/3/2003

g. Insert the image file ac01_Guitar in the Attachment field of the first record.
h. Adjust the column widths using the Best Fit feature.
i. Delete the record for the title Rank. Add a new record and enter your name in the Title field and the current date in the Acquired Date field.
j. Preview and print the table in portrait orientation with wide margins.
k. Save and close the table. Exit Access.

Library Catalog Database ★★

3. You are a volunteer at a small county library. The library recently received a large collection of young adult books and would like to keep better track of the titles. The library is still using an antiquated method for cataloging most its books. Because of your computer skills, you have been asked to create a database containing the catalog number, title, author, and copyright date of each

of the new books. The young adult titles database will serve as a model for the library's entire collection; after it is done, the database will make search, tracking, and inventory functions much easier. Your printed database table should be similar to the one shown here.



Catalog 10/6/2008

Catalog #	Title	Description	Acquired Date	ISBN	Location	Condition
1	Speak	Paperback	8/12/2006	340817623	Building	Binding loose
3	Hoot	Paperback	8/17/2006	375821813	Building	
4	Artemis Fowl	Hardcover	8/17/2006	141312122	Bookmobile	Missing dust jacket
5	Wolfie	Hardcover	9/29/2008	299389231	Bookmobile	

a. Create a blank database named County Library.
b. Add fields using the following field templates from the Assets list:

Item
Description
Acquired Date
Manufacturer

c. Switch to Design view. Save the table as **Catalog**.
d. Edit the field properties using the following information:

Field Name	Data Type	Description	Field Size
Change ID to Catalog #	AutoNumber		
Change Item to Title	Text	**Include complete title**	**150**
Description	Text	**Hardcover or paperback**	**15**
Change Manufacturer to ISBN	Text	**Unique 10-digit number**	**10**

e. Add the following new fields:

Field Name	Data Type	Description	Field Size
Location	Text	Building or Bookmobile	30
Condition	Memo	Describe condition of book if needed	

f. Switch to Datasheet view and enter the following records into the table:

	Record 1	Record 2	Record 3	Record 4
Title	Speak	Freak the Mighty	Hoot	Artemis Fowl
Description	Paperback	Paperback	Paperback	Hardcover
Acquired Date	8/12/2006	8/12/2006	8/17/2006	8/17/2006
ISBN	0340817623	0439286069	0375821813	0141312122
Location	Building	Bookmobile	Building	Bookmobile
Condition	Binding loose			Missing dust jacket

g. Best Fit all column widths.

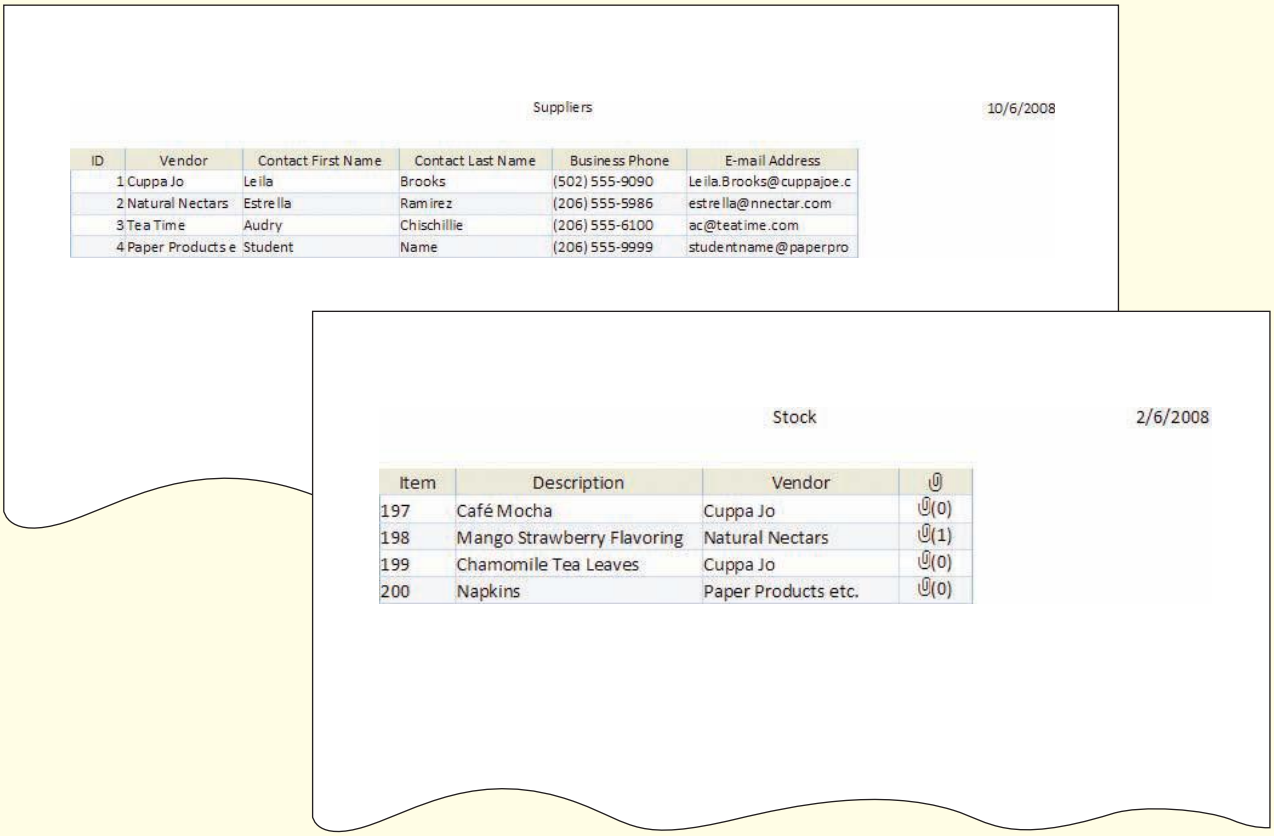
h. Delete record 2. Add another record with the following data:

Title: Wolfie
Description: Hardcover
Acquired Date: 9/29/08
ISBN: 0299389231
Location: Bookmobile

i. Check the table in Print Preview. Change the page layout to landscape with wide margins. Print, save, and close the table. Exit Access.

DownTown Internet Café Inventory Database ★★★

4. The Downtown Internet Café, which you helped get off the ground, is an overwhelming success. The clientele is growing every day, as is the demand for the beverages the café serves. Up until now, the information about the vendors has been kept in an alphabetical card file. This has become quite unwieldy, however, and Evan, the owner, would like a more sophisticated tracking system. He would like you to create a database containing each supply item and the contact information for the vendor that sells that item. When you are finished, your database tables should be similar to those shown here.



Suppliers 10/6/2008

ID	Vendor	Contact First Name	Contact Last Name	Business Phone	E-mail Address
1	Cuppa Jo	Leila	Brooks	(502) 555-9090	Leila.Brooks@cuppajoe.c
2	Natural Nectars	Estrella	Ramirez	(206) 555-5986	estrella@nnectar.com
3	Tea Time	Audry	Chischillie	(206) 555-6100	ac@teatime.com
4	Paper Products e	Student	Name	(206) 555-9999	studentname@paperpro

Stock 2/6/2008

Item	Description	Vendor	
197	Café Mocha	Cuppa Jo	(0)
198	Mango Strawberry Flavoring	Natural Nectars	(1)
199	Chamomile Tea Leaves	Cuppa Jo	(0)
200	Napkins	Paper Products etc.	(0)

a. Create a blank database named Cafe Inventory.
b. Design a table using the **Item** and **Description** field templates from the Assets list:
c. Switch to Design view. Save the table as **Stock**.
d. Delete the ID field. Make Item the primary key field.
e. Add the following information to the field properties:

Field Name	Data Type	Description	Field Size
Item	Text	**Unique three-digit product number**	**3**
Description	Text	**Name of product**	**50**

f. Create a second table using the following field templates from the Contacts list:

Company
First Name
Last Name
Business Phone
E-mail Address

g. Switch to Design view. Save the table as **Suppliers**.
h. Edit the field properties as shown here:

Field Name	Data Type	Description	Field Size
Change Company to Vendor	Text	**Company name of supplier**	**50**
Change First Name to Contact First Name	Text		**50**
Change Last Name to Contact Last Name	Text		**50**
Business Phone	Text	**Include the area code in parentheses: (800) 555-5555**	**15**
Change E-mail Address to E-mail	Text	**E-mail address of contact person**	**50**

i. Enter the following records into the Stock and Suppliers tables:

Stock table			
Record 1	**Record 2**	**Record 3**	
197	**198**	**199**	
Café Mocha	**Mango Strawberry Flavoring**	**Chamomile Tea Leaves**	
Suppliers table			
Record 1	**Record 2**	**Record 3**	**Record 4**
Cuppa Jo	**Natural Nectars**	**Tea Time**	**Paper Products etc.**
Leila	**Estrella**	**Audry**	**Enter your first name**
Brooks	**Ramirez**	**Chischillie**	**Enter your last name**
(502) 555-9090	**(206) 555-5986**	**(206) 555-6001**	**(206) 555-9999**
lbrooks@cuppajo.com	**estrella@nnectar.com**	**ac@teatime.com**	**Yourname@paperproducts.com**

j. Add the existing field, Vendor, from the Suppliers table as the last field in the Stock table.
k. In the Stock table, select Cuppa Jo as the vendor for the first record, Natural Nectars for the second record, and Tea Time for the third record.
l. In the Suppliers table, edit the record for ID 1 by changing the E-mail address to **Leila.Brooks@cuppajo.com**.
m. Add a new field to the Stock table named **Picture.** Make the data type Attachment. For item number 198 insert the file ac01_Flavoring.
n. Add the following new item to the Stock file.

Item: **200**
Description: **Napkins**
Vendor: **Paper Products etc.**

o. Adjust the column widths in both tables using Best Fit.
p. Preview the Suppliers table. Change to landscape orientation. Change the margins to wide and print the table.
q. Close the database. Exit Access.

Kodiak Construction Database ★★★

5. You have just been hired by Kodiak Paint and Construction to create and maintain a database containing information about their clients and jobs. The company has grown rapidly and they need ready access to information about jobs spread across the city. When you are finished, your tables should be similar to those shown here.

ID	Job	Client Last Name	Begin Date	Forema	Job Description	Job Location	Job Estimate
010	Ridgeline Condos	Foss	2/18/2008	Pisano	New construction of 75 condo units	Aurora	$2,500,000.00
053	R Bar C Ranch	Sanchez	7/18/2008	Englan	Private home guest addition	Glendale	$125,000.00
062	Sandalwood Villa	McGhee	9/15/2008	Name	Remodel restaurant	Aurora	$750,000.00
112	Williams Retreat	Bortle	12/13/2008	Valdez	New construction	Golden	$925,000.00

Foremen 10/6/2008

ID	Foreman First Name	Foreman Last Name	Mobile Phone	
1	Jonathan	Hedly	(303) 555-1480	(0)
2	Hector	Valdez	(303) 555-7677	(1)
3	Bob	England	(303) 555-6123	(0)
4	Ricky	Pisano	(303) 555-9438	(0)
5	Student	Name	(303) 555-7712	(0)

Clients 10/6/2008

ID	First Name	Last Name	Address	City	State	ZIP Code	Business Phone
1	Joe	Bortle	20032 W. 13th Place	Lakewood	CO	80215	(303) 555-1232
2	Timothy	McGhee	135 Mountain Peak Rd.	Aurora	CO	80011	(303) 555-7922
3	Charlotte	Foss	39 Avery Rd.	Denver	CO	80246	(303) 555-2525
4	Miguel	Sanchez	7218 N Crestview St.	Glendale	CO	80246	(303) 555-0932
5	Alan	Chang	82 Pine Land	Denver	CO	80002	(303) 555-0048

a. Create a blank database named Kodiak Construction. Design a table using the following field templates from the Projects list:

Project Name
Begin Date
End Date

b. Add the following additional fields to the table.

Field Name	Type
Job Description	Memo
Job Location	Text
Job Estimate	Currency

c. Save the table as **Jobs**. Switch to Design view.

d. Change the Project Name field name to **Job**. Delete the End Date field. Add field descriptions and make the changes to the field properties shown in the following table:

Field Name	Data Type	Description	Field Size	Format
ID	Text	**Unique three-digit job ID**	**3**	
Job		**Project Name**	**75**	
Begin Date				General date
Job Description		**Brief description of project**		
Job Location	Text	**Enter city only**	**25**	

e. Enter the following records into the table:

Record 1	Record 2	Record 3	Record 4	Record 5
034	**062**	**010**	**053**	**112**
Summit Lakes	**Sandalwood Villa**	**Ridgeline Condos**	**R Bar C Ranch**	**Williams Retreat**
4/13/2008	**9/15/2008**	**2/18/2008**	**7/18/2008**	**12/13/2008**
Remodel golf club	**Remodel restaurant**	**New construction of 75 condo units**	**Private home guest addition**	**New construction**
Denver	**Aurora**	**Aurora**	**Glendale**	**Golden**
1,200,000	**750,000**	**2,500,000**	**125,000**	**925,000**

f. Adjust the column widths using Best Fit.
g. Delete the record for the Summit Lakes job.
h. Create a second table for the client information using the following field templates from the Contacts list:

First Name
Last Name
Address
City
State/Province
ZIP/Postal Code
Business Phone

i. Save the table as **Clients**.
j. Add field descriptions and make the changes to the field properties shown in the following table:

Field Name	Data Type	Description	Field Size
First Name		**First name of client**	**25**
Last Name		**Last name of client**	**25**
Address	Text		**50**
Change State/Province to State		**Use two character abbreviation**	**2**
Change ZIP/Postal Code to ZIP Code		**Enter 10 digit code, if available**	**10**
Business Phone		**Enter phone as (###) ###-####**	**14**

k. Add the following client information:

	Record 1	Record 2	Record 3	Record 4	Record 5
First Name	**Joe**	**Timothy**	**Charlotte**	**Miguel**	**Alan**
Last Name	**Bortle**	**McGhee**	**Foss**	**Sanchez**	**Chang**
Address	**20032 W. 13th Place**	**135 Mountain Peak Rd.**	**39 Avery Rd.**	**7218 N. Crestview St.**	**82 Pine Lane**
City	**Lakewood**	**Aurora**	**Denver**	**Glendale**	**Denver**
State	**CO**	**CO**	**CO**	**CO**	**CO**
ZIP Code	**80215**	**80011**	**80012**	**80246**	**80002**
Business Phone	**(303) 555-1232**	**(303) 555-7922**	**(303) 555-2525**	**(303) 555-0932**	**(303) 555-0048**

l. Create a third table for the foreman information with the following fields:

Field Name	Data Type	Description	Field Size
Foreman First Name	Text		**25**
Foreman Last Name	Text		**25**
Mobile Phone	Text	**Enter phone as (###) ###-####**	**14**
Picture	Attachment	**Photo of foreman**	

m. Save the table as **Foremen.**
n. Enter the following information for the five foremen.

Jonathan Hedly	Hector Valdez	Bob England	Ricky Pisano	Your Name
(303) 555-1480	(303) 555-7677	(303) 555-6123	(303) 555-9438	(303) 555-7712

o. Add the file ac01_Valdez to the attachment field for Hector Valdez.
p. Add the existing field Foreman Last Name from the Foremen table to the Jobs table after the Begin Date field.
q. Enter the following foremen for each job:

Job	Foreman
010	Pisano
053	England
062	Your Name
112	Valdez

r. Add the existing field Last Name from the Clients table to after the Job field in the Jobs table. Rename the field **Client Last Name.**

s. Enter the following clients for each job:

Job	Client
010	Foss
053	Sanchez
062	McGhee
112	Bortle

t. Best fit all fields in all tables.
u. Preview and print the Jobs table in landscape orientation with narrow margins. Print the Foremen table in portrait orientation with wide margins.
v. Save and close all tables and exit Access.

on your own

Valley View Newsletter Advertising Database ★



1. Your homeowner's association distributes a monthly newsletter, *Valley View News,* to keep residents up to date with neighborhood news. In the past year, there has been rapid growth in building, including more houses and small office complexes. There are also plans to build an elementary school, fire station, and shopping center in the community. Consequently, the newsletter is now the size of a small newspaper, and the homeowners' dues are not covering the expense of publishing it.

The editorial staff has already begun selling ad space in the newsletter to local businesses, and, based on your background in database management, they have asked you to set up a database to keep track of the advertiser contact information. You agree to design such a database, called Valley View News, and tell them you will have something to show them at the next meeting. Your finished database should include each advertiser's billing number, business name and address, and contact name and phone number in a table named **Advertisers**. Enter 10 records and include a record that has your name as the contact name. Preview and print the table when you are finished.

Music Collection Database ★

2. You have just purchased a 200-disk CD carousel and now you would like to organize and catalog your CDs. You realize that without an updatable list, it will be difficult to maintain an accurate list of what is in the changer. To get the most out of your new purchase, you decide a database is in order. Create a new database called Music Collection and a table called **CD Catalogue**. The table you create should include the Artist's Name, Album Title, Genre, and Position Number. Make the Position Number field the primary key (because you may have multiple CDs by a given artist). Enter at least 15 records. Include an entry that has your name as the artist. Preview and print the table when you are finished.

Patient Database ★

3. You are the manager of a newly opened dental office. As one of your first projects, you need to create a patient database. Create a database called Dental Patients and a table named **Personal Information**. The database table you set up should contain patient identification numbers, last and first names, addresses, and phone numbers. Also include a field named "Referred by" and another field named "Patient since". Use appropriate field sizes and make the ID number field the primary key. Enter at least ten records, adjusting the column widths as necessary. Include a record that contains your name as the patient. Preview and print the table.

Old Watch Database Using the Web ★★

4. You have a small online business, Timeless Treasures, that locates and sells vintage wrist and pocket watches. Your business and inventory has grown large enough now that you have decided to use a database to track your inventory. Create a simple database named Timeless Treasures with a table named **Watches** that contains identification numbers, manufacturer (Waltham, Hamilton, Melrose), category (pocket watch, wrist watch), description, price, and quantity on hand. Size the fields appropriately and assign a primary key to one of them. Enter at least 10 records in the table. To obtain data about watches to include in your table, search the Web on "old watches". Use the information you locate to complete the data for the records in your table. Adjust column widths as necessary. Include your name as the manufacturer in one of the records. Preview and print the table.

Expense Tracking Database ★★★

5. You work in the accounting department at a start-up company called EMP Enterprises. One of your duties is to process, which up until now was a simple task of having the employees fill out a form and submit it to you for payment. You would then cut a check for them and charge it to the general expense fund of the company. However, the company has grown tremendously in the last year, adding employees and departments at a rapid rate, and the executive team has decided that it is time to start managing the income and expenses on a much more detailed level. To this end, you

need to create a database that includes the employee ID, employee name, submission date, expense type, and expense amount for each expense report that is turned in. Name the database EMP Enterprises. Create two tables, one for the employee information named **Employee Info** and the other for employee expenses named **Employee Expenses**. Include the Employee ID, First Name and Last Name fields in the Employee Info table. Include the Employee ID, Submission Date, Expense Type and Expense Amount fields in the Employee Expenses table. Use the Currency data type for the Expense Amount field, and appropriate data types for all other fields. Size the fields appropriately. Delete the ID field from the Employee Info table and make the Employee ID field the primary key. Enter at least 15 records. Adjust the column widths as necessary. Delete one of the records you just entered, and then edit one of the remaining records so it contains your name as the employee. Enter 10 records in the Employee Expenses table (one should be an expense record for the record containing your name.) Preview and print both tables.

Modifying and Filtering a Table and Creating a Form

LAB 2

Objectives

After completing this lab, you will know how to:

1. Navigate a large table.
2. Change field format properties.
3. Set default field values.
4. Insert a field.
5. Define validation rules.
6. Hide and redisplay fields.
7. Create a lookup field.
8. Find and replace data.
9. Sort records.
10. Format a datasheet.
11. Filter a table.
12. Create, modify, and use a form.
13. Preview, print, close, and save a form.
14. Identify object dependencies.
15. Add file and object documentation.

Case Study

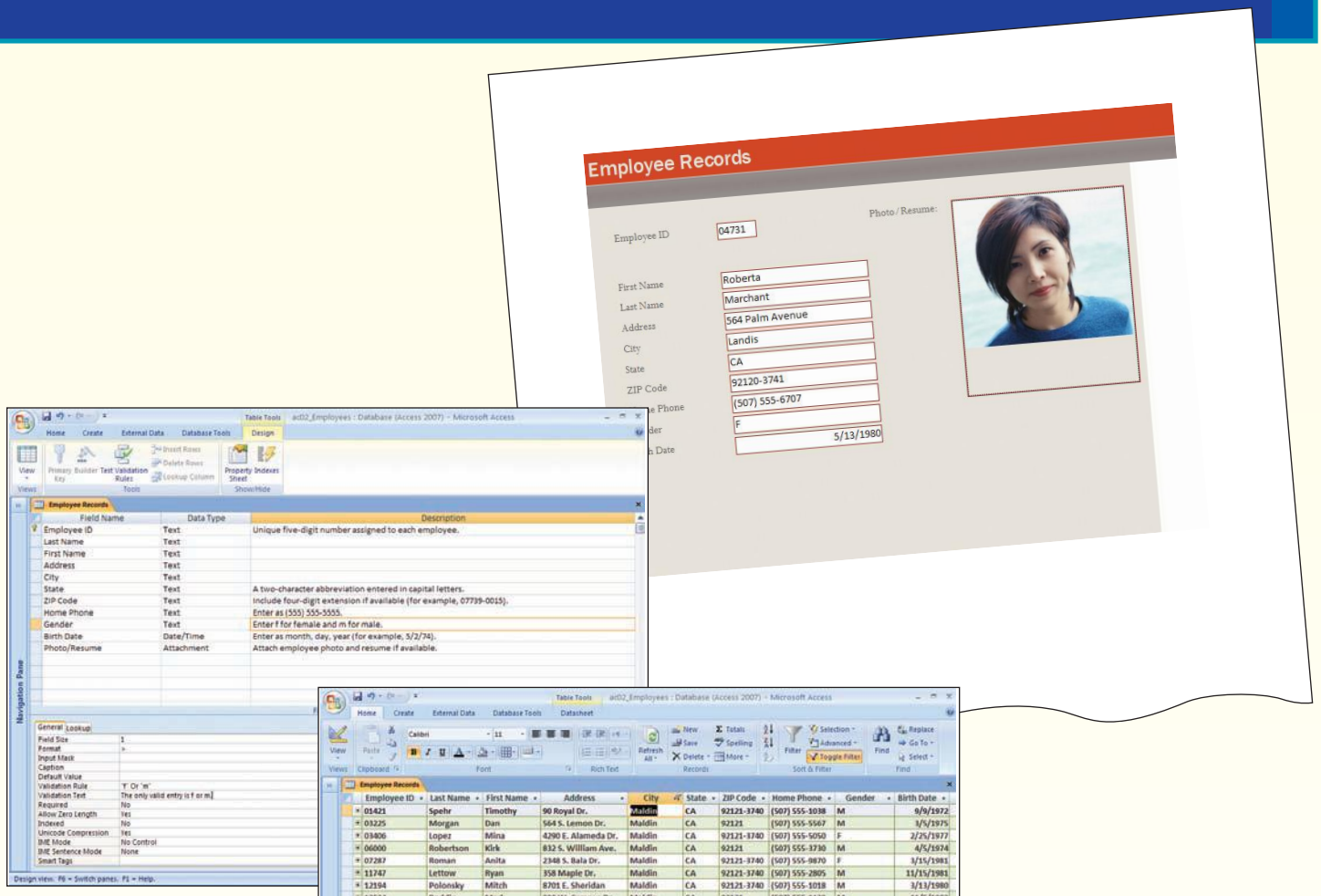
Lifestyle Fitness Club

The Lifestyle Fitness Club owners, Ryan and Felicity, are very pleased with your plans for the organization of the database and with your progress in creating the first table of basic employee data. As you have seen, creating a database takes planning and a great deal of time to set up the structure and enter the data. As you have continued to add more employee records to the table, you have noticed several errors. You also realize that you forgot to include a field for the employee's gender. Even with the best of planning and care, errors occur and the information may change. You will see how easy it is to modify the database structure and to customize field properties to provide more control over the data that is entered in a field.



Even more impressive, as you will see in this lab, is the program's ability to locate information in the database. This is where all the hard work of entering data pays off. With a click of a button, you can find data that might otherwise take hours to locate. The result saves time and improves the accuracy of the output.

You also will see how you can make the data you are looking at onscreen more pleasing and easier to read by creating and using a form.



Field properties make a table easier to use and more accurate.

Filtered data displays information on selected records only.

Forms can be used to display information in an easy-to-read manner and make data entry easier.

Concept Preview

The following concepts will be introduced in this lab:

1. **Format Property** The Format property is used to specify the way that numbers, dates, times, and text in a field are displayed and printed.
2. **Default Value Property** The Default Value property is used to specify a value that is automatically entered in a field when a new record is created.
3. **Validation Rule** Validation rules are used to control the data that can be entered in a field by defining the input values that are valid or allowed.
4. **Expression** An expression is a formula consisting of a combination of symbols that will produce a single value.
5. **Find and Replace** The Find and Replace feature helps you quickly find specific information and automatically replace it with new information.
6. **Sort** You can sort the data in a table to quickly rearrange the order of the records.
7. **Filter** A filter is a restriction placed on records in the open datasheet or form to quickly isolate and display a subset of records.
8. **Form** A form is a database object used primarily to display records onscreen to make it easier to enter new records and to make changes to existing records.
9. **Controls** Controls are objects that display information, perform actions, or enhance the design of a form or report.

Navigating a Large Table

You have continued to add more records to the Lifestyle Fitness Club employee database. As you entered the data, you know you made data entry errors that still need to be corrected. Additionally, you have found that with the addition of records, it takes much longer to move around in the datasheet. Typical database tables are very large and consequently can be very inefficient to navigate. Learning how to move around in a large table will save time and help you get the job done faster. You want to open the expanded database that you saved using a new file name, and to continue working on and refining the Records table.

Note: Before you begin, you may want to create a backup copy of the ac02_Employees file by copying and renaming it.

1. **Start Office Access 2007.**

- **In the Open Recent Database list, click** More... **.**
- **Change the location to the location containing your data files.**
- **Double-click** ac02_Employees**.**
- **Click** Options... **in the Security Warning bar just below the ribbon.**
- **Choose Enable this content and click** OK **.**
- **Open the Employee Records table.**

Your screen should be similar to Figure 2.1

Having Trouble?
Your screen may display a different number of records depending on your monitor settings.

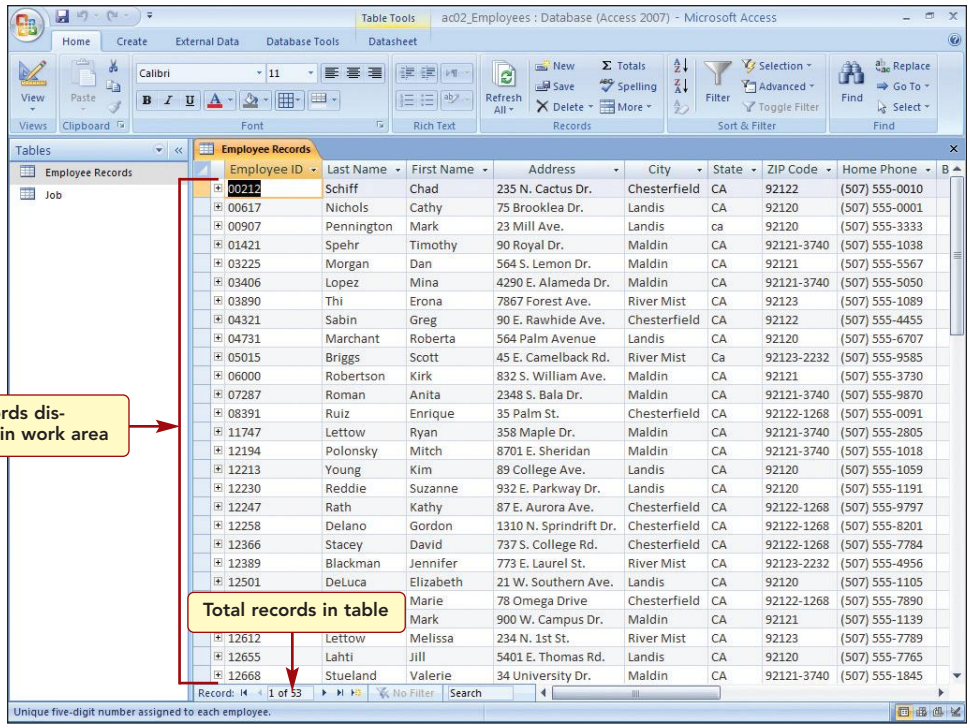


Figure 2.1

By default, the table is displayed in Datasheet view. As you can see from the record number indicator, the updated table now contains 53 records.

Moving Using the Keyboard

In a large table, there are many methods you can use to quickly navigate through records in Datasheet view. You can always use the mouse to move from one field or record to another. However, if the information is not visible in the window, you must scroll the window using the scroll bar first. The following table presents several keyboard methods that will help you move around in the datasheet.

Keys	Effect
Page Down	Down one window
Page Up	Up one window
Ctrl + Page Up	Left one window
Ctrl + Page Down	Right one window
Ctrl + End	Last field of last record
Ctrl + Home	First field of first record
Ctrl + ↑	Current field of first record
Ctrl + ↓	Current field of last record

Currently, records 1 through 27 are displayed in the work area. You can easily move from one window of records to the next.

1 Press Page Down.

Having Trouble?

If your screen displays a different number of records, this is because your monitor and system setup may be different than those used to create the figures in the text.

Your screen should be similar to Figure 2.2

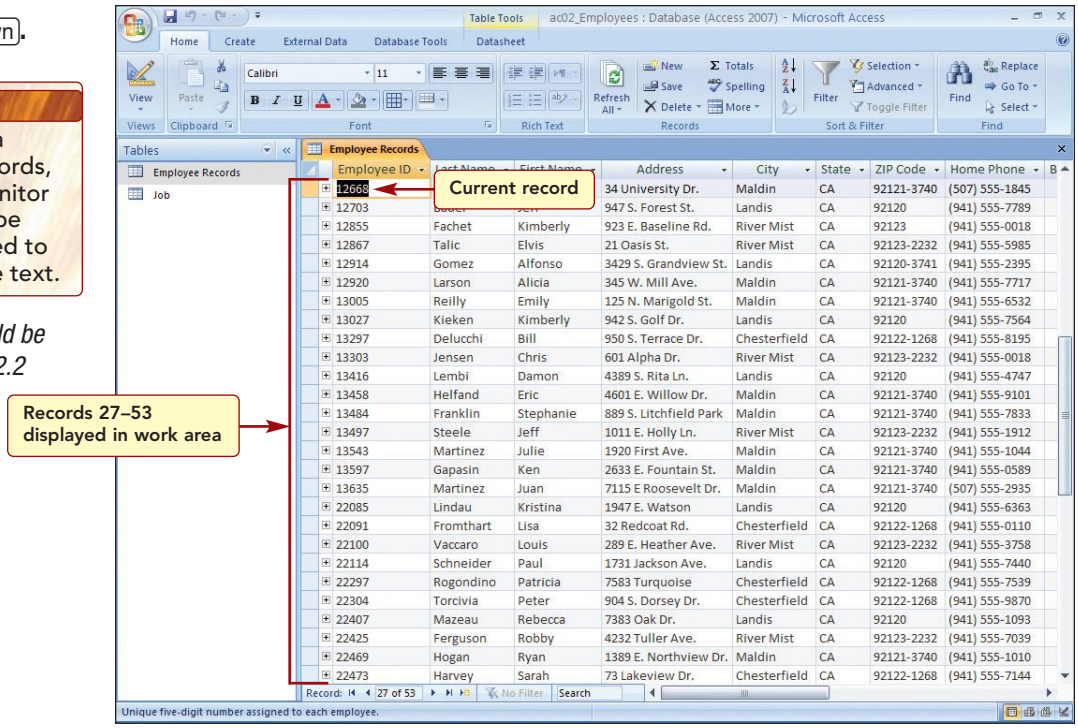


Figure 2.2

Now records 27 through 53 are displayed in the window. The first record in the window is now the current record.

Because of the number and width of the fields, all of the fields cannot be displayed in the window at the same time. Rather than scrolling the window horizontally to see the additional fields, you can quickly move to the right a window at a time.

2 Press Ctrl + Page Down.

Your screen should be similar to Figure 2.3

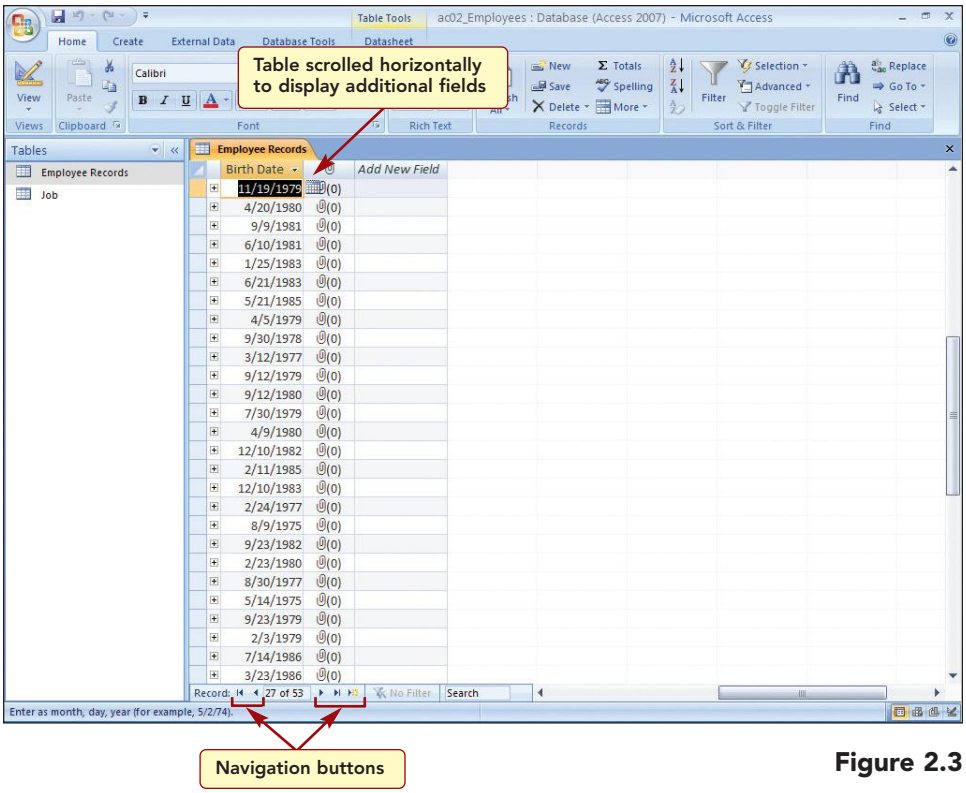


Figure 2.3

The table scrolled horizontally one window to the right and the last two fields in the table are now visible.

Moving Using the Navigation Buttons

The navigation buttons in the status bar also provide navigation shortcuts. These buttons are described in the following table.

Another Method

You also can use Go To in the Find group of the Home tab to access the navigation buttons.

Button	Effect
	First record, same field
	Previous record, same field
	Next record, same field
	Last record, same field
	New (blank) record

Additional Information

You can move to a specific record by typing the record number in the Record Number Indicator box.

You will use the navigation buttons to move to the same field that is currently selected in the last record, and then back to the same field of the first record. Then you will move to the first field of the first record.

1. **Click Last Record.**
2. **Click First Record.**
3. **Press Home.**

Your screen should be similar to Figure 2.4

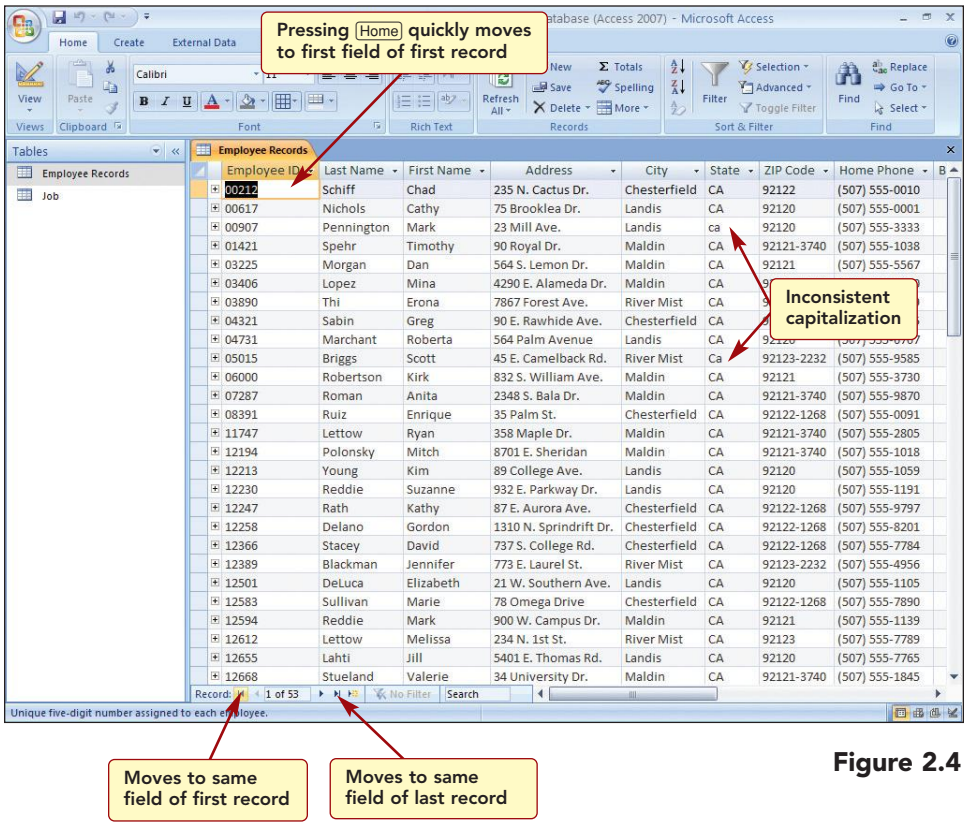


Figure 2.4

The first field of the first record is selected.

Customizing and Inserting Fields

As you looked through the records, you noticed that record 3 has a lowercase entry in the State field and that record 10 has a mixed-case entry. You want all the State field entries to be consistently entered in all uppercase letters. Also, because all the club locations are in California, it is unlikely that any club employees live in another state. Rather than repeatedly entering the same state for each record, you want the State field to automatically display CA. You will make these changes to the State field by modifying its properties.

Additionally, you realize that you forgot to include a field for each employee's gender. While developing a table, you can modify and refine how the table operates. You can easily add and delete fields and add restrictions on the data that can be entered in a field as well as define the way that the data entered in a field will be displayed.

Setting Display Formats

You will begin by fixing the display of the entries in the State field. Instead of manually editing each field, you will fix the entries by defining a display format for the field to customize the way the entry is displayed.

Concept 1

Format Property

1 The **Format property** is used to specify the way that numbers, dates, times, and text in a field are displayed and printed. Format properties do not change the way Access stores data, only the way the data is displayed. To change the format of a field, you can select from predefined formats or create a custom format by entering different symbols in the Format text box. Text and Memo data types can use any of the four symbols shown in the following table.

Symbol	Meaning	Example
@	Requires a text character or space	@@@-@@-@@@ would display 123456789 as 123-45-6789. Nine characters or spaces are required.
>	Forces all characters to uppercase	> would display SMITH whether you entered SMITH, smith, or Smith.
<	Forces all characters to lowercase	< would display smith whether you entered SMITH, smith, or Smith.
&	Allows an optional text character	@@-@@& would display 12345 as 12-345 and 12.34 as 12-34. Four out of five characters are required, and a fifth is optional.

You want to change the format of the State field to display the entries in all uppercase characters.

1. **Click Design View.**
2. **Click the State field to make it the current field.**
3. **Move to the Format field property text box.**
4. **Type >.**

Your screen should be similar to Figure 2.5

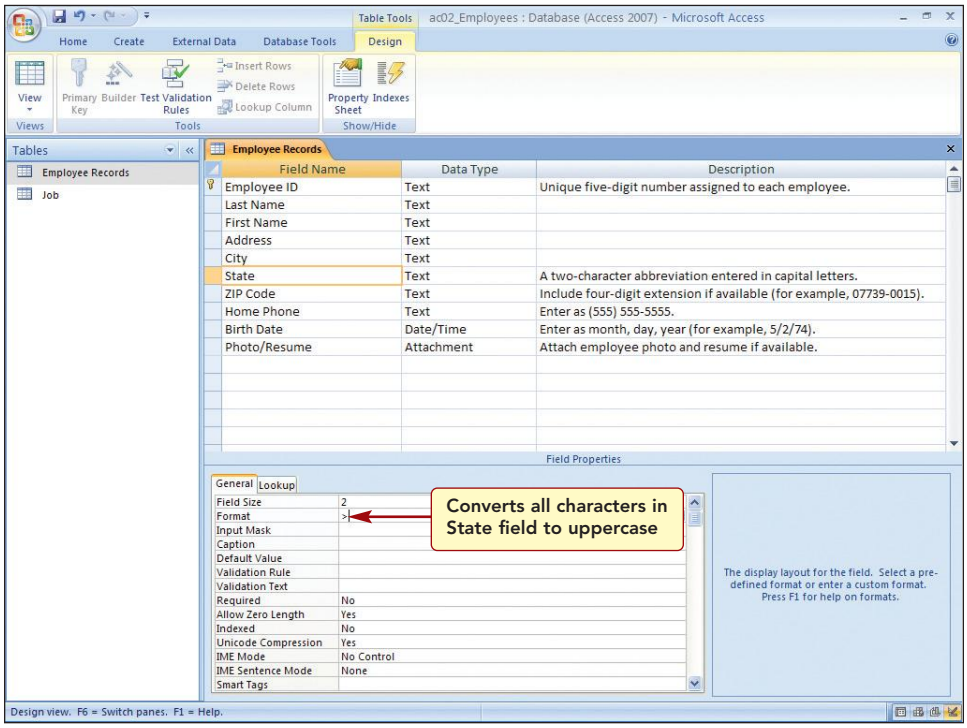


Figure 2.5

Setting Default Values

Next, you want to change the State field for new records to automatically display CA. To do this, you specify a default value property.

Concept 2

Default Value Property

2 The **Default Value property** is used to specify a **value** that is automatically entered in a field when a new record is created. This property is commonly used when most of the entries in a field will be the same for the entire table. That default value is then displayed automatically in the field. When users add a record to the table, they can either accept this value or enter another value. This saves time while entering data.

You will set the State field's default value to display CA.

1. **Click in the Default Value property text box.**
2. **Type CA.**
3. **Press Enter.**

Your screen should be similar to Figure 2.6

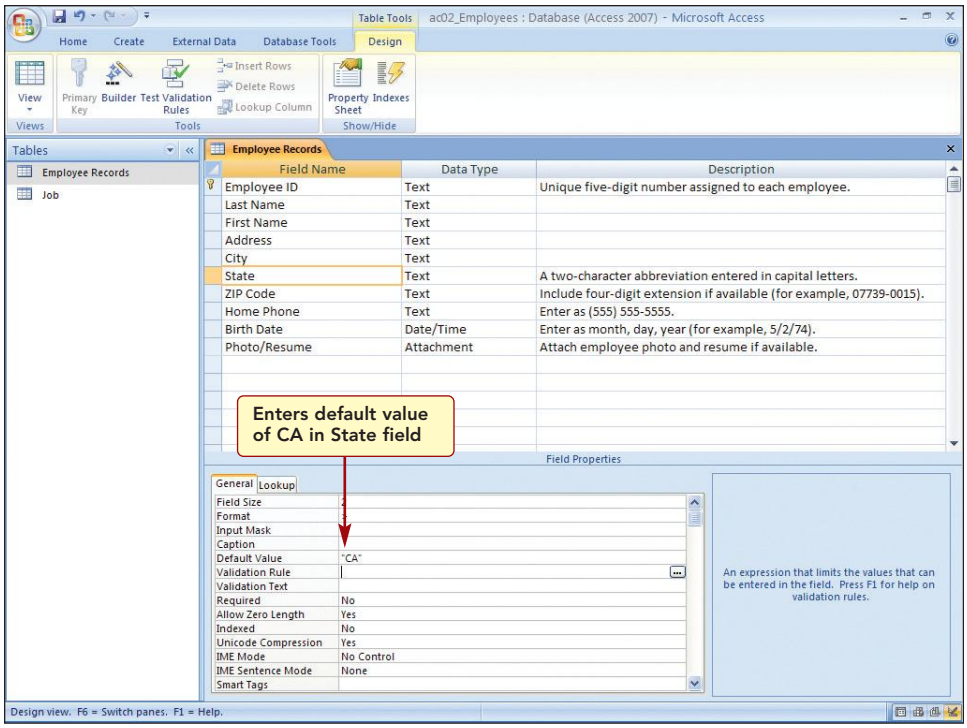


Figure 2.6

The default value is automatically enclosed in quotation marks to identify the entry as a group of characters called a **character string.** To see the effect on the table of setting a default value, you will return to Datasheet view and look at a new blank record.

Next, you want to see the effect of the modifications to the State field's properties on the table.

2. **Click Datasheet View.**
3. **Click Yes to save the table.**
4. **Hide the Navigation pane.**

Your screen should be similar to Figure 2.7

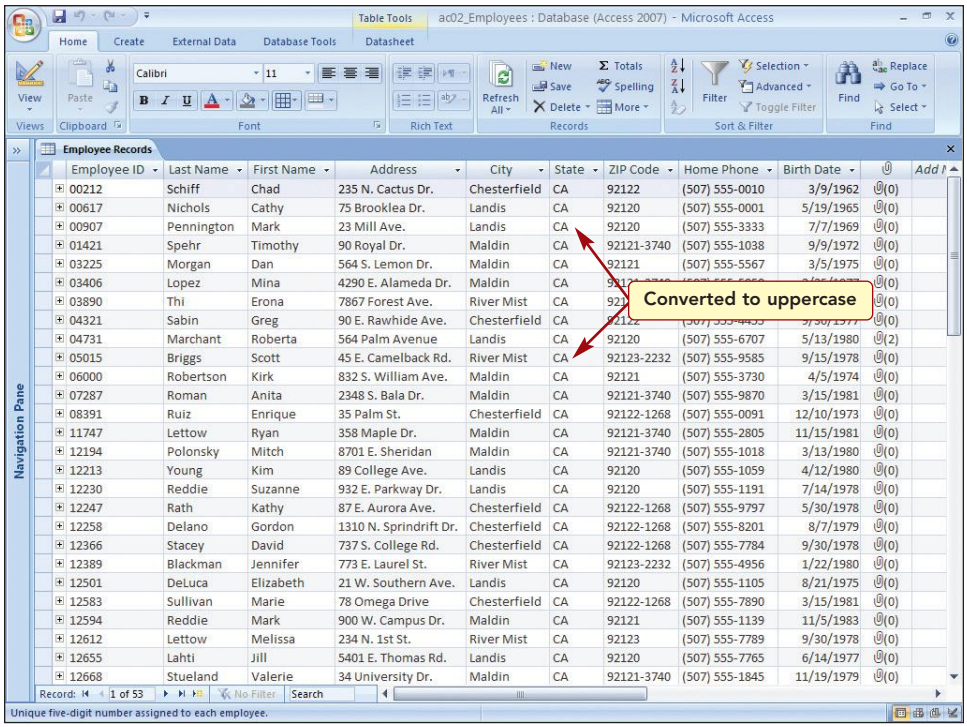
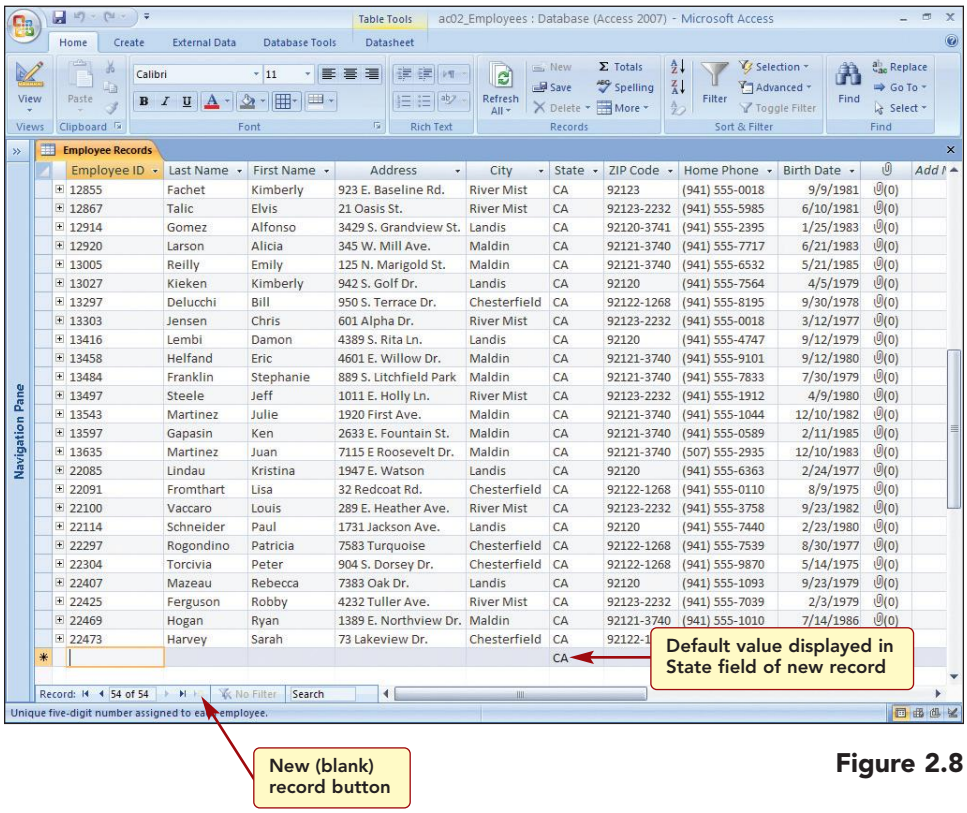


Figure 2.7

You can see that records 3 (Mark Pennington) and 10 (Scot Briggs) now correctly display the state in capital letters. Setting the format for the field will prevent this type of error from occurring again.

3 **Click New (blank) Record on the status bar to move to a new record.**

Your screen should be similar to Figure 2.8



Employee ID	Last Name	First Name	Address	City	State	ZIP Code	Home Phone	Birth Date
12855	Fachet	Kimberly	923 E. Baseline Rd.	River Mist	CA	92123	(941) 555-0018	9/9/1981
12867	Talic	Elvis	21 Oasis St.	River Mist	CA	92123-2232	(941) 555-5985	6/10/1981
12914	Gomez	Alfonso	3429 S. Grandview St.	Landis	CA	92120-3741	(941) 555-2395	1/25/1983
12920	Larson	Alicia	345 W. Mill Ave.	Maldin	CA	92121-3740	(941) 555-7717	6/21/1983
13005	Reilly	Emily	125 N. Marigold St.	Maldin	CA	92121-3740	(941) 555-6532	5/21/1985
13027	Kieken	Kimberly	942 S. Golf Dr.	Landis	CA	92120	(941) 555-7564	4/5/1979
13297	Delucchi	Bill	950 S. Terrace Dr.	Chesterfield	CA	92122-1268	(941) 555-8195	9/30/1978
13303	Jensen	Chris	601 Alpha Dr.	River Mist	CA	92123-2232	(941) 555-0018	3/12/1977
13416	Lembi	Damon	4389 S. Rita Ln.	Landis	CA	92120	(941) 555-4747	9/12/1979
13458	Helfand	Eric	4601 E. Willow Dr.	Maldin	CA	92121-3740	(941) 555-9101	9/12/1980
13484	Franklin	Stephanie	889 S. Litchfield Park	Maldin	CA	92121-3740	(941) 555-7833	7/30/1979
13497	Steele	Jeff	1011 E. Holly Ln.	River Mist	CA	92123-2232	(941) 555-1912	4/9/1980
13543	Martinez	Julie	1920 First Ave.	Maldin	CA	92121-3740	(941) 555-1044	12/10/1982
13597	Gapasin	Ken	2633 E. Fountain St.	Maldin	CA	92121-3740	(941) 555-0589	2/11/1985
13635	Martinez	Juan	7115 E Roosevelt Dr.	Maldin	CA	92121-3740	(507) 555-2935	12/10/1983
22085	Lindau	Kristina	1947 E. Watson	Landis	CA	92120	(941) 555-6363	2/24/1977
22091	Fromthart	Lisa	32 Redcoat Rd.	Chesterfield	CA	92122-1268	(941) 555-0110	8/9/1975
22100	Vaccaro	Louis	289 E. Heather Ave.	River Mist	CA	92123-2232	(941) 555-3758	9/23/1982
22114	Schneider	Paul	1731 Jackson Ave.	Landis	CA	92120	(941) 555-7440	2/23/1980
22297	Rogondino	Patricia	7583 Turquoise	Chesterfield	CA	92122-1268	(941) 555-7539	8/30/1977
22304	Torcivia	Peter	904 S. Dorsey Dr.	Chesterfield	CA	92122-1268	(941) 555-9870	5/14/1975
22407	Mazeau	Rebecca	7383 Oak Dr.	Landis	CA	92120	(941) 555-1093	9/23/1979
22425	Ferguson	Robby	4232 Tuller Ave.	River Mist	CA	92123-2232	(941) 555-7039	2/3/1979
22469	Hogan	Ryan	1389 E. Northview Dr.	Maldin	CA	92121-3740	(941) 555-1010	7/14/1986
22473	Harvey	Sarah	73 Lakeview Dr.	Chesterfield	CA	92122-1		
					CA			

Figure 2.8

The new blank record at the end of the table displays CA as the default value for the State field. If you did need to enter a different state, it would display in all capital letters because of the format property setting associated with the field.

Another Method

You also can insert a field in Datasheet view by moving to the location where you want to insert the new field and using Insert on the Datasheet tab. However, you still need to switch to Design view to set the new field's properties.

Inserting a Field

Now you want to add the new field to hold each employee's gender. Although it is better to include all the necessary fields when creating the table structure, it is possible to add fields to a table at a later time. After looking at the order of the fields, you decide to add the Gender field between the Home Phone and Birth Date fields. To do so, you will switch to Design view to insert the new field in the table.

1. **Switch to Design view.**
2. **Make the Birth Date field current.**
3. **Click Insert Rows in the Tools group of the Design tab.**

Another Method

You also can use Insert Rows on the shortcut menu.

Your screen should be similar to Figure 2.9

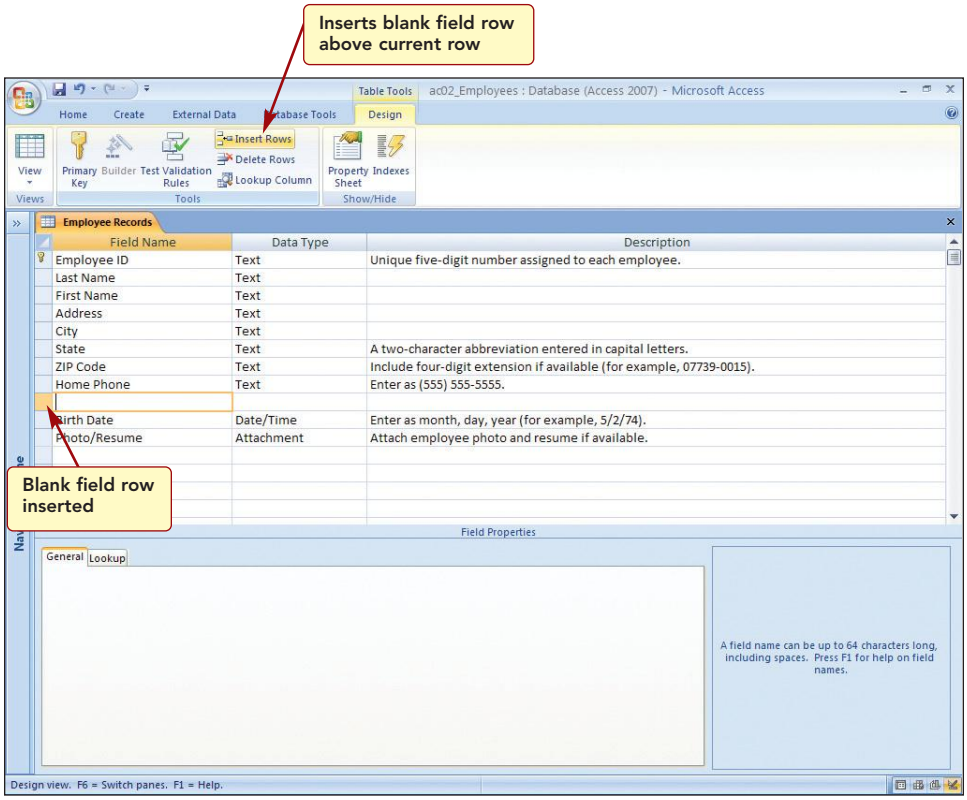


Figure 2.9

A new blank row is inserted into the table. Next, you will name the field and set its properties.

2. **Enter the new field definitions from the table shown here:**

Field Name	**Gender**
Data Type	Text
Description	**Enter f for female and m for male.**
Field Size	**1**
Format	**>**

Your screen should be similar to Figure 2.10

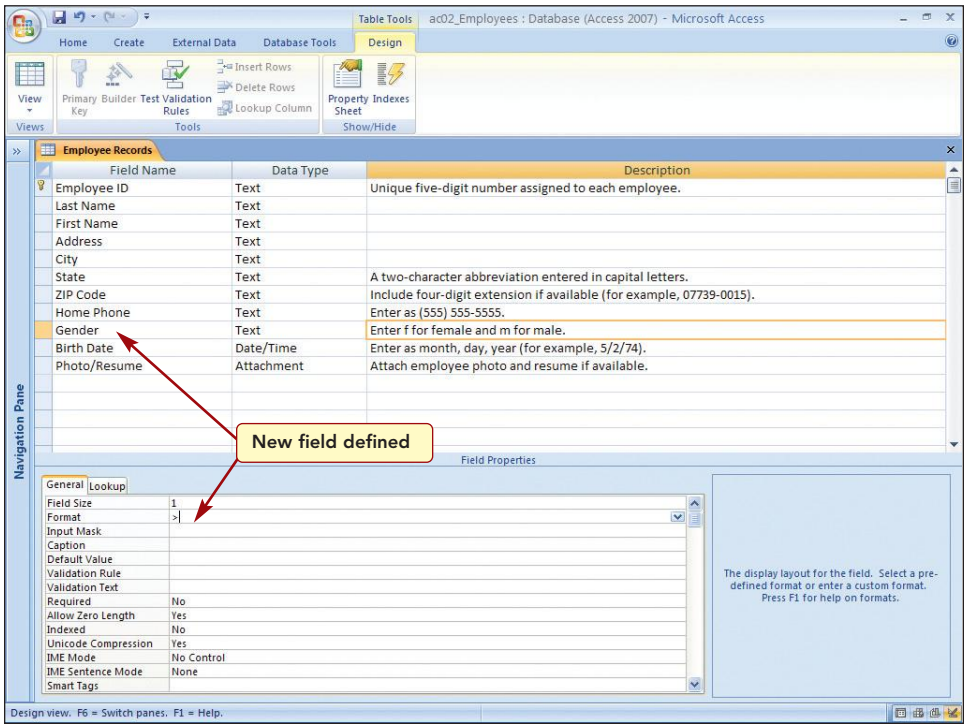


Figure 2.10

Defining Validation Rules

The only two characters you want the Gender field to accept are F for female and M for male. To specify that these two characters are the only entries acceptable in the Gender field, you will add a validation rule to the field's properties.

Concept 3

Validation Rule

3

Validation rules are used to control the data that can be entered in a field by defining the input values that are valid or allowed. Certain checks on the validity of the data that is entered in a field are performed automatically based on the field's data type and size. For example, in a field whose data type is Number and size is five, the type of data that can be entered in the field is restricted to a maximum of five numeric entries. You can further refine these basic restrictions by adding a validation rule to the field's properties that defines specific restrictions for the type of data that can be entered in the field.

You also can include a validation text message. **Validation text** is an explanatory message that appears if a user attempts to enter invalid information in a text field for which there is a validity check. If you do not specify a message, Access will display a default error message, which may not clearly describe the reason for the error.

You will create a validation rule for the Gender field to restrict the data entry to the two valid characters. A validation rule is specified by entering an expression in the validation rule property that limits the values that can be entered in the field.

Concept 4

Expression

4

An **expression** is a formula consisting of a combination of symbols that will produce a single value. You create an expression by combining identifiers, operators, and values to produce the desired results. An **identifier** is an element that refers to the value of a field, a graphical object, or a property. In the expression [Sales Amount] + [Sales Tax], [Sales Amount] and [Sales Tax] are identifiers that refer to the values in the Sales Amount and Sales Tax fields. Identifiers are separated by dots or exclamation points. Each part of an identifier is surrounded by square brackets.

An **operator** is a symbol or word that indicates that an operation is to be performed. Common mathematical operators are + for addition, - for subtraction, * for multiplication, and / for division. A **comparison operator** is a symbol that allows you to make comparisons between two items. The following table describes the comparison operators:

Operator	Meaning
=	Equal to
<>	Not equal to
<	Less than
>	Greater than
<=	Less than or equal to
>=	Greater than or equal to

In addition, the OR and AND operators allow you to enter additional criteria in the same field or different fields.

Values are numbers, dates, or character strings. Character strings such as "F", "M", or "Workout Gear" are enclosed in quotation marks. Dates are enclosed in pound signs (#), as in #1/1/99#.

The following table shows some examples of possible expressions.

Expression	Result
[Sales Amount] + [Sales Tax]	Sums values in two fields.
"F" OR "M"	Restricts entry to the letters F or M only.
>= #1/1/99# AND <= #12/31/99#	Restricts entries to dates greater than or equal to 1/1/99 and less than or equal to 12/31/99.
"Workout Gear"	Allows the entry Workout Gear only.

You will enter the expression to restrict the data entry in the Gender field to the letters "f" or "m."

1. **Move to the Validation Rule field property text box.**

- **Type f or m.**

Additional Information
The AND and OR operators can be entered using uppercase or lowercase characters.

- **Press Enter.**
- **For the validation text, type The only valid entry is f or m.**

Your screen should be similar to Figure 2.11

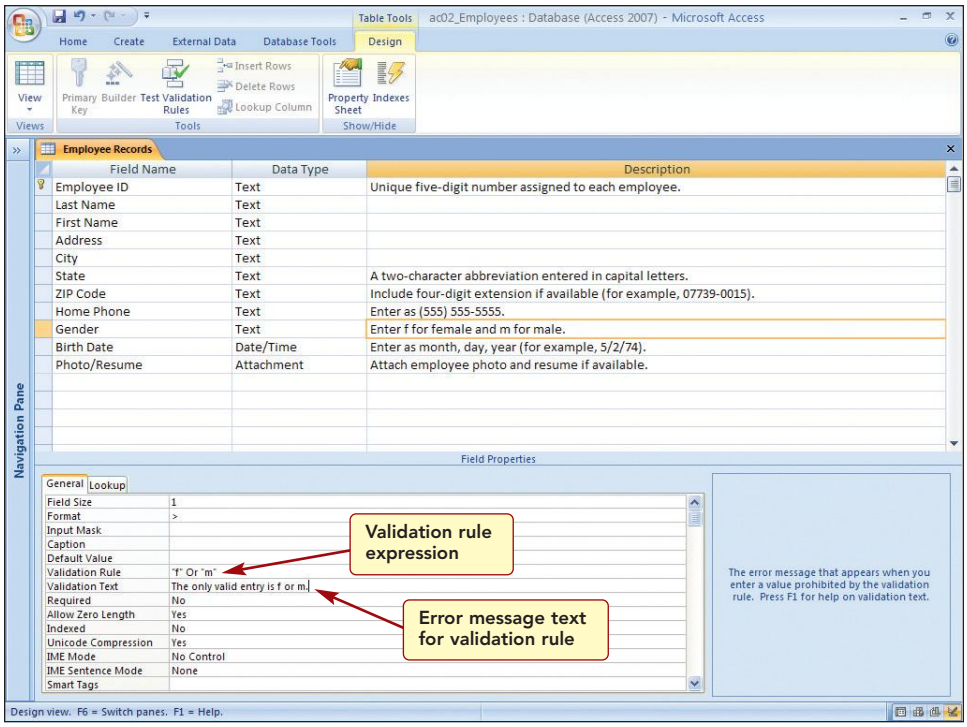


Figure 2.11

The expression states that the acceptable values can only be equal to an F or an M. Notice that Access automatically added quotation marks around the two character strings and changed the "o" in "or" to uppercase. Because the Format property has been set to convert all entries to uppercase, this means that an entry of f or m is as acceptable as F or M.

Next, you will switch back to Datasheet view to test the validation rule by entering data for the Gender field. In addition to a message box asking whether you want to save the design changes, another message box will appear to advise you that the data integrity rules have been changed. When you restructure a table, you often make changes that could result in a loss of data. Changes such as shortening field sizes, creating validity rules, or changing field types can cause existing data to become invalid. Because the field is new, it has no data values to verify, and a validation check is unnecessary at this time.

2 Switch to Datasheet view.

- Click Yes to save the table.
- Click No to skip the validation check.
- Move to the Gender field for record 1.
- Type p.
- Press Enter.

Your screen should be similar to Figure 2.12

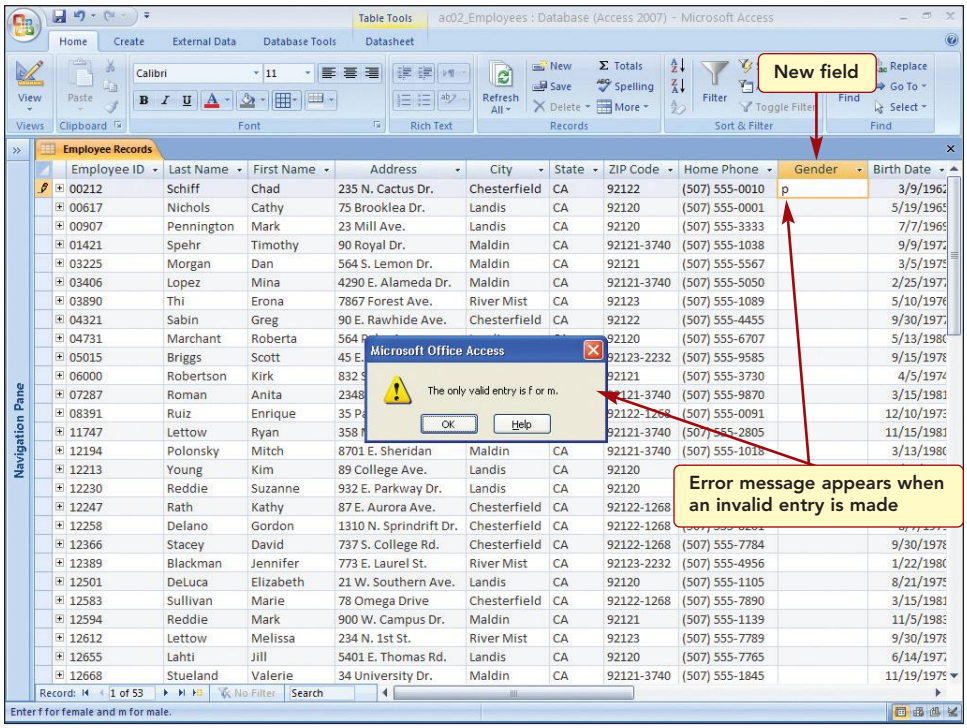


Figure 2.12

The new field was added to the table between the Home Phone and Birth Date fields. Because the letter p is not a valid entry, Access displays the error message you entered as the Validation Text for the field. You will clear the error message and correct the entry.

3 Click OK.

- Press ←Backspace.
- Type m.
- Press ↓.

Your screen should be similar to Figure 2.13

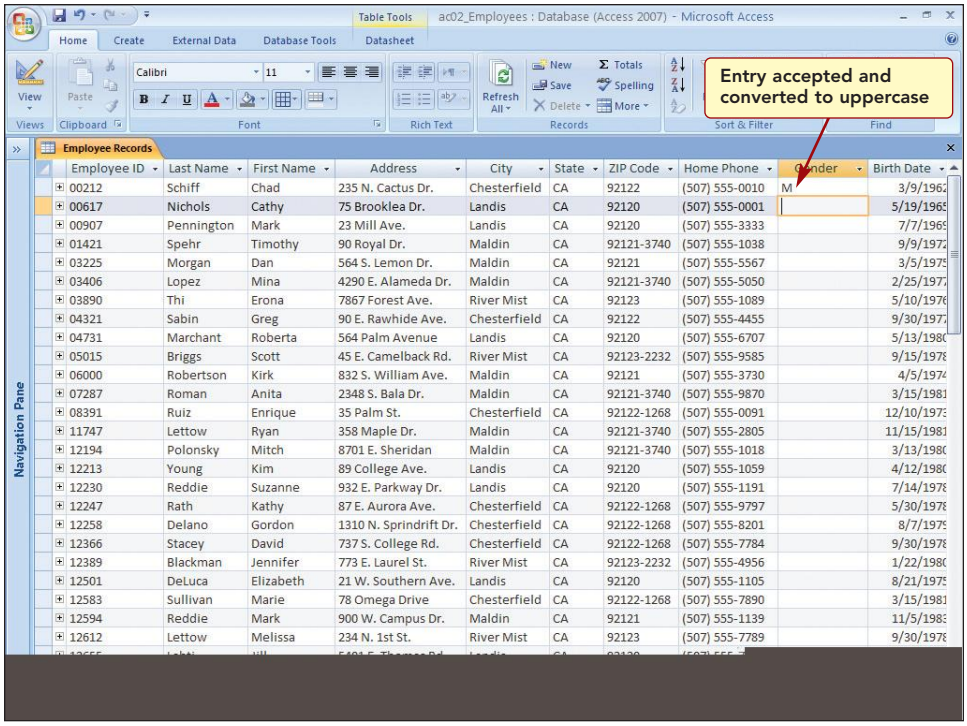


Figure 2.13

The entry for the first record is accepted and displayed as an uppercase M.

Hiding and Redisplaying Fields

To enter the gender data for the rest of the fields, you will use the First Name field as a guide. Unfortunately, the First Name and Gender fields are currently on opposite sides of the screen and will require you to look back and forth across each record. You can eliminate this problem by hiding the fields you do not need to see, and then redisplaying them when you have finished entering the gender data.

Hiding Fields

A quick way to view two fields side by side (in this case, the First Name and Gender fields) is to hide the fields that are in between (the Address through Home Phone fields).

1 **Select the Address field through the Home Phone field.**

Additional Information

Drag along the column heads when the mouse pointer is ↓ to select the fields.

- **Right-click on the selection.**
- **Choose Hide Columns from the shortcut menu.**

Another Method

You also can click More in the Records group of the Home tab and choose Hide Columns.

Your screen should be similar to Figure 2.14

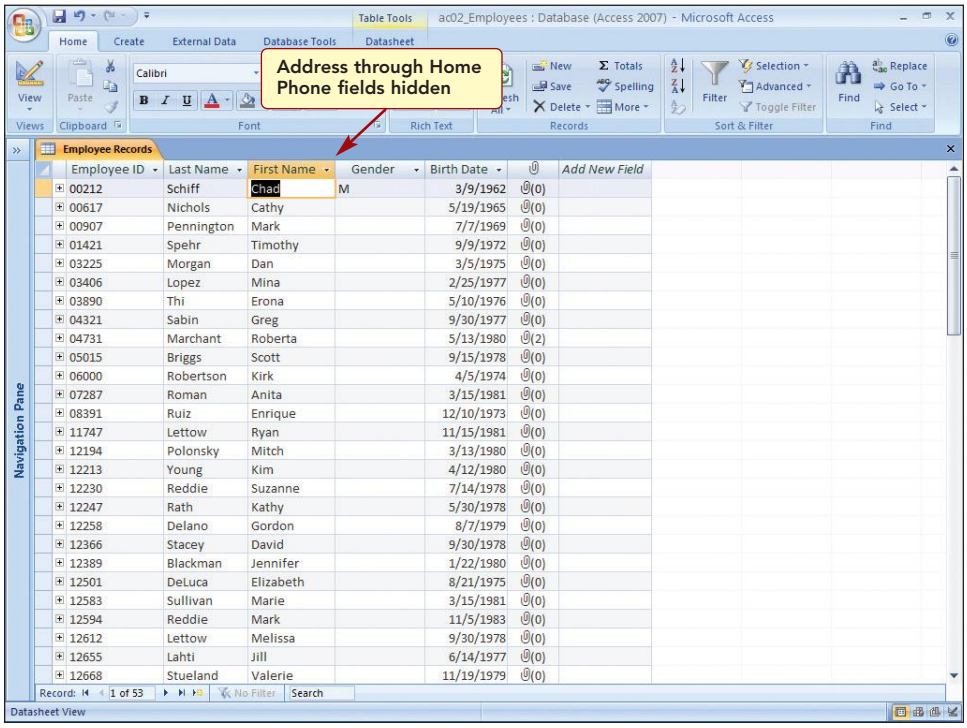


Figure 2.14

Now that the First Name and Gender columns are next to each other, you can refer to the first name in each record to enter the correct gender data.

2 **Enter the Gender field values for the remaining records by looking at the First Name field to determine whether the employee is male or female.**

- **Reduce the size of the Gender column using the Best Fit command.**

Having Trouble?

Remember, to best fit data in a column, you double-click its right border.

Your screen should be similar to Figure 2.15

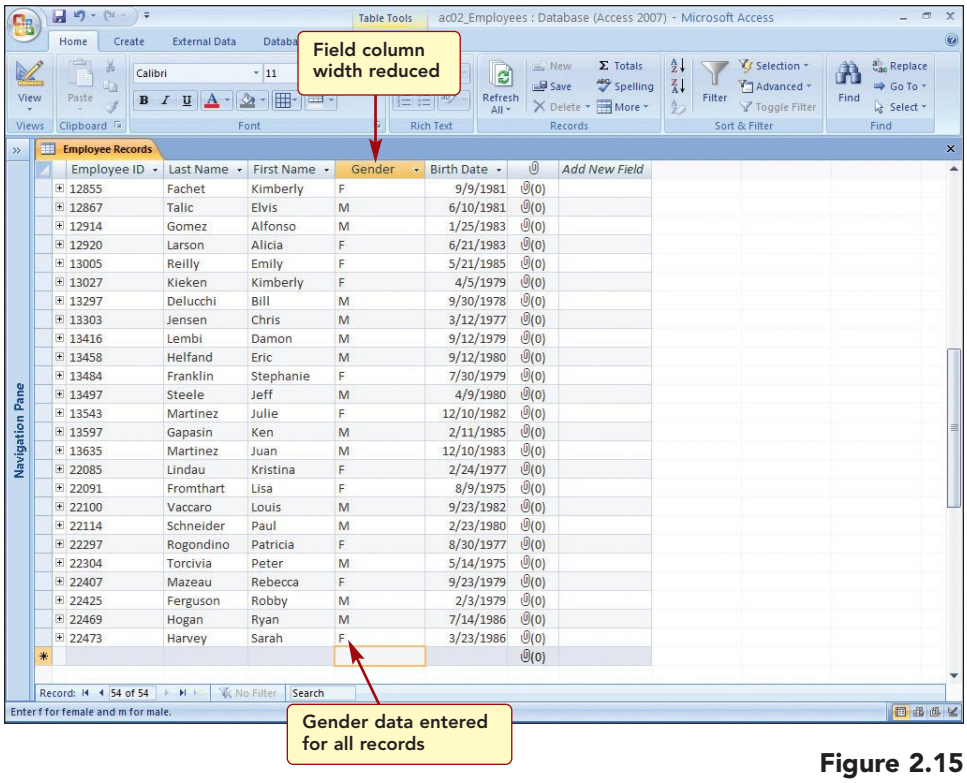


Figure 2.15

Redisplaying Hidden Fields

After you have entered the gender data for all of the records, you can redisplay the hidden fields.

1 **Right-click on any column header.**

- **Choose Unhide columns from the shortcut menu.**

Another Method

You also can click More in the Records group of the Home tab and choose Unhide Columns.

Your screen should be similar to Figure 2.16

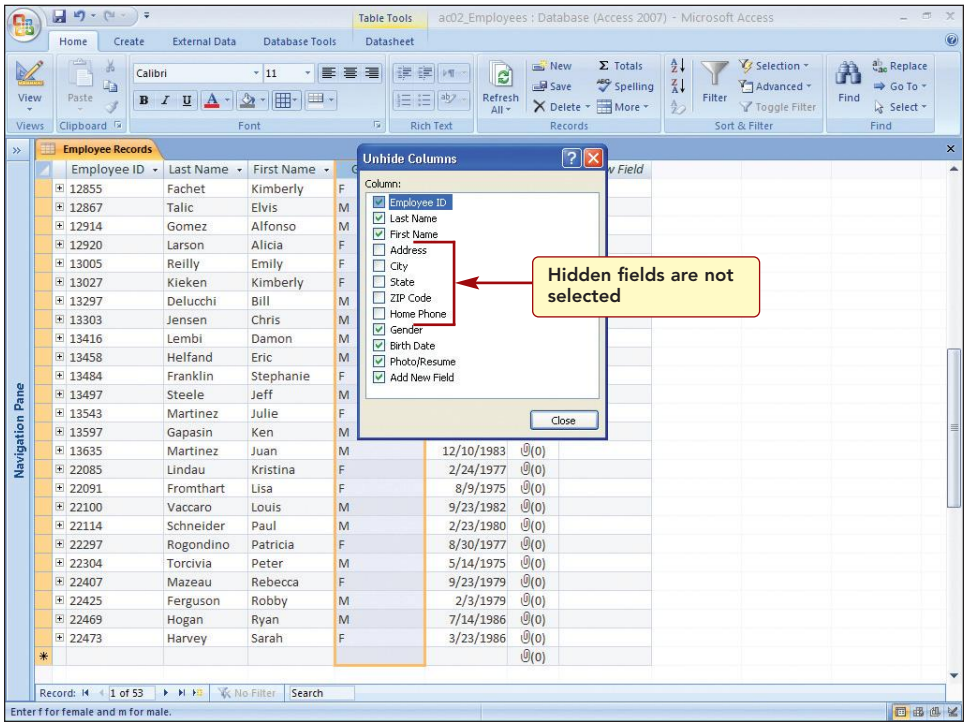


Figure 2.16

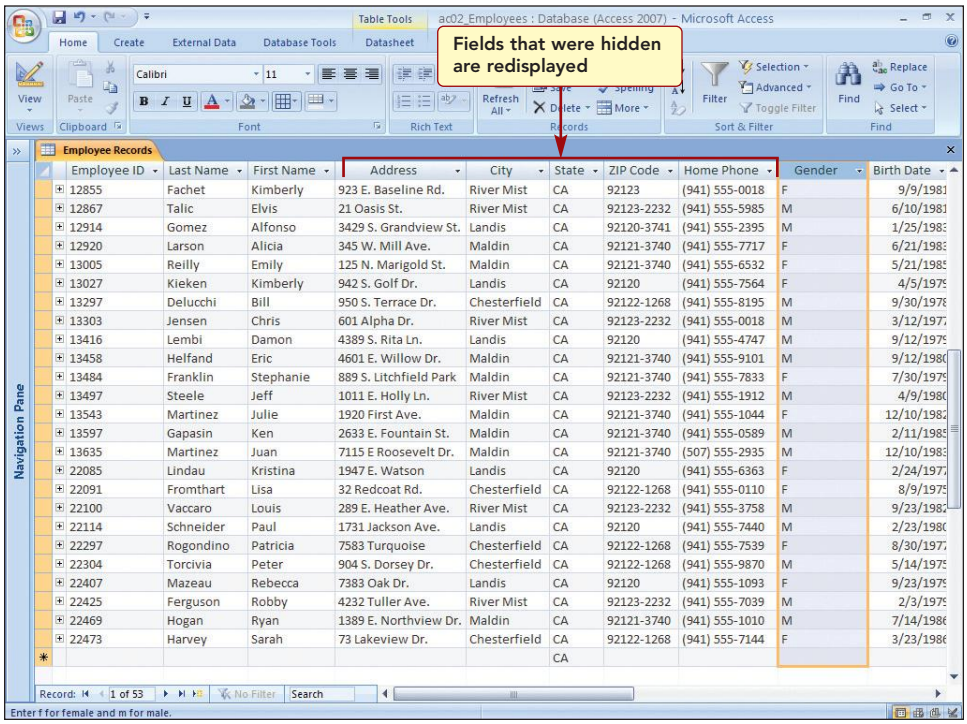
You use the Unhide Columns dialog box to select the currently hidden columns you want to redisplay. A checkmark in the box next to a column name indicates that the column is currently displayed; column names with no checkmarks indicate that they are currently hidden. You want to unhide all hidden columns in your table.

2 **Select the five column names that do not display checkmarks.**

Additional Information
Notice that as you make each selection, the corresponding column reappears in the table datasheet behind the dialog box.

Click Close **.**

Your screen should be similar to Figure 2.17



Employee ID	Last Name	First Name	Address	City	State	ZIP Code	Home Phone	Gender	Birth Date
12855	Fachet	Kimberly	923 E. Baseline Rd.	River Mist	CA	92123	(941) 555-0018	F	9/9/1981
12867	Talic	Elvis	21 Oasis St.	River Mist	CA	92123-2232	(941) 555-5985	M	6/10/1981
12914	Gomez	Alfonso	3429 S. Grandview St.	Landis	CA	92120-3741	(941) 555-2395	M	1/25/1983
12920	Larson	Alicia	345 W. Mill Ave.	Maldin	CA	92121-3740	(941) 555-7717	F	6/21/1983
13005	Reilly	Emily	125 N. Marigold St.	Maldin	CA	92121-3740	(941) 555-6532	F	5/21/1985
13027	Kieken	Kimberly	942 S. Golf Dr.	Landis	CA	92120	(941) 555-7564	F	4/5/1975
13297	Delucchi	Bill	950 S. Terrace Dr.	Chesterfield	CA	92122-1268	(941) 555-8195	M	9/30/1978
13303	Jensen	Chris	601 Alpha Dr.	River Mist	CA	92123-2232	(941) 555-0018	M	3/12/1977
13416	Lembi	Damon	4389 S. Rita Ln.	Landis	CA	92120	(941) 555-4747	M	9/12/1975
13458	Helfand	Eric	4601 E. Willow Dr.	Maldin	CA	92121-3740	(941) 555-9101	M	9/12/1980
13484	Franklin	Stephanie	889 S. Litchfield Park	Maldin	CA	92121-3740	(941) 555-7833	F	7/30/1975
13497	Steele	Jeff	1011 E. Holly Ln.	River Mist	CA	92123-2232	(941) 555-1912	M	4/9/1980
13543	Martinez	Julie	1920 First Ave.	Maldin	CA	92121-3740	(941) 555-1044	F	12/10/1982
13597	Gapasin	Ken	2633 E. Fountain St.	Maldin	CA	92121-3740	(941) 555-0589	M	2/11/1985
13635	Martinez	Juan	7115 E Roosevelt Dr.	Maldin	CA	92121-3740	(507) 555-2935	M	12/10/1983
22085	Lindau	Kristina	1947 E. Watson	Landis	CA	92120	(941) 555-6363	F	2/24/1977
22091	Fromthart	Lisa	32 Redcoat Rd.	Chesterfield	CA	92122-1268	(941) 555-0110	F	8/9/1975
22100	Vaccaro	Louis	289 E. Heather Ave.	River Mist	CA	92123-2232	(941) 555-3758	M	9/23/1982
22114	Schneider	Paul	1731 Jackson Ave.	Landis	CA	92120	(941) 555-7440	M	2/23/1980
22297	Rogondino	Patricia	7583 Turquoise	Chesterfield	CA	92122-1268	(941) 555-7539	F	8/30/1977
22304	Torcivia	Peter	904 S. Dorsey Dr.	Chesterfield	CA	92122-1268	(941) 555-9870	M	5/14/1975
22407	Mazeau	Rebecca	7383 Oak Dr.	Landis	CA	92120	(941) 555-1093	F	9/23/1975
22425	Ferguson	Robby	4232 Tuller Ave.	River Mist	CA	92123-2232	(941) 555-7039	M	2/3/1975
22469	Hogan	Ryan	1389 E. Northview Dr.	Maldin	CA	92121-3740	(941) 555-1010	M	7/14/1986
22473	Harvey	Sarah	73 Lakeview Dr.	Chesterfield	CA	92122-1268	(941) 555-7144	F	3/23/1986
					CA				

Figure 2.17

All of the fields are displayed again.

Creating a Lookup Field

Next you decide to change the Location field in the Job table to a lookup field that will make entering the location information easier, faster, and less prone to errors. There are three club locations: Landis, Chesterfield, and River Mist. You want the club locations to be listed so that anyone entering a new employee record will merely have to choose from this list to enter the club location for that employee.

Having Trouble?
Refer to Concept 6 in Lab 1 to review Lookup fields.

You will use the Lookup Wizard to change the existing Location field to a lookup field that uses fixed values.

1. **Display the Navigation pane and open the Job table.**
2. **Hide the Navigation pane and switch to Design view.**
3. **Make the Location field active.**
4. **Open the Data Type drop-down list and choose Lookup Wizard.**

Your screen should be similar to Figure 2.18

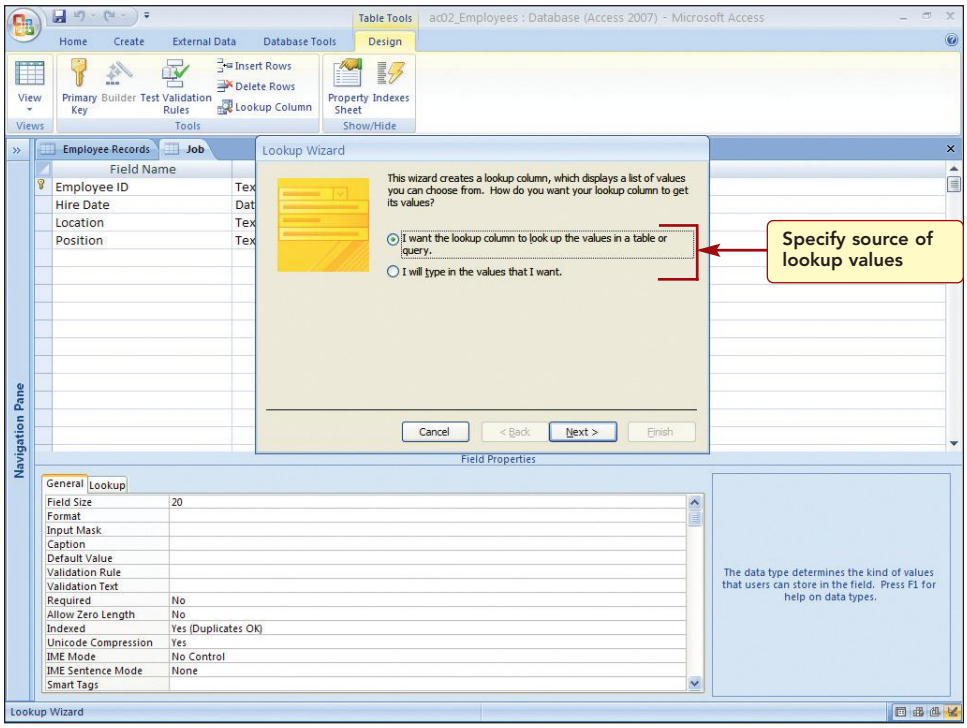


Figure 2.18

Additional Information

Using Lookup Column in the Fields & Columns group of the Datasheet tab inserts a new field column and starts the Lookup Wizard.

In the first Lookup Wizard dialog box, you specify the source for the values for the lookup field. You will enter your own values, the club locations, for this field.

2. **Choose "I will type in the values that I want."**
3. **Click** Next > **.**

Your screen should be similar to Figure 2.19

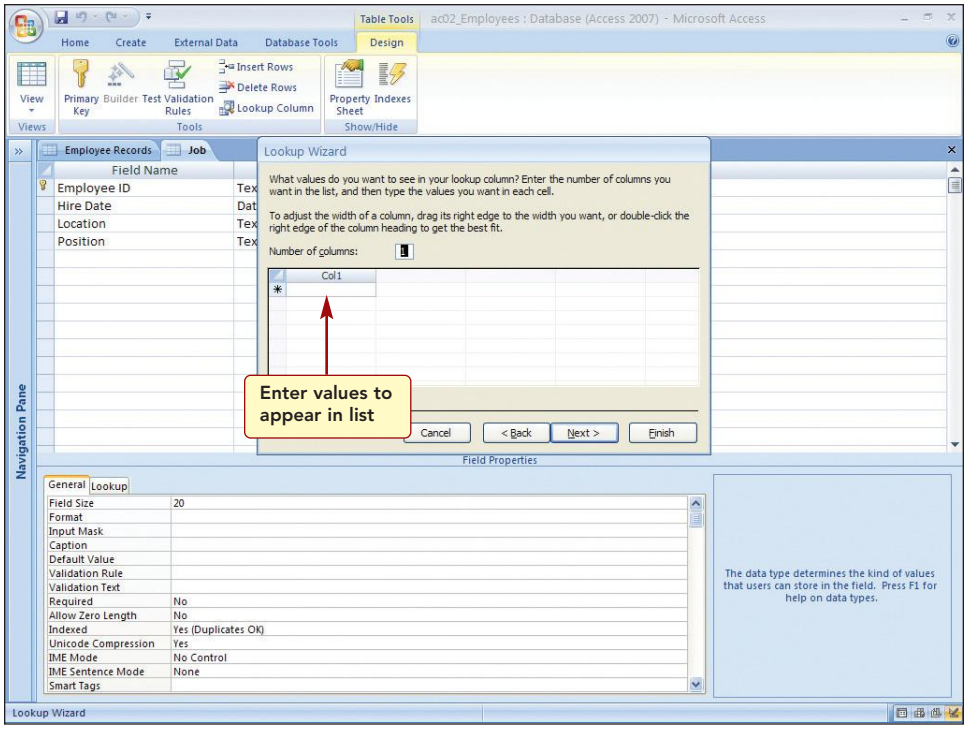


Figure 2.19

The next step is to enter the values you want listed in the lookup field. You also can add columns and adjust their widths to fit the values you enter, if necessary. You only need one column, and the current width is sufficient for the values you will enter.

3 **Click the entry box under Col1.**

- **Type Landis.**
- **Press Tab.**
- **Enter Chesterfield and River Mist locations next, pressing Tab to go from one cell to the next.**

Having Trouble?

You can correct these entries the same way you do when entering data into any other field.

Your screen should be similar to Figure 2.20

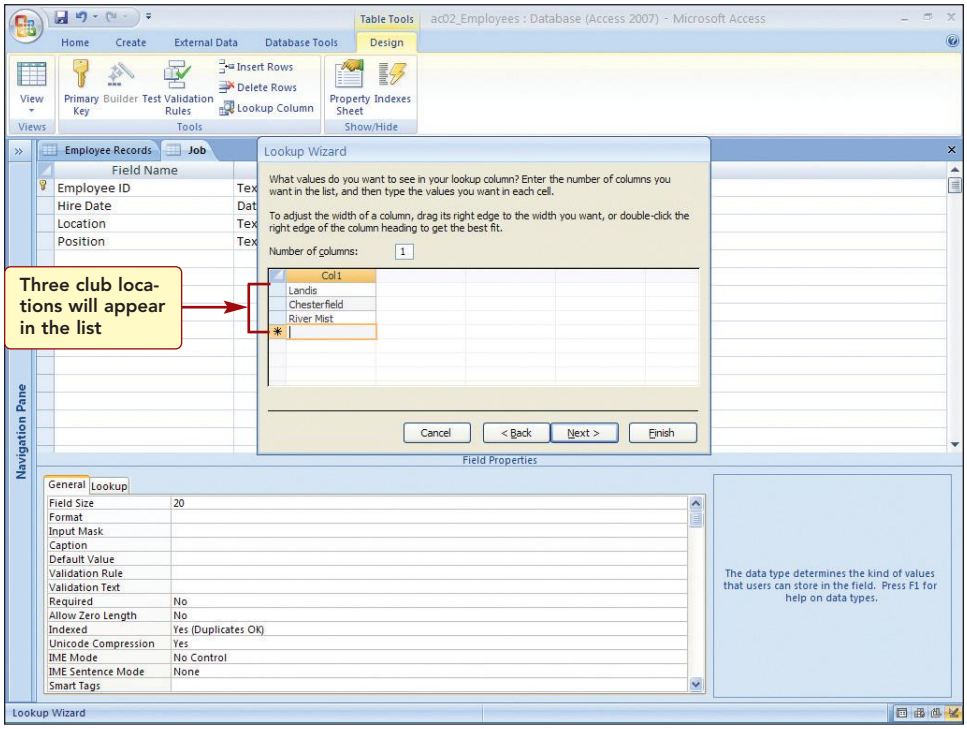


Figure 2.20

After entering the field values, you will move to the next step to enter a field name and finish the wizard. You will leave the field name as Location. Then you will check the field property settings established for this field to see whether any changes are necessary.

4 **Click** Next > .

Click Finish .

Open the Lookup tab in the Field Properties section.

Your screen should be similar to Figure 2.21

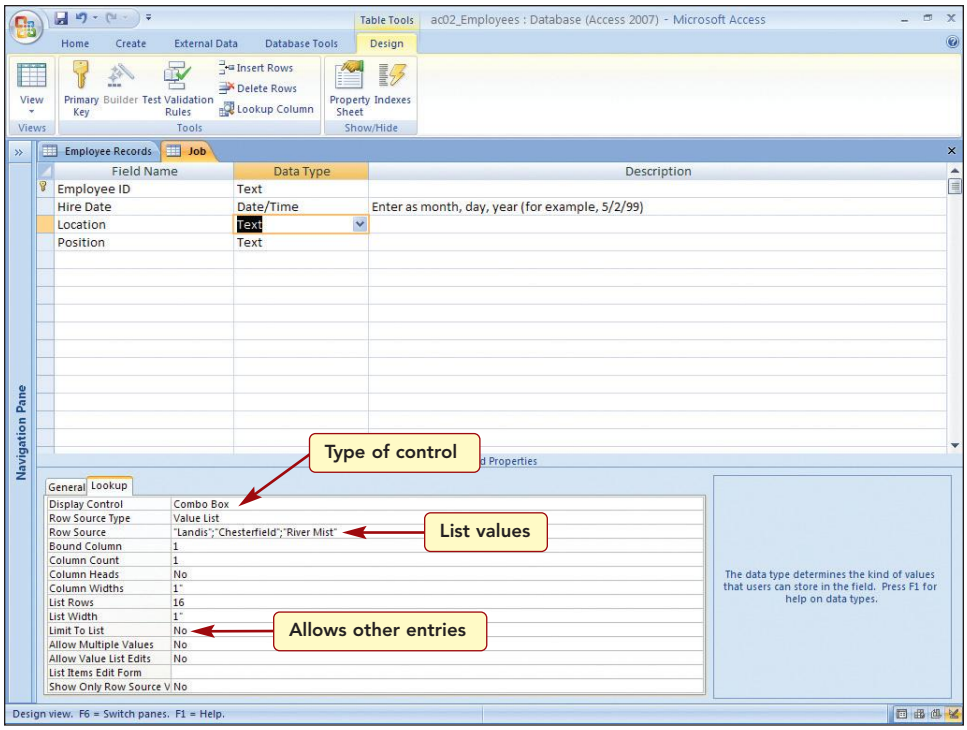


Figure 2.21

The lookup list will display in a combo box (drop-down list) control on forms. It gets its list values from the value list containing the values you specified as the source. The other properties are set to the defaults for lookup fields. The only change you want to make is to restrict the data entry in that field to values in the lookup list. Then you will test that the Location field is performing correctly.

5 **Change the Limit to List property to Yes.**

Having Trouble?

Select the property and click ▼ at the end of the box to open the drop-down list of options.

Save the table design and switch to Datasheet view.

Additional Information:

If you do not save the table design before switching views, Access will prompt you to save it. Click Yes to continue.

Click in the Location field of the first record.

Replace the current location with Maldin and press Enter.

Your screen should be similar to Figure 2.22

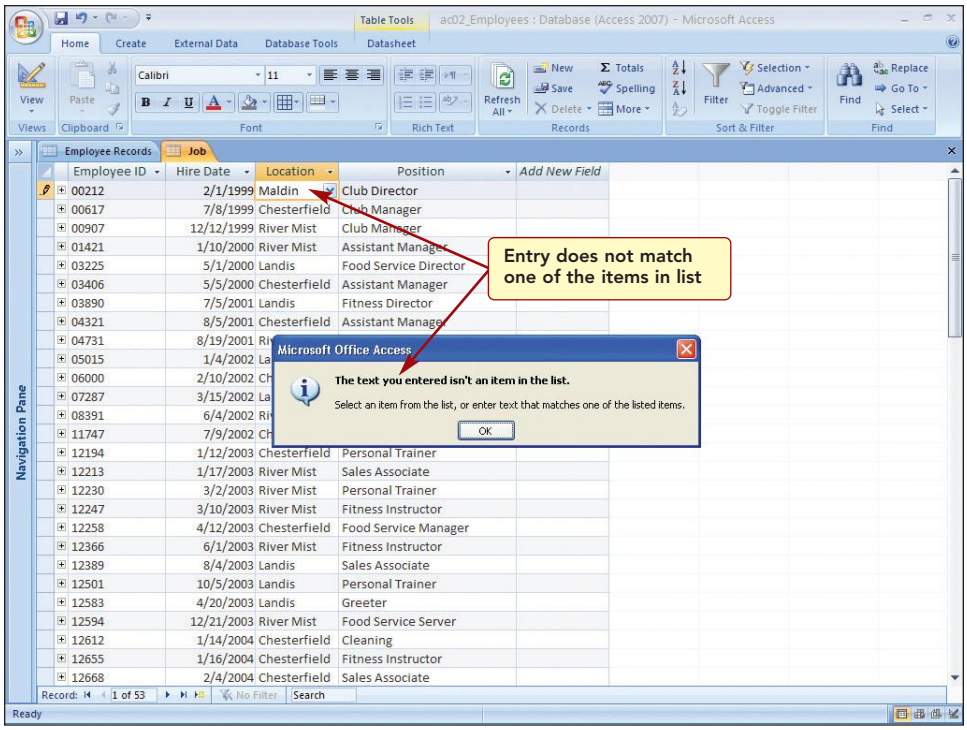


Figure 2.22

A warning box advises you that the entry is not one of the listed items because you restricted the field entries in the Location field to the lookup values you specified.

6 **Click OK.**

Select Landis from the list of values.

Press Enter.

Your screen should be similar to Figure 2.23

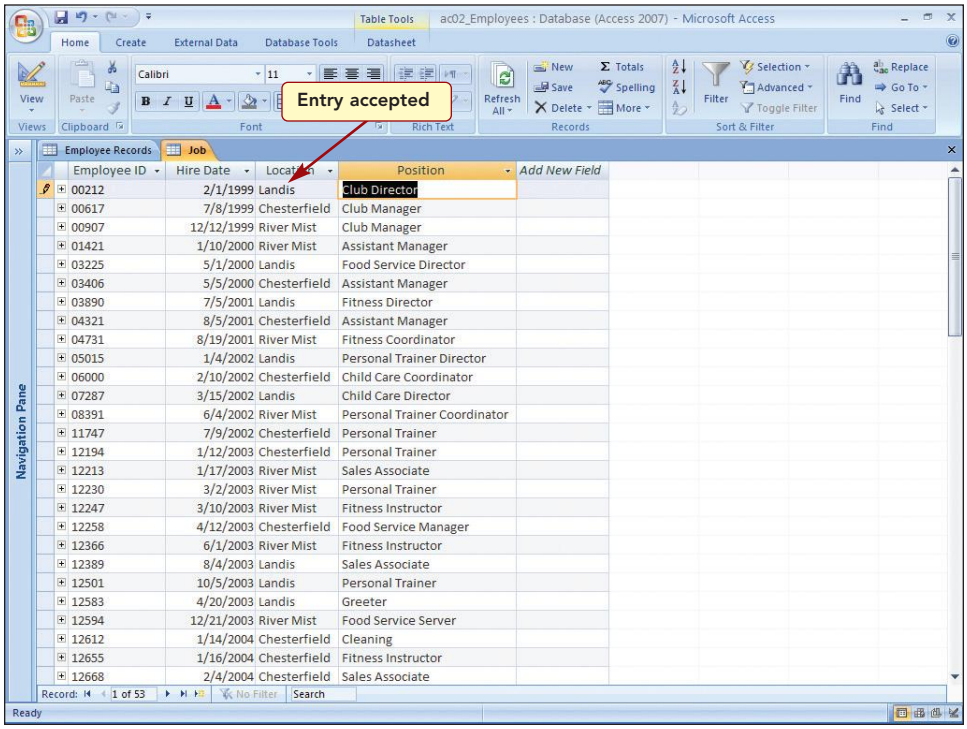


Figure 2.23

The Location lookup field is working correctly. Using a lookup field makes entering repetitive information faster and more accurate.

Finding and Replacing Data

Over the past few days, you have received several change-request forms to update the employee records. Rather than have to scroll through all the records to locate the ones that need to be modified, you can use the Find and Replace feature.

Concept 5

Find and Replace

5 The **Find and Replace** feature helps you quickly find specific information and automatically replace it with new information. The Find command will locate all specified values in a field, and the Replace command will both find a value and automatically replace it with another. For example, in a table containing supplier and item prices, you may need to increase the price of all items supplied by one manufacturer. To quickly locate these items, you would use the Find command to locate all records with the name of the manufacturer and then update the price appropriately. Alternatively, you could use the Replace command if you knew that all items priced at $11.95 were increasing to $15.99. This command would locate all values matching the original price and replace them with the new price.

Finding and replacing data is fast and accurate, but you need to be careful when replacing not to replace unintended matches.

Finding Data

The first change request is for Melissa Lettow, who recently married and has both a name and address change. To quickly locate this record, you will use the Find command.

1. **Close the Job table.**
2. **Move to the Last Name field of record 1 in the Employee Records table.**
3. **Click Find in the Find group of the Home tab.**

Another Method

The keyboard shortcut is Ctrl + F.

Your screen should be similar to Figure 2.24

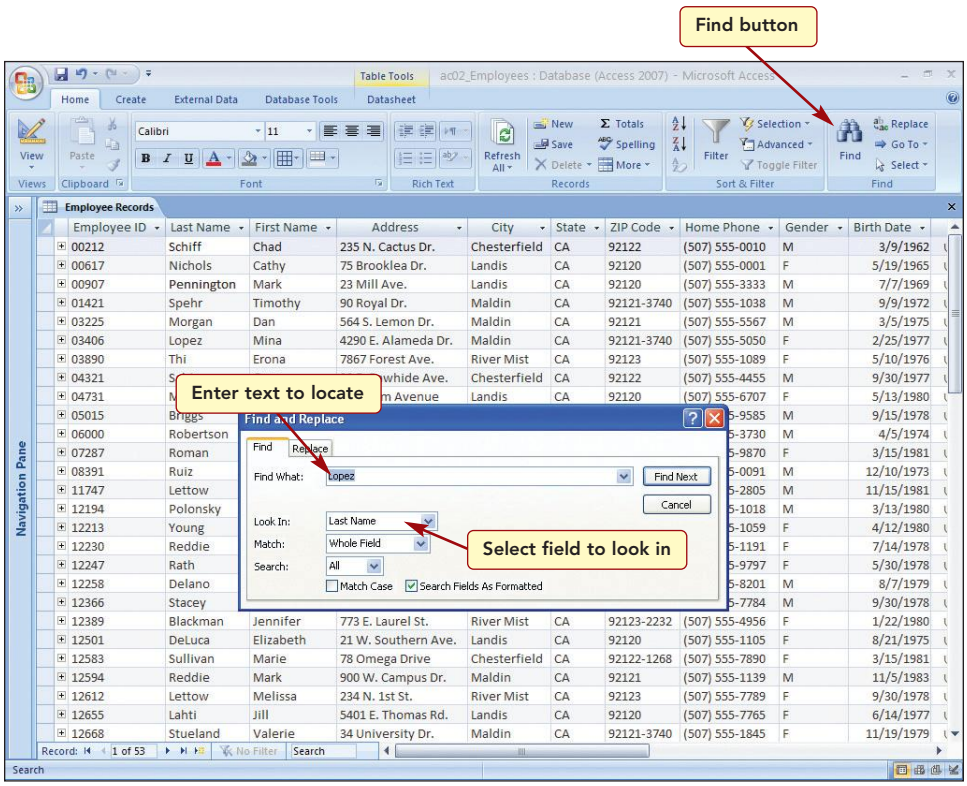


Figure 2.24

You use the Find and Replace dialog box to specify the information you are looking for and the way that you want Access to search the table. In the Find What text box, you specify the **criteria** or a set of limiting conditions records must meet by entering the text you want to locate. You can enter a specific character string or use wildcards to specify the criteria. **Wildcards** are symbols that are used to represent characters. The * symbol represents any collection of characters and the ? symbol represents any individual character. For example, ?ar will locate any three-letter text such as bar, far, and car. In contrast, *ar will locate the same text, but in addition will expand the criteria to locate any text ending with ar, such as star, popular, and modular.

You can further refine your search by using the options described in the following table.

Option	Effect
Look In	Searches the current field or the entire table for the specified text.
Match	Locates matches to the whole field, any part of the field, or the start of the field.
Search	Specifies the direction in which the table will be searched: All (search all records), Down (search down from the current insertion point location in the field), or Up (search up from the current insertion point location in the field).
Match Case	Finds words that have the same pattern of uppercase letters as entered in the Find What text box. Using this option makes the search case sensitive.
Search Fields as Formatted	Finds data based on its display format.

Because the insertion point is already in the field you want to search, the Look In location is correctly specified. If you wanted to search on a different field, you could click on the field you want in the datasheet without closing the dialog box. You also can select the table name from the Look In list if you want to search the entire table.

The other default options, to match the whole field and to search all records, are also appropriately set.

First, you will use the * wildcard to find all records whose last name begins with "l".

2. **Type l* in the Find What text box.**

3. **Click Find Next eight times to move from one located record to the next.**

Your screen should be similar to Figure 2.25

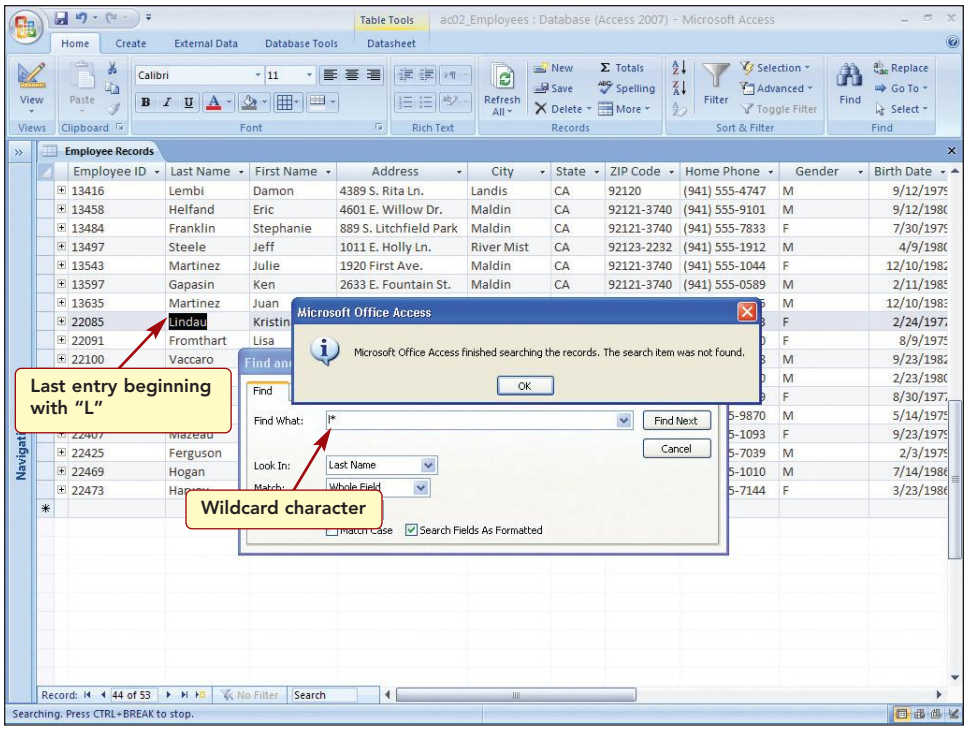


Figure 2.25

Using the wildcard located seven records whose last name starts with the letter l. The more specific you can make your criteria, the quicker you can locate the information you want to find. In this case, you want to find a specific last name, so you will enter the complete name in the Find What text box.

3 **Click** OK **to close the finished searching informational box.**

- **Click on the entry in the Find What text box to select it and type lettow.**

Additional Information

Because the Match Case option is not selected in the Find and Replace dialog box, you can enter the text to be located in uppercase, lowercase, or mixed-case letters—Access will ignore the case and look for the specified text.

- **Click** Find Next.

Your screen should be similar to Figure 2.26

Having Trouble?

If the Find command did not locate this record, try it again. Make sure that you entered the name "lettow" (uppercase or lowercase) correctly and that Last Name is the selected field in the Look In box.

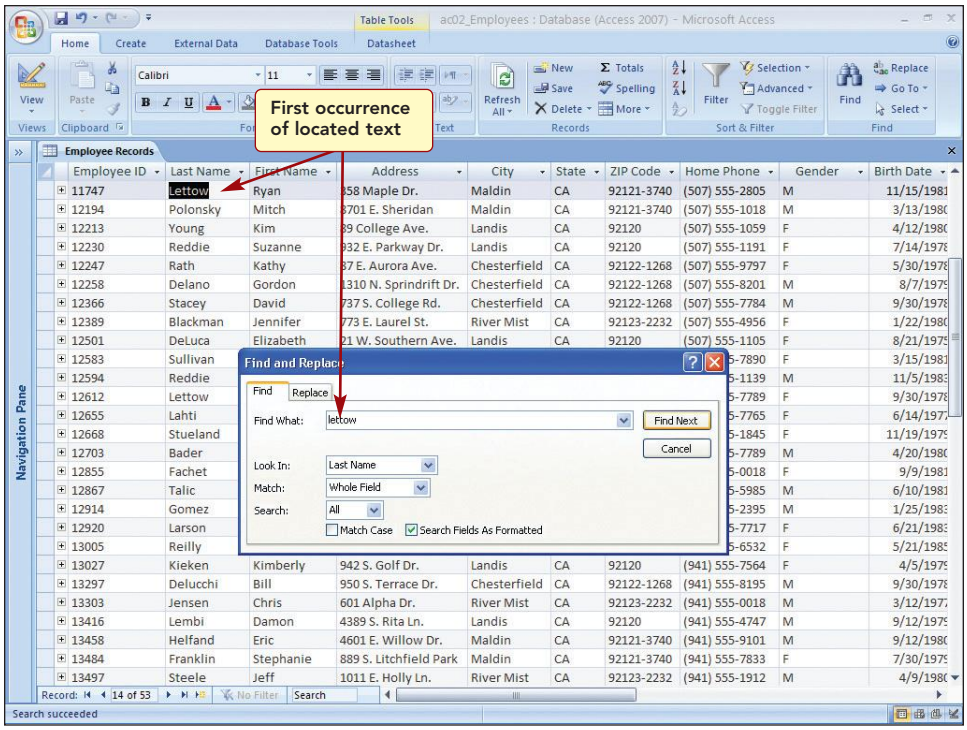


Figure 2.26

Access searches the table and moves to the first located occurrence of the entry you specified. The Last Name field is highlighted in record 14. You need to change the last name from Lettow to Richards.

4 **Click in the Last Name field of record 14.**

Additional Information

You do not need to close the Find and Replace dialog box before you make a change to the table. You will be using this dialog box again to perform more searches, so leave it open for now.

- **Double-click Lettow to select the entry.**
- **Type Richards.**
- **Press Enter.**

Your screen should be similar to Figure 2.27

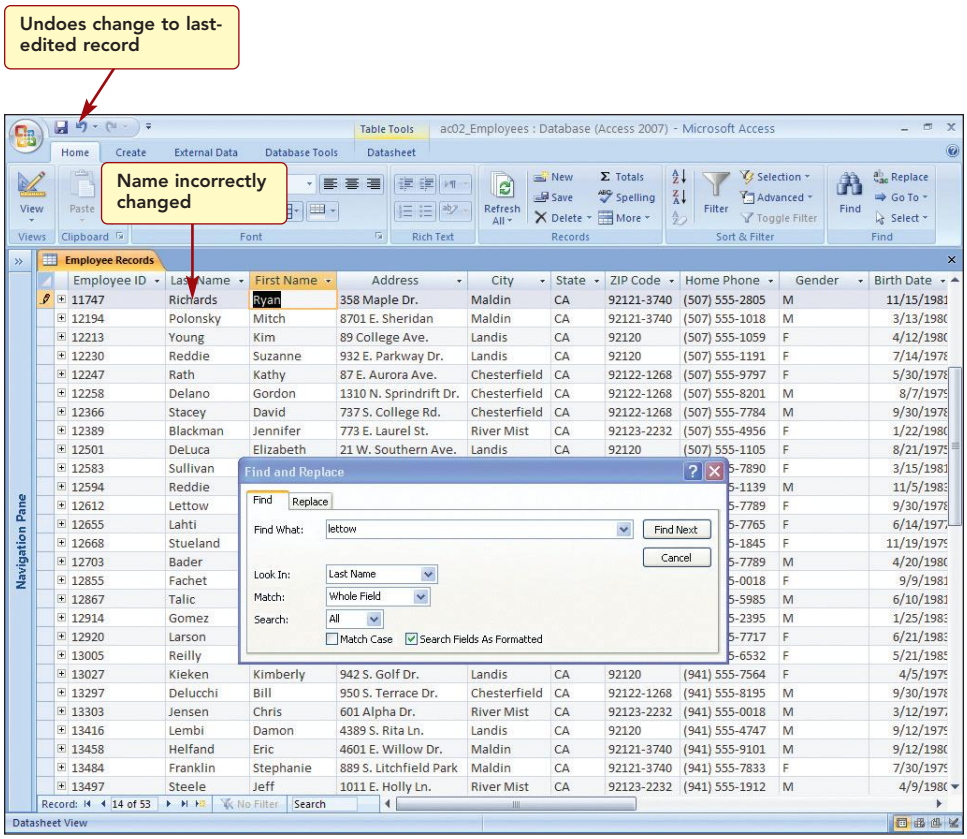


Figure 2.27

Now that the highlight is on the First Name field, you notice that this is the record for Ryan Lettow, not Melissa. You changed the wrong record. You will use the Undo command next to quickly fix this error.

Using Undo

Undo will cancel your last action as long as you have not made any further changes to the table. Even if you save the record or the table, you can undo changes to the last edited record by clicking Undo. After you have changed another record or moved to another window, however, the earlier change cannot be undone. You will use Undo to return Ryan's record to the way it was before you made the change.

1 Click Undo.

Another Method

The keyboard shortcut is Ctrl + Z.

Your screen should be similar to Figure 2.28

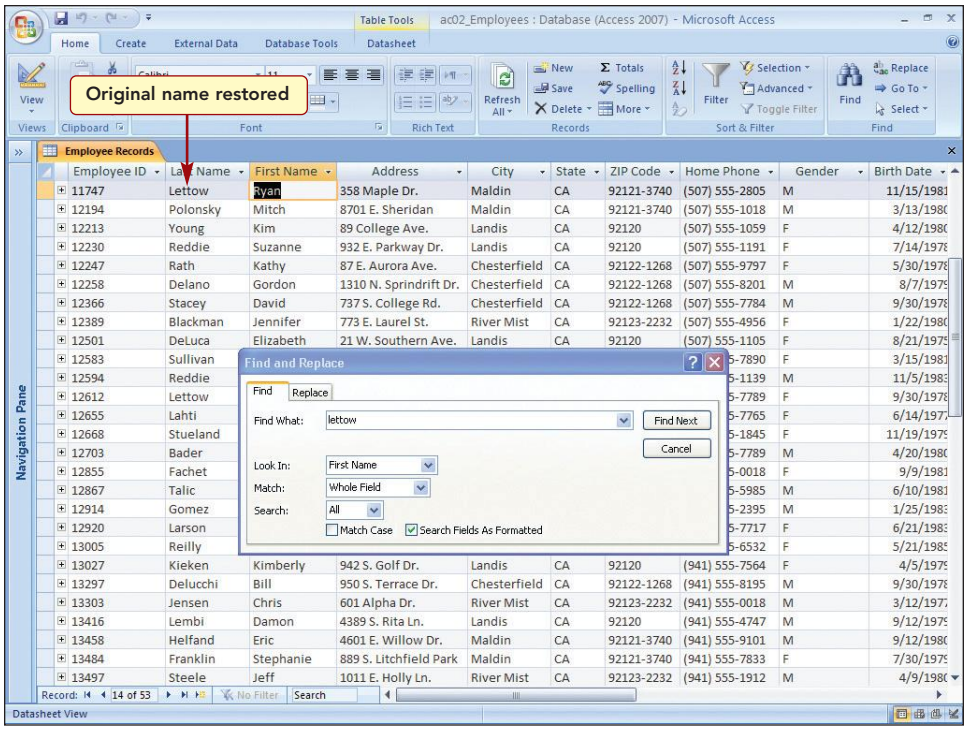


Figure 2.28

The original field value of Lettow is restored. Now, you want to continue the search to locate the next record with the last name of Lettow.

2 Move back to the Last Name field of record 14.

- Click Find Next in the Find and Replace dialog box.
- When Access locates the record for Melissa Lettow (record 25), change her last name to Richards and the Address to 5522 W. Marin Lane.

Having Trouble?

If necessary, move the Find and Replace dialog box.

Your screen should be similar to Figure 2.29

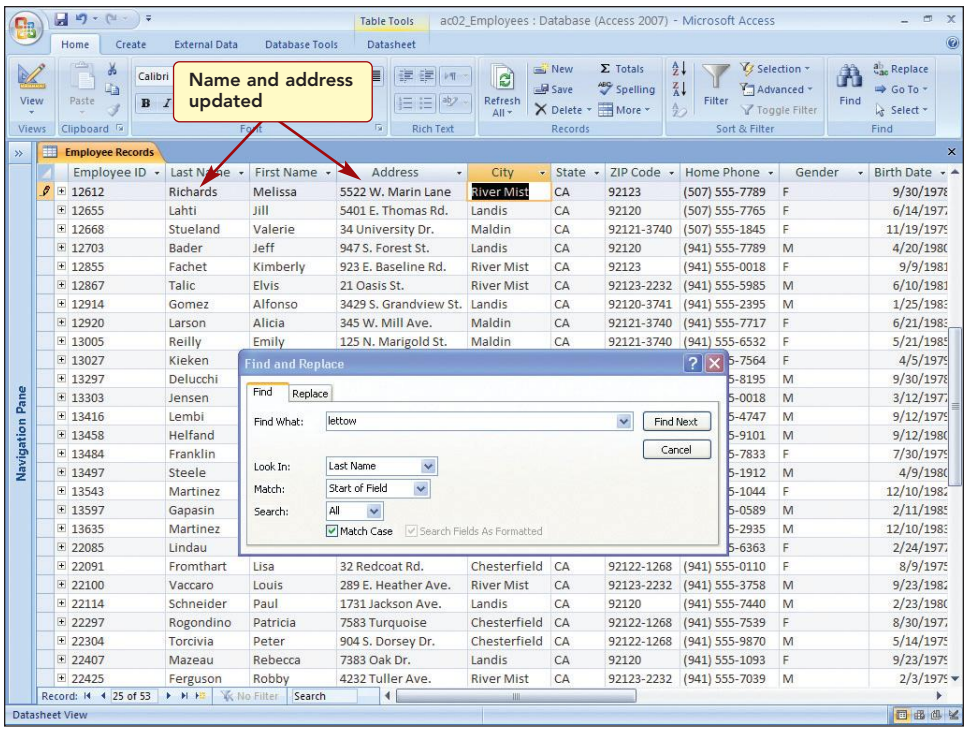


Figure 2.29

The Find method works well when you need to locate an individual field in order to view the data and/or modify it. However, when you need to make the same change to more than one record, the Replace command is the quicker method because it both finds and replaces the data.

Replacing Data

You have checked with the U.S. Postal Service and learned that all zip codes of 92120 have a four-digit extension of 3741. To locate all the records with this zip code, you could look at the ZIP Code field for each record to find the match and then edit the field to add the extension. If the table is small, this method would be acceptable. For large tables, however, this method could be quite time consuming and more prone to errors. A more efficient way is to search the table to find specific values in records and then replace the entry with another.

1. **Move to the ZIP Code field of record 1.**
2. **Open the Replace tab.**

Another Method

You can use Replace in the Find group or the keyboard shortcut is Ctrl + H to open the Find and Replace dialog box and display the Replace tab.

Your screen should be similar to Figure 2.30

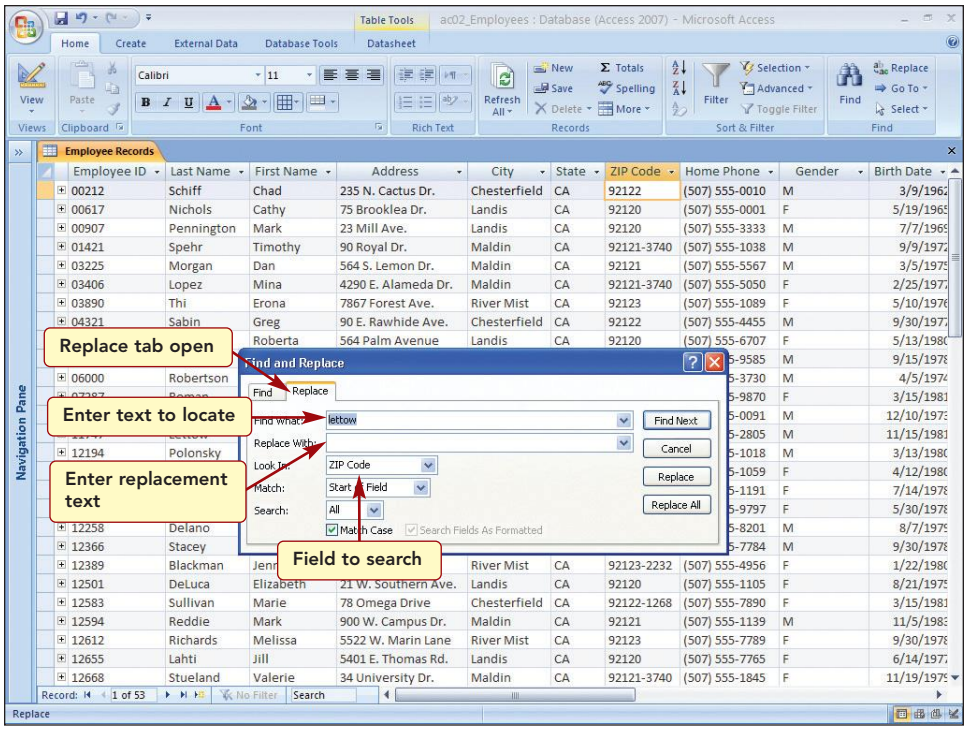


Figure 2.30

The options in the Replace tab are the same as those in the Find tab, with the addition of a Replace With text box, where you enter the replacement text exactly as you want it to appear in your table.

2. **In the Find What text box, type 92120.**
3. **Press Tab to move to the Replace With text box.**
4. **Type 92120-3741.**
5. **Click Find Next.**

Your screen should be similar to Figure 2.31

Having Trouble?
If necessary, move the dialog box so you can see the highlighted entry.

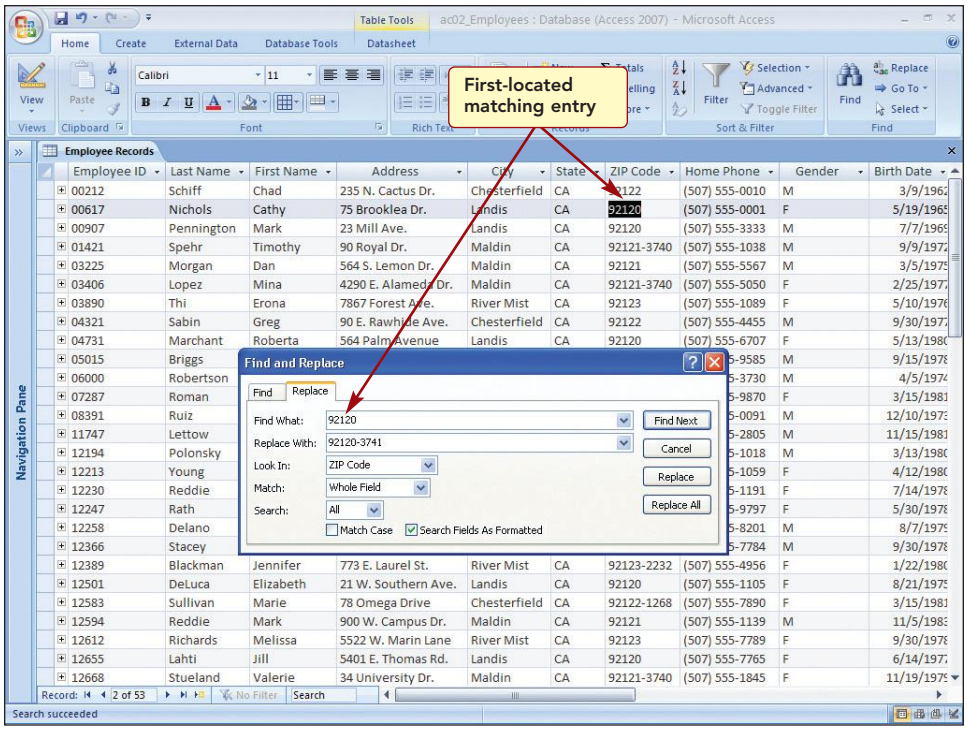


Figure 2.31

Immediately, the highlight moves to the first occurrence of text in the document that matches the Find What text and highlights it. You can now replace this text with the click of a button.

3. **Click Replace.**

Your screen should be similar to Figure 2.32

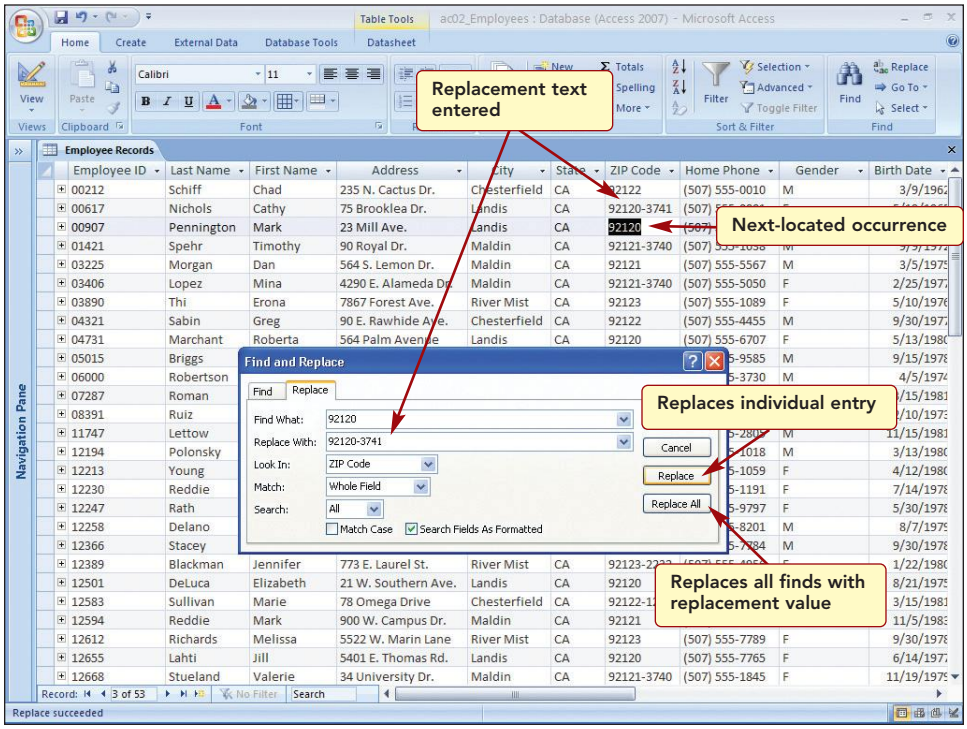


Figure 2.32

The original zip code entry is replaced with the new zip code. The program immediately continues searching and locates a second occurrence of the entry. You decide that the program is locating the values accurately and that it will be safe to replace all finds with the replacement value.

4. **Click** Replace All.
   - **Click** Yes **in response to the advisory message.**
   - **Close the Find and Replace dialog box.**

Your screen should be similar to Figure 2.33

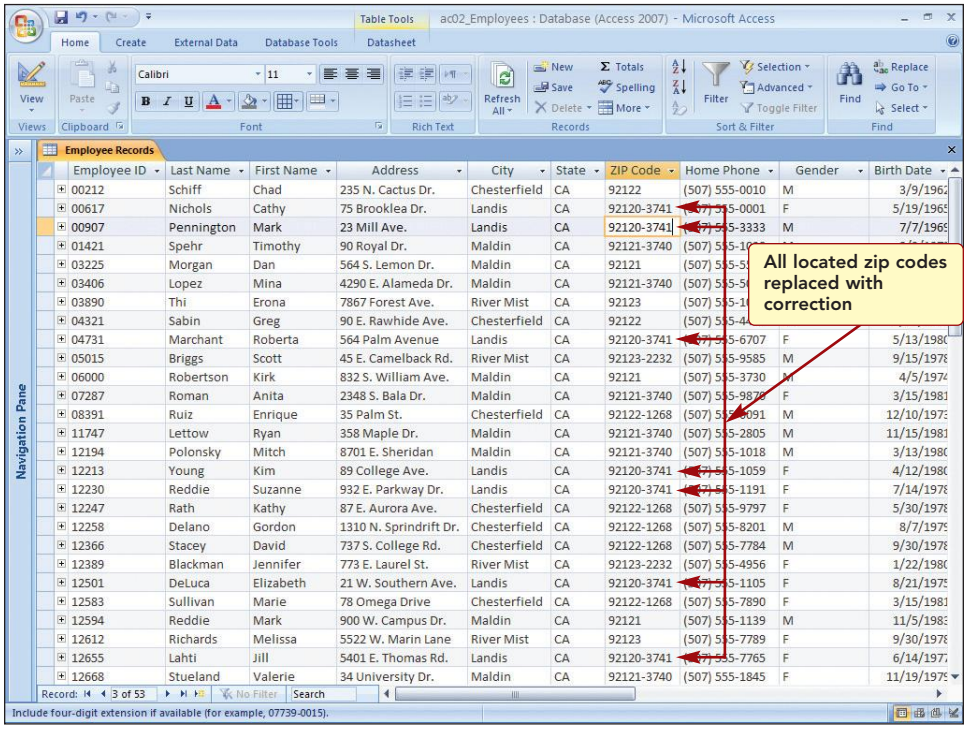


Figure 2.33

All matches are replaced with the replacement text. It is much faster to use Replace All than to confirm each match separately. However, exercise care when using Replace All, because the search text you specify might be part of another field and you may accidentally replace text you want to keep.

Sorting Records

As you may recall from Lab 1, the records are ordered according to the primary key field, Employee ID. The accounting manager, however, has asked you for an alphabetical list of all employees. To do this, you will sort the records in the table.

Concept 6

Sort

6 You can **sort** the data in a table to quickly rearrange the order of the records. Sorting data helps you find specific information more quickly without having to browse the data. You can sort data in **ascending sort order** (A to Z or 0 to 9) or **descending sort order** (Z to A or 9 to 0).

You can sort all records in a table by a single field, such as State, or you can select adjacent columns and sort by more than one field, such as State and then City. When sorting on multiple fields, you begin by selecting the columns to sort. Access sorts records starting with the column farthest left (the outermost field) and then moves to the right across the selected columns to sort the innermost fields. For example, if you want to sort by State, and then by City, the State field must be to the left of the City field. The State field is the outermost field and the city field is the innermost field.

Access saves the new sort order with your table data and reapplies it automatically each time you open the table. To return to the primary key sort order, you must remove the temporary sort.

Sorting on a Single Field

You will sort the records on a single field, Last Name. To perform a sort on a single field, you move to the field on which you will base the sort and click the button that corresponds to the type of sort you want to do. In this case, you will sort the Last Name field in ascending alphabetical order.

1 **Move to the Last Name field of any record.**

Click Ascending in the Sort & Filter group.

Additional Information

Clicking Descending arranges the data in descending sort order.

Your screen should be similar to Figure 2.34

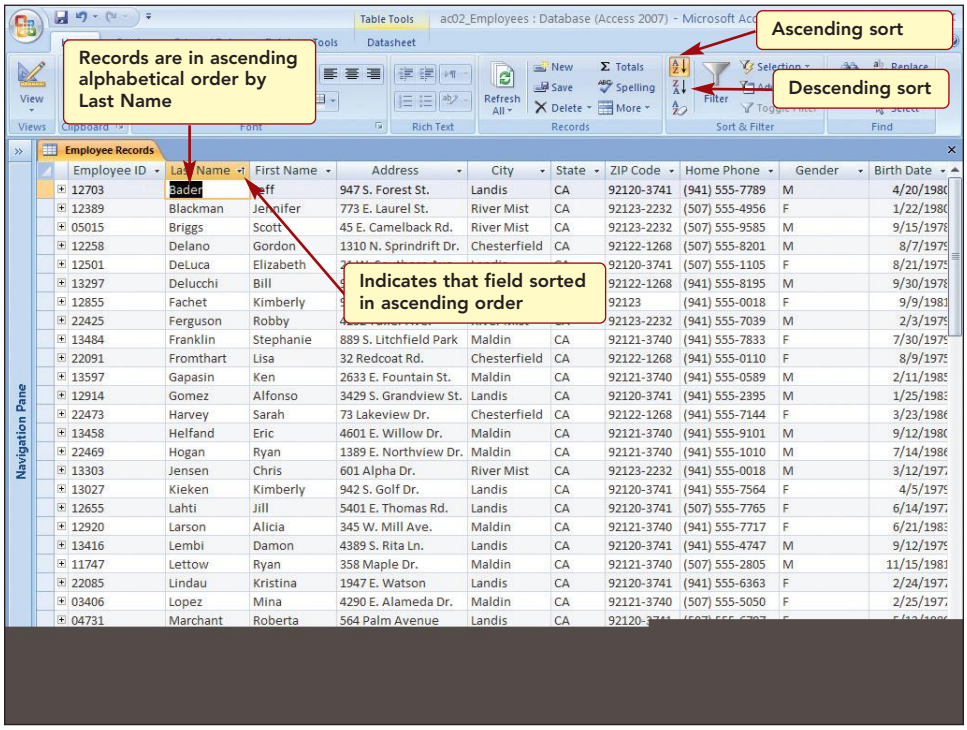


Figure 2.34

The employee records are displayed in alphabetical order by last name. The Last Name field header displays a to show that the field is in ascending sorted order. Next, you want to check the rest of the table to see if there is anything else you need to do.

2 **Use the scroll box to scroll down to record 25.**

Additional Information

As you drag the scroll box, the record location is displayed in a Screen Tip (for example, "Record 25 of 53").

Your screen should be similar to Figure 2.35

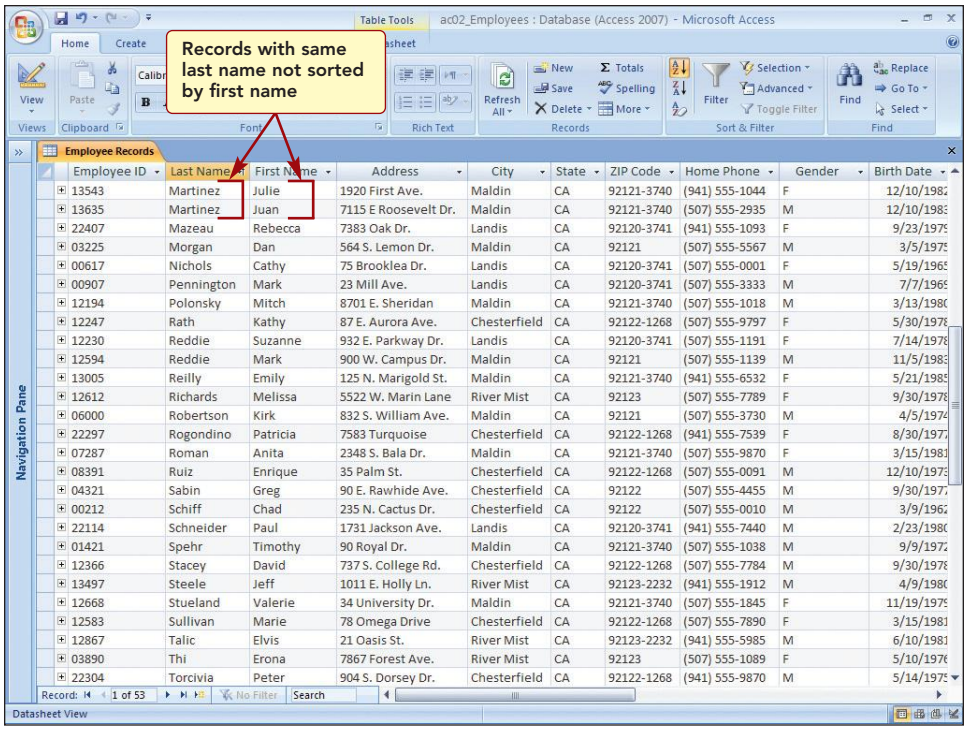


Figure 2.35

Now, you can see that the records for Julie and Juan Martinez are sorted by last name but not by first name. You want all records that have the same last name to be further sorted by first name. To do this, you need to sort using multiple sort fields.

Additional Information

If the columns to sort were not already adjacent, you would hide the columns that are in between. If the columns were not in the correct order, you would move the columns. You will learn how to do this in Lab 3.

Sorting on Multiple Fields

When sorting on multiple fields, the fields must be adjacent to each other in order to designate the inner and outer sort fields. The outer sort field (primary field in the sort) must be to the left of the inner sort field. The Last Name and First Name fields are already in the correct locations for the sort you want to perform. To specify the fields to sort on, both columns must be selected.

1. **Select the Last Name and First Name field columns.**
2. **Click Ascending.**
3. **Scroll down to record 25 again.**

Your screen should be similar to Figure 2.36

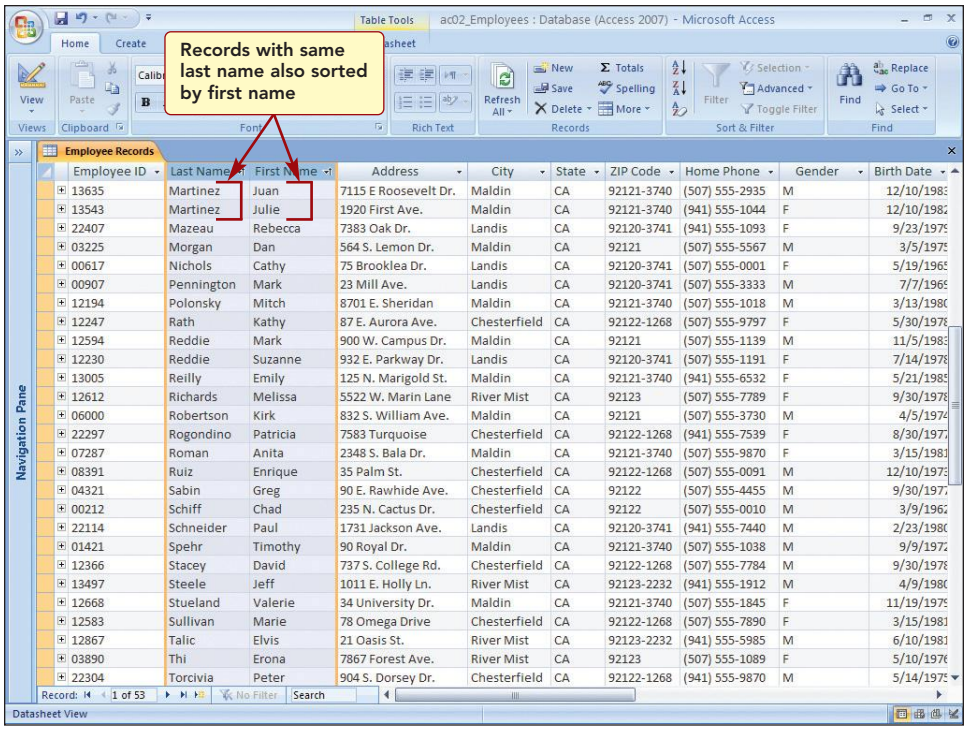


Figure 2.36

The record for Juan Martinez now appears before the record for Julie. As you can see, sorting is a fast, useful tool. The sort order remains in effect until you remove the sort or replace it with a new sort order. Although Access remembers your sort order even when you exit the program, it does not actually change the table records.

You can remove the sort at any time to restore the records to the primary key sort order. You decide to return to primary key sort order and resort the table alphabetically for the Accounting department later, after you have finished making changes to it.

1 **Click Datasheet Formatting in the Font group of the Home tab.**

Your screen should be similar to Figure 2.38

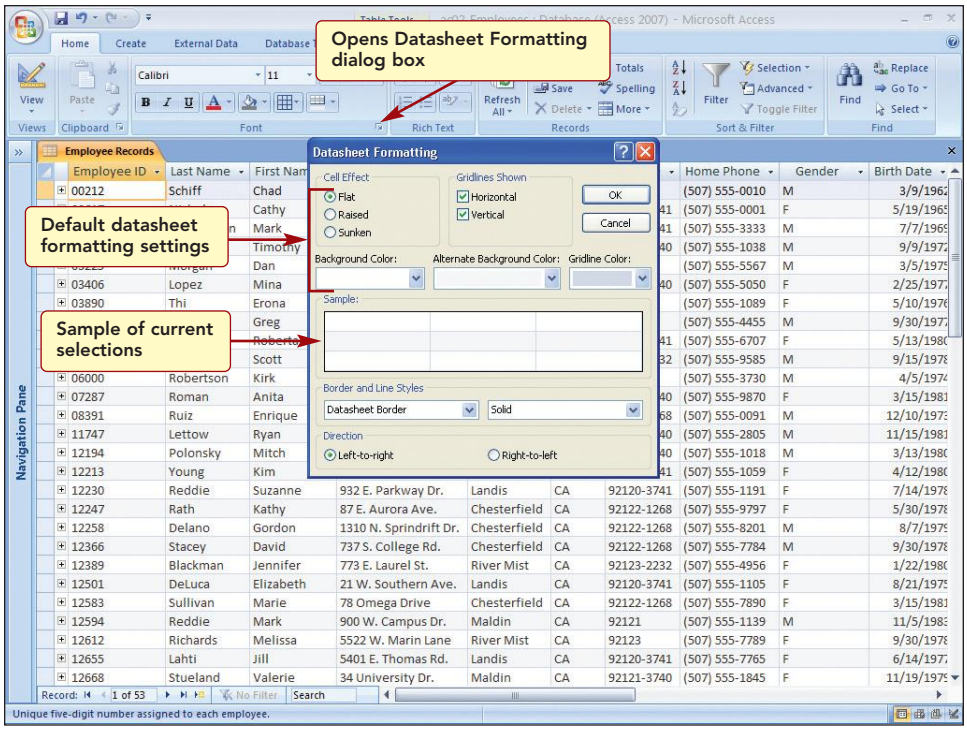


Figure 2.38

The default datasheet formatting settings are displayed in the dialog box and the Sample area shows how the settings will appear in the datasheet. You will leave the background color white and change the color of the alternate rows.

2 **Open the Alternate Background Color drop-down menu.**

Your screen should be similar to Figure 2.39

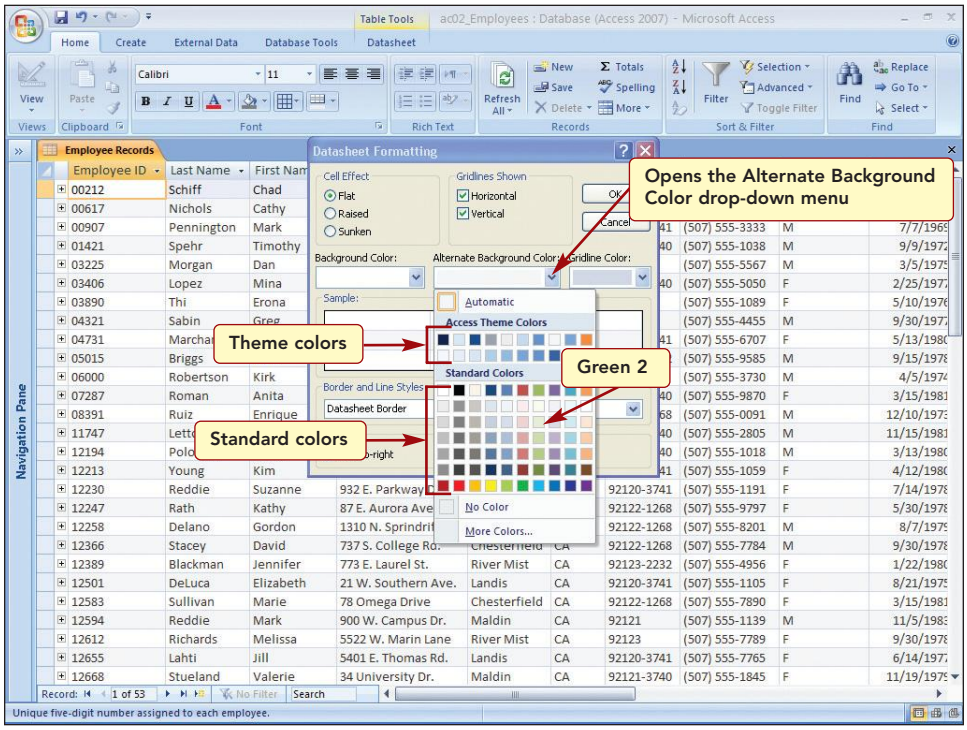


Figure 2.39

The color gallery displays the Access Theme Colors in the upper section and standard colors in the lower section. **Theme colors** are a combination of coordinating colors that are used in the default datasheet. Each color is assigned to a different area of the datasheet, such as label text or table background. Pointing to a color identifies where it is used in a ScreenTip. The colors in the Standard Colors gallery are not assigned to specific areas on the datasheet. Pointing to a Standard Color displays the name assigned to the color.

3. **Point to several theme colors to see where they are used in the datasheet.**

- **Click on the Green 2 color in the Standard Colors area.**

Another Method

You also can use Alternate Fill/Back Color in the Font group to change the color.

Your screen should be similar to Figure 2.40

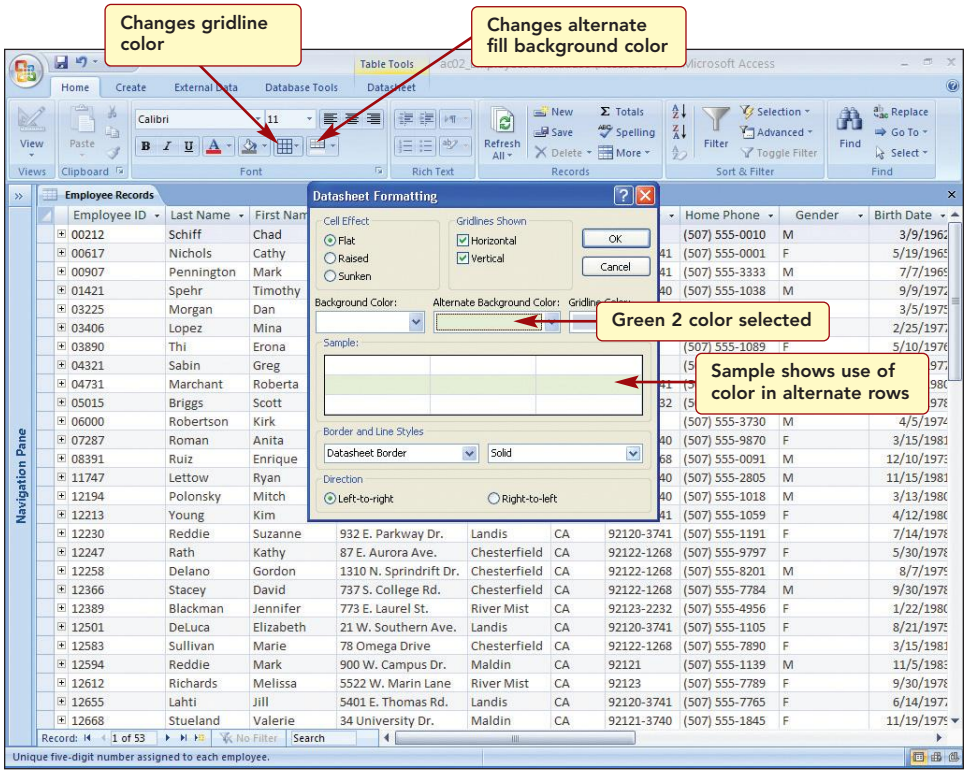


Figure 2.40

The sample area displays how the selection will appear in the datasheet. You like the green shading and want to change the gridline color to a darker shade of the same green.

4 **Open the Gridline Color drop-down menu.**

Choose Green 5 from the Standard colors area.

Click OK **.**

Your screen should be similar to Figure 2.41

Another Method

You also can use Gridline Color in the Font group to change the color.

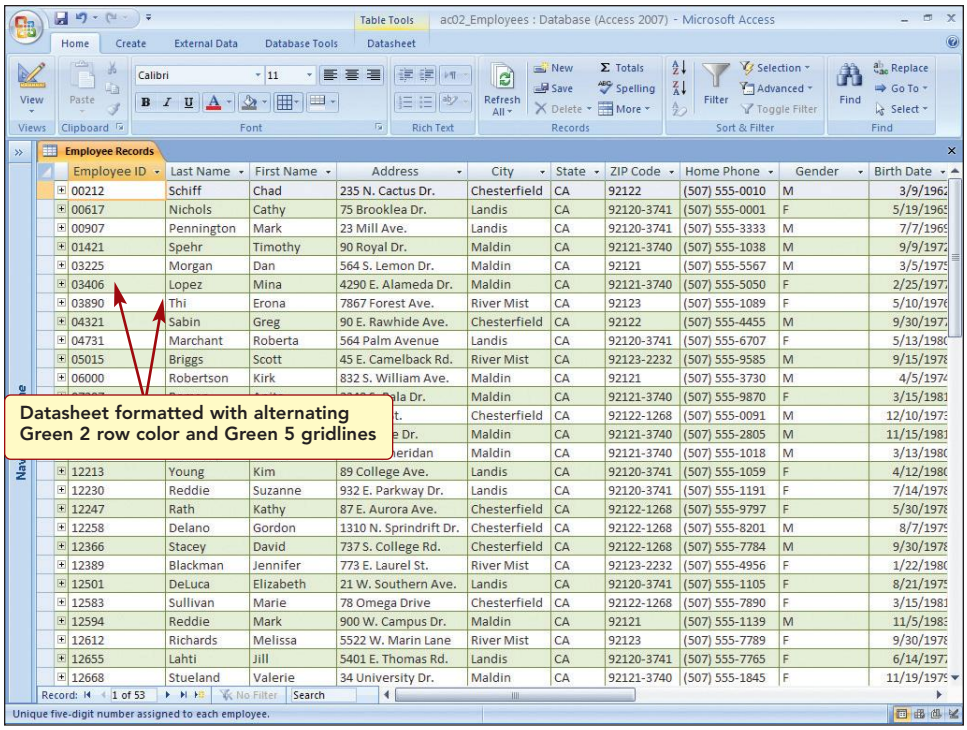


Figure 2.41

The selected alternating row and gridline color formatting has been applied to the datasheet.

Changing the Text Color

The datasheet background colors brighten the screen appearance, but you think the text is a little light, making it difficult to read. You will change the text color to a dark blue and bold.

1. **Open the Font Color drop-down menu in the Font group.**
2. **Select Dark Blue from the Standard Colors section of the color gallery.**
3. **Click Bold in the Font group.**

Your screen should be similar to Figure 2.42

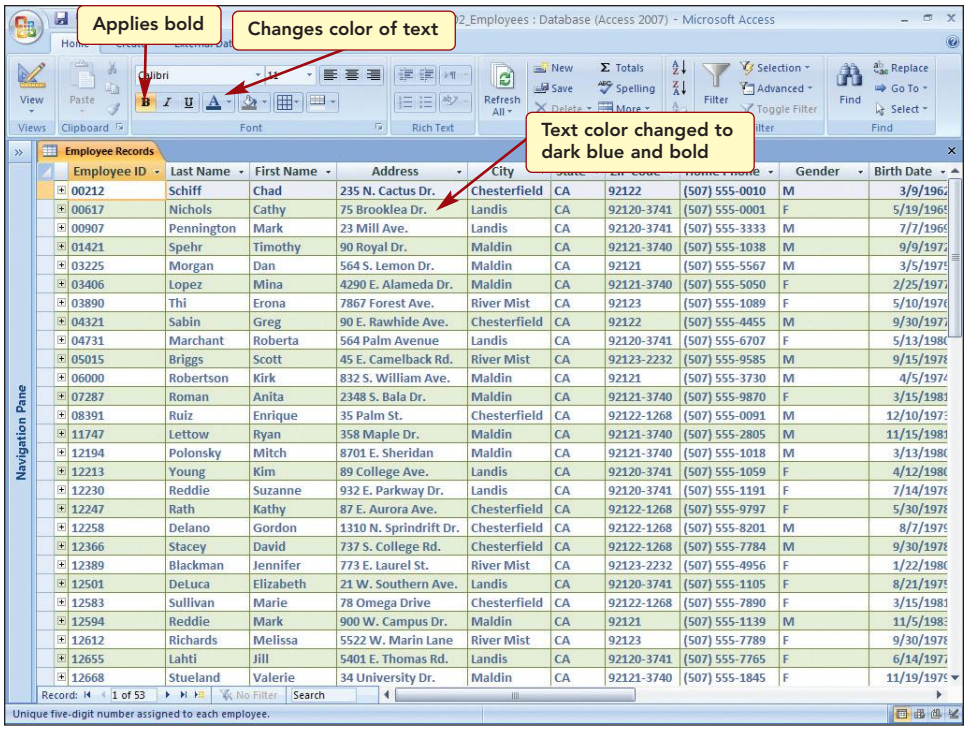


Figure 2.42

You do not like how the blue text color looks and want to change it back to the default color. You cannot use Undo to remove formatting, so you will need to select the text color again.

1. **Open the Font Color drop-down menu.**
2. **Choose Automatic to restore the default font color.**

Your screen should be similar to Figure 2.43

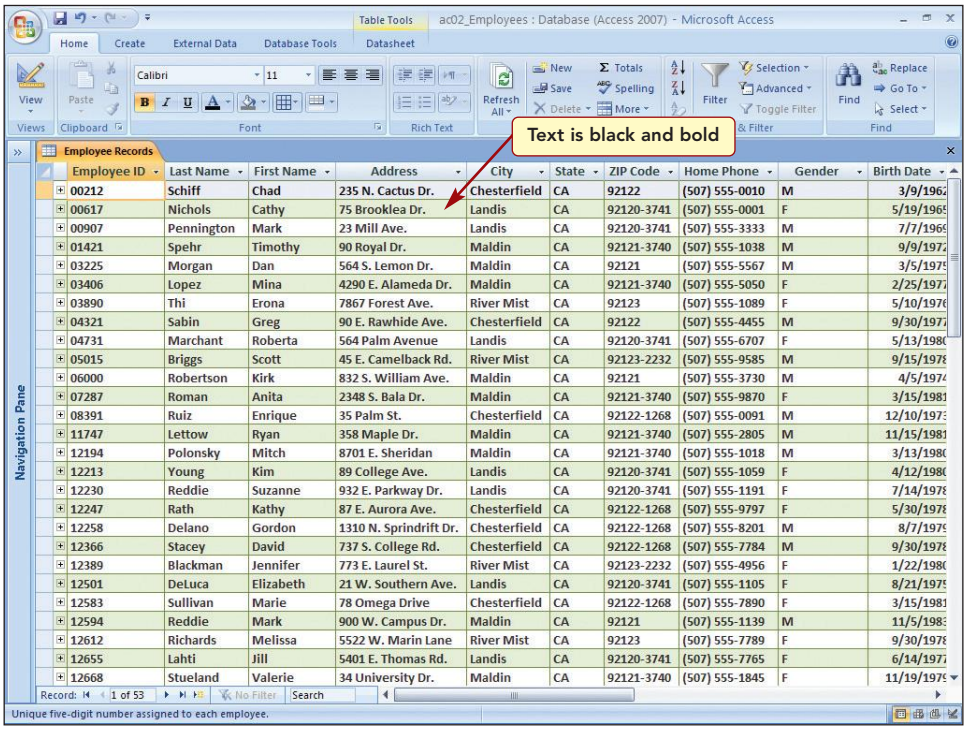


Figure 2.43

The black text color is restored. The text is still bolded and is easier to read.

Filtering a Table

Juan Martinez, an employee at the Landis location, is interested in forming a car pool. He recently approached you about finding other employees who also may want to carpool. You decide this would be a great opportunity to use the table of employee data to find this information. To find the employees, you could sort the table and then write down the needed information. This could be time-consuming, however, if you had hundreds of employees in the table. A faster way is to apply a filter to the table records to locate this information.

Concept 7

Filter

7 A **filter** is a restriction placed on records in the open table or form to quickly isolate and display a subset of records. A filter is created by specifying the criteria that you want records to meet in order to be displayed. A filter is ideal when you want to display the subset for only a brief time and then return immediately to the full set of records. You can print the filtered records as you would any form or table. A filter is only temporary, and all records are redisplayed when you remove the filter or close and reopen the table or form. The filter results cannot be saved. However, the last filter criteria you specify can be saved with the table, and the results quickly redisplayed.

Using Filter by Selection

Juan lives in Maldin and works at the Lifestyle Fitness Club located in Landis. You can locate other employees who live in Maldin quite easily by using the Filter by Selection feature. Filter by Selection displays only records containing a specific value. This method is effective when the table contains only one value that you want to use as the criterion for selecting and displaying records.

Additional Information

If the selected part of a value starts with the first character in the field, the subset displays all records with values that begin with the same selected characters.

The process used to select the value determines the results that will be displayed. Placing the insertion point in a field selects the entire field contents. The filtered subset will include all records containing an exact match. Selecting part of a value in a field (by highlighting it) displays all records containing the selection. For example, in a table for a book collection, you could position the mouse pointer anywhere in a field containing the name of the author Stephen King, choose the Filter by Selection command, and only records for books whose author matches the selected name, "Stephen King," would be displayed. Selecting just "King" would include all records for authors Stephen King, Martin Luther King, and Barbara Kingsolver.

You want to filter the table to display only those records with a City field entry of Maldin. To specify the city to locate, you select an example of the data in the table.

1. **Move to the City field of record 4.**

2. **Click** Selection **in the Sort & Filter group of the Home tab.**

Your screen should be similar to Figure 2.44

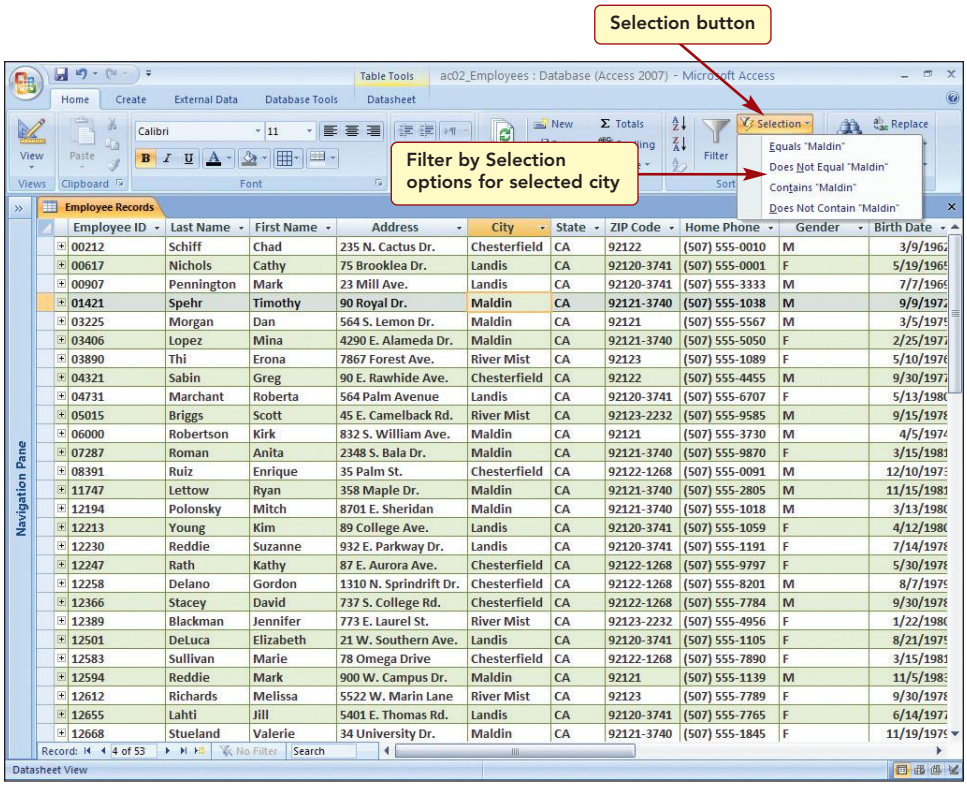


Figure 2.44

The drop-down list of commands contains the current selected value in the field. The commands that appear will vary depending on the data type of the selected value. Also, the commands will vary depending on how much of the value is selected. If the selection is a partial selection, the commands allow you to specify a filter using the beginning, middle, or end of a field value. In this case, the entire value is selected and the four commands allow you to specify whether you want the selection to equal, not equal, contain, or not contain the value.

2 **Choose Equals "Maldin".**

Another Method

You also can display the Filter by Selection commands using the selection's shortcut menu.

Your screen should be similar to Figure 2.45

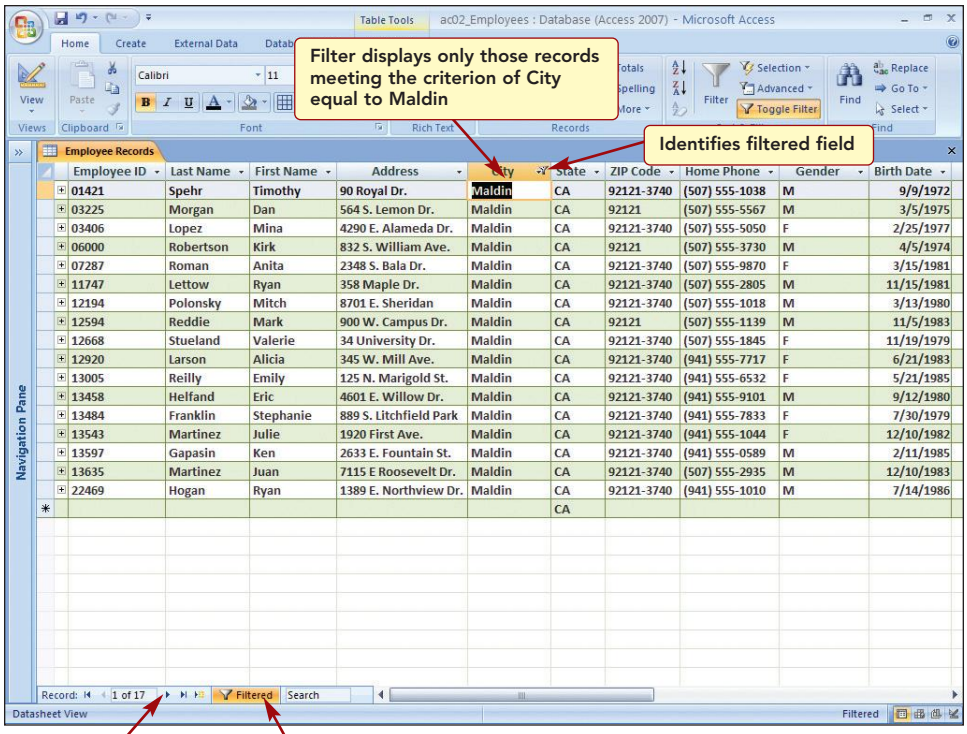


Figure 2.45

Additional Information

You can print a filtered datasheet just like any other table.

The table displays only those records that contain the selected city. All other records are temporarily hidden. The status bar displays the Filtered button to show that the datasheet is filtered and the record number indicator shows that the total number of filtered records is 17. The City field name also displays a filter icon to identify the field on which the table was filtered.

After seeing how easy it was to locate this information, you want to locate employees who live in Chesterfield. This information may help in setting up the car pool, because the people traveling from the city of Maldin pass through Chesterfield on the way to the Landis location.

Removing and Deleting Filters

Before creating the new filter, you will remove the current filter and return the table to its full display.

1. **Click Toggle Filter in the Sort & Filter group.**

Another Method

You also can use Filtered in the record navigator bar to apply and remove a filter.

Your screen should be similar to Figure 2.46

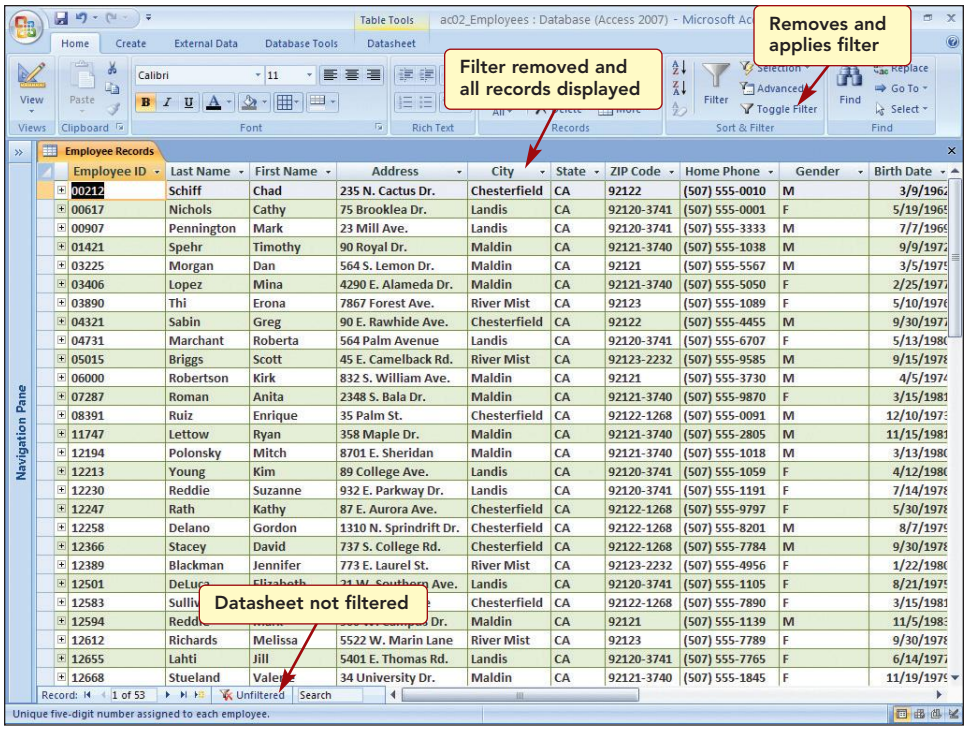


Figure 2.46

The filter is temporarily removed from the field and all the records are displayed again. The navigator bar displays Unfiltered. The filter is still available and can be reapplied quickly by clicking Toggle Filter or Unfiltered.

You will reapply the filter and then you will permanently remove these filter settings.

2. **Click Toggle Filter to redisplay the filtered datasheet.**

Click Advanced in the Sort & filter group.

Choose Clear All Filters.

The filter is removed and all the records are redisplayed. The Toggle Filter button is dimmed because the table does not include any filter settings.

Filtering Using Common Filters

To filter the employee data by two cities, Chesterfield and Maldin, you can select from a list of several popular filters. Using this list allows you to perform filters on multiple criteria within a single field.

1 **Click on the ▾ in the City column header to open the field's drop-down menu.**

Another Method

You also can move to the field to filter on and click Filter in the Sort & Filter group to display the Filter list.

Your screen should be similar to Figure 2.47

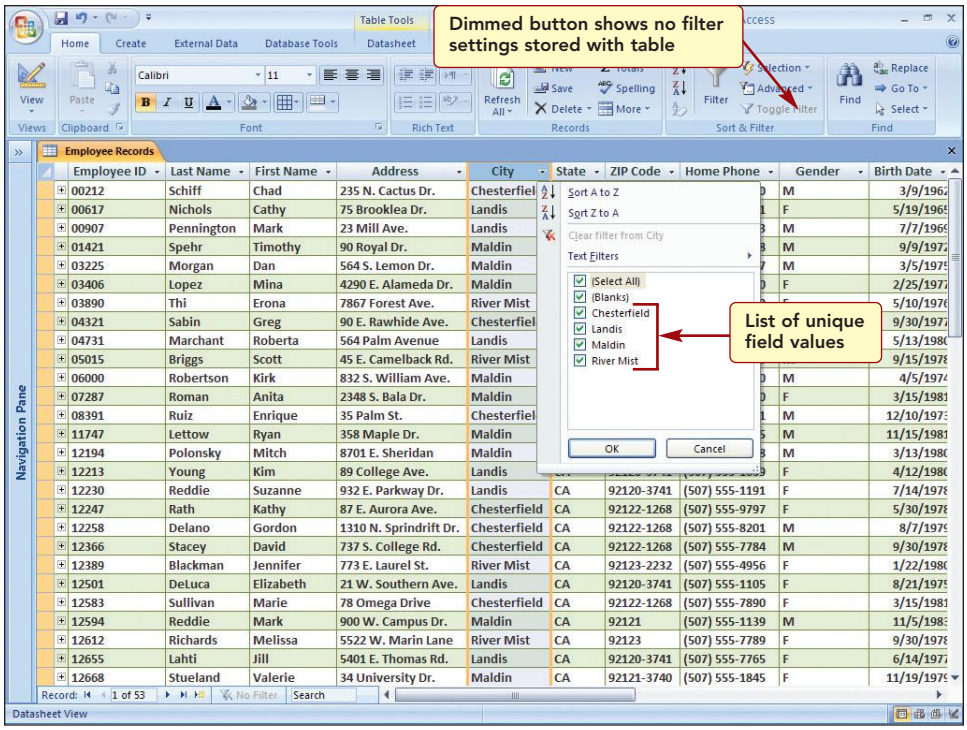


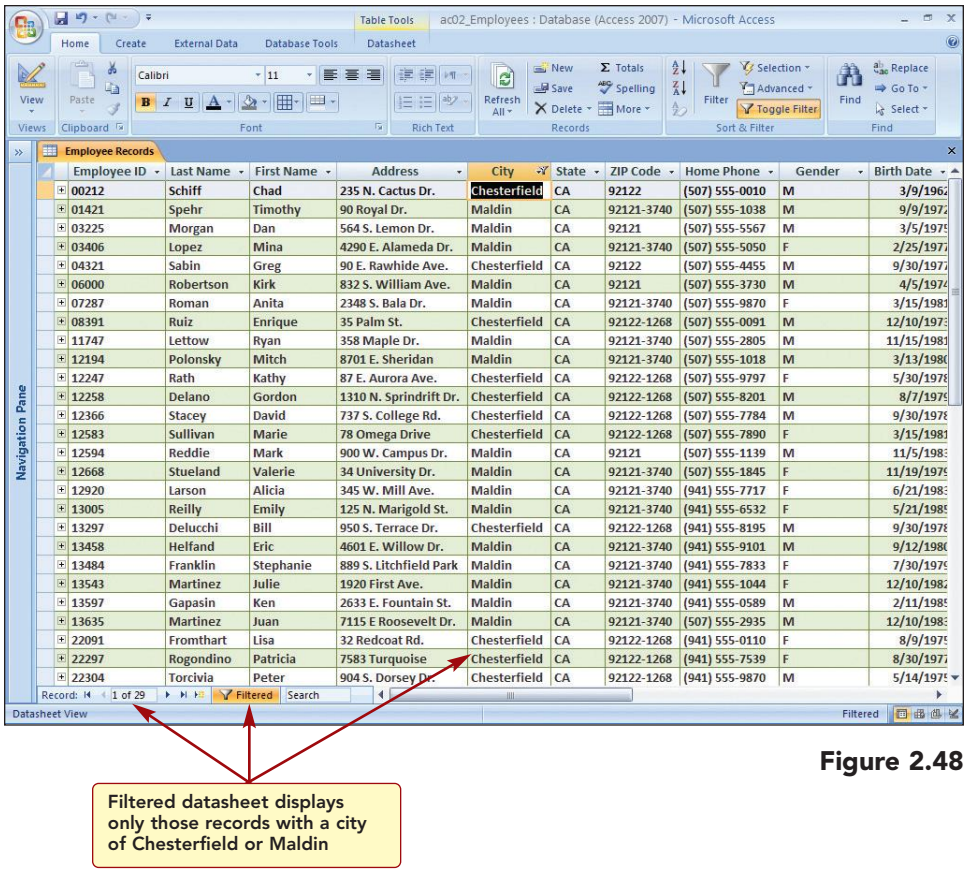
Figure 2.47

A list of all the unique values that are stored in the current field is displayed. Selecting a value from the list filters the table based on the selected value. Depending on the data type of the selected value, you may be able to filter for a range of values by clicking on a value and specifying the appropriate range. In this case, because the field is not filtered, all the values are selected. You will first clear the selection from all values, and then select the names of the two cities you want displayed in the filtered list.

2. **Click the Select All check box to clear the selection from all values.**

- **Click the Chesterfield and Maldin check boxes to select them.**
- **Click** OK **.**

Your screen should be similar to Figure 2.48



Employee ID	Last Name	First Name	Address	City	State	ZIP Code	Home Phone	Gender	Birth Date
00212	Schiff	Chad	235 N. Cactus Dr.	Chesterfield	CA	92122	(507) 555-0010	M	3/9/196
01421	Spehr	Timothy	90 Royal Dr.	Maldin	CA	92121-3740	(507) 555-1038	M	9/9/197
03225	Morgan	Dan	564 S. Lemon Dr.	Maldin	CA	92121	(507) 555-5567	M	3/5/197
03406	Lopez	Mina	4290 E. Alameda Dr.	Maldin	CA	92121-3740	(507) 555-5050	F	2/25/197
04321	Sabin	Greg	90 E. Rawhide Ave.	Chesterfield	CA	92122	(507) 555-4455	M	9/30/197
06000	Robertson	Kirk	832 S. William Ave.	Maldin	CA	92121	(507) 555-3730	M	4/5/197
07287	Roman	Anita	2348 S. Bala Dr.	Maldin	CA	92121-3740	(507) 555-9870	F	3/15/198
08391	Ruiz	Enrique	35 Palm St.	Chesterfield	CA	92122-1268	(507) 555-0091	M	12/10/197
11747	Lettow	Ryan	358 Maple Dr.	Maldin	CA	92121-3740	(507) 555-2805	M	11/15/198
12194	Polonsky	Mitch	8701 E. Sheridan	Maldin	CA	92121-3740	(507) 555-1018	M	3/13/198
12247	Rath	Kathy	87 E. Aurora Ave.	Chesterfield	CA	92122-1268	(507) 555-9797	F	5/30/197
12258	Delano	Gordon	1310 N. Sprindrift Dr.	Chesterfield	CA	92122-1268	(507) 555-8201	M	8/7/197
12366	Stacey	David	737 S. College Rd.	Chesterfield	CA	92122-1268	(507) 555-7784	M	9/30/197
12583	Sullivan	Marie	78 Omega Drive	Chesterfield	CA	92122-1268	(507) 555-7890	F	3/15/198
12594	Reddie	Mark	900 W. Campus Dr.	Maldin	CA	92121	(507) 555-1139	M	11/5/198
12668	Stueland	Valerie	34 University Dr.	Maldin	CA	92121-3740	(507) 555-1845	F	11/19/197
12920	Larson	Alicia	345 W. Mill Ave.	Maldin	CA	92121-3740	(941) 555-7717	F	6/21/198
13005	Reilly	Emily	125 N. Marigold St.	Maldin	CA	92121-3740	(941) 555-6532	F	5/21/198
13297	Delucchi	Bill	950 S. Terrace Dr.	Chesterfield	CA	92122-1268	(941) 555-8195	M	9/30/197
13458	Helfand	Eric	4601 E. Willow Dr.	Maldin	CA	92121-3740	(941) 555-9101	M	9/12/198
13484	Franklin	Stephanie	889 S. Litchfield Park	Maldin	CA	92121-3740	(941) 555-7833	F	7/30/197
13543	Martinez	Julie	1920 First Ave.	Maldin	CA	92121-3740	(941) 555-1044	F	12/10/198
13597	Gapasin	Ken	2633 E. Fountain St.	Maldin	CA	92121-3740	(941) 555-0589	M	2/11/198
13635	Martinez	Juan	7115 E Roosevelt Dr.	Maldin	CA	92121-3740	(507) 555-2935	M	12/10/198
22091	Fromthart	Lisa	32 Redcoat Rd.	Chesterfield	CA	92122-1268	(941) 555-0110	F	8/9/197
22297	Rogondino	Patricia	7583 Turquoise	Chesterfield	CA	92122-1268	(941) 555-7539	F	8/30/197
22304	Torcivia	Peter	904 S. Dorsey Dr.	Chesterfield	CA	92122-1268	(941) 555-9870	M	5/14/197

Figure 2.48

The filtered datasheet displays the records for all 29 employees who live in the city of Chesterfield or Maldin.

Filtering on Multiple Fields

As you look at the filtered results, you decide to further refine the list by restricting the results to those records that have the same zip code as Juan's zip code of 92121. Although you can only specify one filter per field, you can specify a different filter for each field that is present in the view.

1. **Open the ZIP Code field's drop-down menu to display the field list.**
2. **Clear the checkmark from the 92121-3740 value.**
3. **Click** OK **.**

Your screen should be similar to Figure 2.49

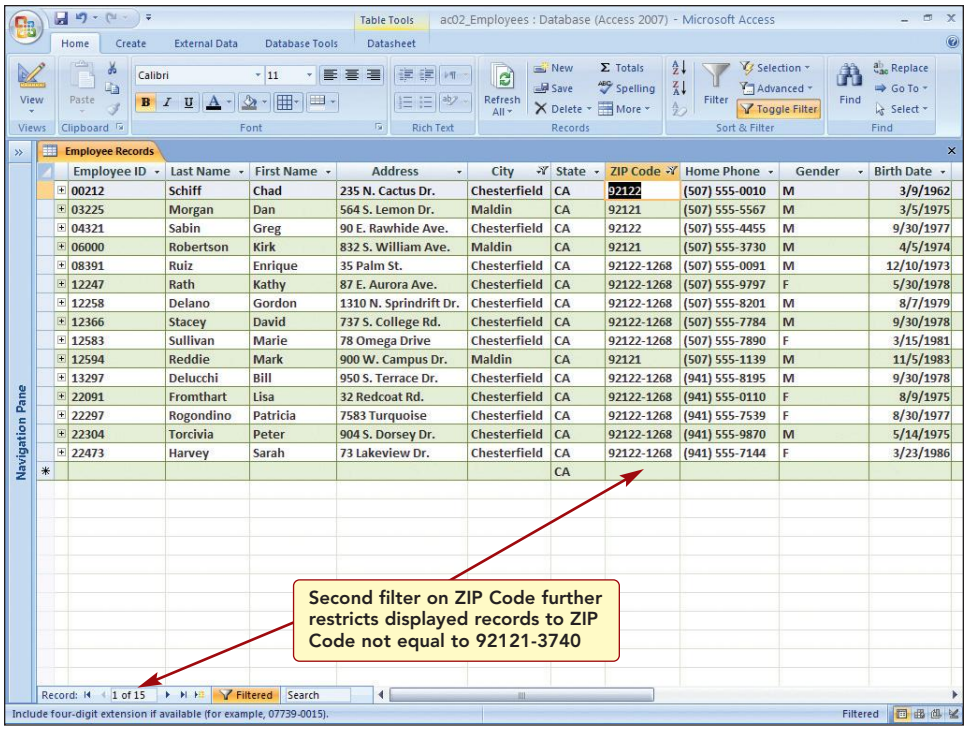


Figure 2.49

Now there are only 15 records displayed in the filtered table. Applying the second filter refined the results by removing all records from the filtered list that had a zip code of 92121-3740.

Although you would like to provide a copy of this information to Juan, you realize that it contains more information about each employee than someone would need (or should even have access to) in order to form a car pool. Also, because you are not finished adding records to the employee database, these findings may not be complete.

You will redisplay all the records in the table, but you will not clear the filter settings. If you do not clear the filters, the filter criteria you last specified are stored with the table, and the results can be redisplayed simply by applying the filter again.

4. **Click** Toggle Filter **to display the unfiltered datasheet.**
5. **Close the table, saving your design changes.**
6. **Redisplay the Navigation pane.**

The table is closed and the work area is empty. Next you will learn how to create and use a form in Access.

Note: If you are ending your session now, close the database file and exit Access. When you begin again, start Access and open the ac02_Employees database file.

Creating and Using Forms

One of your objectives is to make the database easy to use. You know from experience that long hours of viewing large tables can be tiring. Therefore, you want to create an onscreen form to make this table easier to view and use.

Concept 8

Form

8 A **form** is a database object used primarily to display records onscreen and to make it easier to enter new records and to make changes to existing records. Forms can control access to data, such as which fields or rows of data are displayed. That way, any unnecessary fields of data are not displayed, which makes it easier for people using the database. They enable people to use the data in the tables without having to sift through many lines of data to find the exact record.

Forms are based on an underlying table and can include design elements such as descriptive text, titles, labels, lines, boxes, and pictures. Forms also can use calculations to summarize data that is not listed on the actual table, such as a sales total. The layout and arrangement of information can be customized in a form. Using these features creates a visually attractive form that makes working with the database more enjoyable, more efficient, and less prone to data-entry errors.

You want the onscreen form to be similar to the paper form that is completed by each new employee when hired (shown below). The information from that form is used as the source of input for the new record that will be added to the table for the new employee.

EMPLOYEE DATA

Employee ID _____

First Name _____ Last Name _____

Street _____

City _____ State _____ Zip _____

Phone Number _____

Gender _____

Birth Date _____

MORE ABOUT

To learn how to create a datasheet form, see "2 Creating and Formatting Database Elements" in the More About appendix.

There are several different methods you can use to create forms as described in the following table. The method you use depends on the type of form you want to create.

Method	Use to
Form Tool	Create a form containing all the fields in the table.
Split Form tool	Create a form that displays the form and datasheet in a single window
Blank Form tool	Build a form from scratch by adding the fields you select from the table
Datasheet tool	Create a form using all the fields in the table and display it in Datasheet view
Multiple Items tool	Create a form that displays multiple records but is more customizable than a datasheet
Form Wizard	Create a form using a wizard that guides you through the steps to create a complex form that displays selected fields, data groups, sorted records, and data from multiple tables

Using the Form Tool

Using the Form tool is the quickest method to create a simple form. You decide to see if the Form tool will create the form you need.

1. **If necessary, select the Employee Records table in the Navigation pane.**
2. **Open the Create tab.**
3. **Click**  **in the Forms group.**

Your screen should be similar to Figure 2.50

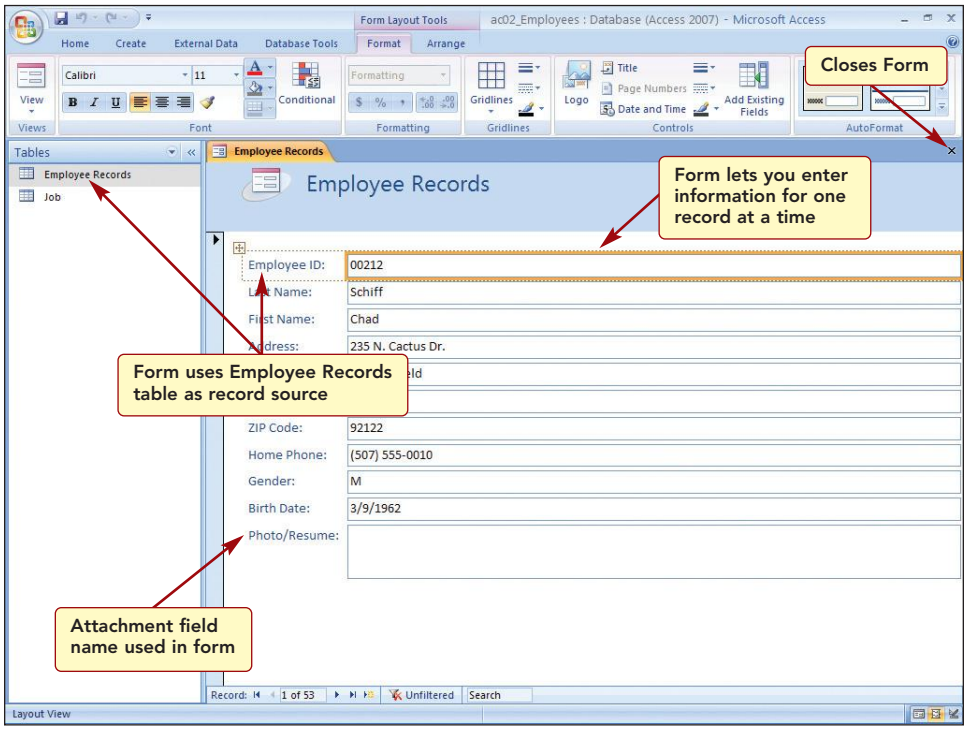


Figure 2.50

A form that allows you to enter data for one record at a time was quickly created. The fields from the Employee Records table were used to create the form because it was the selected object in the Navigation pane. The underlying table that is used to create a form is called the **record source.**

The fields are in the same order as in the datasheet. Notice the field name you specified for the Attachment field is used in the form, although it is not used in the table.

This form does not quite meet your needs and you decide to try another method to create the form.

2. **Close the form.**

   Click No **to the prompt to save the form.**

Using the Multiple Items Tool

Next, you will use the Multiple Items tool to create a form.

1. **If necessary, open the Create tab.**

   Click Multiple Items **in the Forms group.**

   Your screen should be similar to Figure 2.51

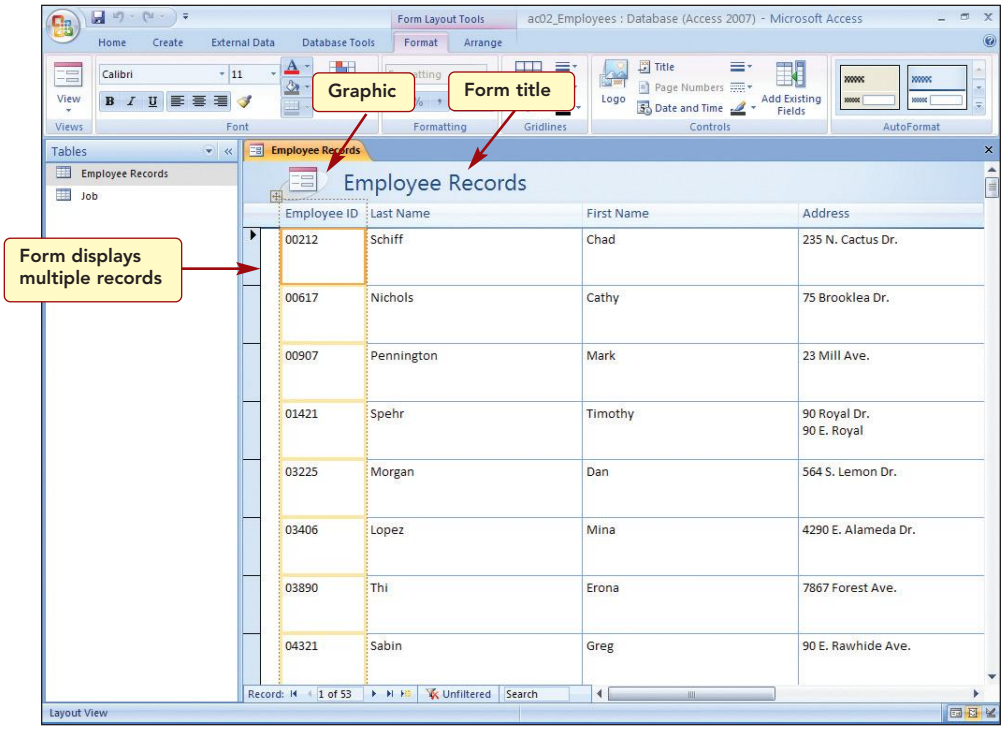


Figure 2.51

A form that displays multiple records at a time was quickly created. Although it looks similar to datasheet view, it is easier to read and includes a title and graphic. However, this form still does not work and you decide to use the Form Wizard to create a form that is closer to your needs.

2. **Close the form.**

   Click No **to the prompt to save the form.**

Using the Form Wizard

The Form Wizard will help you create a form that is closer to your needs by guiding you through a series of steps that allow you to specify different form features.

1. **Click More Forms in the Forms group of the Create tab.**
2. **Choose Form Wizard.**

Your screen should be similar to Figure 2.52

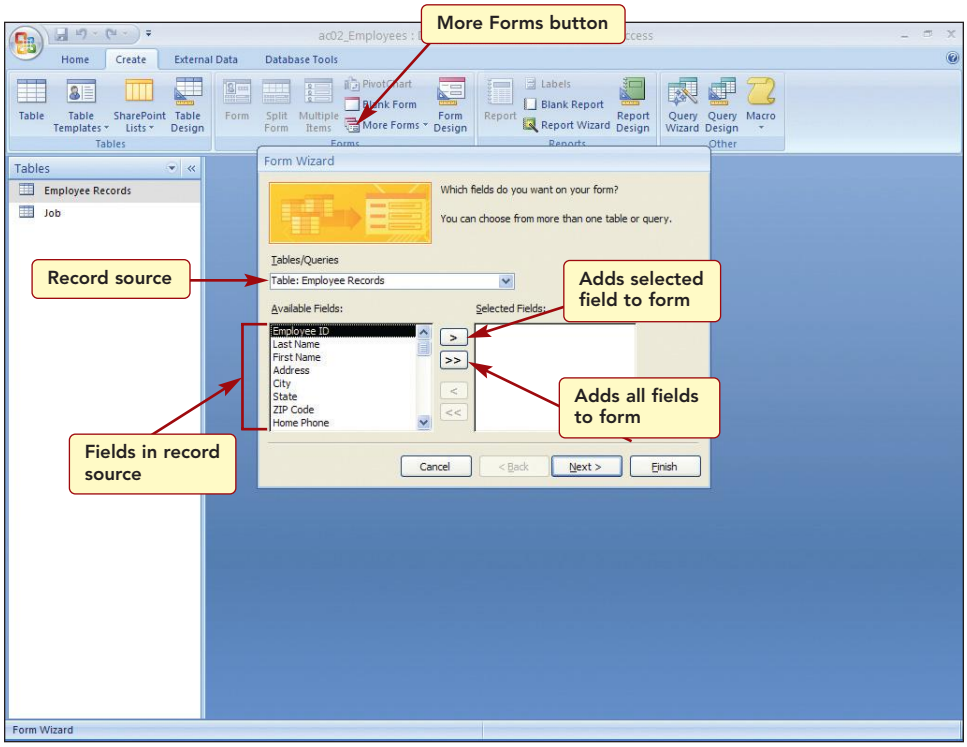


Figure 2.52

The Form Wizard dialog box displays the name of the current table, Employee Records, in the Tables/Queries list box. This is the table that will be used as the record source. If you wanted to use a different table as the record source, you could open the Tables/Queries drop-down list to select the appropriate table.

The fields from the selected table are displayed in the Available Fields list box. You use this box to select the fields you want included on the form, in the order that you want them to appear. This order is called the **tab order** because it is the order that the highlight will move through the fields on the form when you press the Tab key during data entry. You decide that you want the fields to be in the same order as they are on the paper form shown in the illustration on the previous page.

2. **Select First Name.**

   Click [>] Add Field.

Another Method

You also can double-click on each field name in the Available Fields list box to move the field name to the Selected Fields list box.

Additional Information

The [>>] Add All Fields button adds all available fields to the Selected Fields list, in the same order that they appear in the Available Fields list.

Your screen should be similar to Figure 2.53

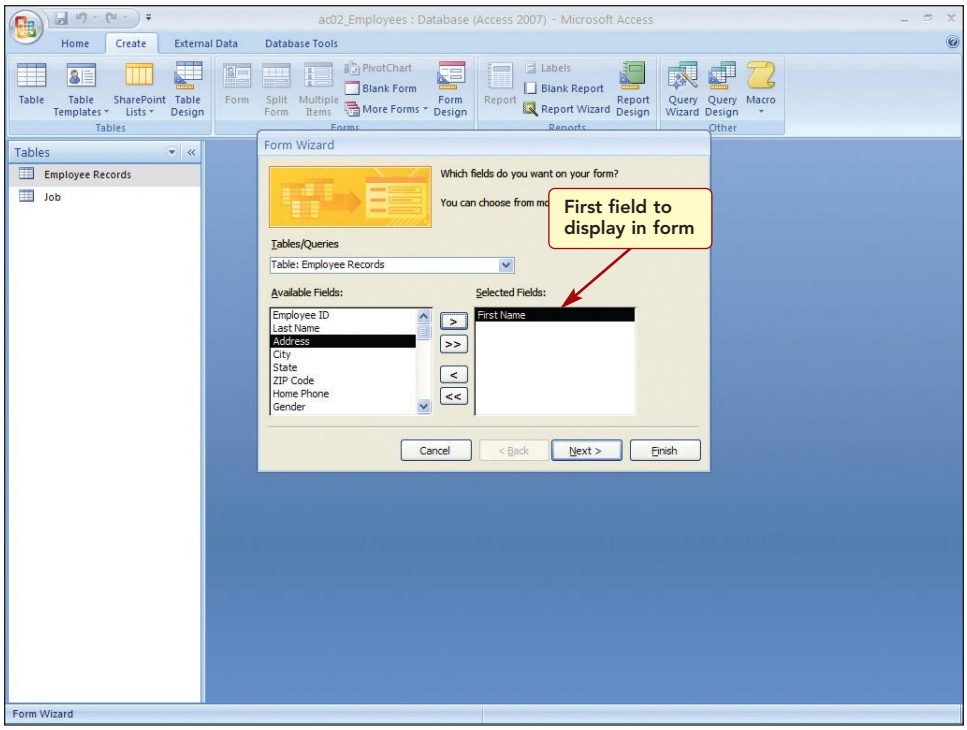


Figure 2.53

The First Name field is removed from the Available Fields list and added to the top of the Selected Fields list box. It will be the first field in the form.

3. **In the same manner, add the following fields to the Selected Fields list in the order shown here:**

   Last Name
   Address
   City
   State
   ZIP Code
   Home Phone
   Gender
   Birth Date
   Employee ID
   Photo/Resume

Your screen should be similar to Figure 2.54

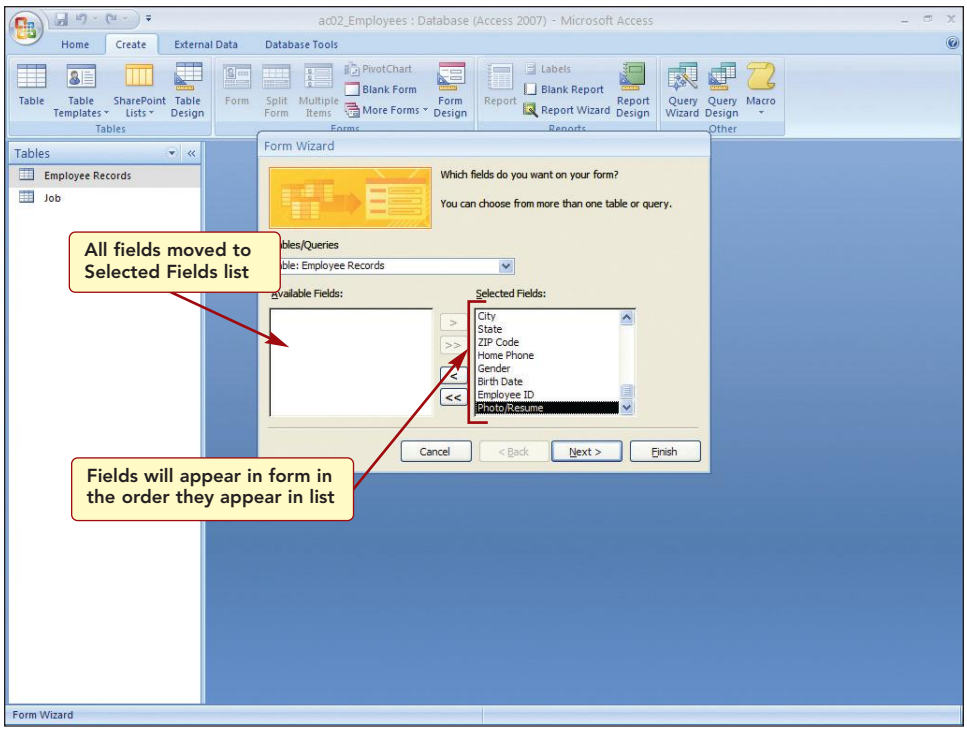


Figure 2.54

When finished, the Available Fields list box is empty and the Selected Fields list box lists the fields in the selected order.

You are now ready to move on to the next Form Wizard screen.

4 Click Next >.

Your screen should be similar to Figure 2.55

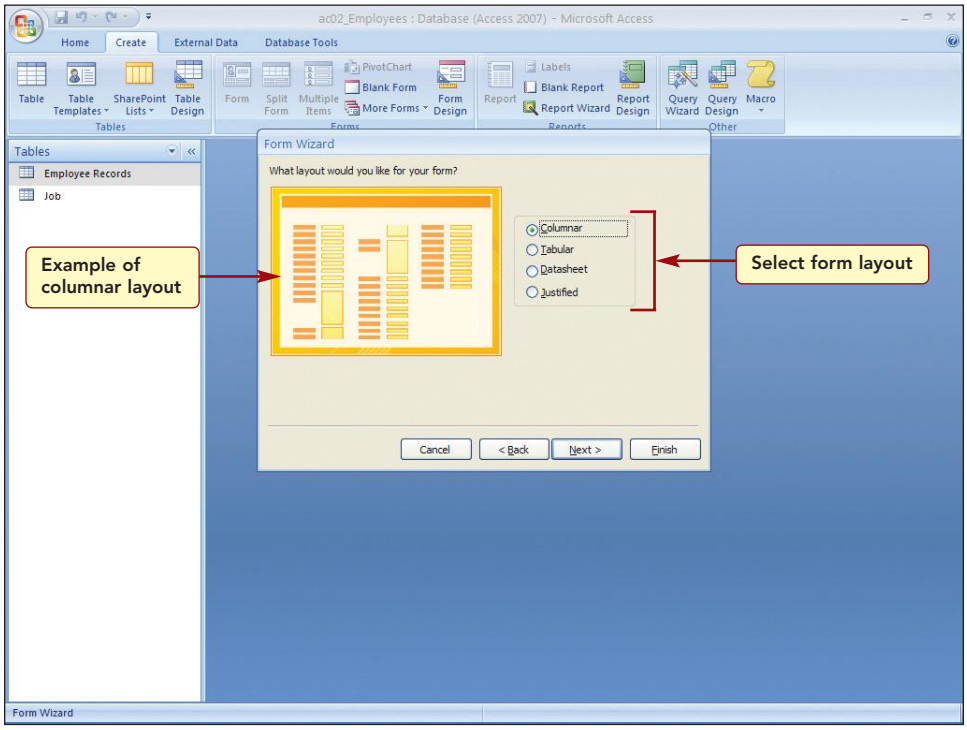
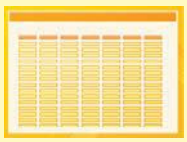
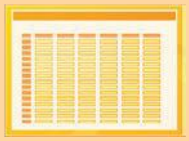


Figure 2.55

In this Form Wizard screen, you are asked to select the control layout for the form. **Layouts** control how the data is displayed in the form by aligning the items horizontally or vertically to give the form a uniform appearance.

The controls are contained in a control layout that was created automatically when the form was created. A control layout aligns controls horizontally and vertically to give the form a uniform appearance. There are two types of layouts: tabular and stacked. **Tabular layouts** arrange the data in rows and columns, with labels across the top. **Stacked layouts** arrange data vertically with a field label to the left of the field data. A form can have both types of layouts in different sections.

The four form layouts offered by the Form Wizard are variations of the two basic layouts as described in the following table.

Form	Layout Style	Description
Columnar		This is a stacked layout that presents data for the selected fields in columns. The field name labels are displayed down the left side of the column with the data for each field just to the right of the corresponding label. A single record is displayed in each Form window.
Tabular		This is the basic tabular layout that presents data with field name labels across the top of the page and the corresponding data in columns under each heading. Multiple records are displayed in the Form window, each on a single row. All fields are displayed across the top of the Form window.
Datasheet		This is a tabular layout that displays data in rows and columns similar to the Table Datasheet view. It displays multiple records, one per row, in the Form window. You may need to scroll the form horizontally to see all the fields.
Justified		This is a tabular layout that displays data in rows, with field name labels across the top of the row and the corresponding field data below it. A single record may appear in multiple rows in the Form window in order to fully display the field name label and data. A single record is displayed in each Form window.

Additional Information

Using  in the Forms group creates a form using the stacked layout.

The columnar layout appears most similar to the paper form currently in use by the club, so you decide to use that layout for your form.

5 **If necessary, choose Columnar.**

Click Next > .

Your screen should be similar to Figure 2.56

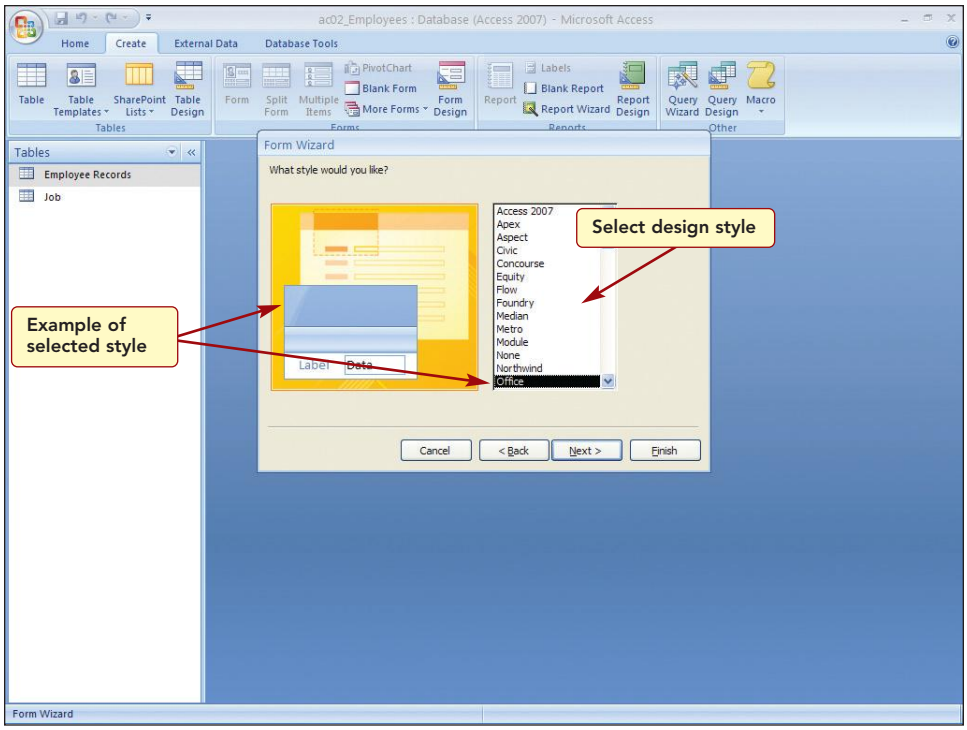


Figure 2.56

Next you select a design style for your form. Design styles consist of different combinations of colors, fonts, and graphic elements. A sample of each style as it is selected is displayed on the left side of the dialog box. None is the default selection. You will create the form using the Flow style.

6 **Choose several design styles to view the example.**

Choose the Flow design style.

Click Next > .

Your screen should be similar to Figure 2.57

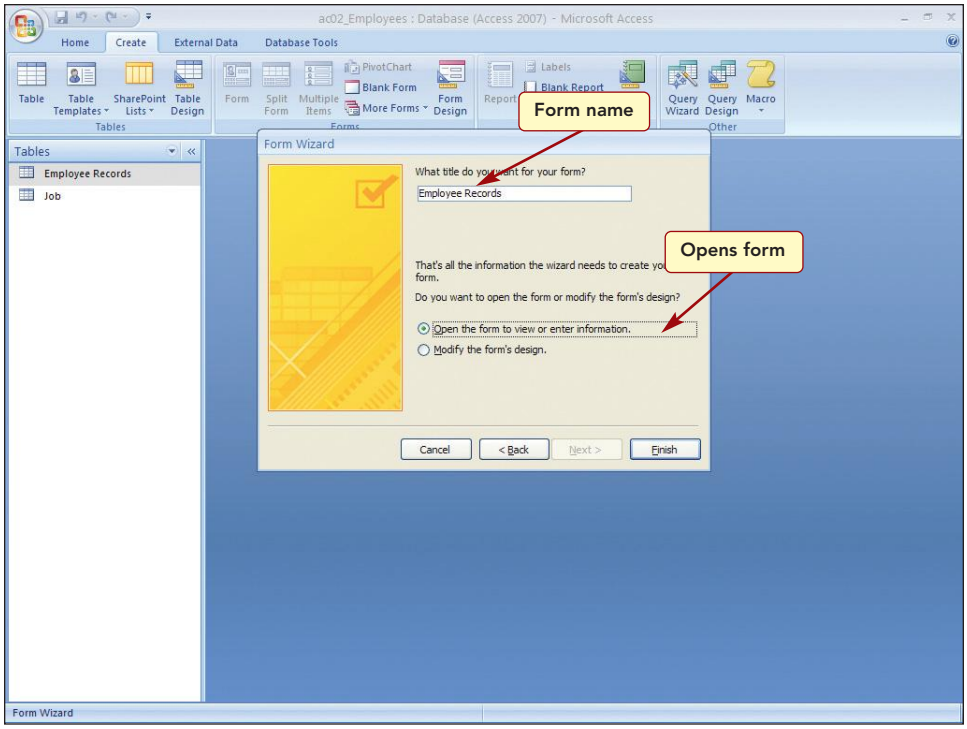


Figure 2.57

In the final Form Wizard dialog box, you can enter a form title to be used as the name of the form, and you can specify whether to open the form or to modify it. The Form Wizard uses the name of the table as the default form title. You will keep the proposed form title and the default of opening the form.

7 Click Finish.

Your screen should be similar to Figure 2.58

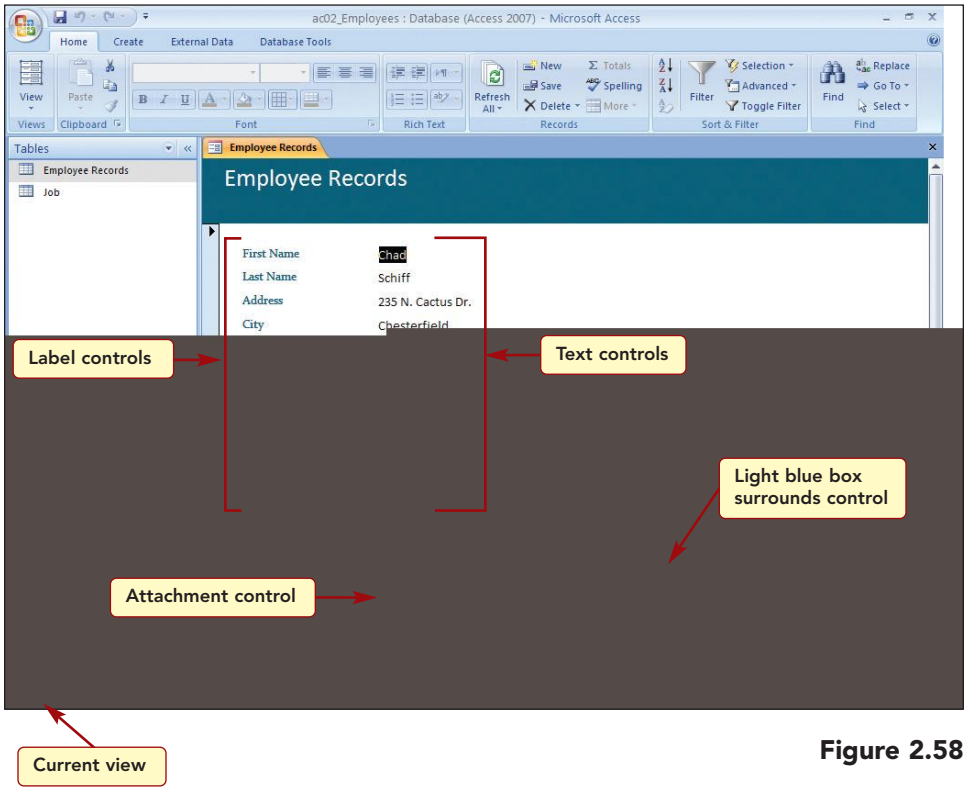


Figure 2.58

Having Trouble?
Do not be concerned if your Photo/Resume field appears in a second column to the right.

The completed form is displayed in the work area in Form view. The form title appears at the top of the form. The employee information for Chad Schiff, the first record in the table, is displayed in the form.

The form displays the selected fields in columnar layout using the Flow design style. A single column displays the field name labels down the left side of the column with the data for each field displayed just to the right of the corresponding label.

Each item in the form is a separate object contained in boxes, called controls.

Concept 9

Controls

9 **Controls** are objects that display information, perform actions, or enhance the design of a form or report. Access provides controls for many types of objects, including labels, text boxes, check boxes, list boxes, command buttons, lines, rectangles, option buttons, and more. The most common controls are **text controls** and **label controls**. Text controls display the information in the field from the record source. Label controls display descriptive labels.

There are two basic types of controls: bound and unbound. A **bound control** is linked to a field in an underlying table. An example of a bound control is a text control that is linked to the record source (usually a field from a table) and displays the field entry in the form or report. An **unbound control** is not connected to an underlying record source. Examples of unbound controls are labels such as the title of a form or elements that enhance the appearance of the form such as lines, boxes, and pictures.

First you moved down three fields to the City field in the current record. Then you moved down two records to record three. The field that was selected in the previous record remains the selected field when you move between records. As you navigate the form, it automatically scrolls to display additional controls. To view controls that are no larger visible, simply use the vertical scroll bar.

Additional Information
The Search feature also can be used in Datasheet view.

Searching in Form View

A quicker way to locate a record is to use the Find command or the Search feature. The Find command works just as it does in Datasheet view. The Search feature simply locates information in a table by searching every field for a match to the text you enter in the Search box. It begins a search with the first field of the first record in the table. To try this out, you will search for the record for Roberta Marchant by entering the characters of her last name in the Search box.

1. **Click in the Search text box at the bottom of the work area.**
2. **Type m.**

Additional Information
The Search feature is not case sensitive.

Your screen should be similar to Figure 2.60

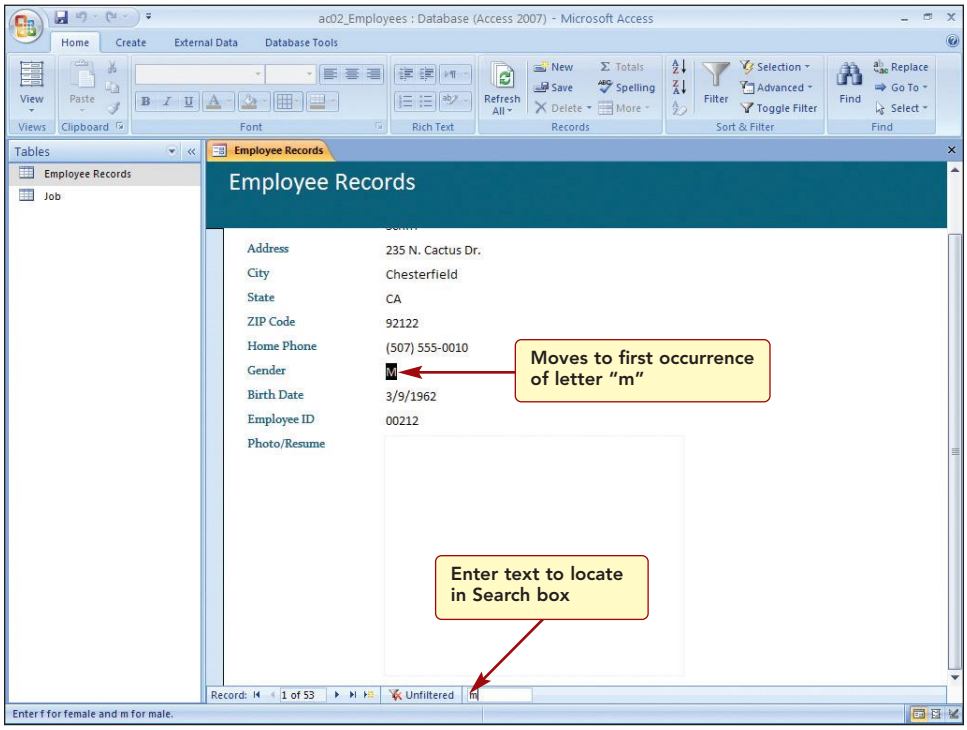


Figure 2.60

The first occurrence of the letter "m" in the table is located and highlighted. The more characters you type in the search text box, the more refined the search becomes. You will type more characters to continue looking for Roberta Marchant's record. As you type the characters, watch how the search advances through the table and highlights matching text.

2 **Type arc in the Search box.**

Your screen should be similar to Figure 2.61

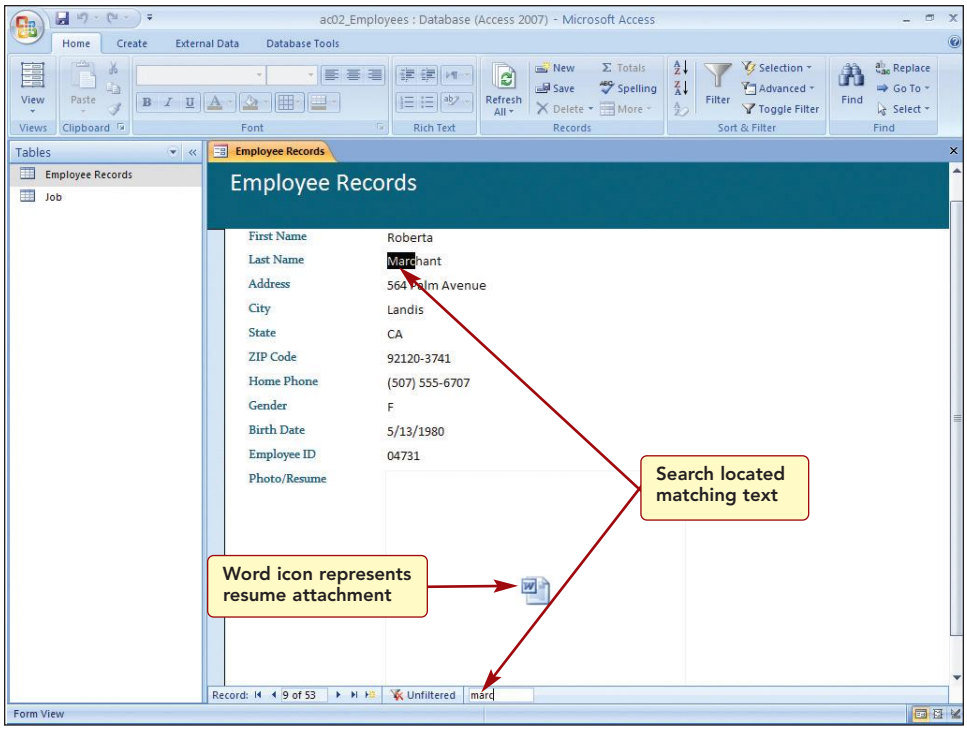


Figure 2.61

Additional Information
The Mini Toolbar appears dimmed until you point to it.

The Search feature located Roberta Marchant's record and displays it in the form. The Photo/Resume field displays a Word icon for the resume file. To move to the next attachment, you make the attachment control active to display the Mini Toolbar. It contains three buttons that are used to work with attachment controls. You can scroll through attached files using the and buttons or add or view attachments using to open the Attachments dialog box.

3. **Click on the Photo/Resume field to make it active.**

Point to the Mini Toolbar and click  **to move to the next attachment.**

Your screen should be similar to Figure 2.62

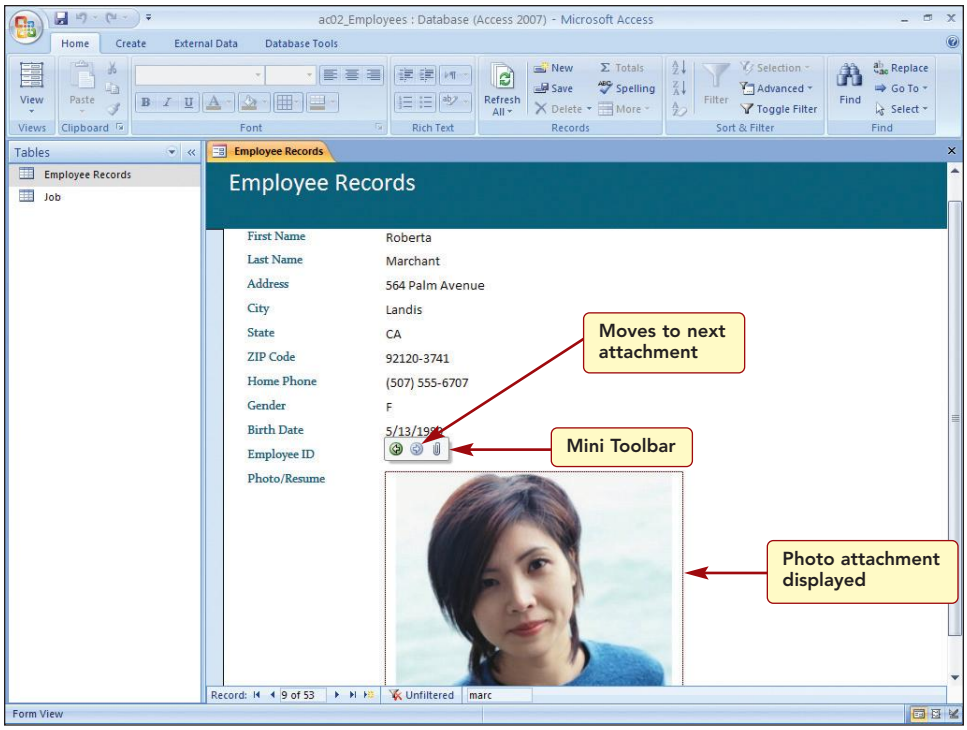


Figure 2.62

Now the photo is displayed in the Photo/Resume field control.

Sorting and Filtering Data in a Form

Just as in the table datasheet, you can sort and filter the data that is displayed in a form. You will use these features to sort the records in alphabetical order by last name and display only those records who live in River Mist.

1. **Right-click on the Last Name field.**
2. **Choose Sort A to Z.**
3. **Move to any record that displays River Mist and right-click on the city field.**
4. **Choose Equals "River Mist".**
5. **Display the last record.**

Your screen should be similar to Figure 2.63

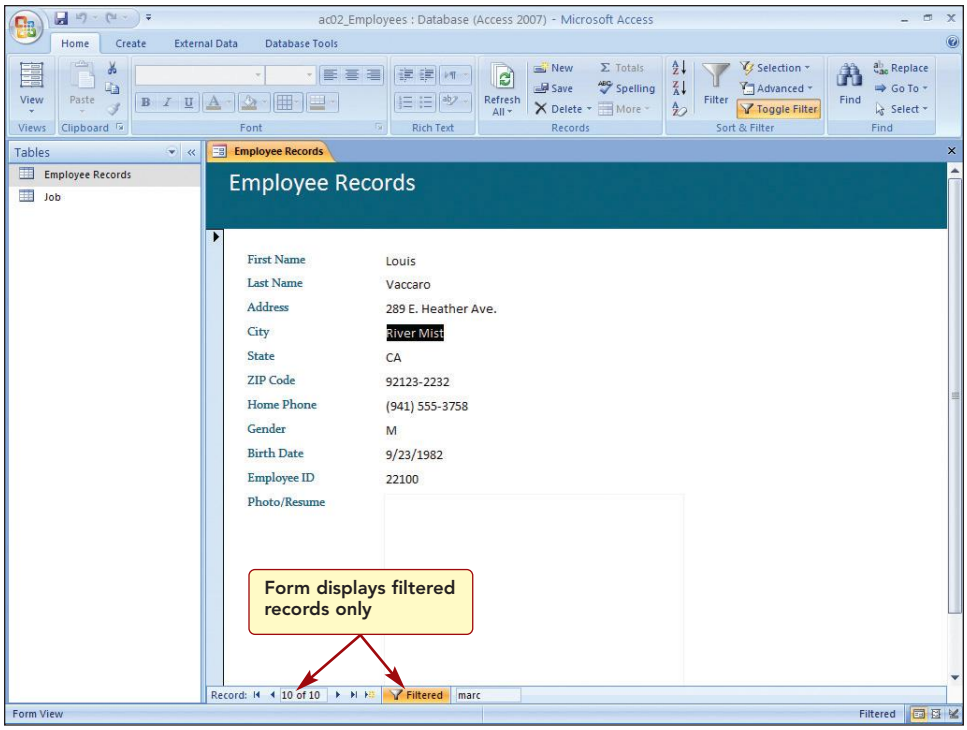


Figure 2.63

The record indicator tells you that there are only 10 records and the table is filtered. The records are also in sorted order by last name. The sort and filter settings apply only to the object in which they were specified, in this case the form.

Working with Controls

Although you are generally satisfied with the look of the form, there are a few changes that you want to make. The first change is to move the Employee ID field to the top of the form and size it to fit the data. Then, if necessary, you will move the Photo/Resume control to the right of the other controls so that it is easier to see.

You can use Form Layout view or Form Design view to modify the design and layout of a form. As in Datasheet Design view, Form Design view displays the structure of the form, not the data in the form. It is used to make extensive changes to the form. Form Layout view displays the underlying data and allows you to make many basic modifications. You will use this view because you want to be able to see the data in the Employee ID field as you adjust the size of the field box.

1 **Click Layout View in the status bar.**

If necessary, close the Field List pane.

Another Method

You also could change to Form Layout View by clicking Layout View in the Home tab.

Your screen should be similar to Figure 2.64

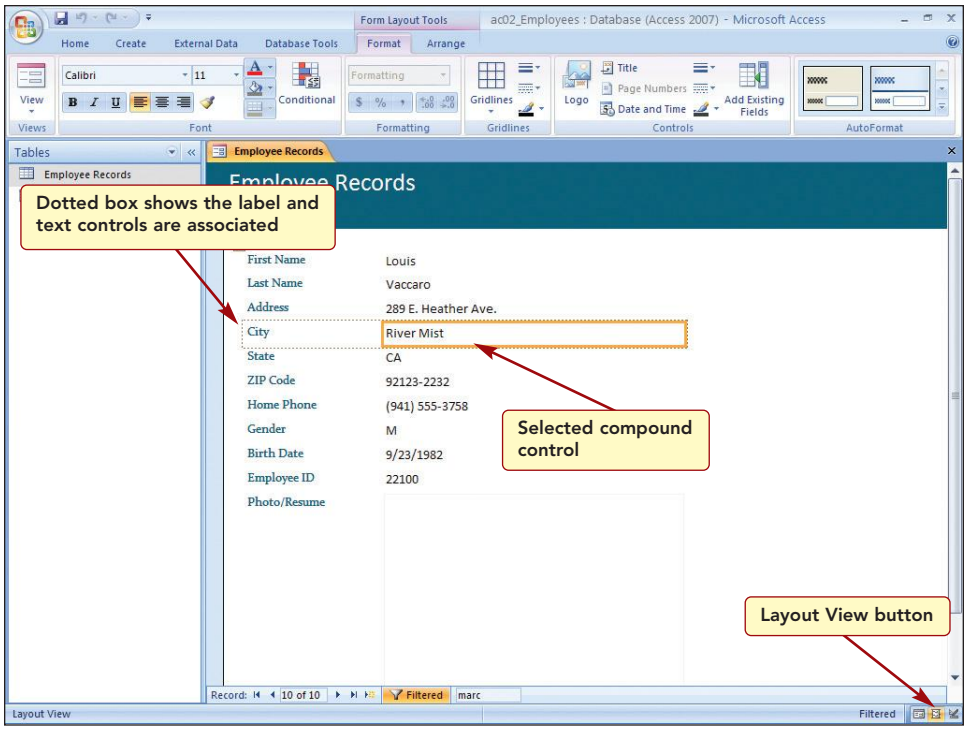


Figure 2.64

Additional Information

You will learn much more about selecting and modifying controls in Lab 3.

The Form Layout Tools Format and Arrange tabs are now available to help you modify the form design. Currently, the City text box control is surrounded with a solid orange box indicating the control is selected and is the control that will be affected by your actions. The dotted box around the label and text box controls shows they are associated. When the two parts of a control are associated, it is called a **compound control.**

First, you will select the Employee ID control to modify its size.

2 **Click on the Employee ID text control.**

Having Trouble?
The mouse pointer must be ✥ when selecting controls.

Your screen should be similar to Figure 2.65

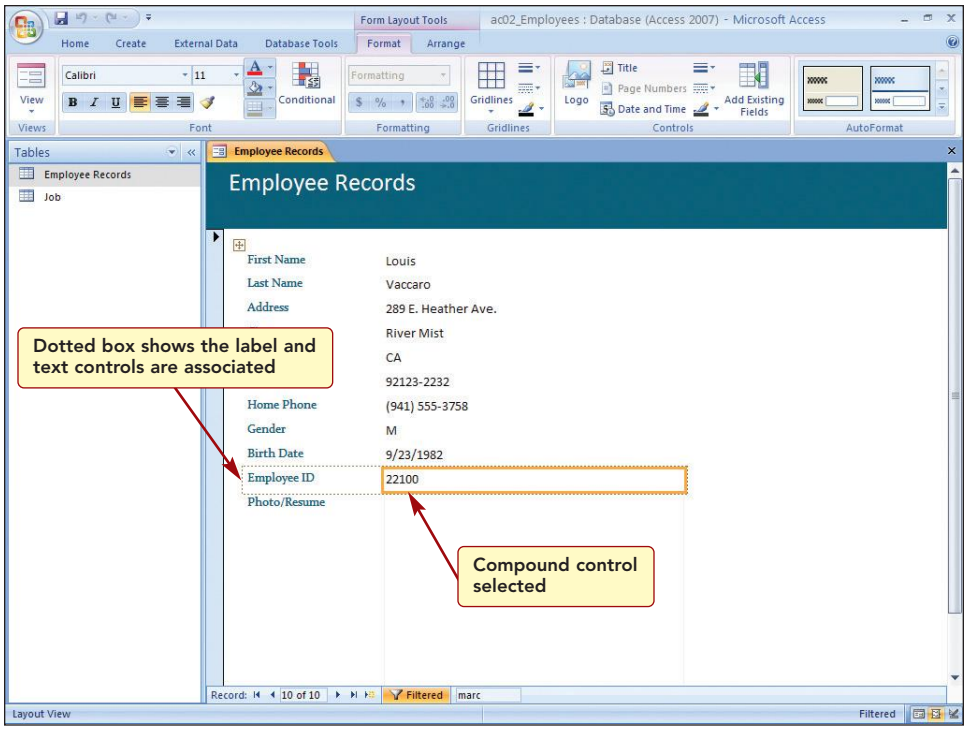


Figure 2.65

The text control of the Employee ID compound control is selected and surrounded in an orange box. Once controls are selected, they can be moved, sized, deleted, or modified. You will move the control to above the First Name control. When you point to the selected control and the mouse pointer appears as ✥, you can move the control by dragging it. A solid orange line appears and shows you where the object will be placed when you stop dragging.

3 **Point to the selected control and drag upward to move the control.**

- **When the solid orange line appears above the First Name control, release the mouse button to drop the control in the new location.**

Your screen should be similar to Figure 2.66

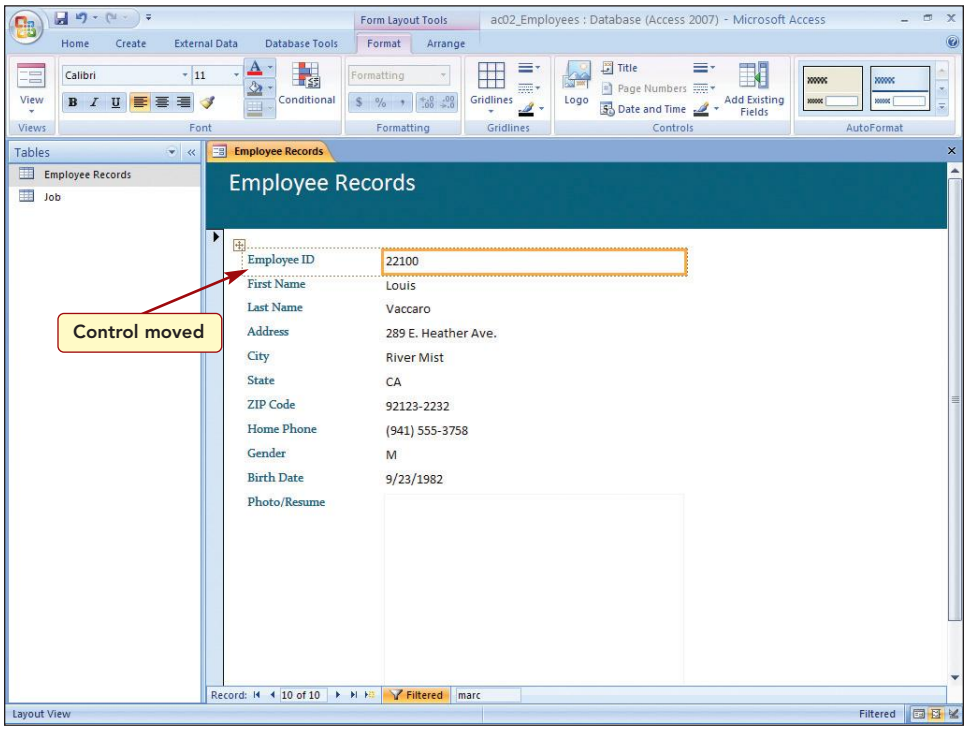


Figure 2.66

Next, you want to reduce the size of the Employee ID text control to match the size of the entry. When you position the mouse pointer on the orange box surrounding the selected control, the pointer changes to ↔ and can be used to size the control. The direction of the arrow indicates in which direction dragging the mouse will alter the shape of the object. This action is similar to sizing a window.

4 **If necessary, click on the text box part of the Employee ID control to select it.**

Having Trouble?
The selected part of the control is contained in the orange box.

Point to the right edge of the selection box and, when the mouse pointer is ↔, drag to the left to decrease the size of the control as in Figure 2.67.

Your screen should be similar to Figure 2.67

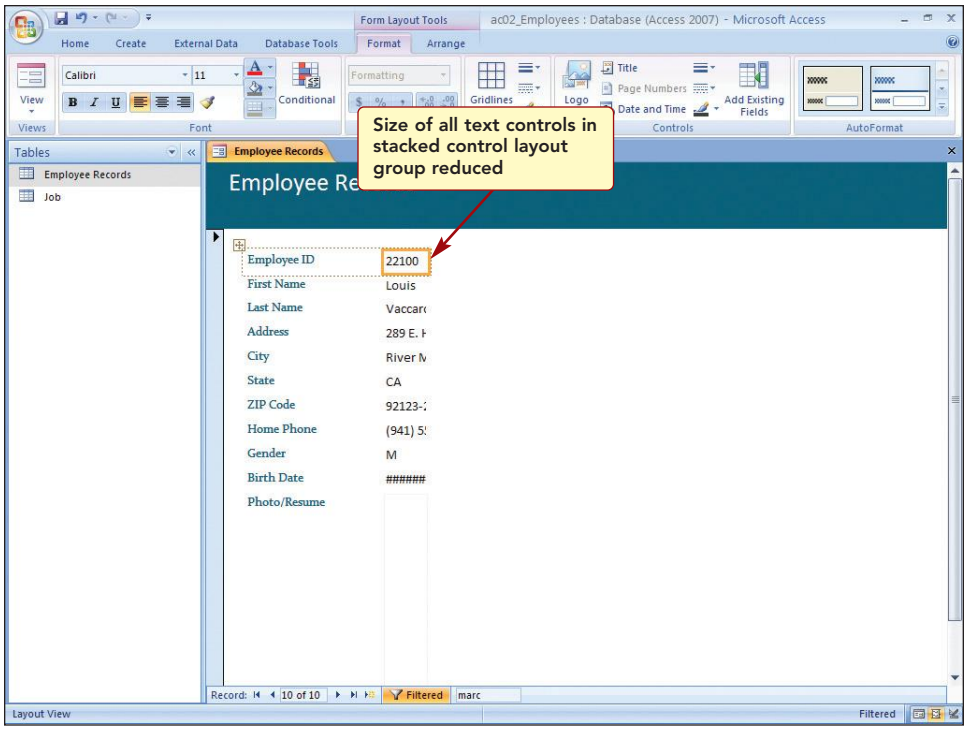


Figure 2.67

Unfortunately, the size of all the text box controls has been reduced. This is because in order for the stacked control layout to maintain the uniform appearance, it groups the controls so that they size as a unit. To size a control individually or move it outside the layout group, it must be removed from the group.

You want to move the Employee ID control outside the group so that it stands alone at the top of the form. Then you will size it to fit the contents. To make space at the top of the form, you will move all the controls in the group down first.

5. **Increase the text control box to fully display the data as shown in Figure 2.68.**

- **Click the layout selector box at the top-left corner of the layout to select all the controls.**
- **Drag the selection down 2 rows.**

Having Trouble?

The control layout changes to dark blue as you move it to show the new position of the object.

- **Scroll the window up to see the blank space above the control layout.**
- **If your Photo/Resume field is displayed to the right of the other fields, move it down until it is even with the First Name field.**

Your screen should be similar to Figure 2.68

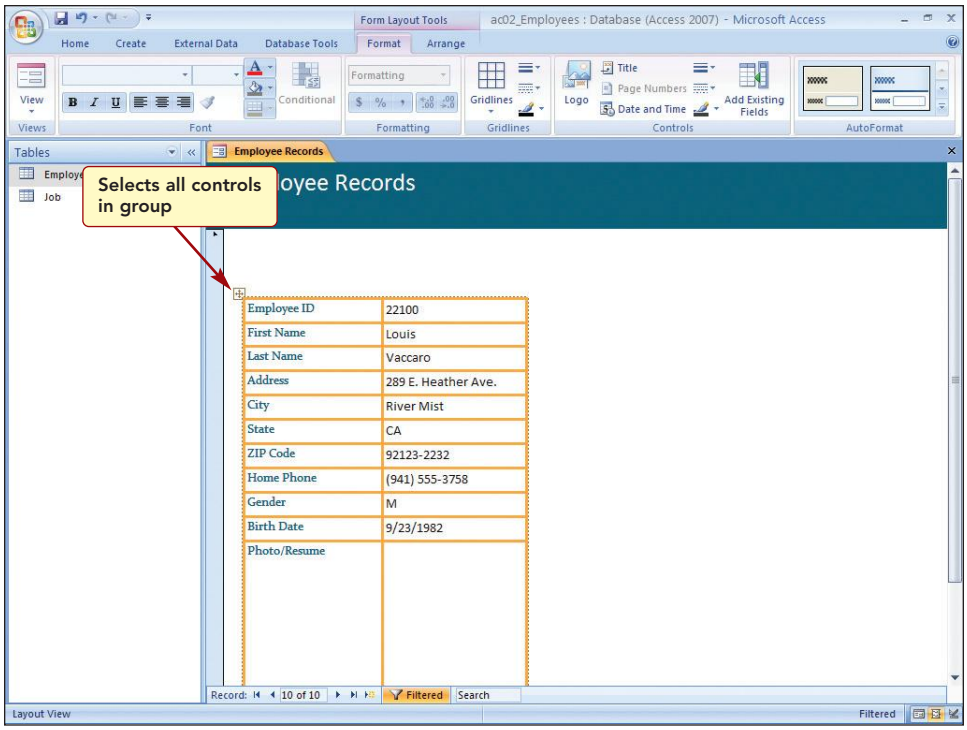


Figure 2.68

Next, you will remove the Employee ID control from the group and move and size it to fit the contents.

6. **Select the Employee ID control.**

- **Click Remove in the Control Layout group of the Arrange tab.**

Your screen should be similar to Figure 2.69

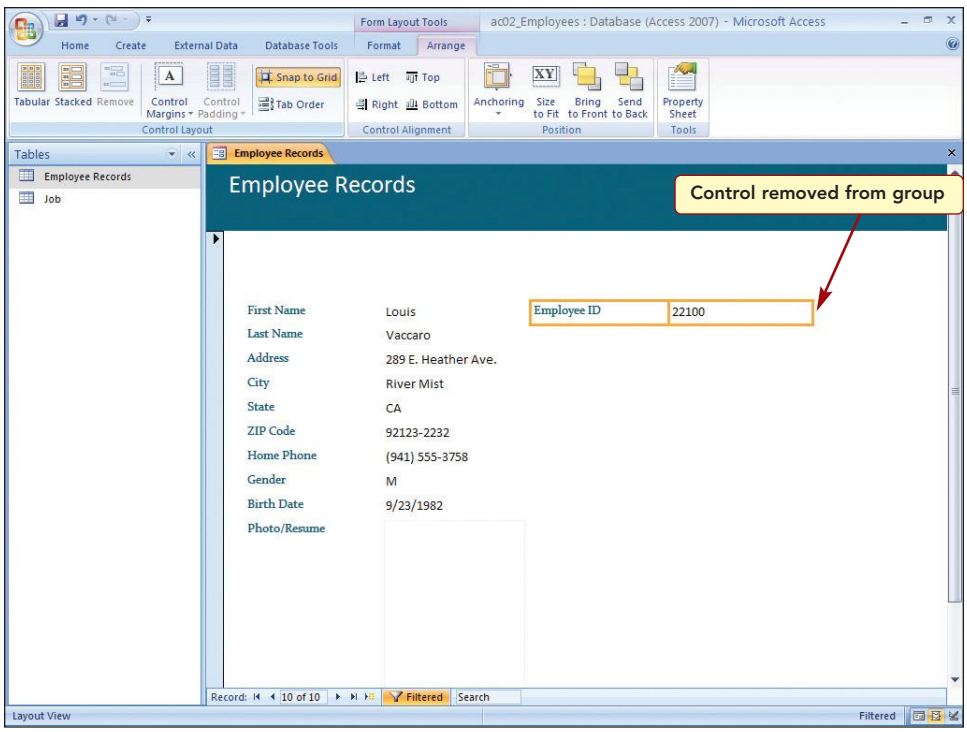


Figure 2.69

The Employee ID is now two separate objects that can be modified individually. Next, you will move the Employee ID control above the other controls.

7 **Drag the Employee ID object to the position shown in Figure 2.70.**

Select the Employee ID text control and reduce its size as in Figure 2.70.

Your screen should be similar to Figure 2.70

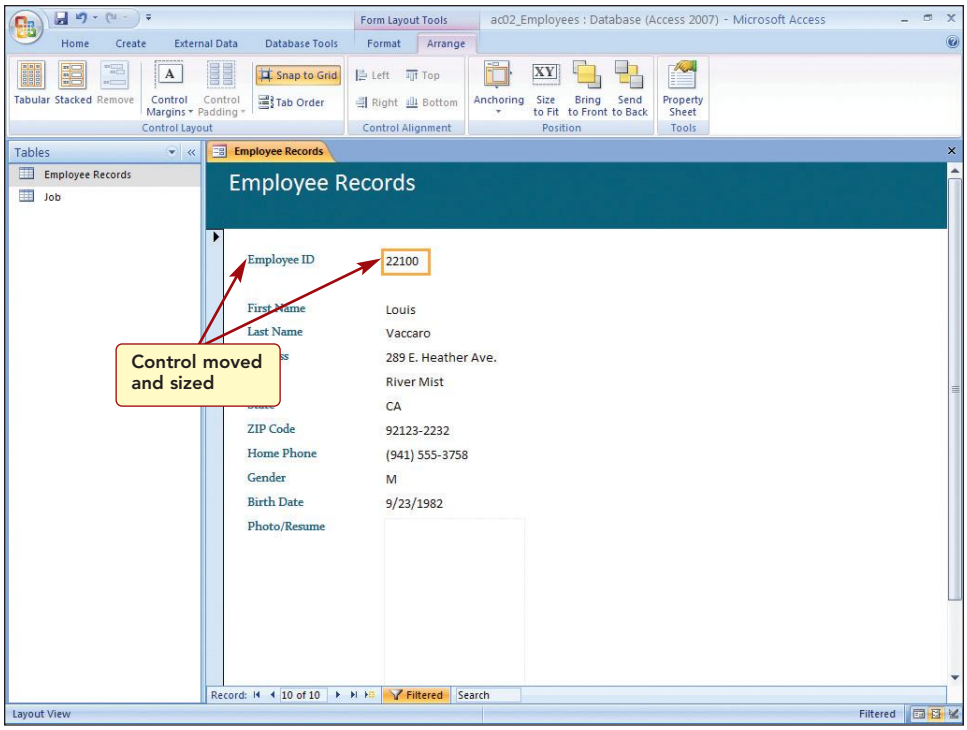


Figure 2.70

Now the Employee ID is clearly separate from the personal data on the form. Next, you will move the Photo/Resume control to the right of the other controls.

8 **If necessary, remove the Photo/Resume control from the Layout control and move it to the right of the other controls.**

Reposition the controls as in Figure 2.71.

Your screen should be similar to Figure 2.71

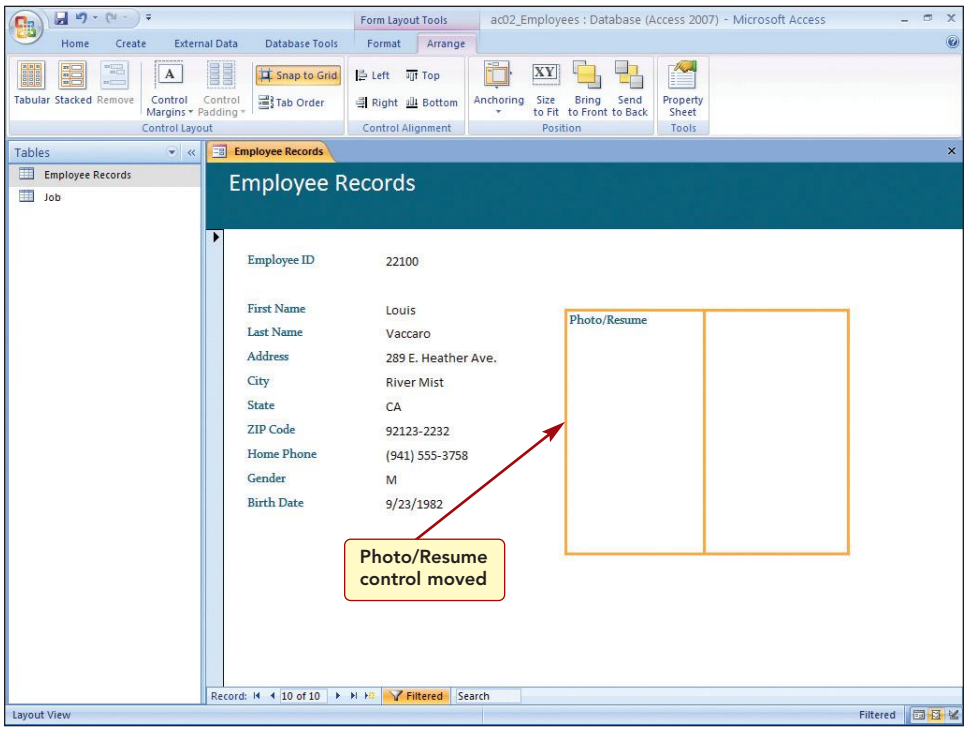


Figure 2.71

Changing the Form Design Style

Finally, you decide to change the form design style to another more colorful style.

1. **Open the Form Layout Tools Format tab.**
2. **Click More in the AutoFormat group.**

Your screen should be similar to Figure 2.72

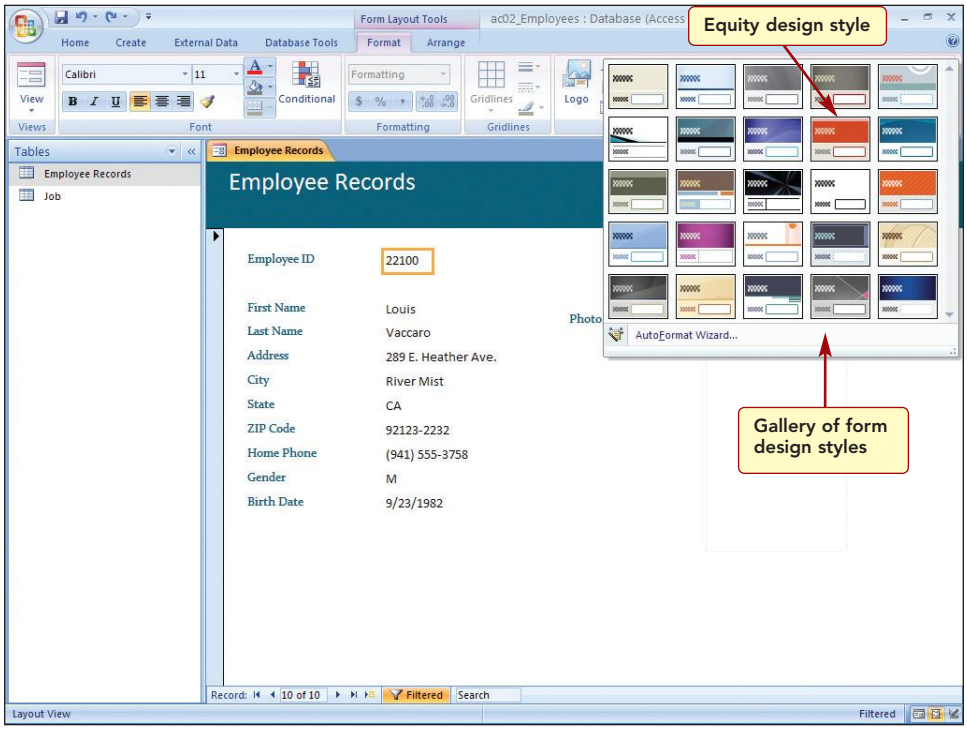


Figure 2.72

The gallery of the form design styles is displayed. You think the Equity design will be more interesting.

2 Choose Equity.

Having Trouble?
The design name appears in a ScreenTip when you point to the different designs.

Click Save in the Quick Access Toolbar to save the form design changes.

Another Method
You also can use Save in the Records group of the Home tab.

Additional Information
If you do not save the design changes at this time, you will be prompted to save them before closing the form.

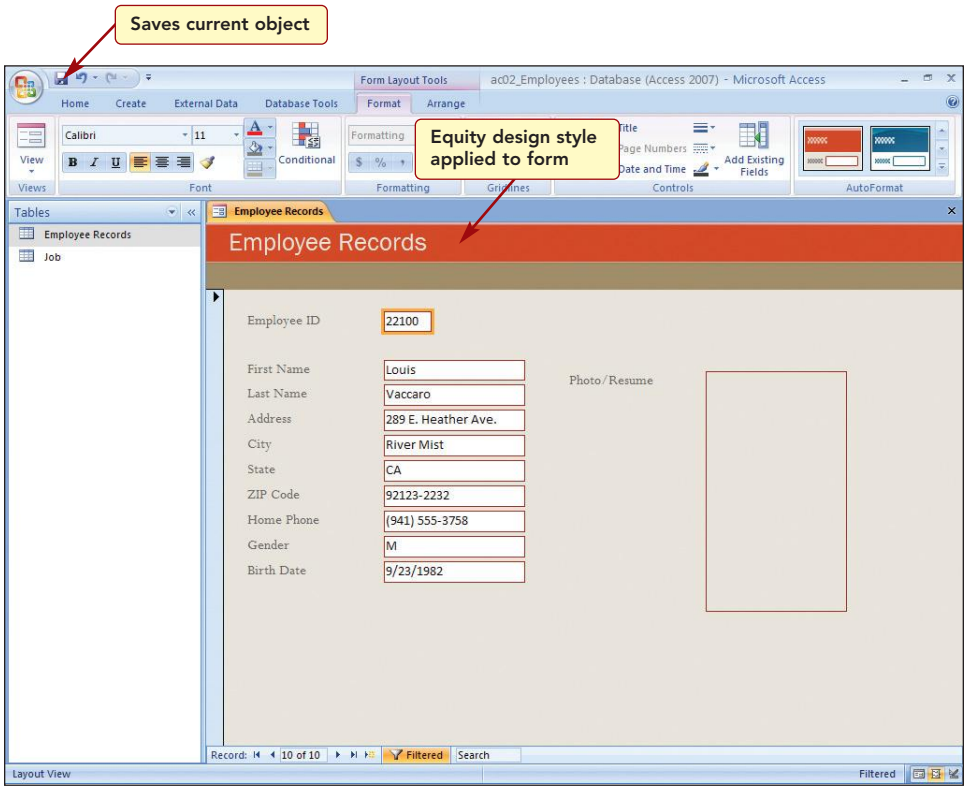


Figure 2.73

Your screen should be similar to Figure 2.73

The selected design was applied to the form.

Adding Records Using a Form

Now, you need to add a new employee record to the database whose paper employee record form is shown here. You will add the record in Form view using the information on the paper form for the field entry data. You also will attach a picture to the Photo/Resume field.

Additional Information
You will learn more about working with form design and layout in later labs.

EMPLOYEE DATA

Employee ID	12918		
First Name	Carlos	Last Name	Ruiz
Street	10101 First St.		
City	Maldin	State CA	Zip Code 92121-3740
Phone Number	(507) 555-5125		
Gender	M		
Birth Date	July 27, 1980		

1. **Click in the View group.**

Another Method

You also could click Form View in the status bar.

- **Click New (blank) record to display a new blank entry form.**

Another Method

You also can use New in the Records group of the Home tab or Ctrl + + to add a new record.

- **Enter the data shown in Figure 2.74 into the new record.**
- **Double-click on the Attachment field control.**

Another Method

You also could choose Manage Attachments from the shortcut menu or click Attachments on the Mini Toolbar.

- **Add the file ac02_Carlos from your data file location.**

Your screen should be similar to Figure 2.74

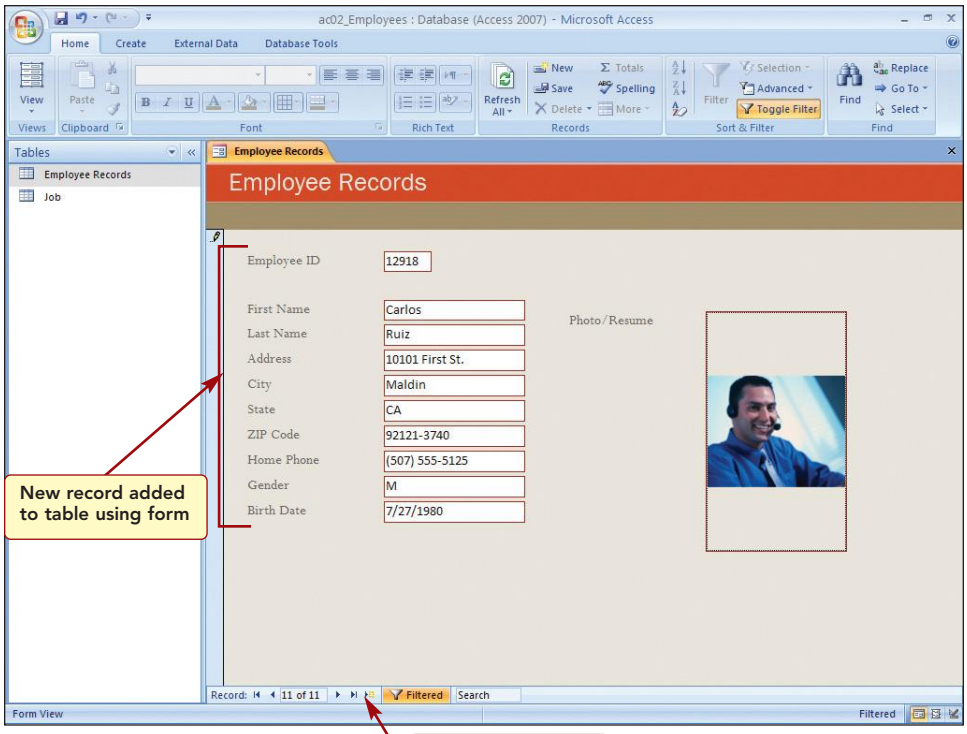


Figure 2.74

Using the form makes entering the new employee data much faster because the fields are in the same order as the information in the paper Employee Data form used by the personnel department.

Before you end this lab, you will add a record for yourself.

2. **Enter another record using your special Employee ID 99999 and your first and last names. The data in all other fields can be fictitious.**

Remove the filter.

The table now contains 55 records. Next, you need to add these two records to the Job table.

Organizing the Navigation Pane

Notice the name of the form does not appear in the Navigation pane. This is because initially the pane is set to display table objects only. To display other objects in the pane, you can change what objects are displayed in the pane and how they are grouped.

1. **Click** 

at the top of the Navigation pane to open the Tables drop-down menu.

Your screen should be similar to Figure 2.75

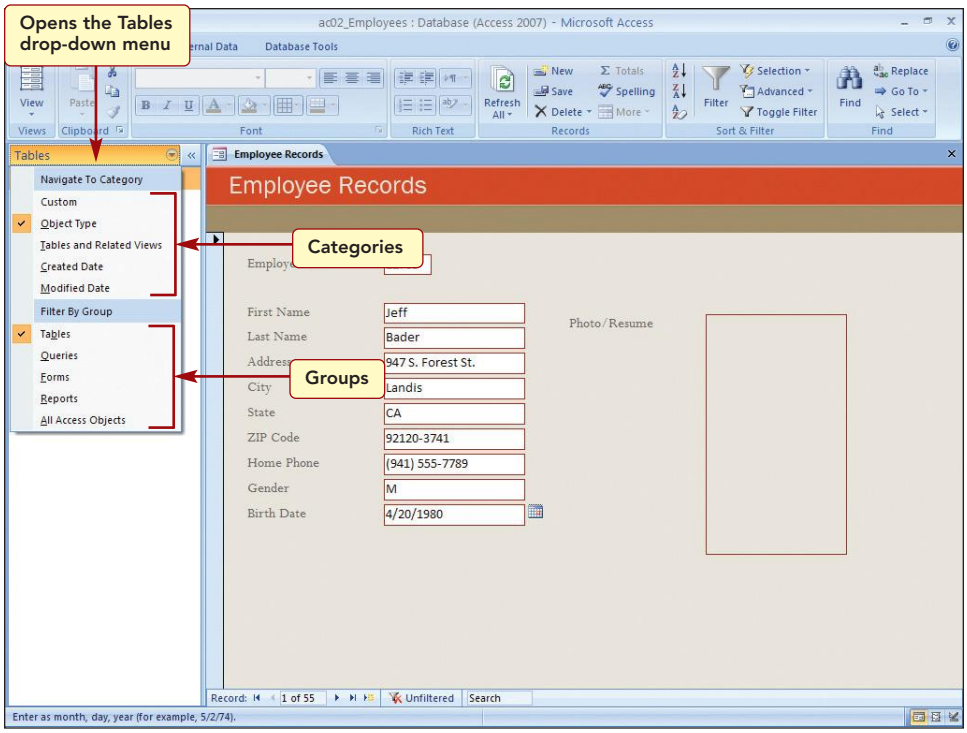


Figure 2.75

The upper section of the menu contains categories and the lower section contains groups. The groups change as you select different categories. Currently, Object Type is the selected category and Tables is the selected group. You want to keep the category selection as Object Type but want to change the group selection to display all object types in the pane at the same time.

2 **From the Filter by Group section, choose All Access Objects.**

- **Double-click the Job table in the Navigation pane.**

Another Method
You also can drag an object from the Navigation pane to the work area to open it.

- **Add the two records in the following table.**

Your screen should be similar to Figure 2.76

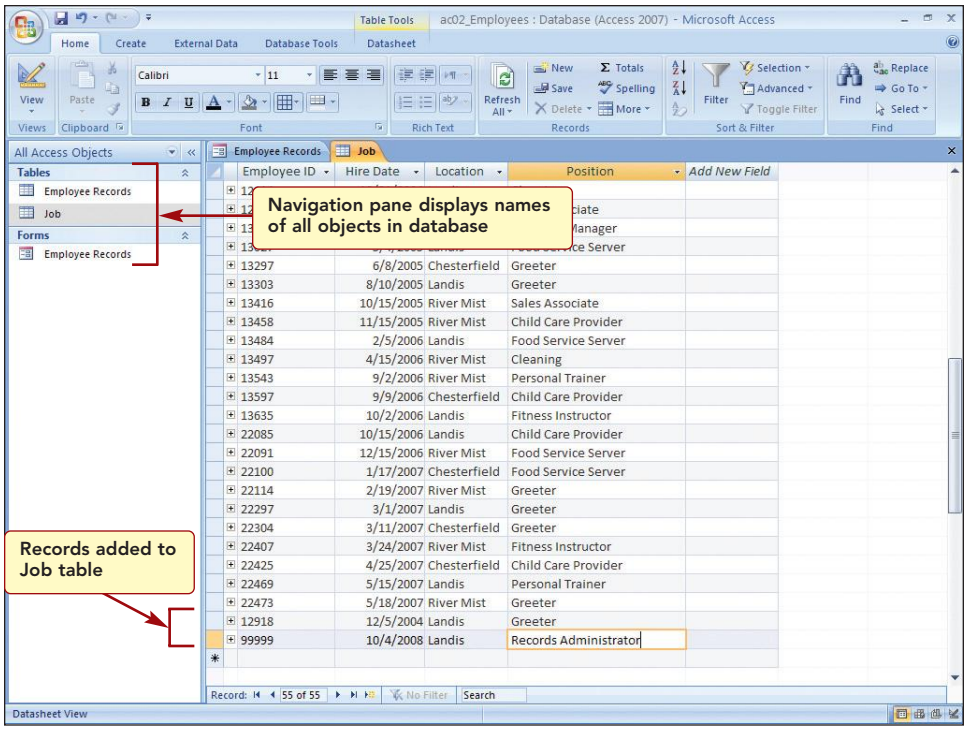


Figure 2.76

Employee ID	12918	99999
Hire Date	12/5/2004	Today's date
Location	Landis	Landis
Position	Greeter	Records Administrator

Additional Information
You will learn in later labs how to create a single form to update both tables.

Now both tables contain 55 records.

Previewing and Printing a Form

You want to preview and print only the form that displays your record.

1. **Click the Employee Records tab to display the form.**
2. **Click Office Button and choose Print/Print Preview.**

Your screen should be similar to Figure 2.77

Having Trouble?
Your form may display fewer records than in Figure 2.77.

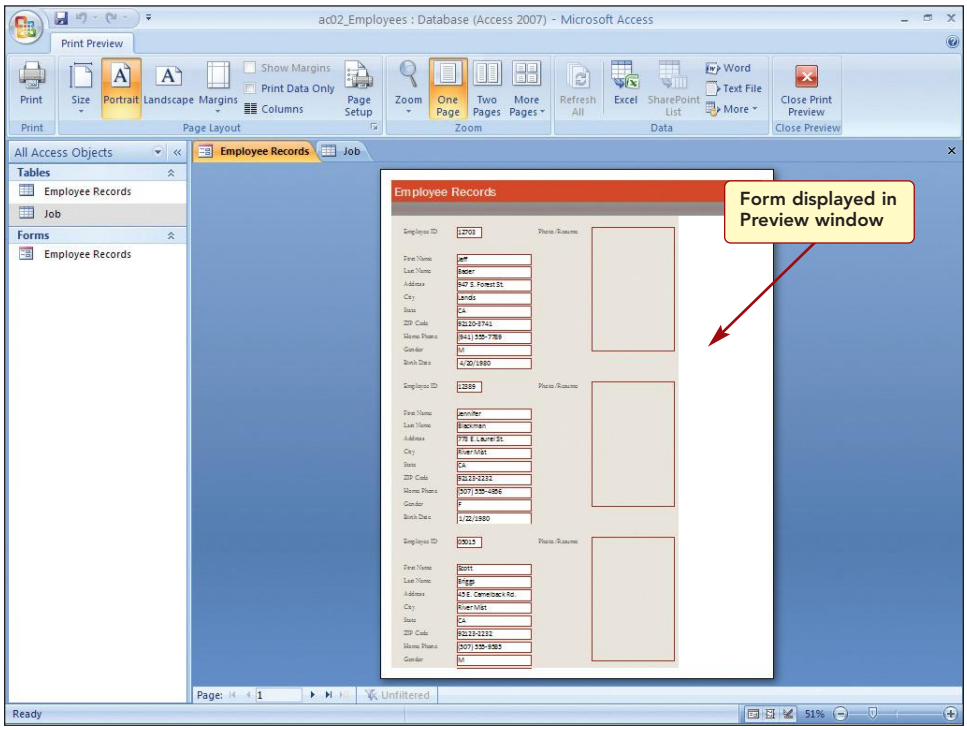


Figure 2.77

Print Preview displays the current object. In this case, because you were last in Form view, the form is displayed in the Preview window.

Printing a Selected Record

Access prints as many records as can be printed on a page using the Form layout. You want to print only the form displaying your record. To do this, you need to select your record first in Form view.

1. **Click** Close Print Preview.
   - **Display your record in the form.**
   - **Click the Record Selector bar (the blue bar along the left side of the form) to select the entire record.**

Another Method

You also can use Select /Select in the Find group of the Home tab to select the record.

Your screen should be similar to Figure 2.78

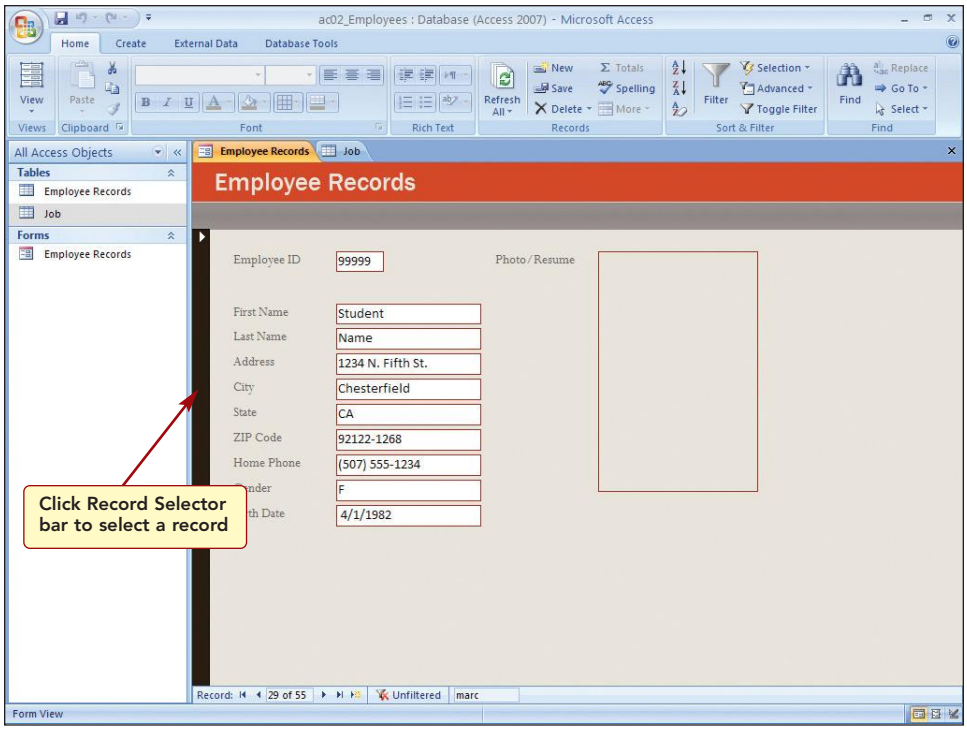


Figure 2.78

Now that the record is selected, you can print the record. The record will print using the current view, in this case, Form view.

2. **Click Office Button and choose Print.**
   - **Choose the Selected Record(s) option.**
   - **Click** OK.

Identifying Object Dependencies

The form is the third database object that has been added to the file. Many objects that you create in a database are dependent upon other objects for their content. In this case, the form is dependent upon the Employee Records database table for its content. Sometimes it is helpful to be able to find out what objects an object is dependent on or that depend on it. To help in these situations, you can display the object dependencies.

1. **Select the Employee Records table object in the Navigation pane.**
2. **Open the Database Tools tab.**
3. **Click Object Dependencies in the Show/Hide group.**
4. **If necessary, select "Objects that depend on me" from the Object Dependencies task pane.**

Your screen should be similar to Figure 2.79

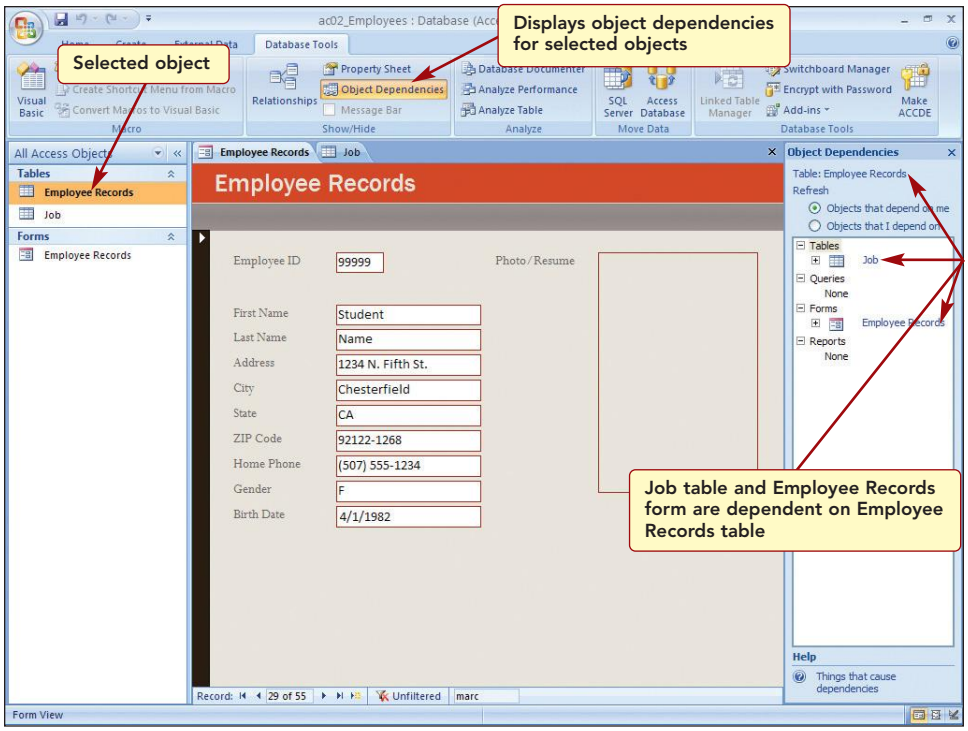


Figure 2.79

The Object Dependencies task pane identifies the two objects that are dependent on the table: the Job table and the Employee Records form. Next, you will see which objects depend on the Employee Records form.

1. **Select Employee Records in the Forms category of the Navigation pane.**
2. **Click Refresh in the Object Dependencies task pane.**

Your screen should be similar to Figure 2.80

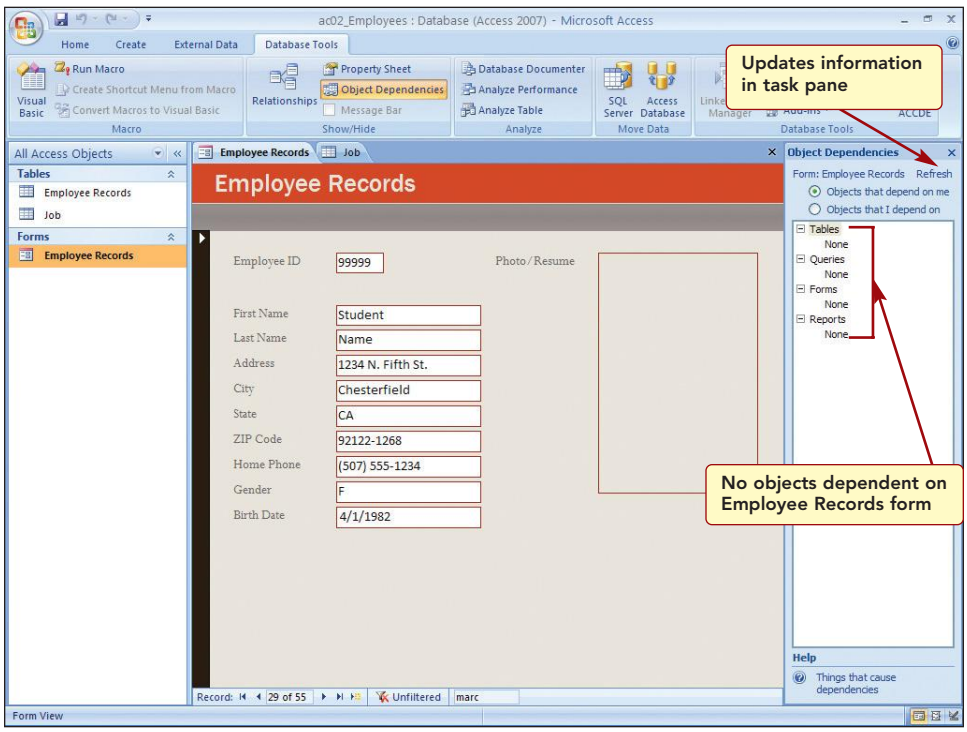


Figure 2.80

You can now see that the Employee Records object does not have any objects dependent on it.

3 Select "Objects that I depend on" from the Object Dependencies task pane.

The Object Dependencies task pane identifies the only object that the form depends on is the Employee Records table.

Setting Database and Object Properties

You have finished working on the database for now. Before exiting Access, you want to look at the file properties or settings that are associated with the database file. Some of these properties are automatically generated. These include statistics such as the date the file was created and last modified. Others such as a description of the file are properties that you can add.

Documenting a Database

The information you can associate with the file includes a title, subject, author, keywords, and comments about the file. You will look at the file properties and add documentation to identify you as the author and a title for the database.

1. **Close the Object Dependencies task pane.**

- **Click Office Button and choose Manage/Database Properties.**
- **Select each tab in the Properties dialog box and look at the recorded information.**
- **Display the Summary tab.**
- **Enter the following information in the Summary tab.**

Title	**Lifestyle Fitness Employee Database**
Author	**Your Name**

Having Trouble?

The Title and Author text boxes may be blank or may already show information. Clear the existing contents first if necessary.

Your screen should be similar to Figure 2.81

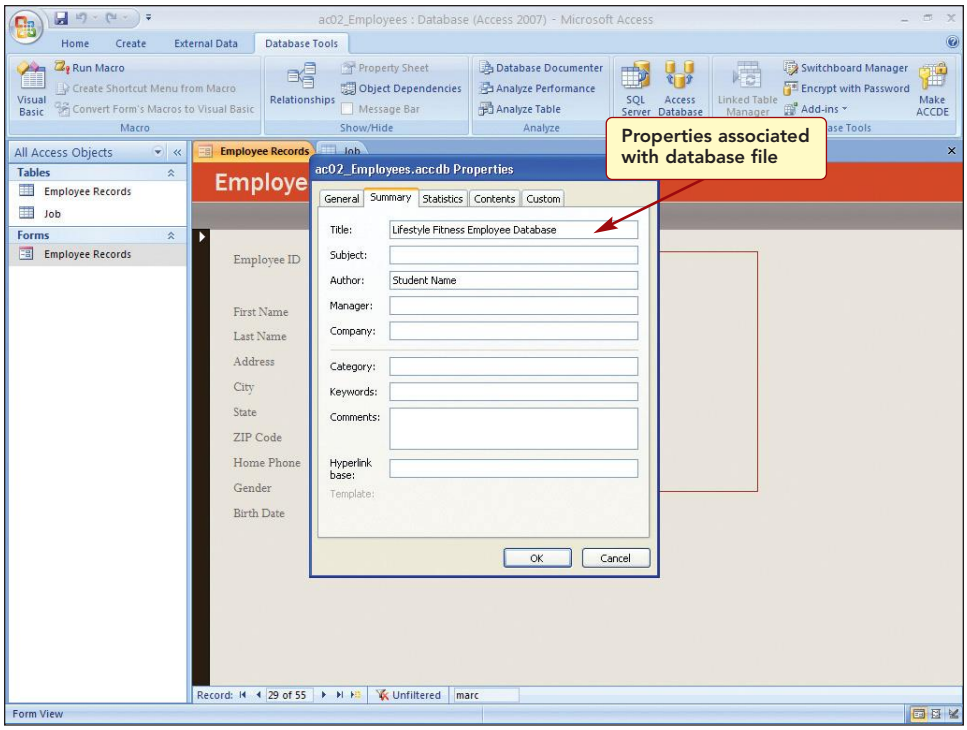


Figure 2.81

You also want to create a custom property to identify the completion date.

2. **Open the Custom tab.**
   - **Select Date Completed from the Name list.**
   - **Select Date as the Type.**
   - **Enter the current date in the Value text box.**
   - **Click** Add.

Your screen should be similar to Figure 2.82

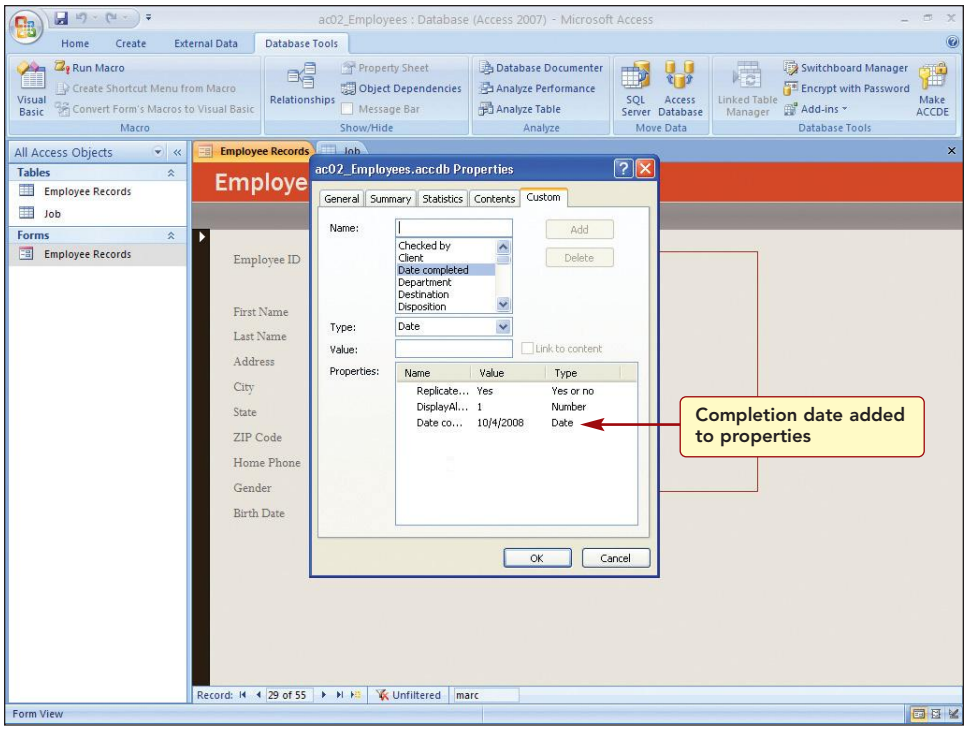


Figure 2.82

You have completed adding the properties to the file. You also can add limited documentation to each object in a database. You will add documentation to the Employee Records table object.

3. **Click** OK.
   - **Select the Employee Records table object.**
   - **Select** Property Sheet **from the Show/Hide group.**
   - **In the Description text box, type This table is under construction and currently contains 55 records.**

Your screen should be similar to Figure 2.83

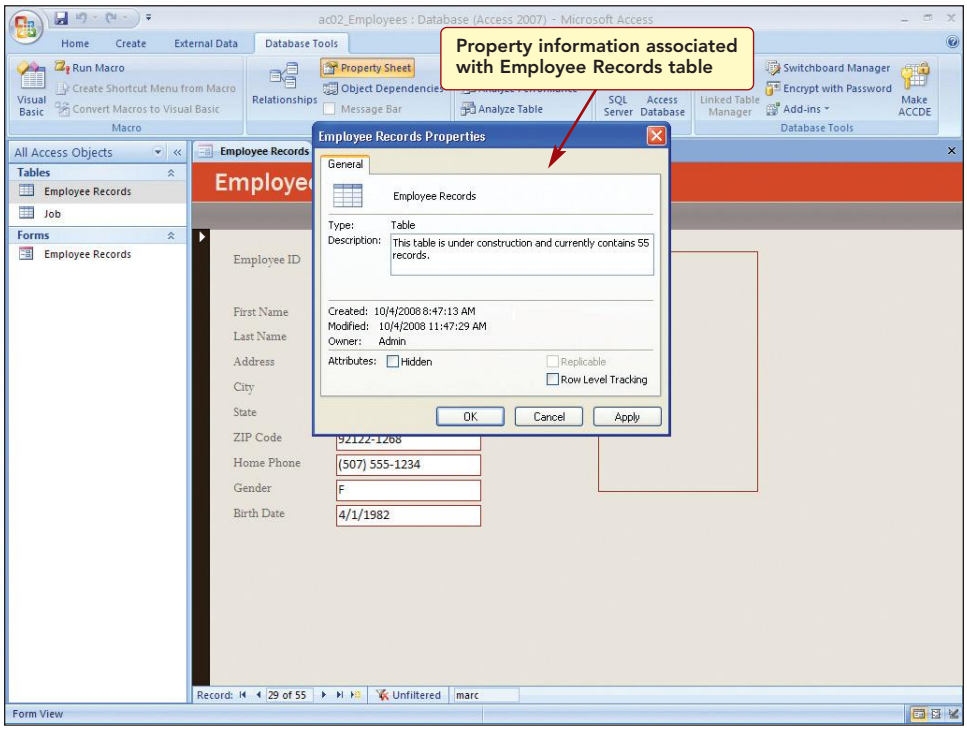


Figure 2.83

MORE ABOUT



For information about creating a report using the Database Documenter that details the properties of an entire database or any of its objects, see "6.2 Manage Databases" in the More About appendix.

You have added property information to both the database file and the Employee Records table.

4. **Click** OK **to close the Properties dialog box.**
5. **Close the form and table objects.**
6. **Exit Access.**



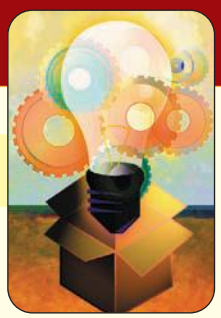
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Administrative Assistant

Administrative assistants are typically responsible for the efficient management of office operations. This position may involve conducting research, training new staff, scheduling meetings, and maintaining databases. As an administrative assistant, you could be responsible for updating an inventory or staffing database. The typical salary range of an administrative assistant is $24,000 to $35,000. Demand for experienced administrative assistants, especially in technology and health fields, is expected to increase through 2010.

Concept Summary



LAB 2

Modifying and Filtering a Table and Creating a Form

Format Property (AC2.8)

The Format property is used to specify the way that numbers, dates, times, and text in a field are displayed and printed.

Default Value Property (AC2.9)

The Default Value property is used to specify a value that is automatically entered in a field when a new record is created.

Validation Rule (AC2.13)

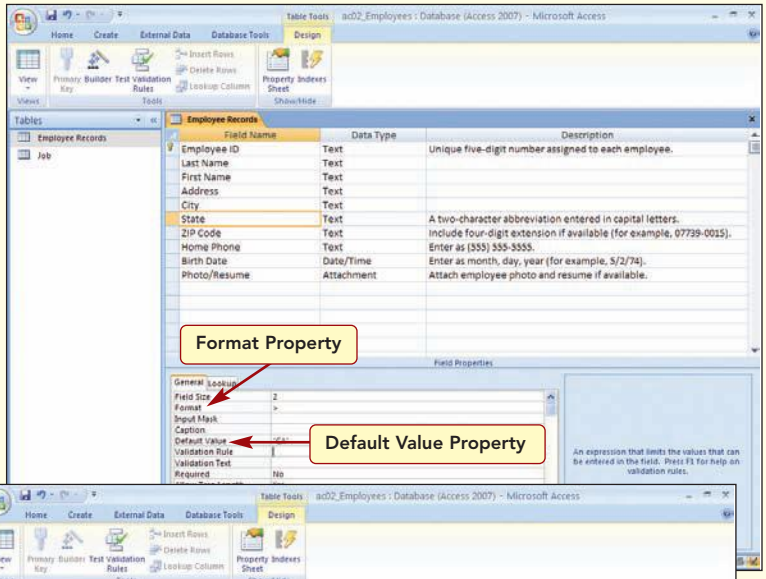
Validation rules are used to control the data that can be entered in a field by defining the input values that are valid or allowed.

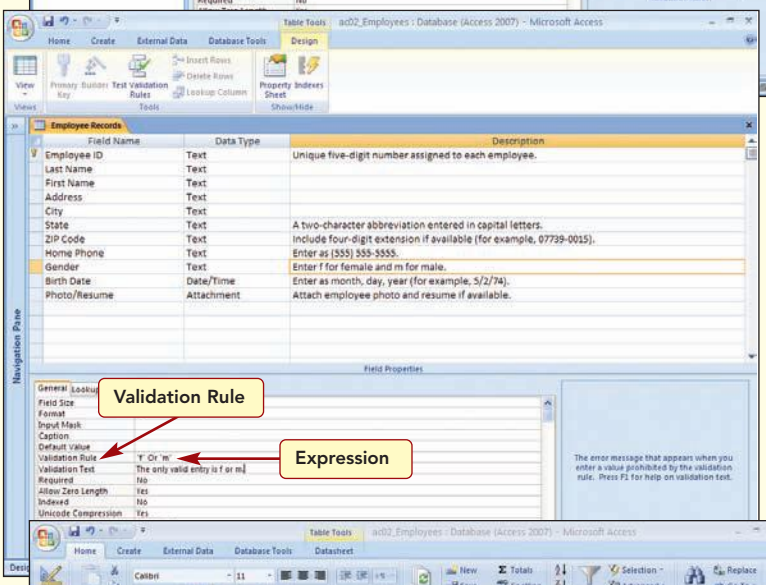
Expression (AC2.14)

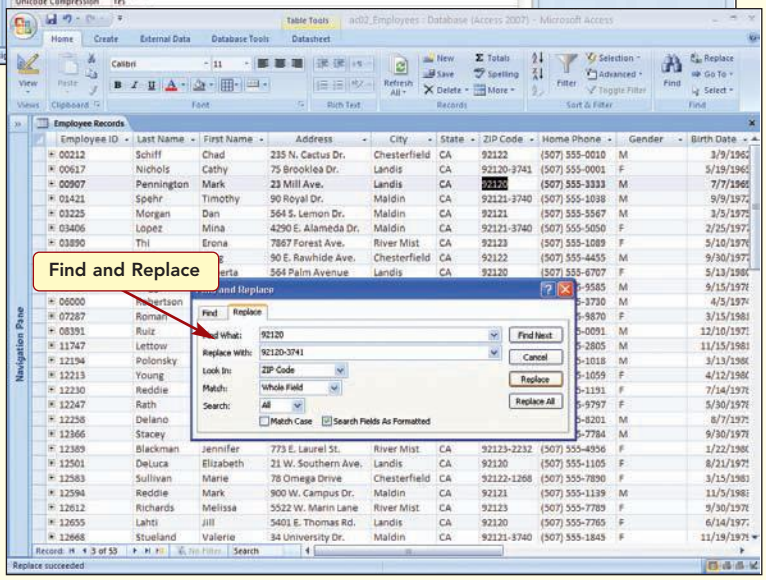
An expression is a formula consisting of a combination of symbols that will produce a single value.

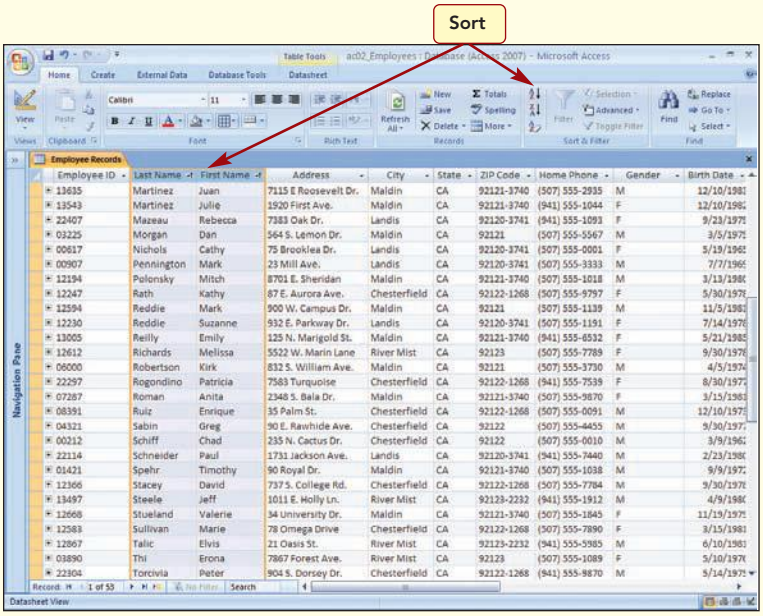
Find and Replace (AC2.24)

The Find and Replace feature helps you quickly find specific information and automatically replace it with new information.



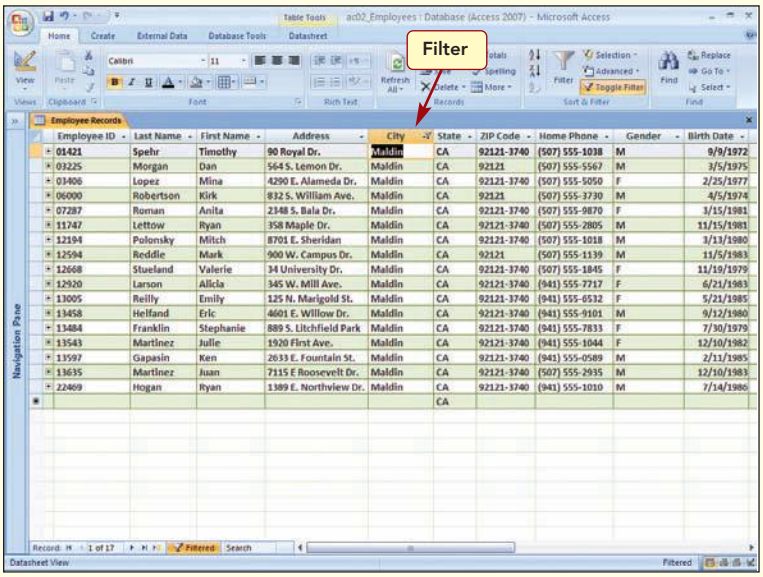






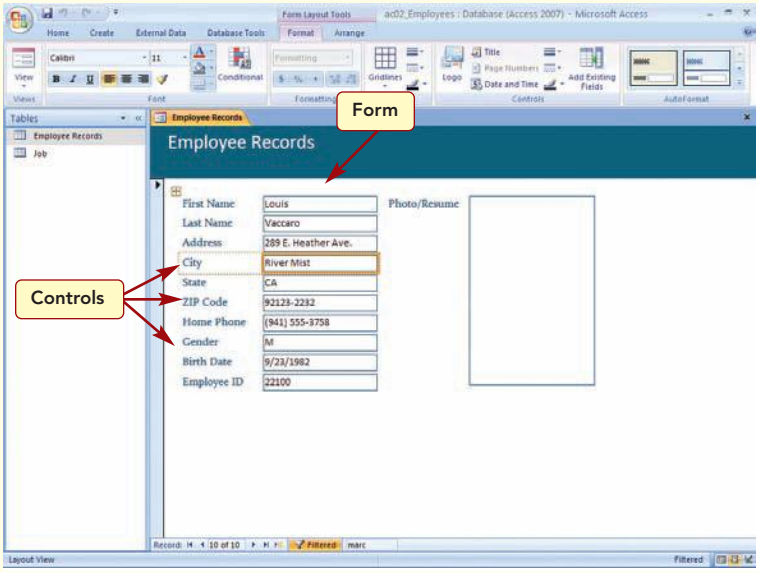
Sort (AC2.34)

You can sort the data in a table to quickly rearrange the order of the records.



Filter (AC2.42)

A filter is a restriction placed on records in the open table or form to quickly isolate and display a subset of records.



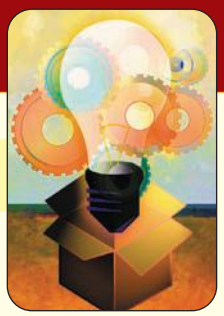
Form (AC2.49)

A form is a database object used primarily to display records onscreen to make it easier to enter new records and to make changes to existing records.

Controls (AC2.57)

Controls are objects that display information, perform actions, or enhance the design of a form or report.

Lab Review



LAB 2

Modifying and Filtering a Table and Creating a Form

key terms

ascending sort order AC2.34
attachment control AC2.58
bound control AC2.57
character string AC2.10
comparison operator AC2.14
compound control AC2.63
control AC2.57
criteria AC2.25
Default Value property AC2.9
descending sort order AC2.34
expression AC2.14
filter AC2.42
Find and Replace AC2.24
form AC2.49
format AC2.37
Format property AC2.8
identifier AC2.14
label control AC2.57
layout AC2.54
operator AC2.14
record source AC2.50
sort AC2.34
stacked layout AC2.54
tab order AC2.52
tabular layout AC2.54
text control AC2.57
theme colors AC2.39
unbound control AC2.57
Validation Rule property AC2.13
Validation Text property AC2.13
value AC2.9
wildcards AC2.25

MCAS Skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2: Microsoft Certified Applications Specialist (MCAS) for a complete list of the skills that were covered in Lab 2.

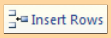
command summary

Command	Shortcut	Action
Office Button		
Manage/Database Properties		Allows changes to database properties
Quick Access Toolbar		
Undo	Ctrl + Z	Cancels last action
Save	Ctrl + S	Saves the current object
Home tab		
Views group		
Form View		Changes to Form view
Form Layout View		Changes to Form Layout view
Font group		
Bold	Ctrl + B	Applies bold effect to all text in datasheet
Font Color		Applies selected color to all text in datasheet
Gridlines		Changes gridline color of datasheet
Alternate Fill/Back Color		Changes background color of datasheet
Records group		
Save	Shift + Enter	Saves changes to object design
New	Ctrl + +	Adds new record
More /Hide Columns		Hides columns in Datasheet view
More /Unhide Columns		Redisplays hidden columns
Sort & Filter group		
Ascending		Changes sort order to ascending
Descending		Changes sort order to descending
Clear All Sorts		Clears all sorts and returns sort order to primary key order
Filter		Allows multiple filter criteria in a single field
Selection /Equals		Displays only those records containing selected value

command summary

Command	Shortcut	Action
Advanced / Clear all Filters		Removes all filters from table
Toggle Filter		Applies and removes filter from table
Find group		
Find	Ctrl + F	Locates specified data
Replace	Ctrl + H	Locates specified data and replaces it with specified replacement text
Go To		Moves to First, Previous, Next, Last, or New record location
Select / Select		Selects current record
Select / Select All		Selects all records in database
Create tab		
Tables group		
		Creates a new table in Datasheet view
Table Design		Creates a new table in Design view
Forms group		
Form		Creates a new form using all the fields from the underlying table
Blank Form		Displays a blank form to which you add the fields from the table that you want to appear on the form
More Forms / Form Wizard		Creates a new form by following the steps in the Form Wizard
Database Tools tab		
Show/Hide group		
Property Sheet		Specifies general properties associated with the database file
Object Dependencies		Shows the objects in the database that use the selected object

command summary

Command	Shortcut	Action
Table Tools Design tab		
Tools group		
		Inserts a new field in Table Design view
Table Tools Datasheet tab		
Fields & Columns group		
		Creates a lookup column
Form Layout Tools Format tab		
AutoFormat group		
 More		Opens gallery of design styles
Form Layout Tools Arrange tab		
Control Layout group		
		Removes selected control
Position group		
		Brings selected control to top of stack

Lab Exercises



matching

Match the numbered item with the correct lettered description.

1. *	_____	**a.**	locates specified values in a field
2. filter	_____	**b.**	an expression
3. tab order	_____	**c.**	database object used primarily for onscreen display
4. character string	_____	**d.**	order that the selection point moves in a form when Tab is used
5. find	_____	**e.**	temporarily displays subset of records
6. >=	_____	**f.**	operator
7. ascending sort	_____	**g.**	a group of characters
8. ="Y" Or "N"	_____	**h.**	rearranges records in A to Z or 0 to 9 order
9. record source	_____	**i.**	wildcard character
10. form	_____	**j.**	underlying table for a form

fill-in

Complete the following statements by filling in the blanks with the correct terms.

1. The upper section of the Navigation pane contains _____ and the lower section contains_____.

2. A(n) _____ is a symbol or word that indicates that an operation is to be performed.

3. _____ restrict the type of data that can be entered in a field.

4. _____ is displayed when an invalid entry is entered.

5. Format _____ is used to create custom formats that change the way numbers, dates, times, and text display and print.

6. The _____ property changes the way data appears in a field.

7. The most common controls are _____ controls and _____ controls.

8. A(n) _____ control is linked to the data in the resource table.

9. The _____ property is used to specify a value that is automatically entered in a field when a new record is created.

10. The two basic form layouts are _____ and _____.

true/false

Circle the correct answer to the following statements.

1. The Default Value property determines the value automatically entered into a field of a new record. True False
2. Forms are database objects used primarily for viewing data. True False
3. Text controls display descriptive labels. True False
4. Values are numbers, dates, or pictures. True False
5. An expression is a sequence of characters (letters, numbers, or symbols) that must be handled as text, not as numeric data. True False
6. Label controls are bound controls. True False
7. A contrast operator is a symbol that allows you to make comparisons between two items. True False
8. A validation rule is an expression that defines acceptable data entry values. True False
9. Filter results can be saved with the database and quickly redisplayed. True False
10. When the two parts of a control are associated, it is called a compound control. True False

multiple choice

Circle the letter of the correct response.

1. _____ control(s) how data is displayed in a form.
   a. Design styles
   b. Controls
   c. Layouts
   d. Tab order
2. A form is _____ an underlying table for its content.
   a. independent of
   b. reliant on
   c. contingent on
   d. dependent on
3. _____ layouts arrange data vertically with a field label to the left of the field data.
   a. Datasheet
   b. Justified
   c. Tabular
   d. Stacked
4. A _____ is a temporary restriction placed on a table to display a subset of records.
   a. wildcard
   b. control
   c. filter
   d. sort

5. The _____ is used to specify a value that is automatically entered in a field when a new record is created.
   a. Default Value property
   b. Sort property
   c. field value
   d. Format property

6. _____ is/are an explanatory message that appears if a user attempts to enter invalid information in a text field.
   a. Validation text
   b. Validation rule
   c. Expressions
   d. Validity checks

7. A(n) _____ control is linked to its underlying data source.
   a. bound
   b. label
   c. field
   d. unbound

8. A _____ is a feature that guides you step by step through a process.
   a. dialog box
   b. wizard
   c. task pane
   d. gallery

9. _____ properties change the way that data is displayed.
   a. Format
   b. Field
   c. Data
   d. Record

10. The _____ property is commonly used when most of the entries in a field will be the same for the entire table.
    a. AutoNumber
    b. Default Value
    c. Field Data
    d. Best Fit

Hands-On Exercises

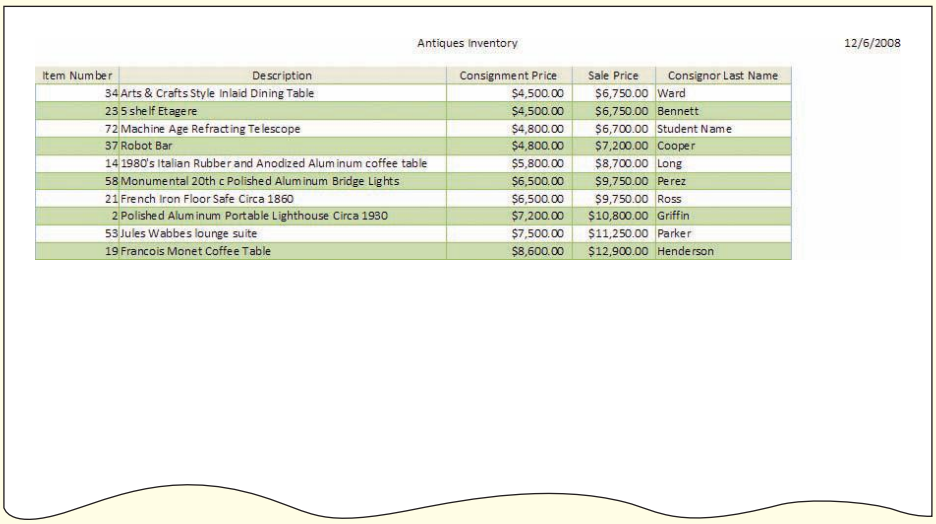
rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Note: Before you begin, you may want to create a backup copy of each data file by copying and renaming it.

Second Time Around Inventory Database ★

1. You have already set up an inventory database for the Second Time Around consignment shop. It currently contains the item number, description, price, and consignor last name fields, and it has records for the inventory currently in stock. The owner of the shop is quite pleased with the database as it stands but has asked you to change the name of the existing price field to show that it is the original price and add a new field for the current selling price of the item. Also, she would like you to modify some existing records, create a form to ease data entry, and print a copy of the form. Your completed table and form will be similar to those shown here.



Antiques Inventory 12/6/2008

Item Number	Description	Consignment Price	Sale Price	Consignor Last Name
34	Arts & Crafts Style Inlaid Dining Table	$4,500.00	$6,750.00	Ward
23	5 shelf Etagere	$4,500.00	$6,750.00	Bennett
72	Machine Age Refracting Telescope	$4,800.00	$6,700.00	Student Name
37	Robot Bar	$4,800.00	$7,200.00	Cooper
14	1980's Italian Rubber and Anodized Aluminum coffee table	$5,800.00	$8,700.00	Long
58	Monumental 20th c Polished Aluminum Bridge Lights	$6,500.00	$9,750.00	Perez
21	French Iron Floor Safe Circa 1860	$6,500.00	$9,750.00	Ross
2	Polished Aluminum Portable Lighthouse Circa 1930	$7,200.00	$10,800.00	Griffin
53	Jules Wabbes lounge suite	$7,500.00	$11,250.00	Parker
19	Francois Monet Coffee Table	$8,600.00	$12,900.00	Henderson

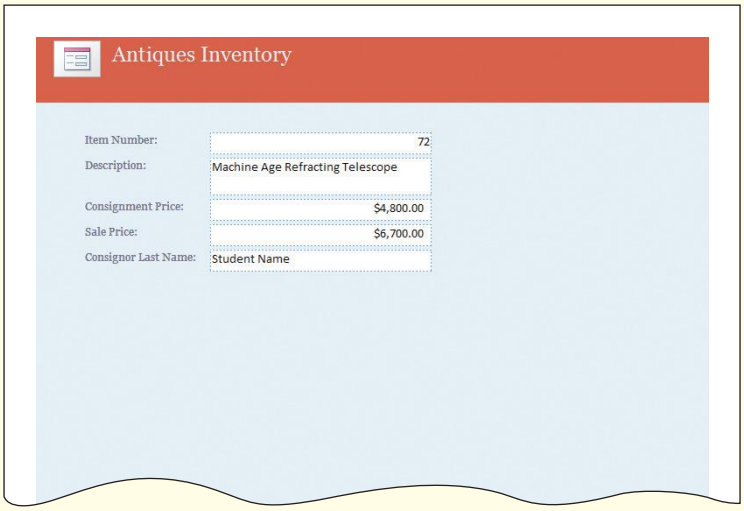
   a. Open the database named ac02_Second Time Around and the table named Antiques Inventory.

   b. Change the Price field name to **Consignment Price**. Change the Data Type for this field to Currency.

   c. Insert the following field before the Consignor Last Name field:

      Field name: Sale Price

      Data type: Currency



   d. Make all fields except Sale Price required. (Hint: Set the Required property to Yes.) Reduce the field size of the Consignor Last Name field to **25.**

   e. Switch to Datasheet view and respond "yes" to all prompts and warnings when saving the design changes.

   f. Update the table by entering **0.00** in the Consignment Price field for all records that have a blank entry in this field. (Hint: Use copy and paste).

g. Enter appropriate values in the Sale Price field for each record. (Generally the sale price is 33 percent more than the consignment price.) Leave the Sale Price field blank for those items with $0.00 in the Consignment Price field.

h. Appropriately size all columns to fully display the data.

i. Find all occurrences of dates that include an apostrophe (1930's) and are preceded with the word circa. Manually delete the 's from each located item.

j. Filter the table to display all records with a consignment price greater than or equal to $4,500. Sort the filtered records in ascending sort order by consignment price.

k. Format the datasheet using alternate row fill colors. Close the table object.

l. Use the Form tool to create a simple form for the Antiques Inventory table.

m. Display the form in Layout view. Change the form design style to another style of your choice. Reduce the size of all the text controls (they will size together as a group).

n. Use the new form to enter the following records:

Record 1	Record 2
Machine Age Refracting Telescope	Mid Century School House Globe
$4,800	$1,100
$6,700	$3,150
[Your Last Name]	Lewis

o. Print the form for the record containing your name. Close the form, saving it as Inventory.

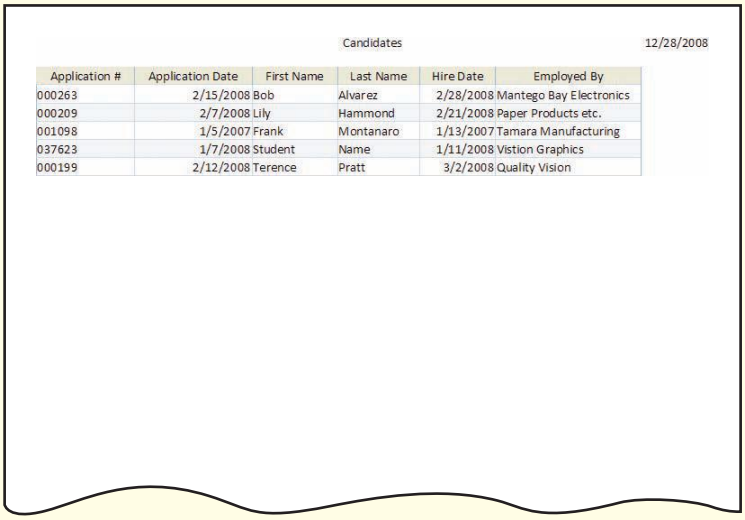
p. Open the table and rerun the filter to display your record in the results. Print the filtered datasheet in landscape orientation using the normal margin setting. Close the table.

q. Display all object types in the Navigation pane.

r. Add object documentation for the form. Add your name to the database properties and exit Access.

Enterprise Employment Client Database ★★

2. You work for a private employment agency as an administrative assistant. As part of your responsibilities, you maintain a client database that contains the job candidates' basic contact information: name, address, and phone number. The office manager has asked you to add to the database the date each candidate applied at your office, the date they were placed with an employer, and the employer's name. Also, because the database is getting rather large, you decide to create a form to make it easier to enter and update records. Your completed table and form will be similar to those shown here.



Candidates 12/28/2008

Application #	Application Date	First Name	Last Name	Hire Date	Employed By
000263	2/15/2008	Bob	Alvarez	2/28/2008	Mantego Bay Electronics
000209	2/7/2008	Lily	Hammond	2/21/2008	Paper Products etc.
001098	1/5/2007	Frank	Montanaro	1/13/2007	Tamara Manufacturing
037623	1/7/2008	Student	Name	1/11/2008	Vistion Graphics
000199	2/12/2008	Terence	Pratt	3/2/2008	Quality Vision

a. Open the database named ac02_Enterprise Employment Agency and the table named Candidates.

b. Reduce the State field size to **2**. Change the State field Format property to display all entries in uppercase. Make the Default Value for the state field **FL**.

c. Change the Zip Code data type to Text with a field size of **10**.

d. Insert the following field after the Application # field.

Field name:	**Application Date**
Data type:	Date/Time
Format:	Short Date



Candidate Information

Application #	037623
Application Date	1/7/2008
First Name	Student
Last Name	Name
Address	802 Valimara Way
City	Palmdale
State	FL
ZIP Code	72725-1016
Phone	(726) 555-0909
Hire Date	1/11/2008
Employed By	Vistion Graphics

e. Add the following two fields to the end of the table:

Field name:	**Hire Date**
Data type:	Date/Time
Format:	Short Date
Field name:	**Employed By**
Data type:	Text
Description:	**Enter the name of the employer**
Field size:	**45**

f. Switch to Datasheet view and save the table design changes.

g. All zip codes of 72725 need to be changed to **72725-1016**. Use Find and Replace to make this change in the database. Best fit the columns.

h. Use the Form Wizard to create a form for the Candidates table. Include all the table fields in their current order. Use the Columnar layout and a style of your choice. Title the form **Candidate Information**.

i. Use the new form to enter the following records:

Application #	001098	037623
Application Date	1/5/08	1/7/08
First Name	Frank	Your first name
Last Name	Montanaro	Your last name
Address	124 Beach Front Way	802 Valimara Way
City	Lexington	Palmdale
State	FL	FL
ZIP Code	72724	72725-1016
Phone	(726) 555-7623	(726) 555-0909
Hire Date	1/13/08	1/11/08
Employed By	Tamara Manufacturing	Vistion Graphics

j. Use the Search feature to locate the following records and update their data.

Locate	Application Date	Hire Date	Employed By
Lilly Hammond	2/7/08	2/21/08	Paper Products etc.
Terrence Pratt	2/12/08	3/2/08	Quality Vision
Bob Alvarez	2/15/08	2/28/08	Mantego Bay Electronics

k. Display all object types in the Navigation pane.

l. Print the form for the record containing your name.

m. Filter the Candidates table to display only those records displaying a hire date. Sort the records in ascending order by last name. Hide the Address through Phone columns.

n. Print the filtered datasheet using the Normal margin setting in landscape orientation.

o. Remove the filter and unhide the columns.

p. Add your name to the database properties. Close all objects and exit Access.

ARF Tracking Database ★★

3. You have created a database for tracking the animals that come into and go out of the Animal Rescue Foundation. Now you need to modify the database structure and customize field properties to control the data entered by the foundation's volunteers who are assigned this task. You also want to create a form to make it easier for the volunteers to enter the necessary information. Your completed datasheet and form will be similar to those shown here.

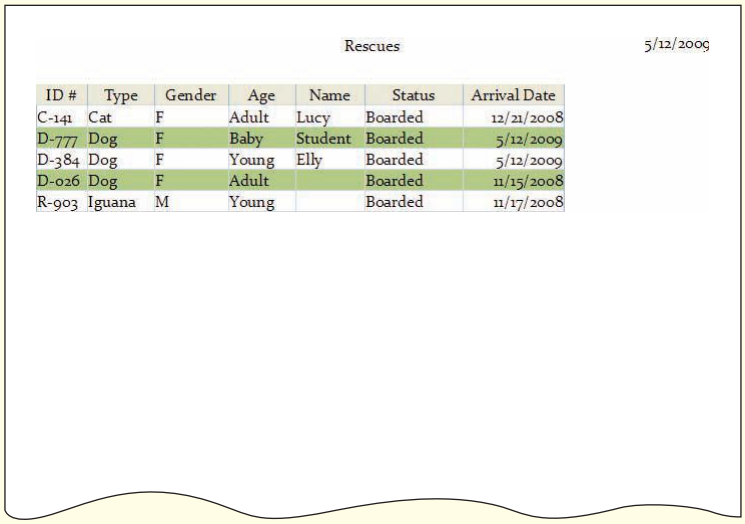
a. Open the file ac02_ARF Database and the table Rescues in Datasheet view.

b. Use Find to locate ID # R-904. Add the adoption date **6/13/2007**.

c. Use Search to locate the animal named Spreckels and change the age to B and enter **12/01/2007** as the Foster Date.

d. Add the following field before the Arrival Date field:

Field name:	**Status**
Data type:	Lookup
Description:	**Select Boarded, Foster Care or Adopted**
Field size:	**15**

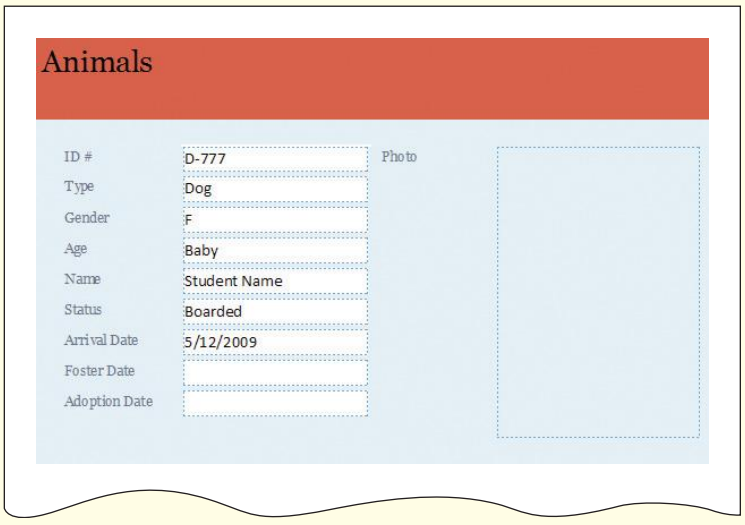


Rescues 5/12/2009

ID #	Type	Gender	Age	Name	Status	Arrival Date
C-141	Cat	F	Adult	Lucy	Boarded	12/21/2008
D-777	Dog	F	Baby	Student	Boarded	5/12/2009
D-384	Dog	F	Young	Elly	Boarded	5/12/2009
D-026	Dog	F	Adult		Boarded	11/15/2008
R-903	Iguana	M	Young		Boarded	11/17/2008

e. Make the following additional changes to the database structure:

- Restrict the entries in the Status field to list items only. Make Boarded the default value for Status.
- Add a validation rule and validation text to the Gender field to accept only M or F (male or female). Format the field to display the information in uppercase.
- Change the Age field to Lookup data type to accept only Baby, Young, or Adult. Increase the field size to **5**. Restrict the entries to items on the list only.



Animals

ID #	D-777
Type	Dog
Gender	F
Age	Baby
Name	Student Name
Status	Boarded
Arrival Date	5/12/2009
Foster Date	
Adoption Date	

Photo

f. In Datasheet view, complete the data for the Status by entering F (if there is a Foster Date only), A (if there is an adoption date), or B (if there is neither a foster or an adoption date). Best fit the columns.

g. Change the data in the Age column by selecting from the list for each record.

h. Best fit all columns.

i. Add formatting of your choice to the Datasheet. Change the font of the datasheet to Constantia, 12 point.

j. Use the Form Wizard to create a columnar form. Include all the fields in their current order and use a style of your choice. Title the form **Animals**.

k. Search in Form view to locate the animal named Titus and add the picture ac02_WhiteDog to the Attachment field.

l. Adjust the size of the attachment control in Form Layout view. Change the form design style to another and make any adjustments to controls that are needed.

m. Add two records using the new form. Use the current date as the arrival date and make the status Boarded. In the Name field of the second record you add, enter your name, so your name appears on the printed output.

n. Save the form and print the record with your name as the animal name.

o. Filter the Rescues datasheet to display only those animals with a status of Boarded. Sort the filtered datasheet by Type. Hide the Foster Date, Adoption Date, and Attachment columns. Print the Rescues datasheet in portrait orientation using the Wide margin setting.

p. Unhide all columns. Clear all sorts and remove the filter.

q. Display all object types in the Navigation pane.

r. Identify object dependencies.

s. Add your name to the database properties. Close all objects and exit Access.

Kodiak Construction Database ★★★

4. Although the database you designed for the expanding Kodiak Construction Company was well received, you have been asked to make several additions and improvements to the original design. In addition, they have asked you to create a form to make the process of entering new records in the database easier. Your completed database table and form will be similar to those shown here.

a. Open the file ac02_Kodiak Construction.

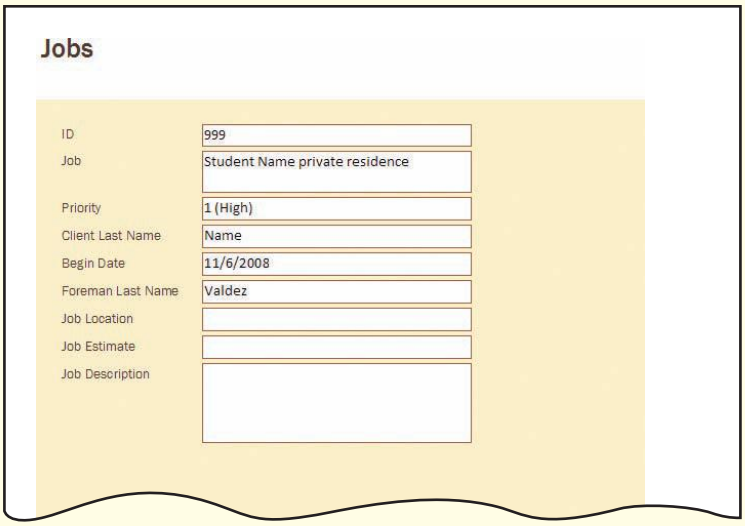
b. Open the Clients table and switch to Design view. Insert a new field before the Business Phone field named **Home Phone**. Include a description. Set the field size to **14**.

c. Enter the following Home Phone numbers into the table. Hide the fields between the Last Name and Home Phone fields. Use Find to locate the records. Unhide the columns when you are done.

Jobs 11/6/2008

ID	Job	Priority	Client Last Name	Begin Date
296	Amberly Oaks	1 (High)		4/28/2007
884	Bella Greens	1 (High)		4/7/2006
163	Frisco Lake View	1 (High)	King	11/4/2006
489	Historia	1 (High)		12/10/2005
587	Pinewood Glen	1 (High)		3/5/2006
254	Shadow Hills	1 (High)		5/7/2006
999	Student Name private res	1 (High)	Name	11/6/2008
985	Willow Shoreline	1 (High)		3/21/2007

Last Name	Home Phone
Lopez	(303) 555-3772
Miller	(303) 555-8831
Walker	(303) 555-6613
Young	(303) 555-0912



d. Change the City column to a Lookup Field data type. Include the following cities as the lookup list values: Aurora, Denver, Glendale, Lakewood, Littleton, Parker.

e. Open the City field drop-down list for each record and select a city.

f. Make the default value for the State field **CO**. Change the format to uppercase.

Next, you want to add a field for the job priority to the Jobs table. This field can only contain three possible values: High, Normal, or Low. Instead of typing this information in the field, you will make the field a Lookup field.

g. Open the Jobs table and insert the new field named **Priority** after the Job field. Select the Lookup Wizard from the Data Type list. Select the "I will type in the values that I want" option. In column 1, enter **High** in the first cell, **Normal** in the second cell, and **Low** in the third cell. Accept the field name. Set the field's size to **15** and the default value to Normal. Limit entries to values from the list.

h. Switch to Datasheet view, saving your design changes.

i. Open the Priority field drop-down list for each record and select a priority level.

j. Best fit the columns.

k. Add formatting of your choice to the Jobs datasheet. Change the font to Arial. Close the table.

l. Use the Form Wizard to create a form for the Jobs table. Include all of the fields from the Jobs table in order. Use the columnar form layout. Select a style of your choice and accept the default form name (**Jobs**).

m. In Form Layout view, search for the record for R Bar C Ranch. Change the foreman to **Valdez**.

n. Appropriately size the label and text controls (they will size together as a group).

o. Create similar forms for the Clients and Foremen tables. Size the controls appropriately.

p. Using the form, add a new record to the Client table using your first and last names as the client name. Save the changes and close the form.

q. Using the form, add a new record to the Jobs table with **999** as the ID and **[your last name] private residence** as the job; select your name as the Client Last Name, priority of High, the current date as the Begin Date, and a foreman of your choice.

r. Print your record in the form.

s. Open the Jobs table. Filter the records to display only those with a High priority. Sort the filtered records by Job in ascending sort order. Hide the Job Location, Job Estimate, and Job Description columns.

t. Print the filtered Jobs datasheet in landscape orientation.

u. Unhide all columns. Clear all sorts and remove the filter.

v. Display all object types in the Navigation pane.

w. Add your name to the database properties. Save and close the database.

EchoPlex Database ★★★

5. EchoPlex is an online record store that specializes in rare and collectible vinyl. You recently expanded the business and created a database to manage your inventory. The database initially began as a list of available titles, but with use you saw a need for more information. You changed the original database file design and have been using it for several weeks now, but it still needs some additional changes that you feel will make inventory control and data entry even easier. The completed database and form are shown here.

a. Open the database file ac02_EchoPlex and the table Records.

b. Change the Format property of the Sold Price field to Currency.

c. Use Search to find the record for Neil Young's *Harvest*. Enter the sold price of **155**.

d. Unhide the Comments field.

e. You want to add a new field to show the condition of each item. This field can only contain four possible values: Excellent, Good, Fair, or Poor. Insert a new field after Artist named **Condition**. Use a data type of Lookup and enter the following as the list values: **Excellent**, **Good**, **Fair**, and **Poor**. Accept the field name. Set the field's Default Value to **Good** and limit entries to list items.

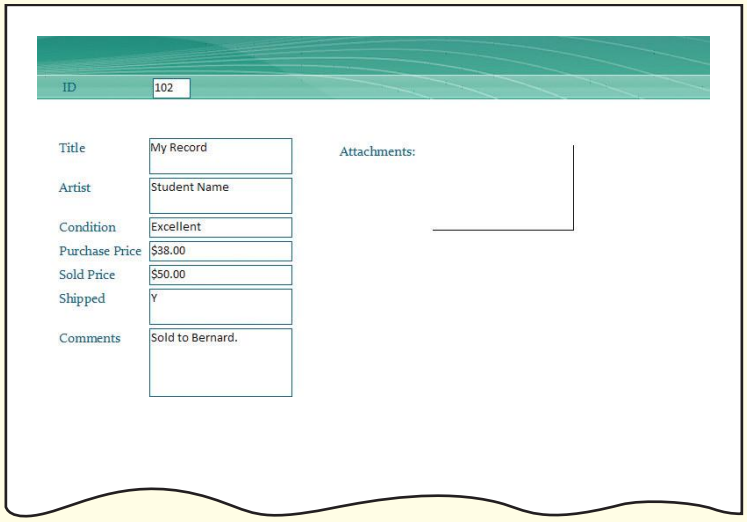
f. Switch to Datasheet view and select a condition for each record.

g. Enter the following information as a new record:

Title:	**School House Rocker**
Artist:	**Kate Lansbergen**
Condition:	**Fair**
Purchase Price:	**$45.00**
Sold Price:	**$47.00**
Comments:	**Traded to SearchLight Records for $47.00 in store credit.**

Records 10/6/2008

ID	Title	Artist	Condition	Purchase Price	Sold Price	Shipped
42	The Doors	The Doors	Excellent	$10.00	$0.00	N
41	Never Mind the Bollocks	The Sex Pistols	Excellent	$10.00	$0.00	N
56	Songs in the Key of Life	Stevie Wonder	Excellent	$12.00	$0.00	N
102	My Record	Student Name	Excellent	$38.00	$50.00	Y
6	What's Going On	Marvin Gaye	Excellent	$50.00	$86.00	Y
51	Bridge Over Troubled Water	Simon and Garfunkel	Excellent	$50.00	$0.00	N
10	The Beatles ("The White Album")	The Beatles	Excellent	$50.00	$0.00	N
15	Are You Experienced?	The Jimi Hendrix Experience	Excellent	$50.00	$0.00	N
81	Graceland	Paul Simon	Excellent	$87.00	$0.00	N



h. Insert a new field after the Sold Price field named **Shipped** with a data type of Text. Add **"Y or N"** as a validation rule. Add **Must be Y or N** as the Validation text. Format the field to display in uppercase.

i. Sort the list by Sold Price. For all of the entries with $0.00, enter **N** in the Shipped field. For entries with a Sold Price, enter **Y** in the Shipped field. Remove the sort.

j. Find all instances of Beatles in the Artist field and replace with **The Beatles**.

k. Hide the Comments and Attachments fields.

l. Add formatting of your choice to the datasheet. Change the font of the datasheet to one of your choice.

m. Use the Form Wizard to create a form for the Records table. Include all of the fields from the Records table in order. Use the columnar form. Apply a style of your choice to the form and accept the default form name (**Records**).

n. Switch to Layout view. Select another design style. Move the grouped controls down on the form. Remove the ID field from the group. Move the ID field above the grouped controls. Size the ID field to fit the data. Adjust the size of the other form controls as needed (they will size together as a group). Move and size the Attachment label and text controls as needed.

o. Use the form to enter a new record with a title of your choice and your name as the artist. Include a condition of Excellent, a purchase price of $38, and a sold price of $50.

p. Preview and print the form for your record. Save and close the form.

q. Filter the records to display only those records with a condition of Excellent and a purchase price of $10 or more. Sort the records in ascending order by Purchase Price. Best fit the fields. Print the filtered datasheet in landscape orientation with Normal margins.

r. Display all object types in the Navigation pane.

s. Add your name to the database properties. Save the database and exit Access.

on your own

Adventure Travel Packages Form ★

1. You have heard from the employees of Adventure Travel Tours that the database table you created is a bit unwieldy for them to enter the necessary data, because it now contains so many fields that it requires scrolling across the screen to locate them. You decide to create a form that will make entering data not only easier, but more attractive as well. Open the ac02_ATT Database. Best fit the columns. Change the order of the Length and Description field columns in Design view. Apply formatting of your choice to the datasheet. Sort the table on Destination in ascending order. Use the Form Wizard to create a form called **Travel Packages** for the Packages table. Use the form to enter five new records with tour package information of your choice (use the newspaper travel section or the Web for ideas). Enter your name as the Contact in one of the new records. Print the form containing your name. Print the datasheet in landscape orientation.

EMP Account Tracking ★★

2. While creating the database table for EMP Enterprises, you learned that some employees have been receiving advances for anticipated expenses (such as for travel). You have also been informed that the CEO wants to start tracking the expenses by department. Open the database file **EMP Enterprise** (Lab 1, On Your Own 5). Add a new field named Advanced Amount with a currency data type to the Employee Expenses table. Also add a Yes/No field named Payment Made to record whether or not the expense has been paid, with a corresponding validation rule and message. In The Employee Info table, add a new field named Department to enter the department's charge code number. Update both tables to include appropriate values in the new fields in the existing records. Apply formatting of your choice to the Employee Expenses datasheet. Sort the Employee Expenses table on the Expense Amount field in Descending sort order. Close the table, saving the changes. Use the Form Wizard to create a form named **Expenses** for the Employee Expenses table. Include the form title Your Name Expenses. To test the form, enter a new expense record using the employee ID number for the record containing your name in the Employee Info table. Select your record in the form and print it.

Dental Patient Database Update ★★

3. The dentist office for which you created a patient database has expanded to include a second dentist and receptionist. The two dentists are Dr. Jones and Dr. Smith. You now need to modify the database to identify required fields and to add a new field that identifies which patient is assigned to which dentist. You also decide that creating a form for the database would make it easier for both you and the other receptionist to enter and locate patient information. Open the Dental Patients database (Lab 1, On Your Own 3) and the Personal Information table. Make the patient identification number, name, and phone number required fields. Add a Dentist Name Lookup list field, with the two dentists' names and an appropriate validation rule and message. Update the table to "assign" some of the patients to one of the dentists and some patients to the other dentist. Assign the record containing your name to Dr. Jones. Sort the table by dentist name to see the results of your new assignments. "Reassign" one of the displayed patients and then remove the sort. Filter the table to display only those patients for Dr. Jones. Apply formatting of your choice to the datasheet. Print the filtered datasheet and then remove the filter. Create a form called **Patient Data** for the table using the Form Wizard. Enter two new records, one for each of the dentists. Use the Search feature to locate the record that has your name as the patient, and then select and print the displayed record in the form.

Lewis & Lewis Employee Database ★★

4. You work in the Human Resource Management department at Lewis & Lewis, Inc. You recently created a simple database containing information on the employees Department and work telephone extension. Several of your co-employees also want to use the database. You decide to add a field for the employees job title and enhance the table. You also want to create a form that will make it easier for others to update the information in the database as well. Open the ac02_Lewis Personnel database and **Phone List** table and add the Job Title field after the Department field. Update the table to include information in the new field for the existing records. Add a new record that includes your name. Apply formatting of your choice to the datasheet. Sort the table by Department and Last Name. Use the Search feature to locate and delete the record for Anna Tai who has left the company. Print the datasheet in landscape orientation, Remove the sort and

close the table, saving the changes. Create a form called **Phone List** for the Phone List table using the Form Wizard. Enter five new records. Use the Replace command to locate and change the last name for Alexa Hirsch to Alexa Muirhead who has gotten married since you first created the database. Use the Search feature to locate the record form that has your name as the employee. Select and print the displayed record.

Timeless Treasures Inventory Database ★★★



5. You realize that you have left out some very important fields in the Inventory table you created in the Timeless Treasures database (On Your Own Exercise 4 of Lab 1)—fields that identify the sources where you can obtain the vintage watches your customers are looking for. Repeat your Web search for old watches and note the resources (for example, online shopping services, specialty stores, or individual collectors who are offering these items at online auctions) for the watches in your table. Add a Source Name field, a Source E-mail field and a Source Phone field to the table. Update the table to include this information in the existing records. Apply formatting of your choice to the datasheet. Sort the records according to the source name field and adjust the column widths to accommodate the new information. Print the datasheet. Remove the sort and close the table, saving the changes. Now, to make data entry easier, create a form named **Watches** using the Form Wizard. Use the form to locate the record with your name as the manufacturer, and then print it.

Querying Tables and Creating Reports

LAB 3

Objectives

After completing this lab, you will know how to:

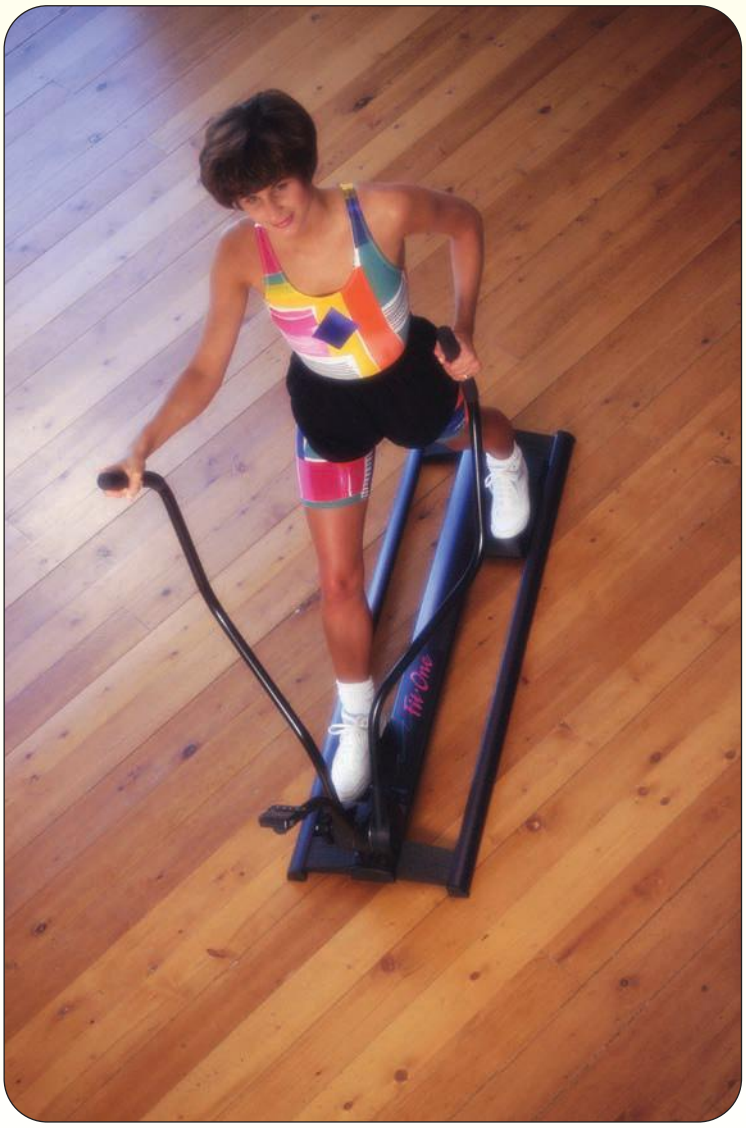
1. Evaluate table design.
2. Establish relationships.
3. Enforce referential integrity.
4. Create and modify a simple query.
5. Query two tables.
6. Filter a query.
7. Find unmatched and duplicate records.
8. Create a Parameter query.
9. Create reports from tables and queries.
10. Display a Totals row.
11. Modify a report design.
12. Select, move, and size controls.
13. Change page margins.
14. Preview and print a report.
15. Compact and back up a database.

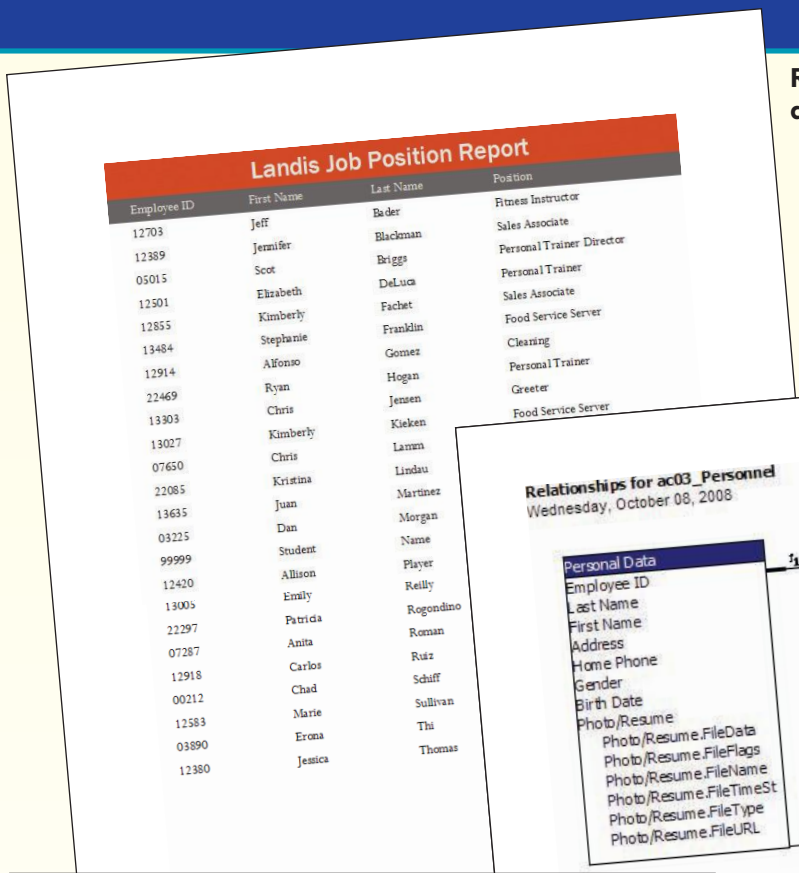
Case Study

Lifestyle Fitness Club

After modifying the structure of the table of Personal Data, you have continued to enter many more records. You also have created a second table in the database that contains employee information about location and job titles. Again, the owners are very impressed with the database. They are eager to see how the information in the database can be used.

As you have seen, compiling, storing, and updating information in a database is very useful. The real strength of a database program, however, is its ability to find the information you need quickly, and to manipulate and analyze it to answer specific questions. You will use the information in the tables to provide the answers to several inquiries about the club employees. As you learn about the analytical features, imagine trying to do the same task by hand. How long would it take? Would it be as accurate or as well presented? In addition, you will create several reports that present the information from the database attractively.

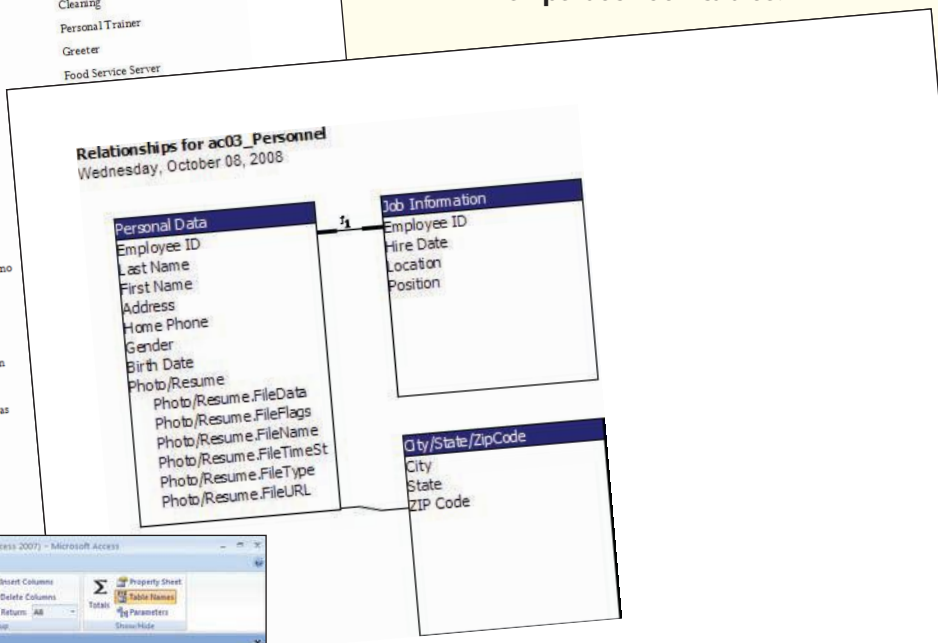




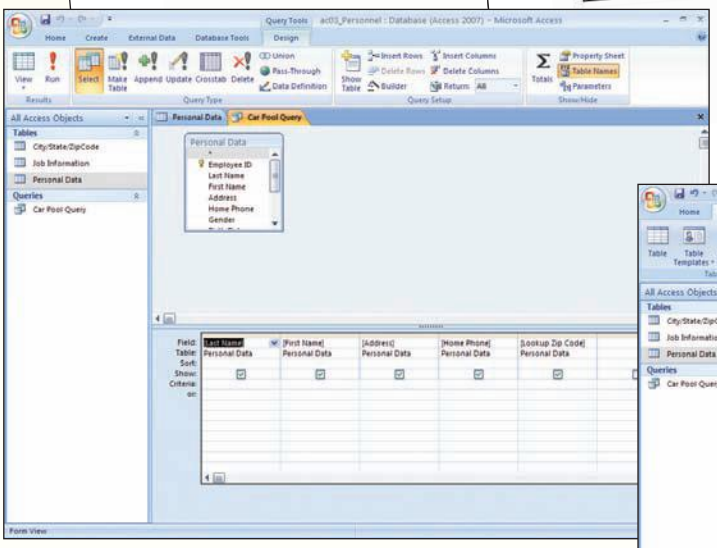
Landis Job Position Report

Employee ID	First Name	Last Name	Position
12703	Jeff	Bader	Fitness Instructor
12389	Jennifer	Blackman	Sales Associate
05015	Scot	Briggs	Personal Trainer Director
12501	Elizabeth	DeLuca	Personal Trainer
12855	Kimberly	Fachet	Sales Associate
13484	Stephanie	Franklin	Food Service Server
12914	Alfonso	Gomez	Cleaning
22469	Ryan	Hogan	Personal Trainer
13303	Chris	Jensen	Greeter
13027	Kimberly	Kieken	Food Service Server
07650	Chris	Lamm	
22085	Kristina	Lindau	
13635	Juan	Martinez	
03225	Dan	Morgan	
99999	Student	Name	
12420	Allison	Player	
13005	Emily	Reilly	
22297	Patricia	Rogondino	
07287	Anita	Roman	
12918	Carlos	Ruiz	
00212	Chad	Schiff	
12583	Marie	Sullivan	
03890	Erona	Thi	
12380	Jessica	Thomas	

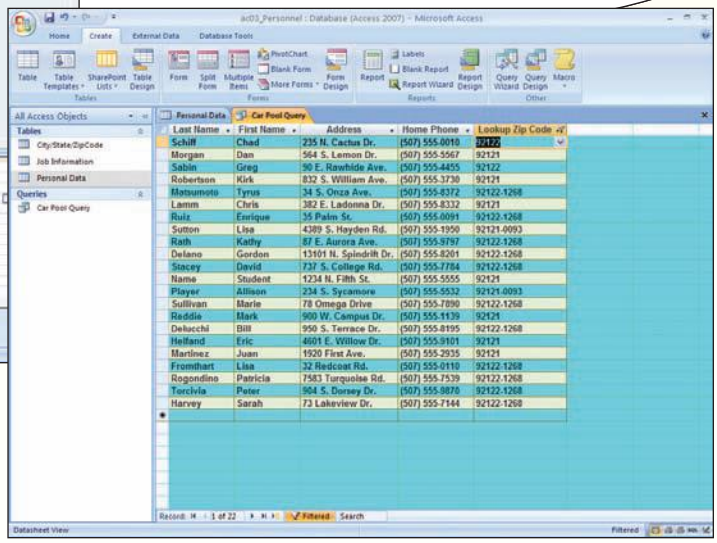
Report created from a multitable query displaying selected fields.



A report showing the relationships between tables.



Query Design view is used to limit information in query results.



Creating queries of data limits the information that is displayed in the results.

Concept Preview

The following concepts will be introduced in this lab:

1. **Relationship** A relationship establishes the association between common fields in two tables.
2. **Query** A query is a request for specific data contained in a database. Queries are used to view data in different ways, to analyze data, and even to change existing data.
3. **Join** A join is an association between a field in one table or query and a field of the same data type in another table or query.
4. **Report** A report is professional-appearing output generated from tables or queries that may include design elements, groups, and summary information.

Refining the Database Design

You have continued to enter Personal Data into the Records table. The updated table has been saved for you as Personal Data in the ac03_Personnel database file.

Note: Before you begin, you may want to create a backup copy of the ac03_Personnel file by copying and renaming it.

1. **Start Office Access 2007.**
2. **Open the ac03_Personnel database file.**
3. **If necessary, respond appropriately to the Security Warning.**

Your screen should be similar to Figure 3.1

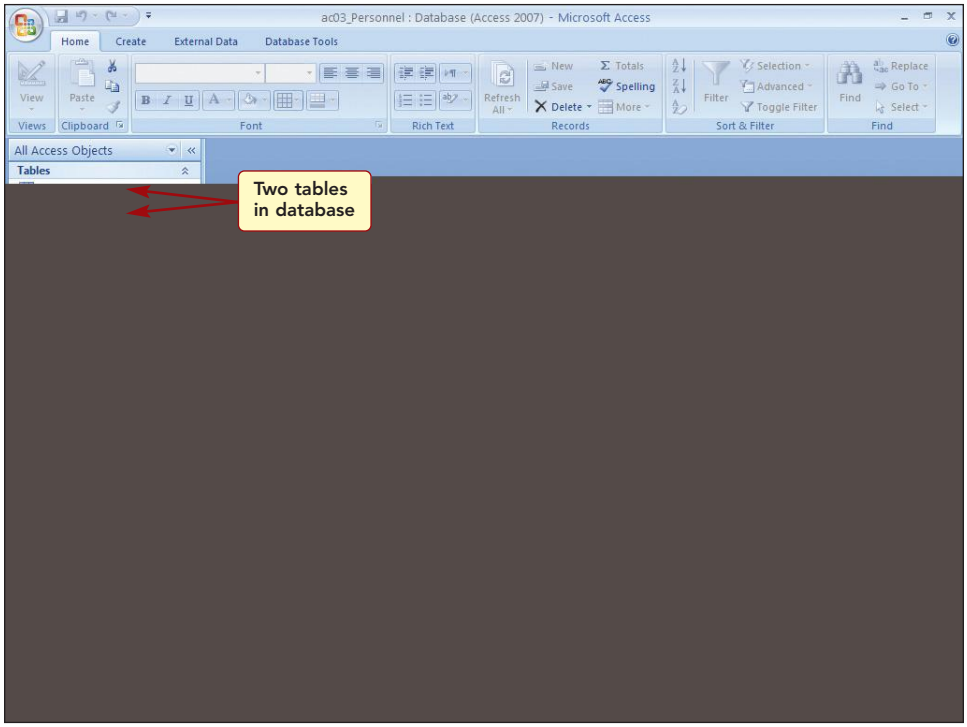


Figure 3.1

The Navigation pane displays the names of two tables in this database: Personal Data and Job Information.

2. **Open the Personal Data table.**

- **Add your information as record number 70 using your special ID number 99999 and your name. Enter Maldin as the city and 92121 as the zip code. Fill in the remaining fields as desired.**
- **Return to the first field of the first record.**
- **Hide the Navigation pane.**

Your screen should be similar to Figure 3.2

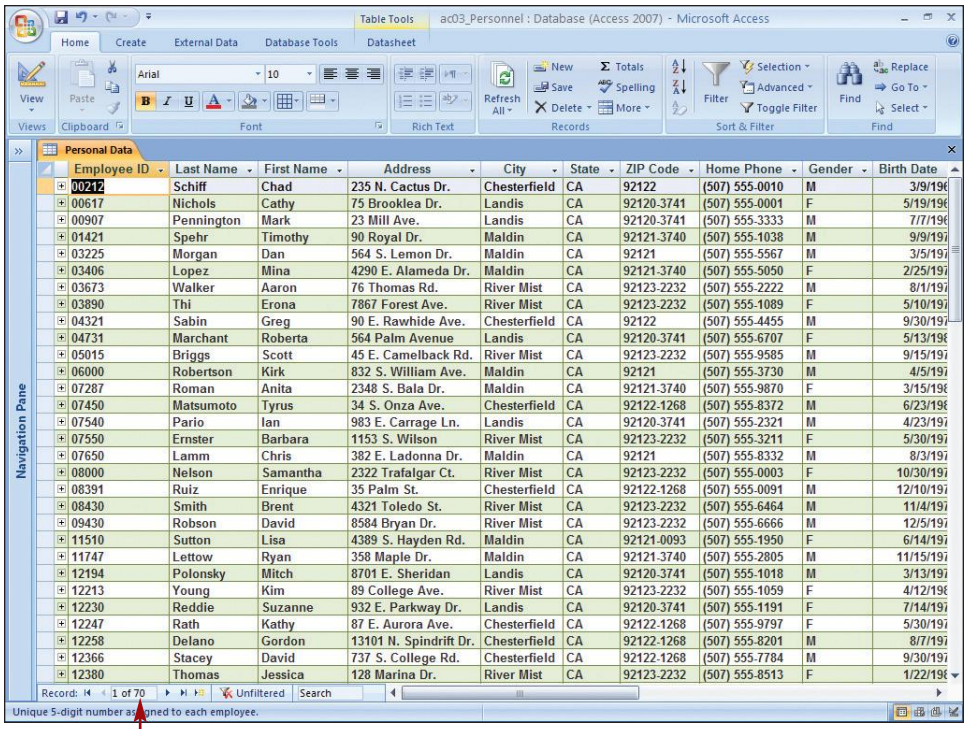


Figure 3.2

Evaluating Table Design

As you continue to use and refine the database, you have noticed that you repeatedly enter the same city, state, and zip code information in the Personal Data table. You decide there may be a better way to organize the table information and will use the Table Analyzer tool to help evaluate the design of the Personal Data table.

1. **Open the Database Tools tab.**

- **Click Analyze Table in the Analyze group.**

Your screen should be similar to Figure 3.3

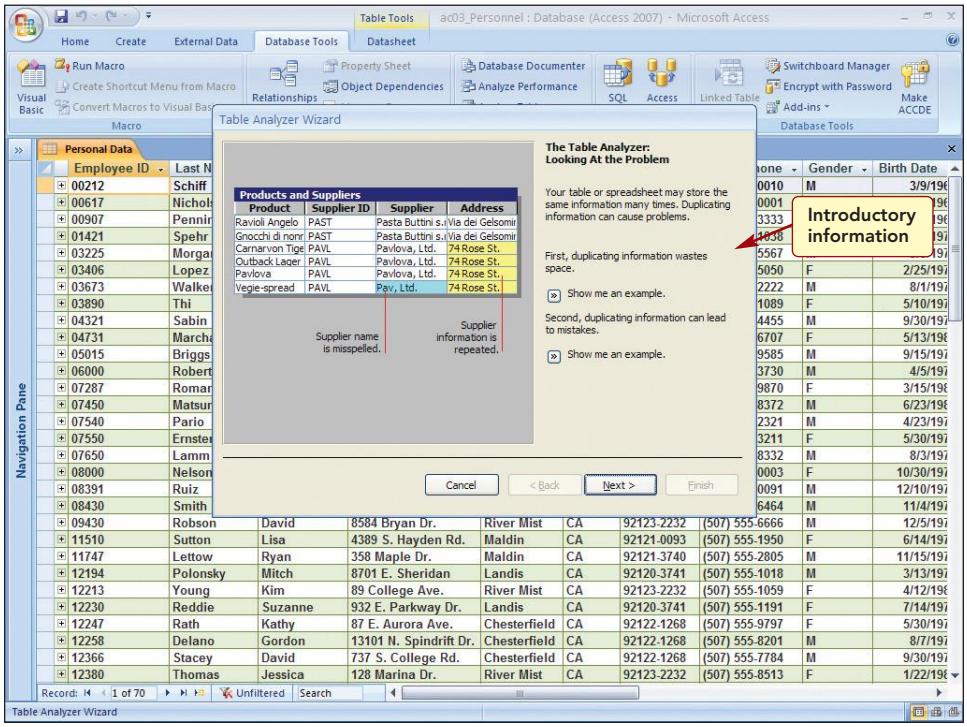


Figure 3.3

The first two windows of Table Analyzer Wizard are introductory pages that review the process that will be used. First it will analyze the information stored in the table by looking for duplicate information. Then, if duplicates are located, it will split the original table and create new tables to store the information a single time to solve the problem.

2 **Click** Next > **to see the next introductory page.**

Click Next > **to move to the first step.**

Your screen should be similar to Figure 3.4

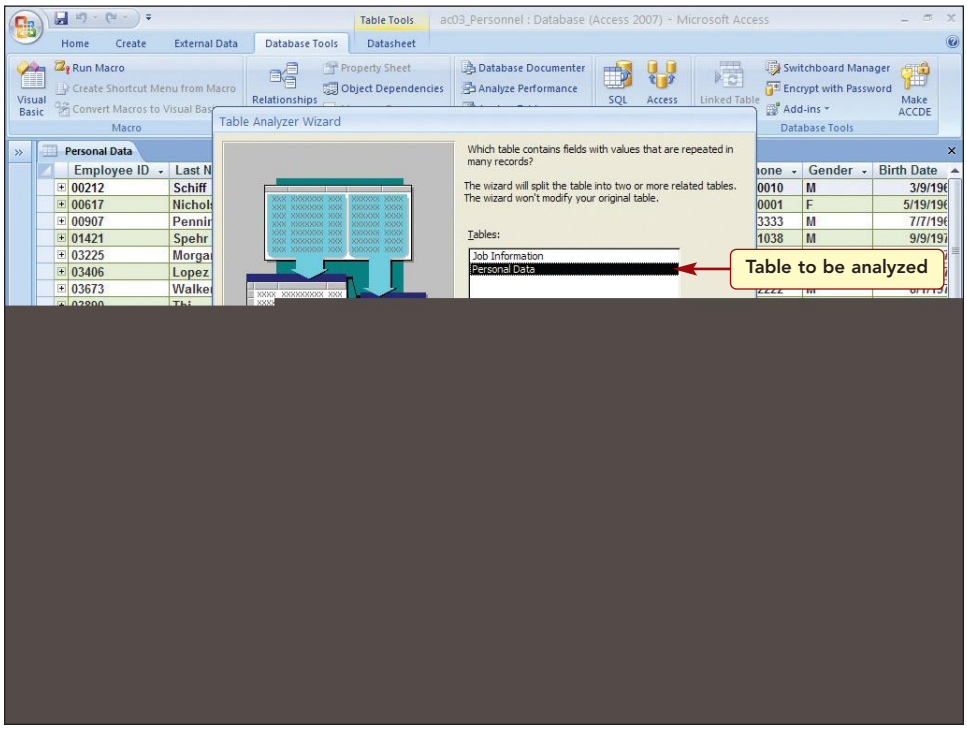


Figure 3.4

In the next two steps, you identify the table you want to evaluate and whether you want the wizard to decide what fields to place in the new table or to make that determination yourself.

3 **Click Next > to accept analyzing the Personal Data table.**

Click Next > to accept letting the wizard decide.

Your screen should be similar to Figure 3.5

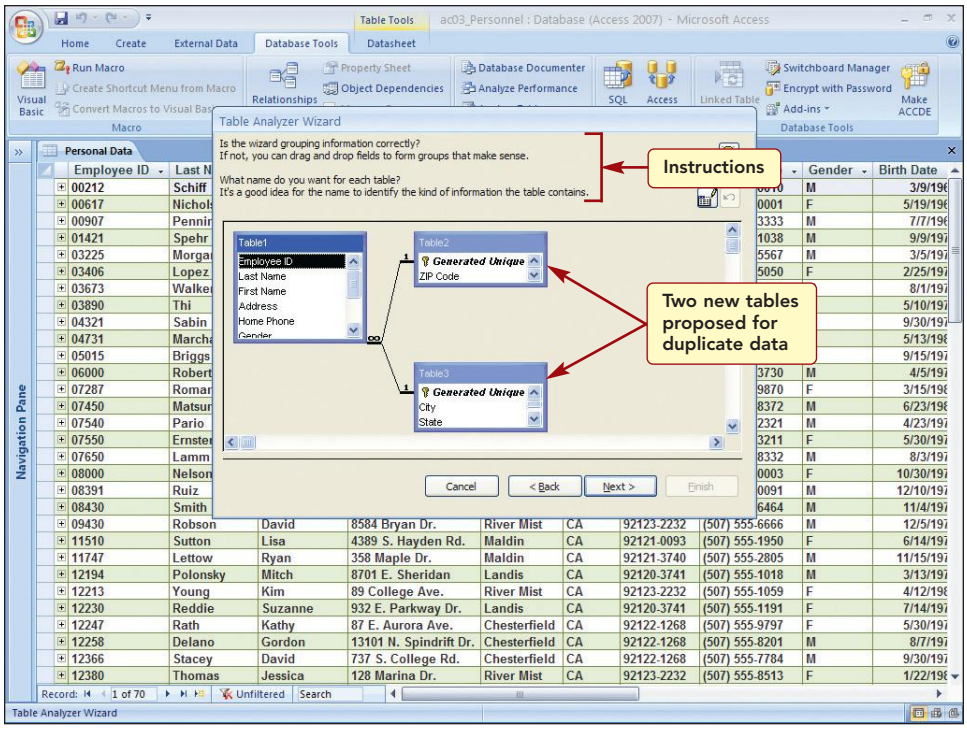


Figure 3.5

The wizard has identified duplicate data in the zip code, city, and state fields and proposes to move these fields into two additional tables: one for zip codes and the other for city and state where the information would be stored only once. The instructions at the top of the Table Analyzer Wizard box ask you to revise the grouping if needed and to create names for the tables. You decide that creating one new table containing the three fields will prevent the duplicate data and will revise the grouping by adding the ZIP Code field to Table3. You will then rename the new table and move to the next step.

4 **Increase the length of the Table1 list to display all the field names.**

Having Trouble?
Drag down the bottom border to size the object.

- **Drag the ZIP Code field in Table2 into Table3.**
- **Move the ZIP Code field below the State field.**
- **Move the Table3 object so that all fields in the list are displayed.**
- **Double-click on the Table3 title bar, enter City/State/ZipCode as the table name, and click** OK **.**
- **Click** Next > **to move to the next step.**

Your screen should be similar to Figure 3.6

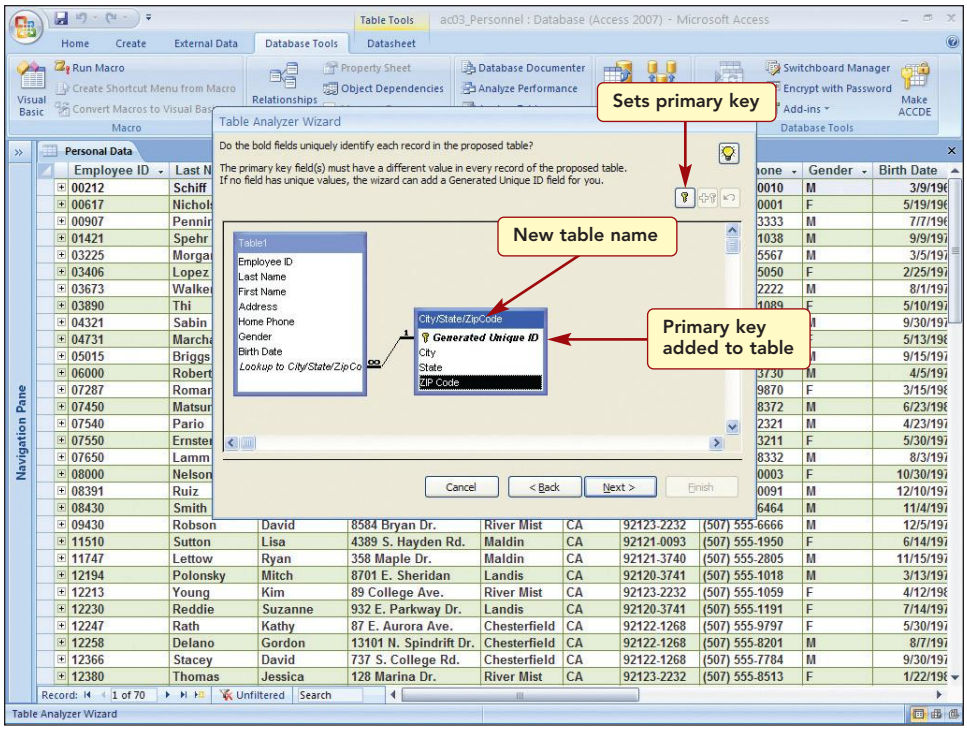


Figure 3.6

This step identifies the fields to use as a primary key in the new tables by bolding the field name. The wizard automatically added a Generated Unique ID field (AutoNumber) to the new table. You will define the ZIP Code field as the primary key field, which will also remove the Unique ID field.

5. **If necessary, select the ZIP Code field and then click** [key].

   Click [Next >] **to move to the next step.**

   Your screen should be similar to Figure 3.7

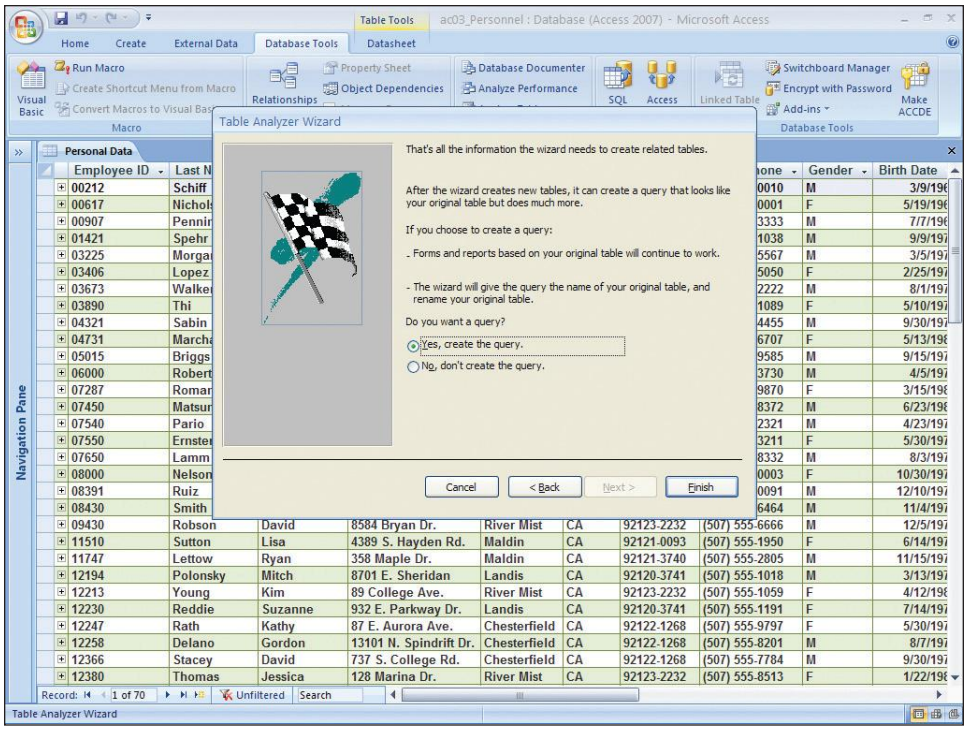


Figure 3.7

The final wizard step asks if you want to create a query. You will be learning about queries shortly so you will not create a query at this time.

6. **Choose No, don't create the query.**

   Click [Finish].

   If an informational message appears, click [OK] **to continue.**

   Your screen should be similar to Figure 3.8

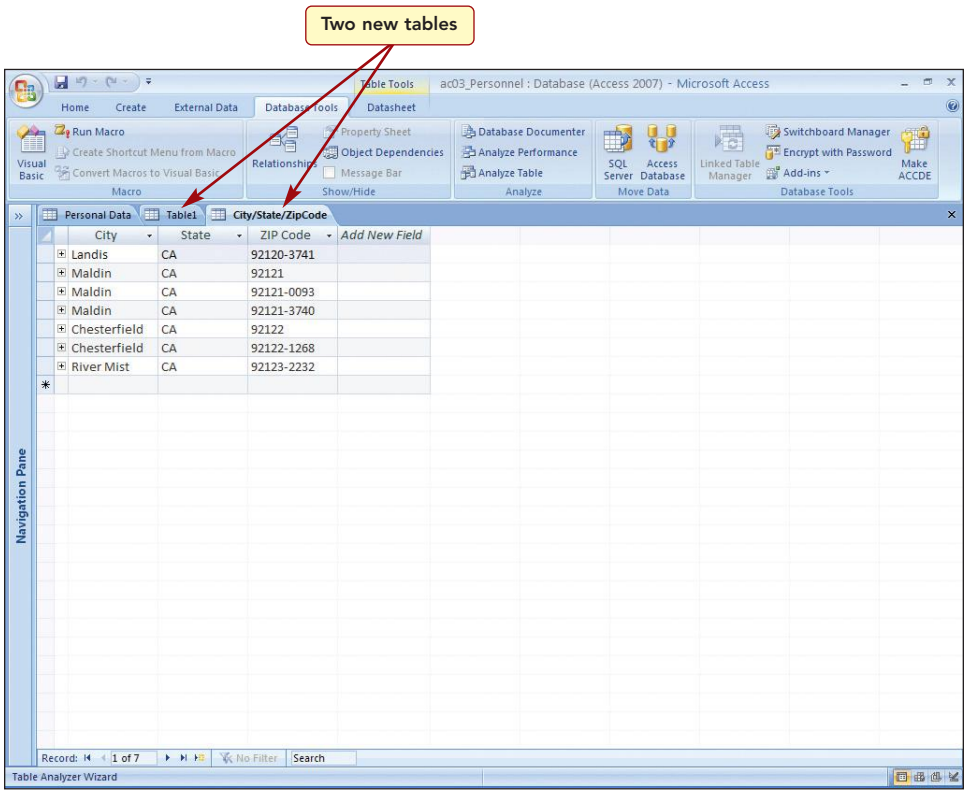


Figure 3.8

The two new tables are opened and the City/State/ZipCode table is displayed. The ZIP Code field is the primary key field and has been associated with the data in the new Table1.

7 **Display Table1 and move to the Lookup to City/State/ZipCode field for the first record.**

- **Best fit the field column.**

Your screen should be similar to Figure 3.9

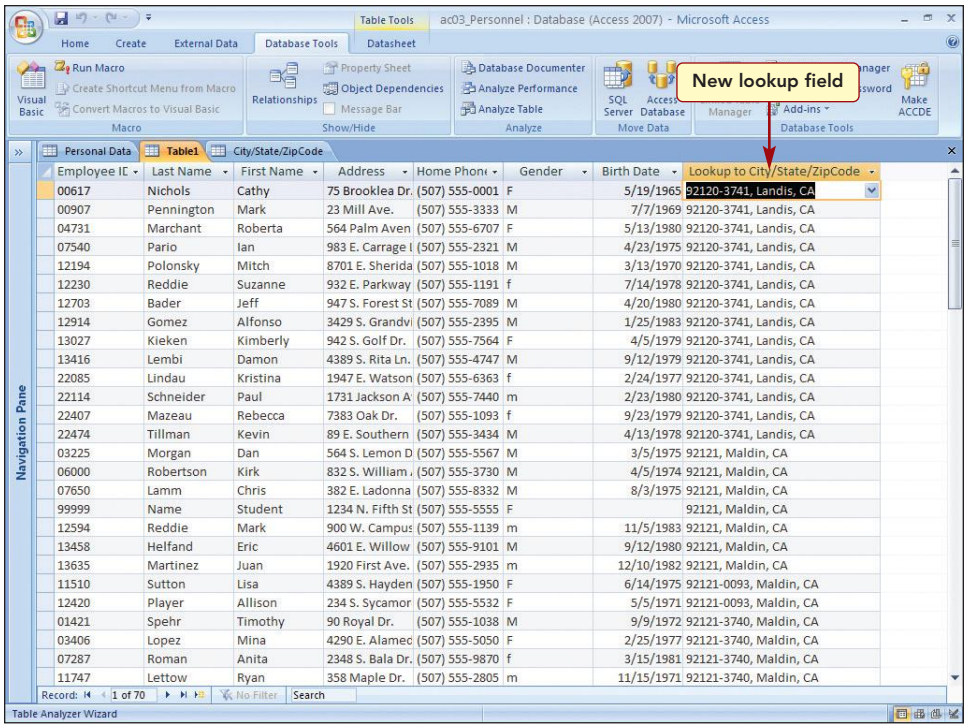


Figure 3.9

The Lookup field displays the zip code, city, and state information from the associated table and the individual fields that stored this information for each record have been deleted. You can now see how using a separate table to store this data saves space by not duplicating the information and also makes data entry more accurate. The zip code field appears first because it is the primary key field.

Creating a Table List Lookup Field

Now your database contains two tables that hold duplicate data, Table1 and Personal Data, and you need to decide which table to keep. You notice that Table1 did not maintain the association to the Job table and the field and datasheet formatting. Rather than make these same changes again to Table1, you decide to modify the Personal Data table by creating a lookup field to the City/State/ZipCode table.

1. **Display the Personal Data table.**

- **Right-click on the Add New Field column and choose Lookup Column.**
- **Run the Lookup Wizard and specify the following settings:**
  - **Look up the values in a table or query.**
  - **Use the City/State/ZipCode table.**
  - **Add all three columns to the selected fields list.**
  - **Do not specify a sort order.**
  - **Clear the checkmark from the Hide key column option to display all three columns.**
  - **Store the ZIP Code value in the lookup column.**
  - **Enter the field name Lookup Zip Code.**
- **Click** Finish **.**
- **Click in the Lookup field for the first record and display the drop-down list.**

Your screen should be similar to Figure 3.10

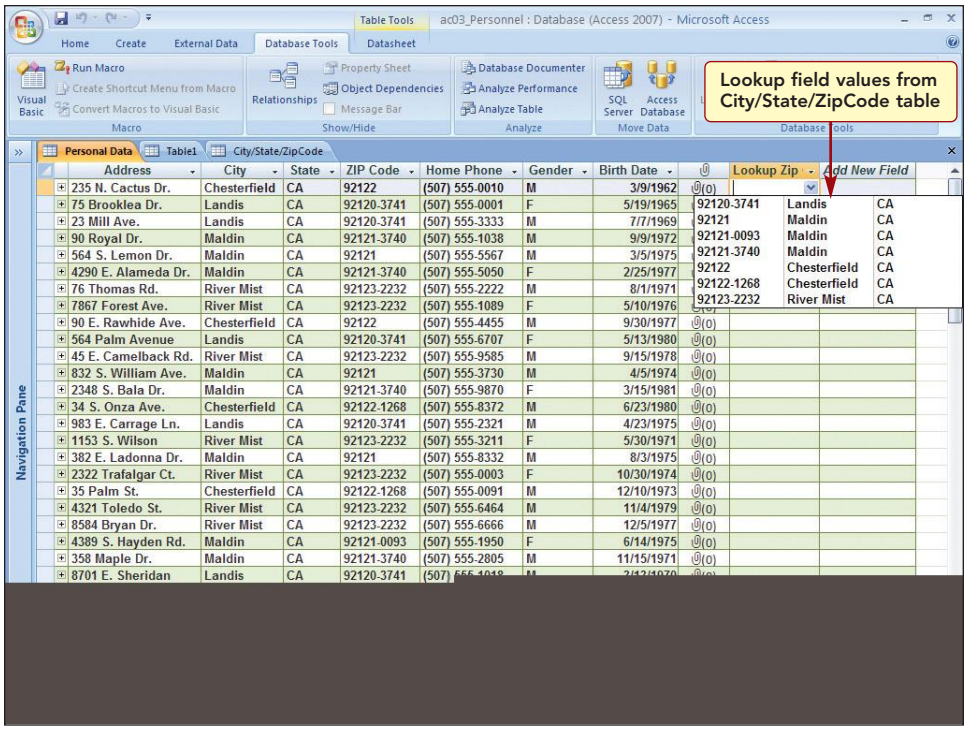


Figure 3.10

Now you need to add the data for this column. Instead of selecting each zip code, you will copy the data in the existing ZIP Code field column into the lookup column. Then, because you will no longer need them, you will delete the City, State, and ZIP Code fields. Finally, you will move the Lookup column after the Address column. You can move a column by selecting it and then dragging it to its new location.

2. **Copy the data in the ZIP Code field column to the Lookup Zip Code column.**

Having Trouble?

Remember, to select an entire column, you click on its column heading when the mouse pointer is ↓.

- **Delete the City, State, and ZIP Code columns.**
- **Select the Lookup Zip Code column.**
- **Click and hold the mouse button on the column heading.**

Additional Information

When the mouse pointer is ↖, it indicates that you can drag to move the selection.

- **Drag the Lookup column to the left until a thick line is displayed between the Address and Home Phone columns.**
- **Release the mouse button.**
- **Best fit the Lookup Zip Code column.**

Your screen should be similar to Figure 3.11

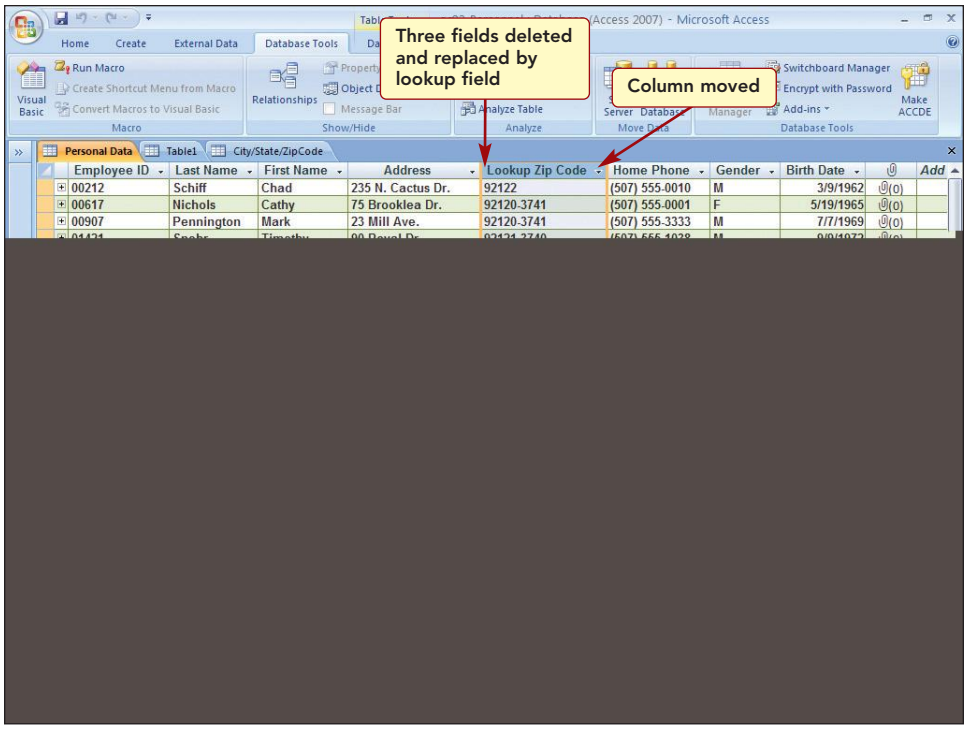


Figure 3.11

Deleting a Table

Now that the Personal Data table is modified, you will delete the duplicate Table1.

1. **Close all tables, saving changes when prompted.**
2. **Redisplay the Navigation pane.**
3. **Select Table1 and click Delete in the Records group of the Home tab.**
4. **Click Yes to confirm the deletion from all groups.**

Another Method

You also could press Delete or choose Delete from the object's shortcut menu.

Your screen should be similar to Figure 3.12

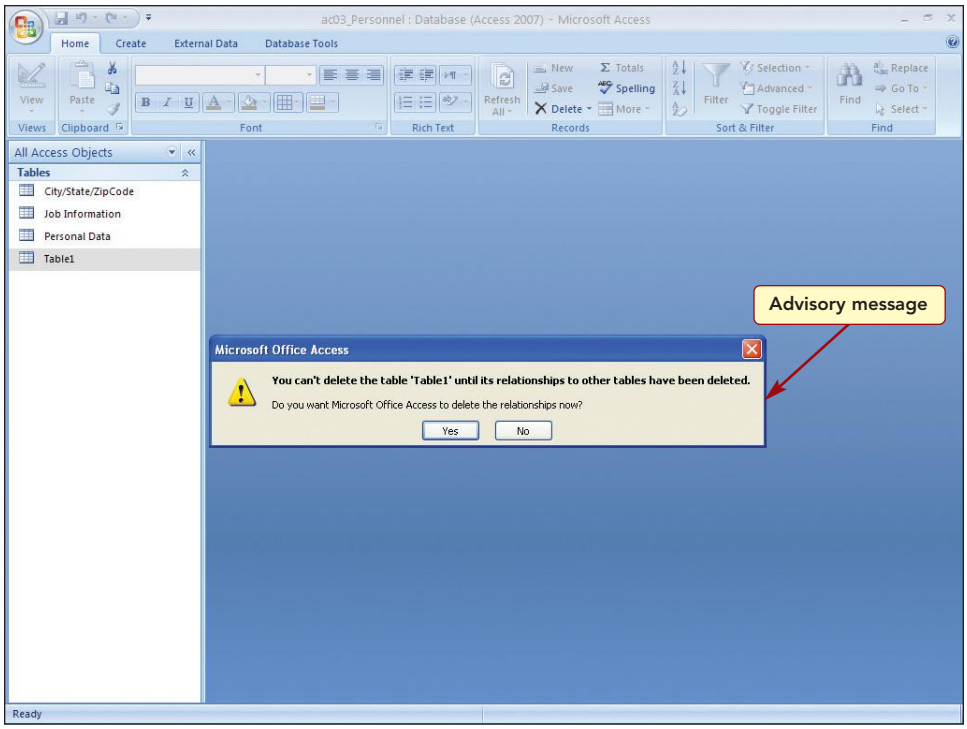


Figure 3.12

The advisory message warns that the table cannot be deleted until its relationships to other tables have been deleted. Rather than have the program remove the relationships for you, you will look at the relationships that have been created between all tables first.

2. **Click No.**
3. **Click OK.**

Defining and Modifying Relationships

The Relationships window is used to create and edit relationships.

1. **Click Relationships in the Show/Hide group of the Database Tools tab.**
2. **Click All Relationships in the Relationships group of the Relationship Tools Design tab.**

Your screen should be similar to Figure 3.13

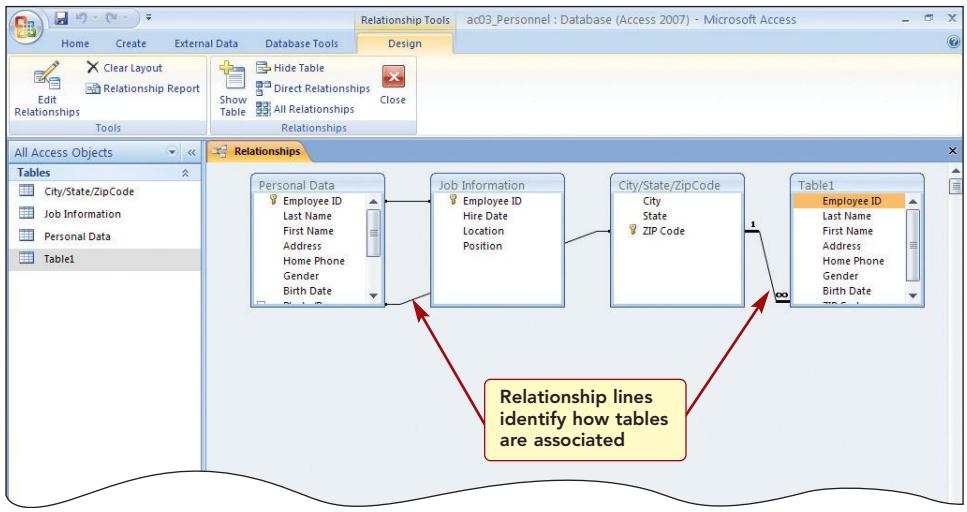


Figure 3.13

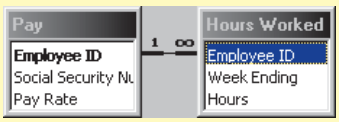
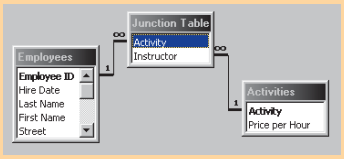
Concept 1

Relationship

1

A **relationship** establishes the association between **common fields** in two tables. The related fields must be of the same data type and contain the same kind of information but can have different field names. The exception to this rule occurs when the primary key field in one of the tables is the AutoNumber type, which can be related to another AutoNumber field or to a Number field, as long as the Field Size property is the same for both. This is also the case when both fields are AutoNumber or Number—they always have to be the same field size in order to be related.

There are three types of relationships that can be established between tables: one-to-one, one-to-many, and many-to-many.

Relationship Type	Description
One-to-one 	An association between two tables in which each record in the first table contains a field value that corresponds to (matches) the field value of one record in the other table.
One-to-many 	An association between two tables in which the primary key field value in each record in the primary table (the "one" side of this relationship) corresponds to the value in the matching field or fields of many records in the related table.
Many-to-many 	An association between two tables in which one record in either table can relate to many records in the other table. In this type of relationship, a third table, called a **junction table**, is used to hold the primary key fields from the other two tables and serves as a bridge between them.

Once relationships are established, rules can be enforced, called the rules of **referential integrity**, to ensure that relationships between tables are valid and that related data is not accidentally changed or deleted. The rules ensure that a record in a primary table cannot be deleted if matching records exist in a related table, and a primary key value cannot be changed in the primary table if that record has related records.

Viewing Relationships

The Relationships window displays a field list for each table in the database and identifies how the tables are associated with relationship lines. To see the relationships better, you will rearrange and size the field lists in the window.

1. **Click on the City/State/Zip Code field list title bar and drag the field list below the Job Information field list.**

- **Move the Table1 field list to the right of the City/State/ZipCode field list.**
- **Increase the length of the Personal Data field list so that all fields are displayed.**
- **Increase the length of the Table1 field list so that all fields are displayed.**

Your screen should be similar to Figure 3.14

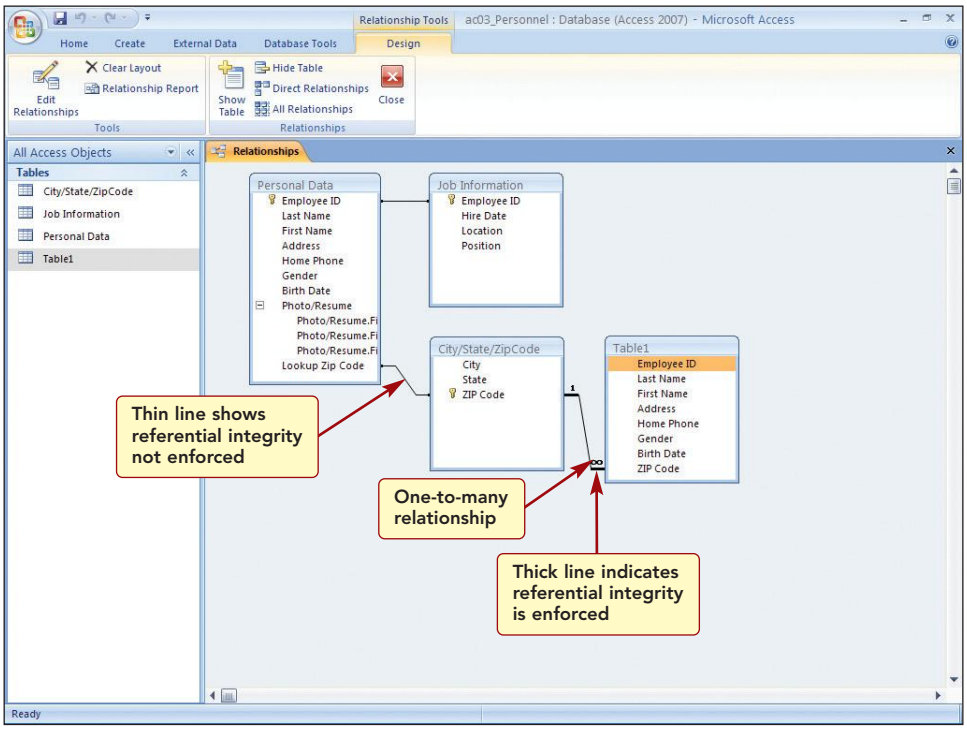


Figure 3.14

Now it is easier to follow the relationship lines. The Personal Data and the Job Information tables are related by the Employee ID fields and are connected by a thin relationship line. This relationship was established when you created the Job Information table by copying an existing field to a new table.

There is also a relationship between the Lookup Zip Code field and the ZIP Code field in the City/State/ZipCode table. A thin line between common fields shows the relationship does not support referential integrity.

The third relationship that exists is between the ZIP Code field in the City/State/ZipCode table and the ZIP Code field in Table1. This line is thicker at both ends, which indicates that referential integrity has been enforced. It also displays a 1 at one end of the line and an infinity symbol (∞) over the other end. This tells you the relationship is a one-to-many type relationship.

Deleting Relationships

The first relationship change you want to make is to remove the relationship between the City/State/ZipCode table and Table1 so that you can delete the table. To edit or delete a relationship, click on the relationship line to select it. It will appear thicker to show it is selected. Then it can be modified.

1. **Click on the relationship line between the City/State/ZipCode table and Table1.**

2. **Press Delete to remove it.**

3. **Click Yes to confirm the deletion.**

Another Method
You also can select Delete from the shortcut menu.

Your screen should be similar to Figure 3.15

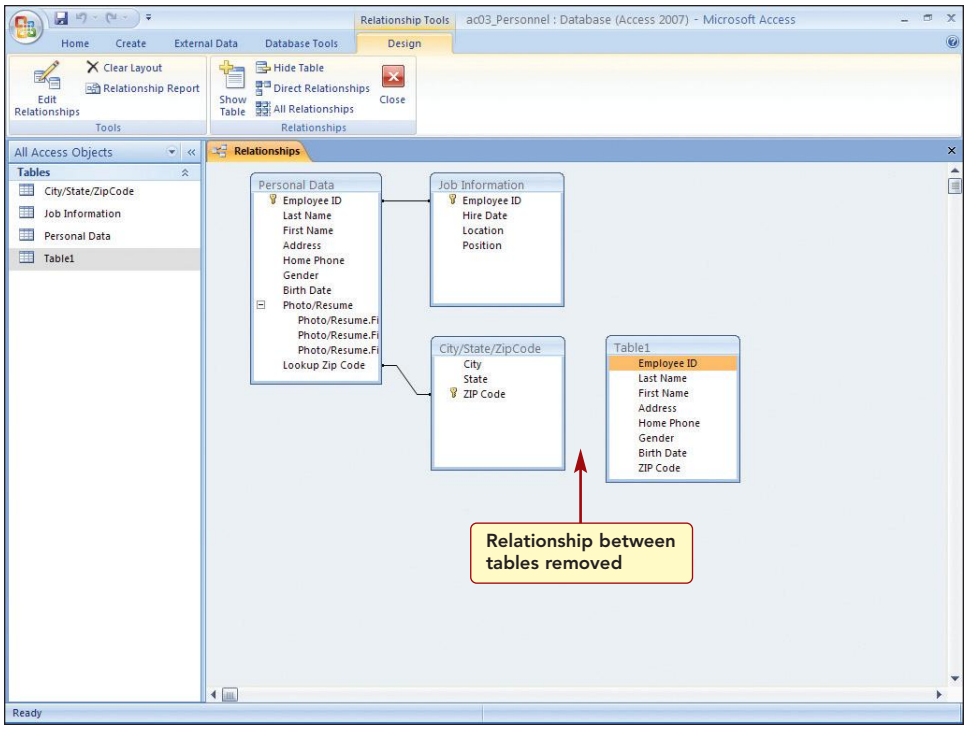


Figure 3.15

The relationship line has been removed between the tables. Now you can delete the table.

1. **Select Table1 in the Navigation pane and press Delete.**

2. **Click Yes to confirm the deletion from all groups.**

Your screen should be similar to Figure 3.16

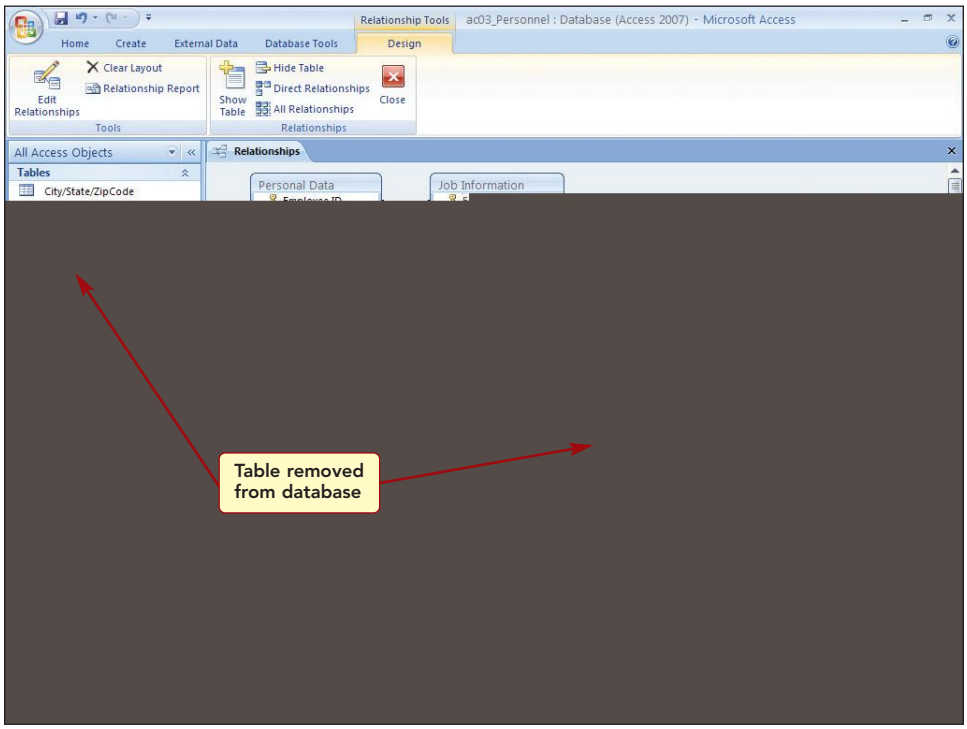


Figure 3.16

The Table1 field list is removed from the Relationships window and the table object is removed from the Navigation pane, showing the table has been deleted from the database.

Enforcing Referential Integrity

Next, you want to change the relationship between the Employee ID fields to support referential integrity.

1. **Right-click the relationship line between the Personal Data and the Job Information tables.**

2. **Select Edit Relationship from the shortcut menu.**

Having Trouble?

If the wrong shortcut menu appears, click on another location on the line to try again.

Another Method

You also can double-click the join line to open the Edit Relationships dialog box or click  in the Tools group of the Relationship Tools Design tab.

3. **Select Enforce Referential Integrity.**

Your screen should be similar to Figure 3.17

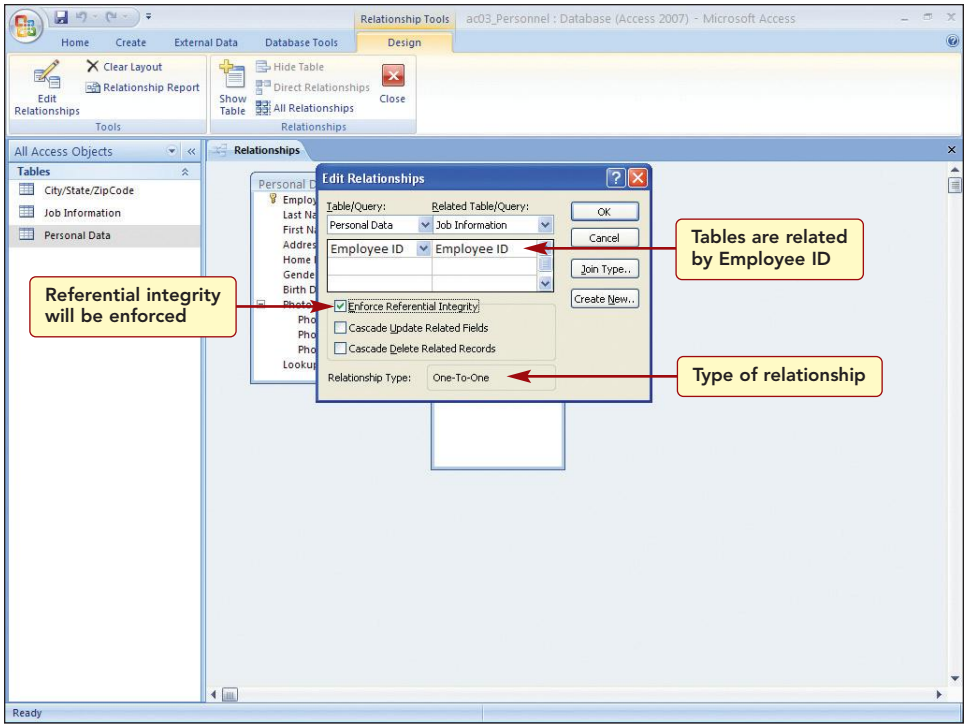


Figure 3.17

The Edit Relationships dialog box shows the tables and their current relationship. Selecting the Enforce Referential Integrity option also makes the Cascade Update and Cascade Delete options available. Selecting these options ensures that if you change a primary key or delete a record, all fields that reference the primary key of that record are likewise updated or deleted in both tables. This prevents inconsistent and orphaned records (records that do not have a matching primary key record in the associated table). You will select both these options. In addition, you can see the relationship type is one-to-one.

2 **Choose Cascade Update Related Fields.**

Choose Cascade Delete Related Records.

Click OK **.**

Click on the Job Information field list to remove the selection from the relationship line.

Your screen should be similar to Figure 3.18

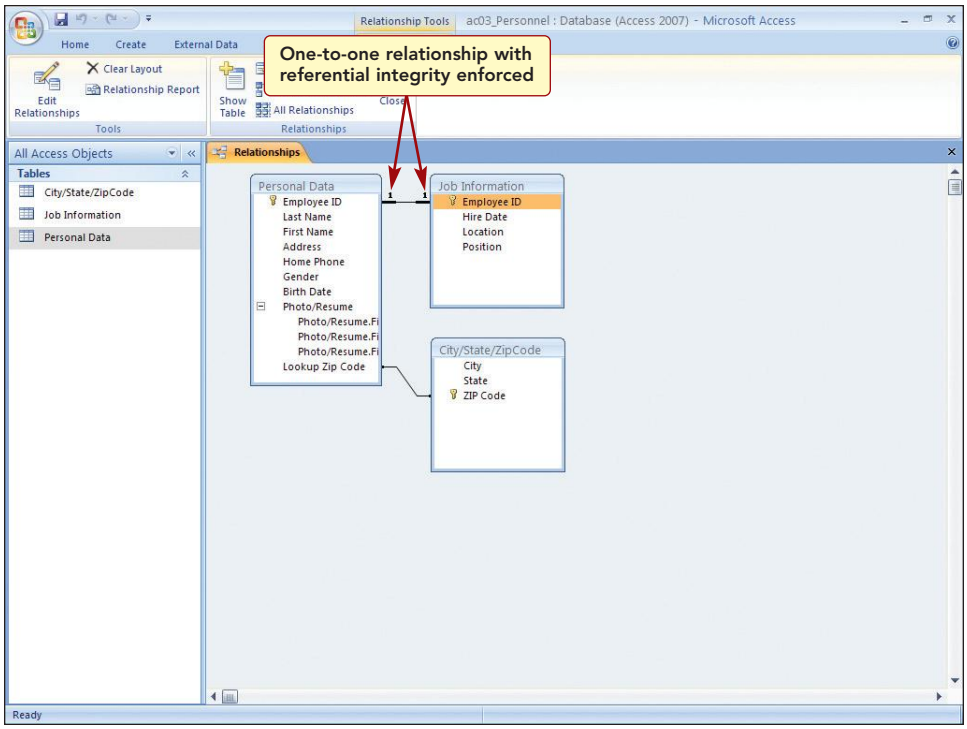


Figure 3.18

Once referential integrity is enforced, the relationship line changes and identifies the type of relationship. The relationship line appears thicker at each end indicating that referential integrity is enforced. Also, the type of relationship is identified. The number 1 next to each table above the relationship line shows a one-to-one relationship exists between these tables.

Creating a Relationship

Although the Lookup Zip Code relationship is already created, you will delete it and then create it again to learn how to create relationships. To do this, you drag the field that you want to relate from one table to the related field in the other table.

1. **Select and delete the ZIP Code relationship.**

2. **Drag the Lookup Zip Code field from the Personal Data table to the ZIP Code field in the City/State/ZipCode table.**

3. **Click** Create.

Your screen should be similar to Figure 3.19

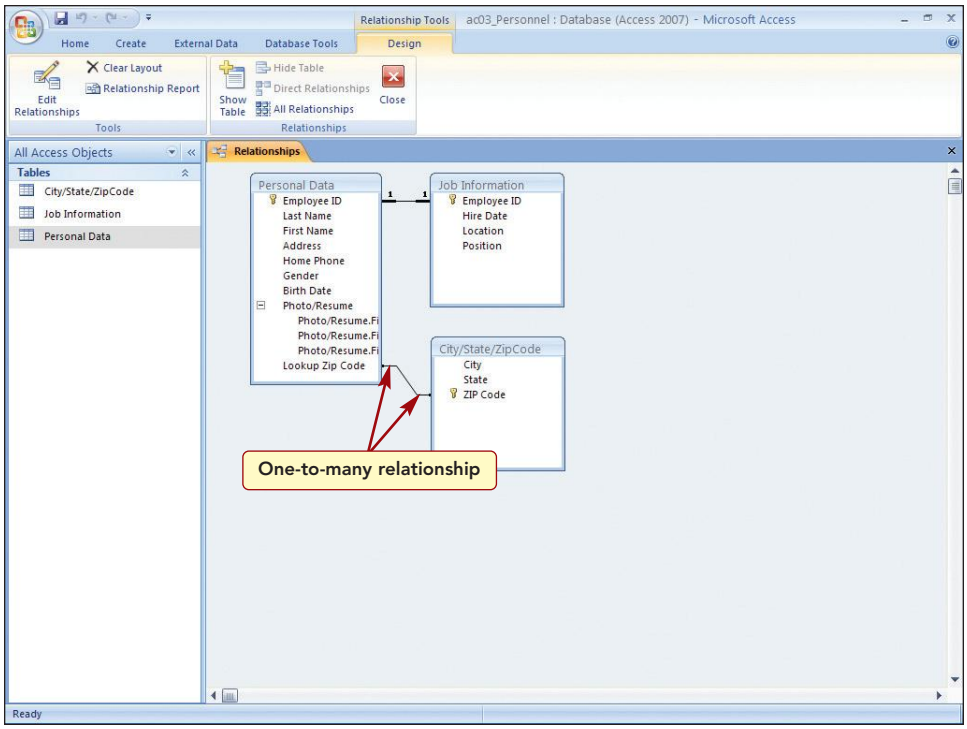


Figure 3.19

The related tables again have a relationship line connecting them. The relationship type is one-to-many because there are many records in the Personal Data table that use the same zip code value and only one record in the City/State/ZipCode table for each zip code. Referential integrity was not enforced because you will want to remove records in the Personal Data table that have matching data in the City/State/ZIPCode table.

The tables in your database are now all related. Once referential integrity has been enforced, a warning message is automatically displayed if one of the rules is broken, and you are not allowed to complete the action you are trying to do.

4. **Click** Close **to close the Relationships window.**

5. **Click** Yes **in response to the prompt to save the layout.**

The relationships and layout are saved.

Creating a Filter

Now you are ready to start gathering some information from the database again. You have added many more records to the database tables and you decide to continue working on the list of employees to help Juan create a car pool. Because the table no longer contains a separate City field, you will need to create a new filter using the ZIP Code field.

1. **Open the Personal Data table.**
2. **Open the Lookup Zip Code field's drop-down menu**
3. **Choose Select all to clear all the selections and then select only the 92121, 92121-0093, 92122, and 92122-1268 values.**
4. **Click** OK **.**

Your screen should be similar to Figure 3.20

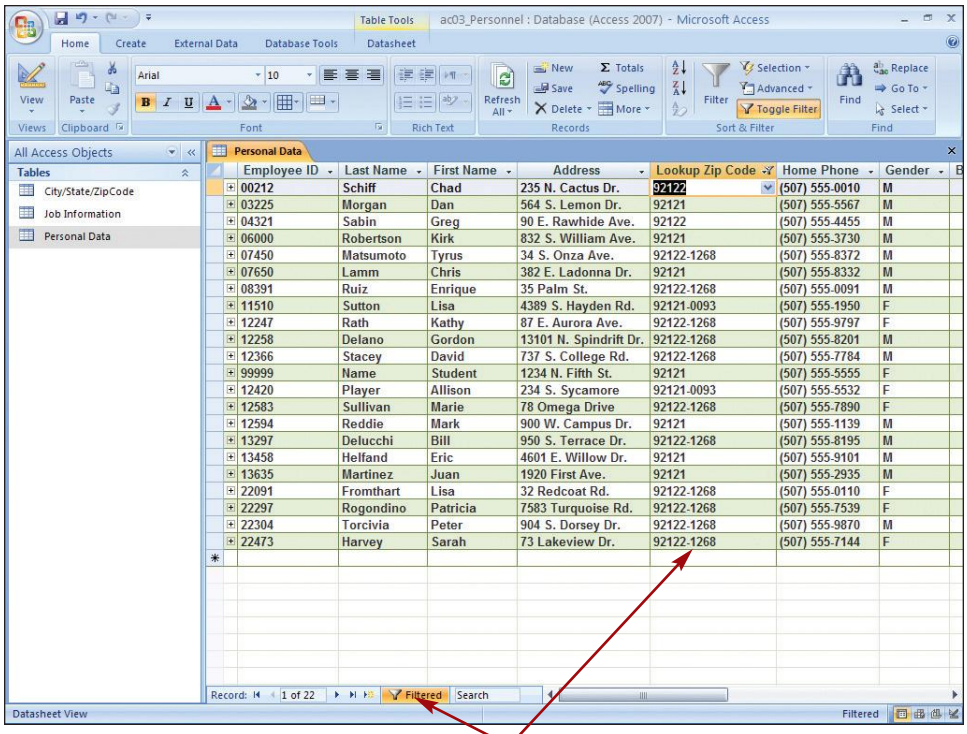


Figure 3.20

Twenty-two records meet these criteria. However, the filtered datasheet still includes more information about each employee than Juan needs to contact people about car pooling.

Querying a Database

To obtain the exact information you need to give Juan for his car pool, you will use a query.

Concept 2

Query

2 A **query** is a request for specific data contained in a database. Queries are used to view data in different ways, to analyze data, and even to change existing data. Because queries are based on tables, you also can use a query as the source for forms and reports. The five types of queries are described in the following table.

Query Type	Description
Select query	Retrieves the specific data you request from one or more tables, then displays the data in a query datasheet in the order you specify. This is the most common type of query.
Crosstab query	Summarizes large amounts of data in an easy-to-read, row-and-column format.
Parameter query	Displays a dialog box prompting you for information, such as the **criteria** for locating data. For example, a parameter query might request the beginning and ending dates, then display all records matching dates between the two specified values.
Action query	Used to make changes to many records in one operation. There are four types of action queries:

	Type	Description
	Make-table query	Creates a new table from selected data in one or more tables
	Update query	Makes update changes to records, when, for example, you need to raise salaries of all sales staff by 7 percent
	Append query	Adds records from one or more tables to the end of other tables
	Delete query	Deletes records from a table or tables

SQL query	Created using SQL (Structured Query Language), an advanced programming language used in Access.

You will create a simple select query to obtain the results for the car pool. Creating a query adds a query object to the database file. It is a named object, just like a form, that can be opened, viewed, and modified at any time.

Using the Query Wizard

Query Design view or the Query Wizard can be used to create a query. The process is much like creating a table or form. You will first use the Query Wizard to guide you through the steps.

1. Click Query Wizard in the Other group of the Create tab.

- Click Yes in response to the prompt to save the table.

Your screen should be similar to Figure 3.21

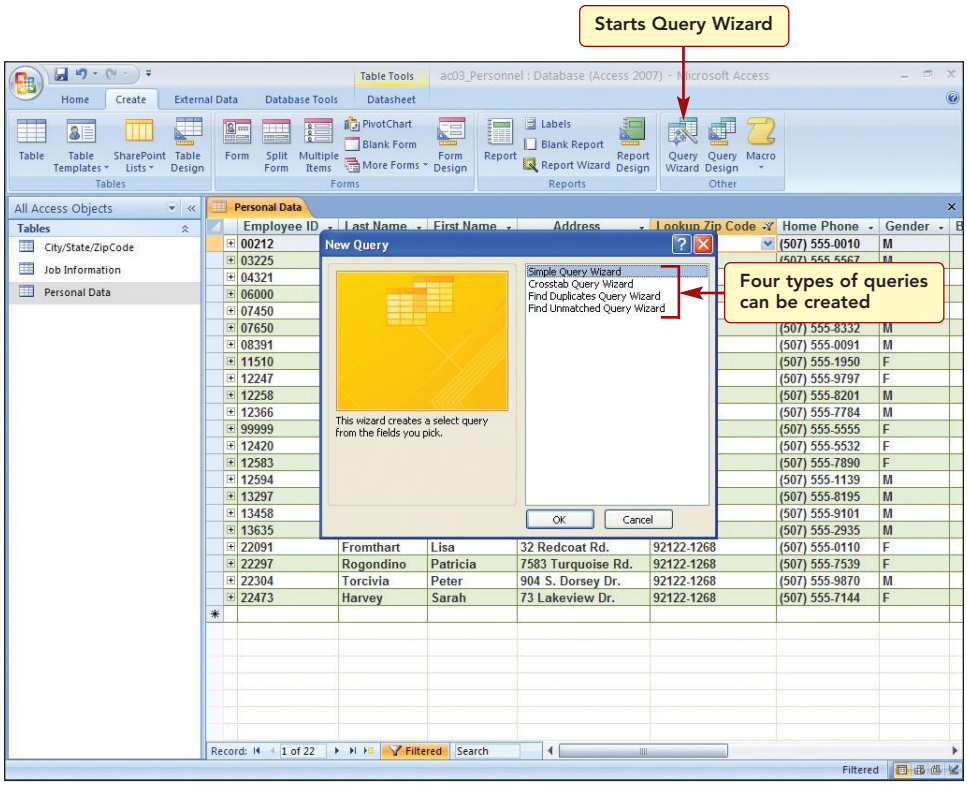


Figure 3.21

From the New Query dialog box, you select the type of query you want to create using the wizard.

Query Wizard	Type of Query
Simple	Select query
Crosstab	Crosstab query
Find Duplicates	Locates all records that contain duplicate values in one or more fields in the specified tables
Find Unmatched	Locates records in one table that do not have records in another. For example, you could locate all employees in one table who have no hours worked in another table.

You will use the Simple Query Wizard to create a select query to see if it gives you the results you want.

2 **If necessary, select Simple Query Wizard.**

Click OK.

Your screen should be similar to Figure 3.22

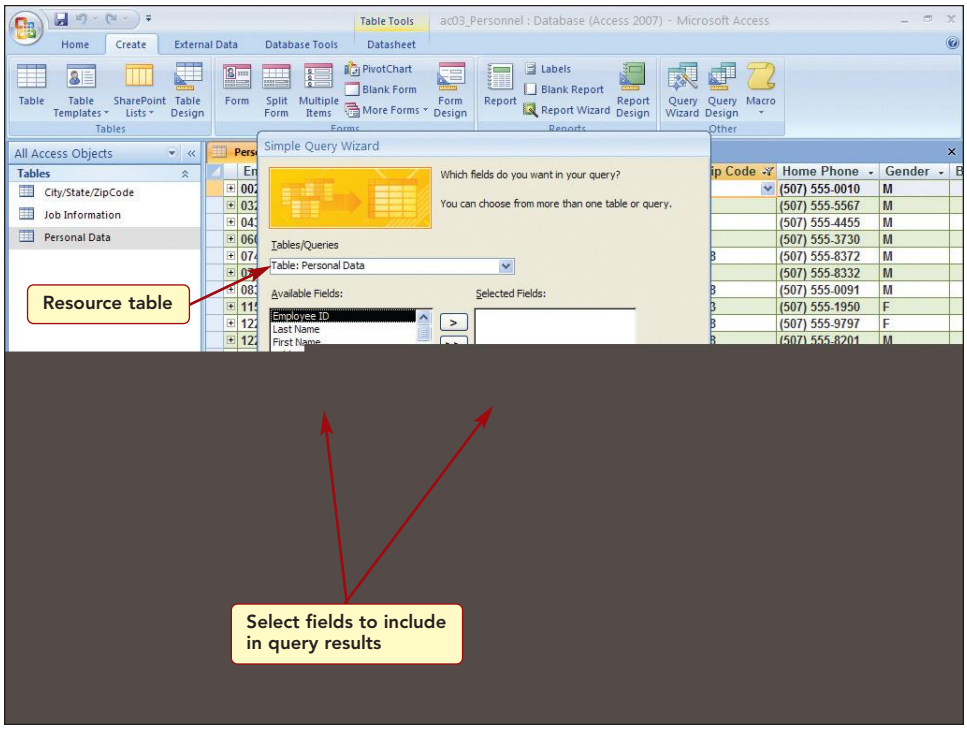


Figure 3.22

In the first Simple Query Wizard dialog box, you specify the resource table that will be used to supply the data and the fields that you want displayed in the query result, just as you did when creating a form. You will use the Personal Data table as the resource table and select the fields you want displayed in the query output.

3 **If necessary, select the Personal Data table from the Table/Queries drop-down list.**

Add the Last Name, First Name, Address, Home Phone, and Lookup Zip Code fields to the Selected Fields list.

Additional Information

The quickest way to add a field to the Selected Fields list is to double-click its field name in the Available Fields list.

Click Next >.

Your screen should be similar to Figure 3.23

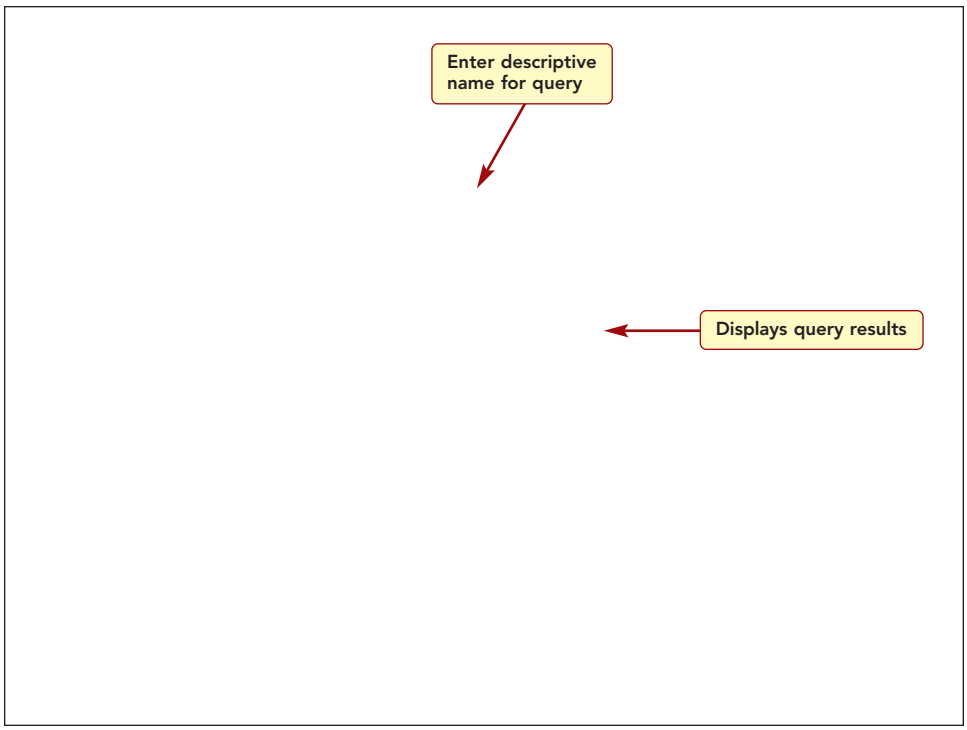


Figure 3.23

In the last Simple Query Wizard dialog box, you specify a name for your query and whether you want to open it to see the results or modify it in Design view. You also can have Access display Help messages while you are working on your query by clicking the corresponding box at the bottom of this wizard screen. You decide that you just want to display the query results, and you want to give the query a name that will identify it.

4 **Replace the suggested title in the text box with Car Pool Query.**

Click Finish.

Your screen should be similar to Figure 3.24

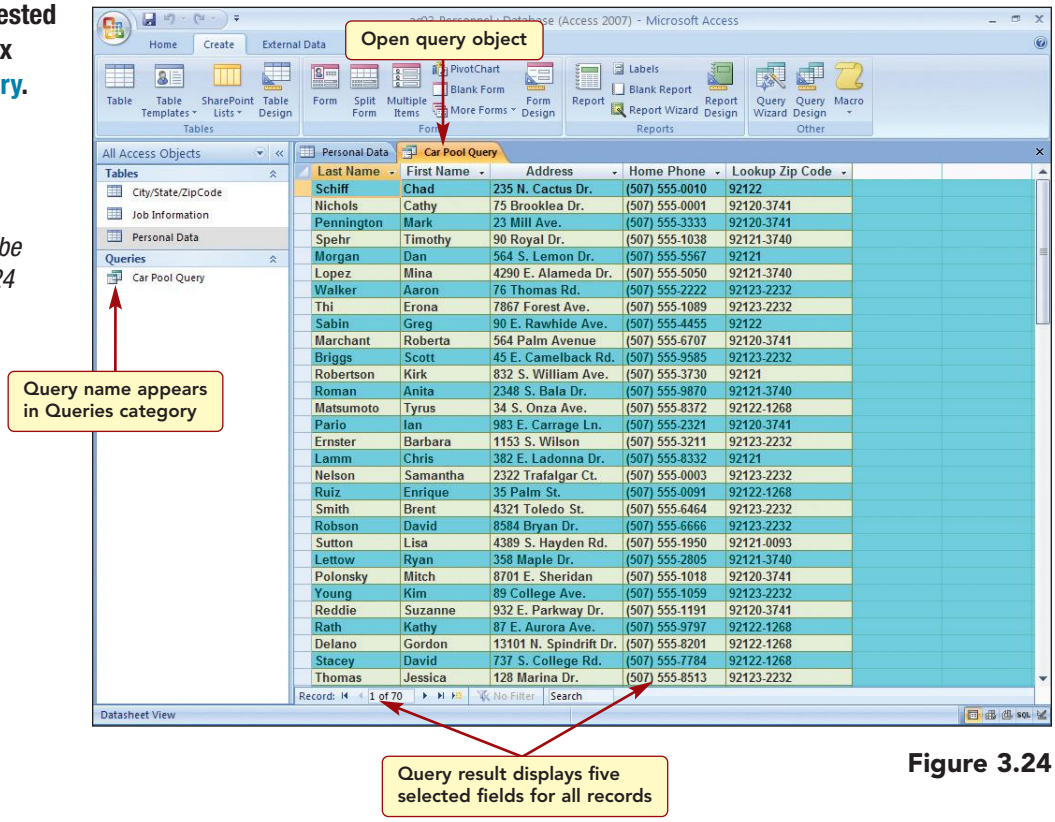


Figure 3.24

The query result displays the five specified fields for all records in the table in a new query datasheet object. The object's tab displays the query name. The Navigation pane also displays the name of the new query object in the Queries category.

Filtering a Query

Although the query result displays only the fields you want to see, it includes all the records in the table. To display only those records in the zip code areas needed for Juan, you can filter the query results. The filter criteria are available with the Personal Data table only and need to be recreated to apply to the query results.

1 **Filter the query to display only records with zip codes of 92121, 92121-0093, 92122, and 92122-1268.**

Your screen should be similar to Figure 3.25

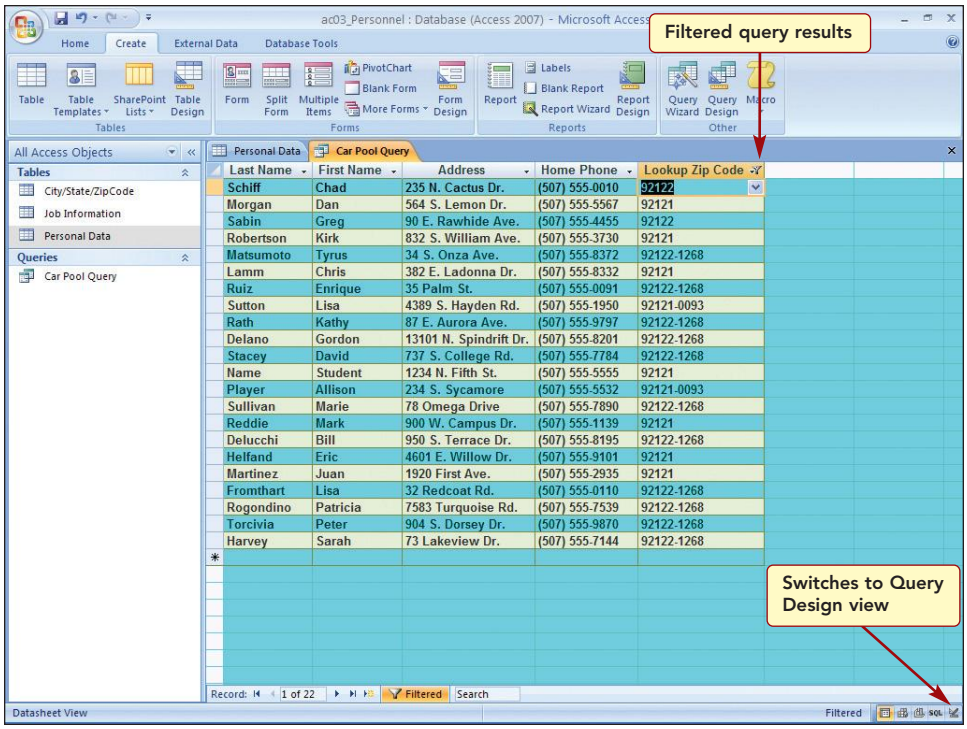


Figure 3.25

Now the Car Pool Query results display the same 22 records as the filtered Personal Data table. Although these results are closer to what you need, you are still not satisfied. You want the results to display the city as well as the zip code. Additionally, it does not tell you which employees work at the Landis location. To make these refinements to the query, you need to use Query Design view.

2 **Click Design View in the status bar to switch to Query Design view.**

Your screen should be similar to Figure 3.26

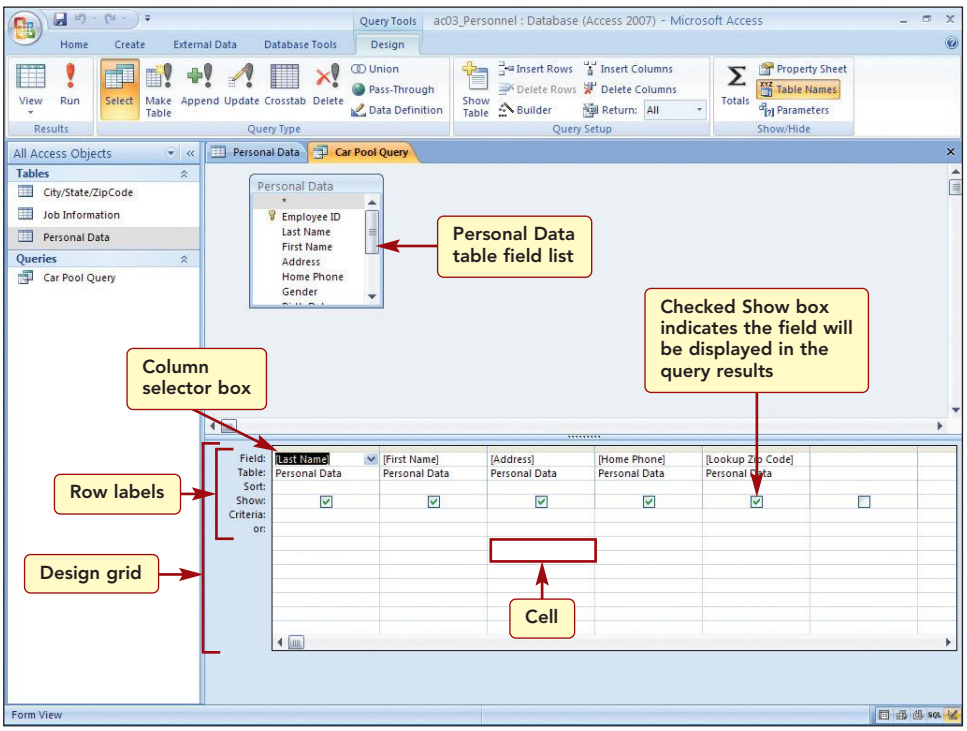


Figure 3.26

Using Query Design View

Query Design view can be used to create a new query as well as modify the structure of an existing query. This view automatically displays the Query Tools Design tab, which contains commands that are used to create, modify, and run queries.

Query Design view is divided into two areas. The upper area displays a list box of all the fields in the selected table. This is called the **field list.** The lower portion of the window displays the **design grid** where you enter the settings that define the query. Each column in the grid holds the information about each field to be included in the query datasheet. The design grid automatically displays the fields that are specified when a query is created using a Query Wizard.

Above the field names is a narrow bar called the **column selector bar,** which is used to select an entire column. Each **row label** identifies the type of information that can be entered. The intersection of a column and row creates a cell where you enter expressions to obtain the query results you need.

The boxes in the Show row are called Show boxes. The **Show box** for a field lets you specify whether you want that field displayed in the query result. A checked box indicates that the field will be displayed; an unchecked box means that it will not.

Adding a Second Table to the Query

To display the city information for each employee in the query results, you need to add the City/State/ZipCode table to the query design. A query that uses information from two or more tables to get the results is called a **multitable query.**

1. Click Show Table in the Query Setup group of the Query Tools Design tab.
2. If necessary, select the City/State/ZipCode table.
3. Click Add.
4. Close the Show Table dialog box.
5. Increase the length of the Personal Data field list to display all the fields.

Your screen should be similar to Figure 3.27

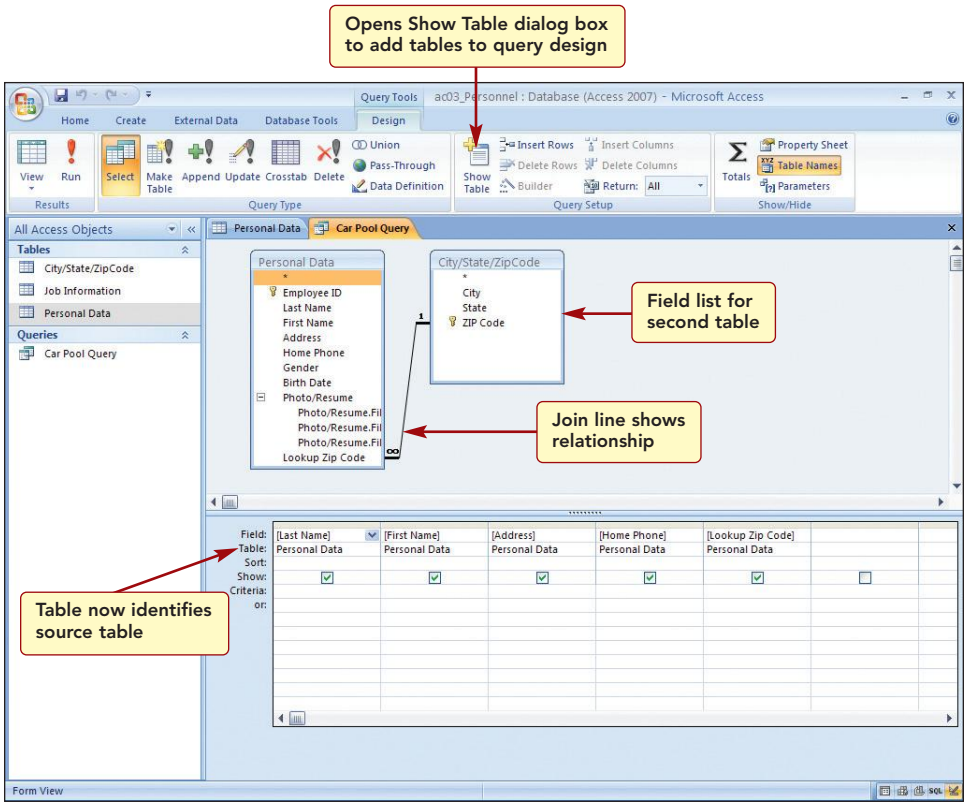


Figure 3.27

The field list for the second table has been added to the Query Design window. When multiple tables are added to a query, Access automatically creates joins between the tables.

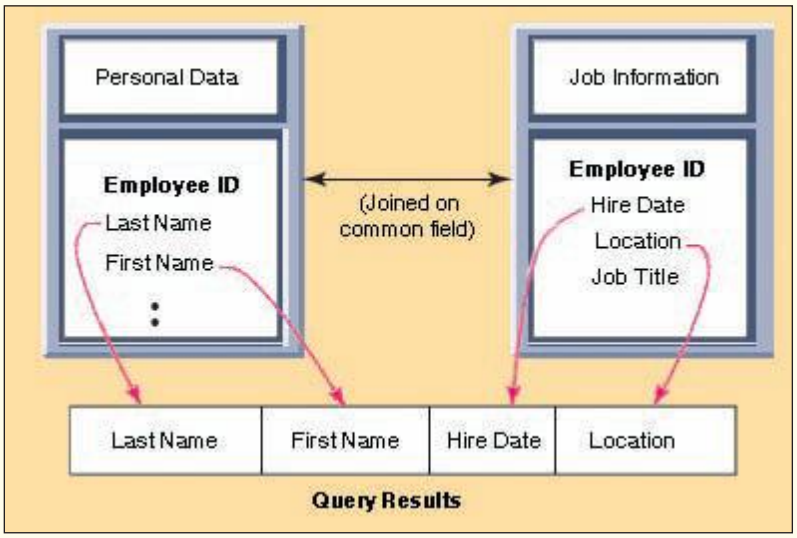
Concept 3

Join

3 A **join** is an association that is created in a query between a field in one table or query and a field of the same data type in another table or query. The join is based on the relationships that have already been defined between tables. A **join line** between the field lists identifies the fields on which the relationship is based.

If a table did not already have a relationship defined, a join would be created between common fields in the tables if one of the common fields is a primary key. If the common fields have different names, however, Access does not automatically create the join. In those cases, you would create the join between the tables using the same procedure that is used to create table relationships.

The difference between a relationship line and a join line in a query is that the join line creates a temporary relationship that establishes rules that the data must match to be included in the query results. Joins also specify that each pair of rows that satisfy the join conditions will be combined in the results to form a single row.



Having Trouble?
If the Table row is not displayed, click Table Names in the Show/Hide group.

In this case, the join line correctly indicates that the two tables are related and that the ZIP Code is the common field.

Additionally a Table row has been added to the grid. It displays the name of the table from which each field is selected.

MORE ABOUT

Sometimes you may want to add a second copy of the same table to a query. To learn how to do this, see "4 Creating and Modifying Queries" in the More About appendix.

Adding Fields

You want the query results to display the City information for each record. To do this, you need to add the City field from the City/State/ZipCode field list to the design grid. You can use the following methods to add fields to the design grid:

- Select the field name and drag it from the field list to the grid. To select several adjacent fields, press Shift while you click the field names. To select nonadjacent fields, press Ctrl while clicking the field names. To select all fields, double-click the field list title bar. You can then drag all the selected fields into the grid, and Access will place each field in a separate column.

- Double-click on the field name. The field is added to the next available column in the grid.

- Select the Field cell drop-down arrow in the grid, and then choose the field name.

In addition, if you select the asterisk in the field list and add it to the grid, Access displays the table or query name in the field row followed by a period and asterisk. This indicates that all fields in the table will be included in the query results. Also, using this feature will automatically include any new fields that may later be added to the table, and will exclude deleted fields. You cannot sort records or specify criteria for fields, however, unless you also add those fields individually to the design grid.

1 **Double-click City in the City/State/ZipCode field list to add it to the grid.**

Your screen should be similar to Figure 3.28

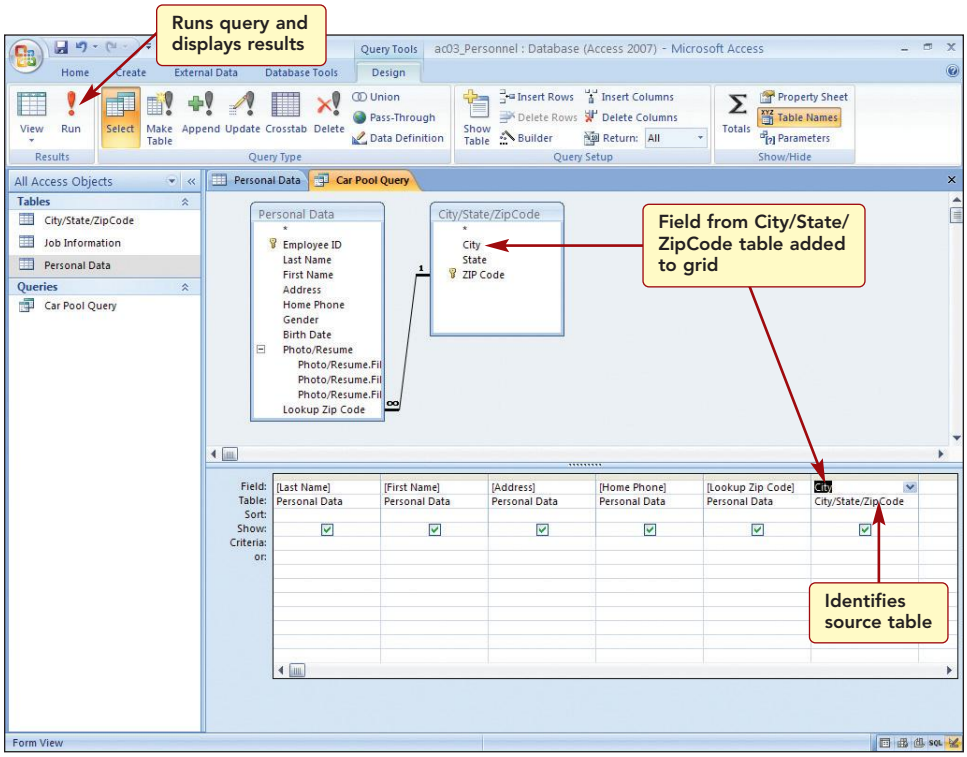


Figure 3.28

Notice the Table row displays the name of the table from which the City field was drawn. Sometimes when multiple tables are specified in a query, they have fields with the same names. For example, two tables may have fields

named Address; however, the address in one table may be a personal address and the other table may be a business address. It is important to select the appropriate field from a table that contains the data you want to appear in the query. The Table row makes it clear from which table a field was drawn.

Now, you want to see the query results. To do this, you run the query.

2. **Click Run in the Results group of the Query Tools Design tab.**

- **If necessary, click OK in response to the informational message.**

- **Click Toggle Filter in the Sort & Filter group to display the filtered list.**

Your screen should be similar to Figure 3.29

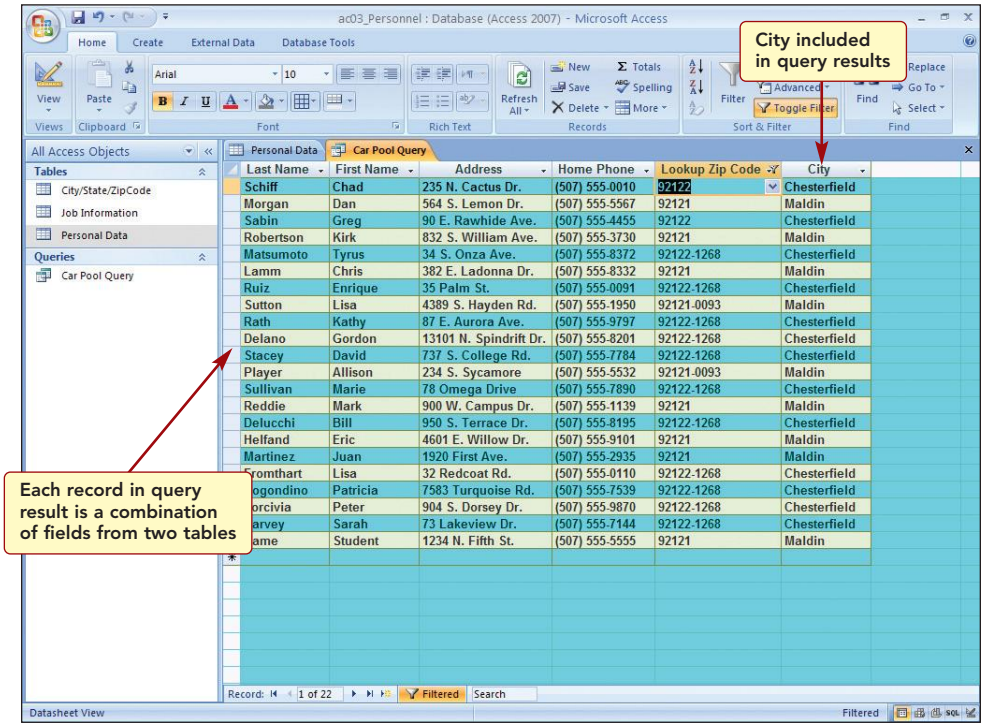


Figure 3.29

The city for each record is displayed in the results. Now, each record in the query result datasheet includes information from both tables. This is because of the type of join used in the query. There are three basic types of joins, as described in the following table.

Join Type	Description
Inner join	Tells a query that rows from one of the joined tables corresponds to rows in the other table on the basis of the data in the joined fields. Checks for matching values in the joined fields and when it finds matches, combines the records and displays them as one record in the query results.
Outer join	Tells a query that although some of the rows on both sides of the join correspond exactly, the query should include all rows from one table even if there is no match in the other table. Each matching record from two tables is combined into one record in the query results. One table contributes all of its records even if the values in its joined field do not match the field values in the other table. Outer joins can be left outer joins or right outer joins. In a query with a left outer join, all rows in the left table are included in the results and only those rows from the other table where the joining field contains values common to both tables are included. The reverse is true with a right outer join.
Unequal joins	Records to be included in the query results are based on the value in one join field being greater than, less than, not equal to, greater than or equal to, or less than or equal to the value in the other join field.

MORE ABOUT



To learn how to create a left or right join, see "4 Creating and Modifying Queries" in the More About appendix.

In a query, the default join type is an inner join. In this case, it checked for matching values in the ZIP Code fields, combined matching records, and displayed them as one record in the query result.

Additionally, by applying the filter, only those records meeting the filter criteria are displayed.

Each time you run the query, you would need to reapply the filter. Rather than do this, you can specify the criteria in the query design and they would automatically be used each time the query is run.

Specifying Criteria

The Criteria row is used to enter the criteria expression (field value or values) and a comparison operator. A **criteria expression** is an expression that will select only records that meet certain limiting criteria. First, you will enter criteria in the City field to locate and display only those records where the city is Maldin. In the Criteria row of the City column, you will enter the criteria expression to select only those records. It is not necessary to enter = (equal to) in the criteria, because it is the assumed comparison operator.

Additional Information
Refer to Lab 2 for a review of expressions and operators.

1. **Click Design View.**
2. **Move to the City Criteria cell.**
3. **Type Maldin.**

Additional Information
The criteria expression is not case-sensitive.

4. **Press ↵Enter.**

Another Method
As with other Access tables and forms, you can use ↵Enter, Tab, and the arrow keys to move from cell to cell in the Query Design grid.

Your screen should be similar to Figure 3.30

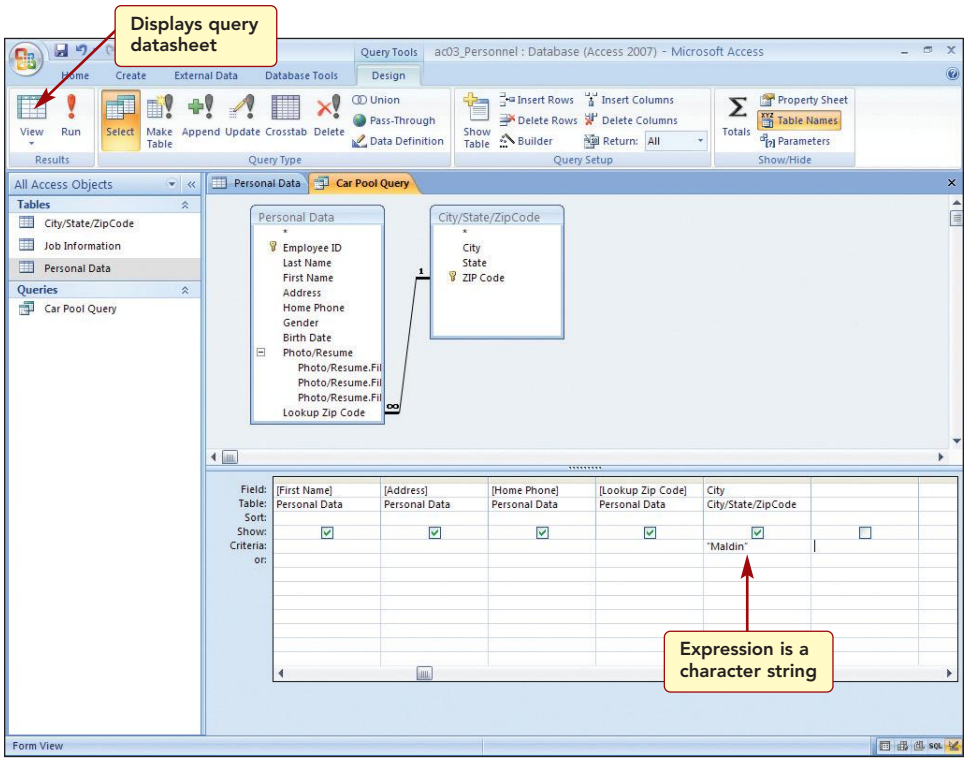


Figure 3.30

The expression is enclosed in quotation marks because it is a character string. To display the query results, you will run the query. Another way to run a query is to change to Datasheet view.

2. **Click Datasheet View.**
3. **If necessary, click OK in response to the informational message.**

Your screen should be similar to Figure 3.31

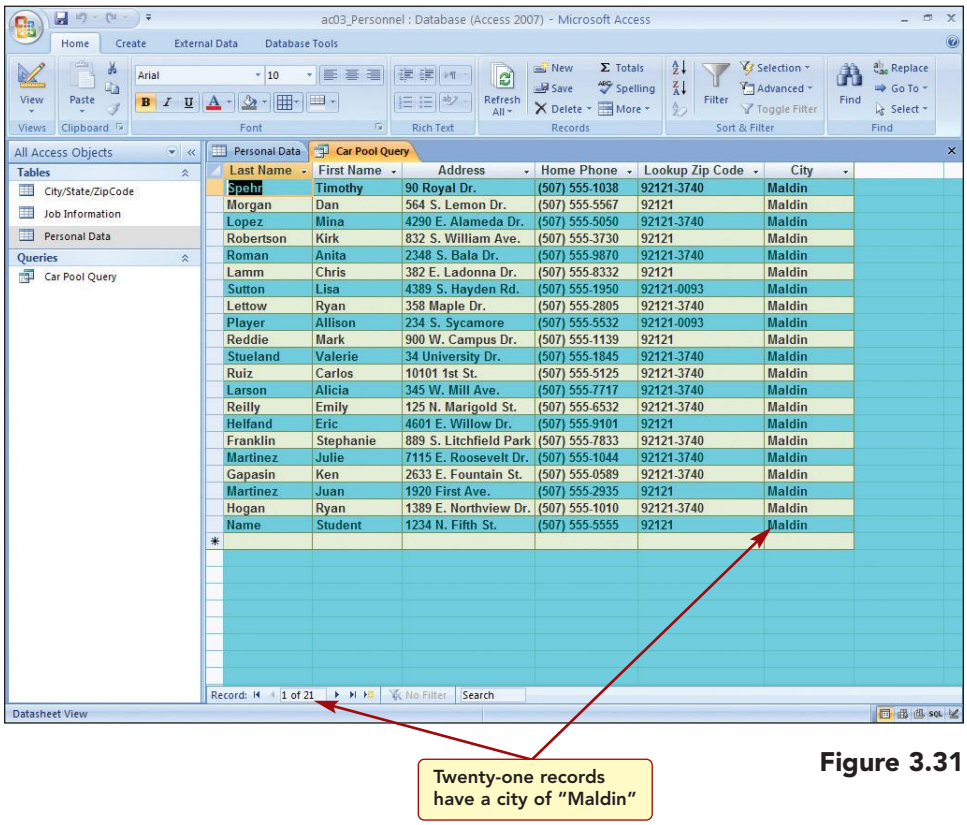


Figure 3.31

Now the query datasheet displays 21 records meeting the city criterion. However, it does not include those who live in Chesterfield or exclude the people who live in the 92121-3740 zip code.

To include those who live in Chesterfield, you will add a second criterion to the City field. To instruct the query to locate records meeting multiple criteria, you use a **compound criterion.** The AND or OR criterion is used to specify multiple conditions that must be met for the records to display in the datasheet. The **AND operator** narrows the search, because a record must meet both conditions to be included. This condition is established by typing the word "and" in a field's Criteria cell as part of its criteria expression. The **OR operator** broadens the search, because any record meeting either condition is included in the output. This condition is established by typing the word "or" in a field's Criteria cell or by entering the first criteria expression in the first Criteria cell for the field, and the second expression in the Or criteria row cell for the same field.

Because you want to display the records for employees who live in either city, you will use the OR operator.

Additional Information
The Or criteria row must be used to enter "or" criteria for different fields.

3 **Switch to Design view.**

- **In the City Criteria cell, continue the criteria by typing or Chesterfield.**
- **Press** ↵Enter.

Another Method
You also could type Chesterfield in the Or cell of the City column.

Your screen should be similar to Figure 3.32

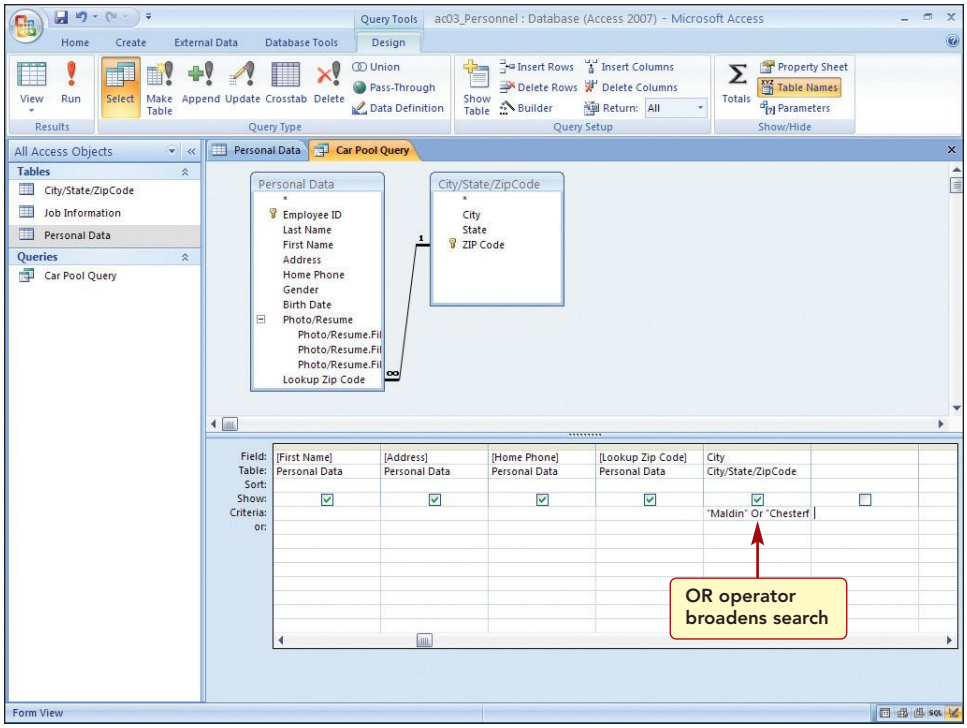


Figure 3.32

"Chesterfield" is now set as the Or condition. Next you will enter the criteria in the ZIP Code field to exclude the zip code of 92121-3740 and then you will run the query.

4. **Enter <>92121-3740 in the LookUp Zip Code criteria cell.**

- **Run the query.**
- **If necessary, click OK in response to the informational message.**

Additional Information

If an expression is entered incorrectly, an informational box that indicates the source of the error will be displayed when the query is run.

Your screen should be similar to Figure 3.33

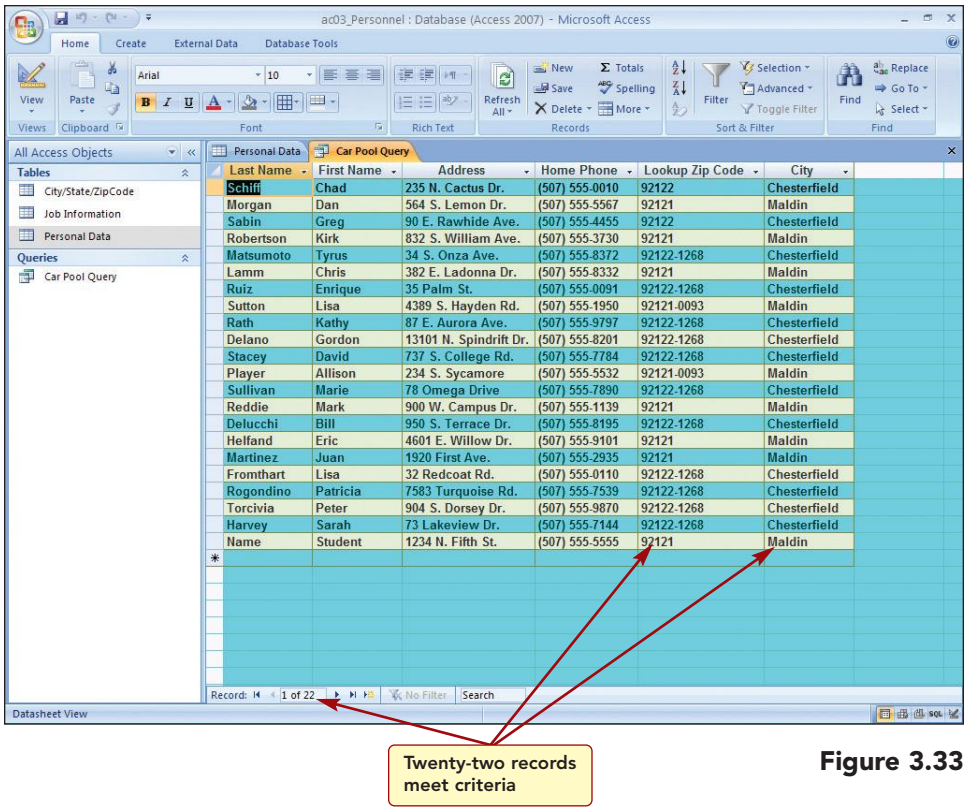


Figure 3.33

The query located 22 records that met the specified criteria. These are the same results you obtained using a filter, except that only the fields you want displayed are included in the datasheet.

The final criterion you need to add to the query is to display only those employees who work at the Landis location. To do this, you need to add the Job Information table to the query design.

5 **Switch to Design view.**

- **Click** Show Table **in the Query Setup group.**
- **Choose the Job Information table.**
- **Click** Add **.**
- **Close the Show Table dialog box.**
- **Move the City/State/ZipCode field list down as in Figure 3.34.**

Your screen should be similar to Figure 3.34

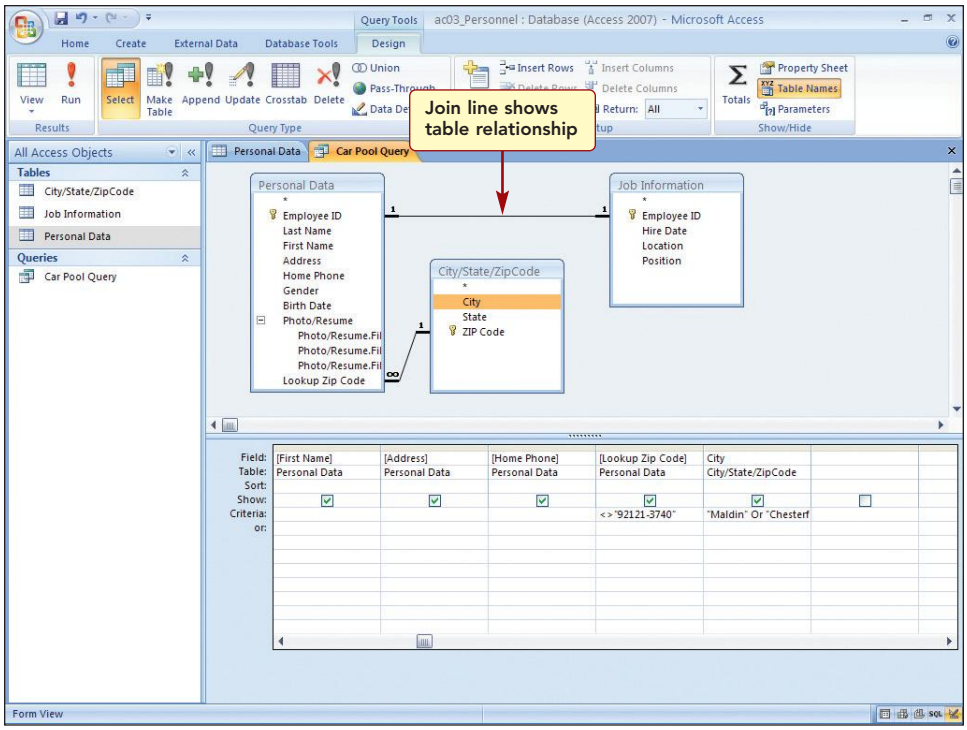


Figure 3.34

The field list for the third table was added to the Query Design window and the join line correctly links the Personal Data and Job Information field lists on the Employee ID fields.

6 **Add the Location field to the design grid.**

- **Enter Landis in the Location Criteria cell.**

Your screen should be similar to Figure 3.35

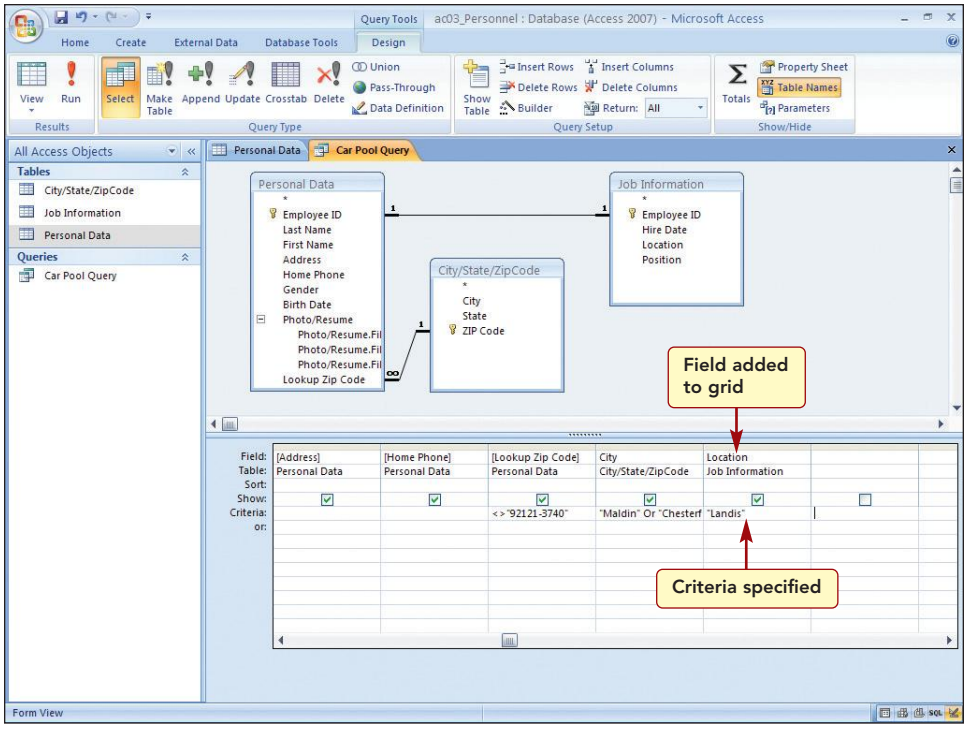


Figure 3.35

Hiding and Sorting Columns

Before running the query, you want to make a few additional changes to the query design. You do not want the ZIP Code field displayed in the results and would like the results to be sorted by last name and city.

1. **Click the Show box of the Lookup Zip Code field to clear the checkmark.**

2. **Click in the Sort row of the Last Name field.**

Having Trouble?
Scroll the grid to bring field columns into view.

3. **Open the Sort drop-down menu and choose Ascending.**

Your screen should be similar to Figure 3.36

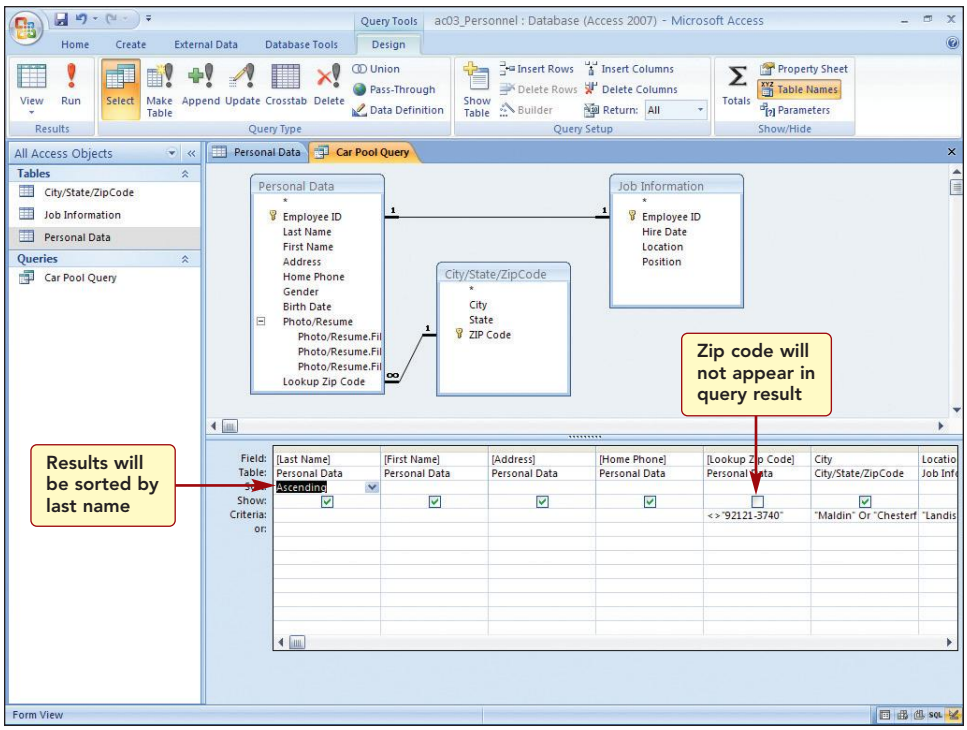


Figure 3.36

Now you can display the results.

2 **Run the query.**

- **If necessary, click** OK **in response to the informational message.**

Your screen should be similar to Figure 3.37

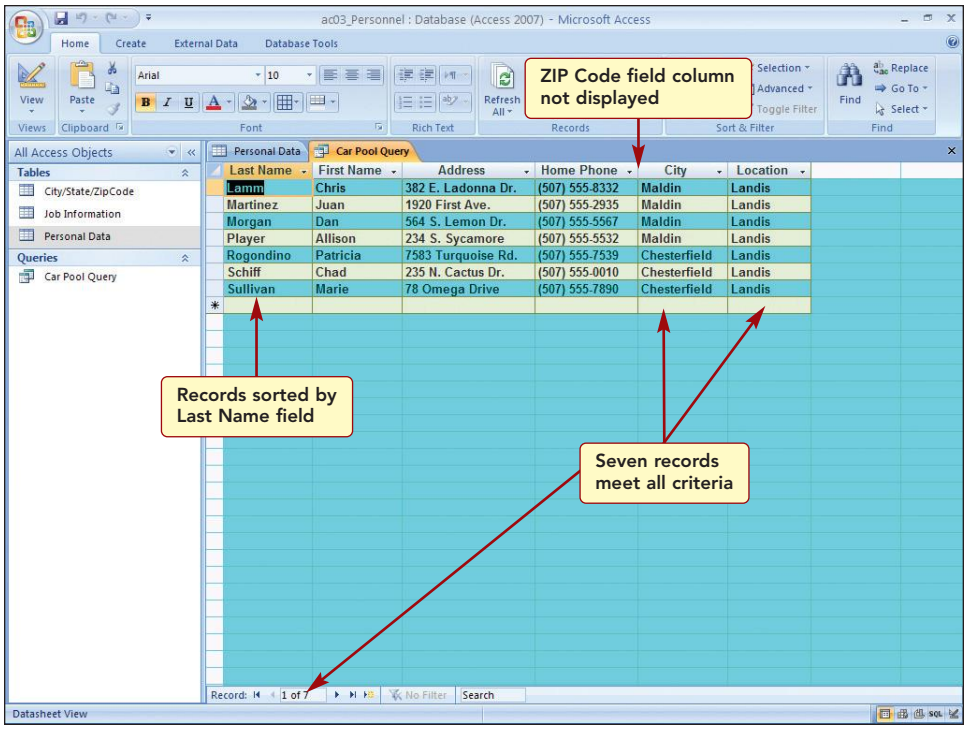


Figure 3.37

The query result now shows that seven employees meet all the criteria. The ZIP Code field is not displayed and last names are sorted in ascending alphabetical order.

Rearranging the Query Datasheet

The order of the fields in the query datasheet reflects the order in which they were placed in the Selected Fields list. You think the results will be easier to read if the Last Name field column followed the First Name column and the City column followed the Address column. You will then size the fields to fit the contents.

Moving a field column in the query datasheet is the same as in a table datasheet. Changing the column order in the query datasheet does not affect the field order in the resource table, which is controlled by the table design.

1. **Select the Last Name column.**

Having Trouble?

Remember, to select an entire column, you click on its column heading when the mouse pointer is ↓.

- **Click and hold the mouse button on the Last Name column heading.**

Additional Information

When the mouse pointer is ↖, it indicates that you can drag to move the selection.

- **Drag the Last Name column to the right until a thick line is displayed between the First Name and Address columns.**
- **Release the mouse button.**
- **Move the City column to the right of the Address column.**

Additional Information

You can move fields in Table Datasheet view in the same way.

- **Best fit the five columns.**
- **Clear the selection.**

Your screen should be similar to Figure 3.38

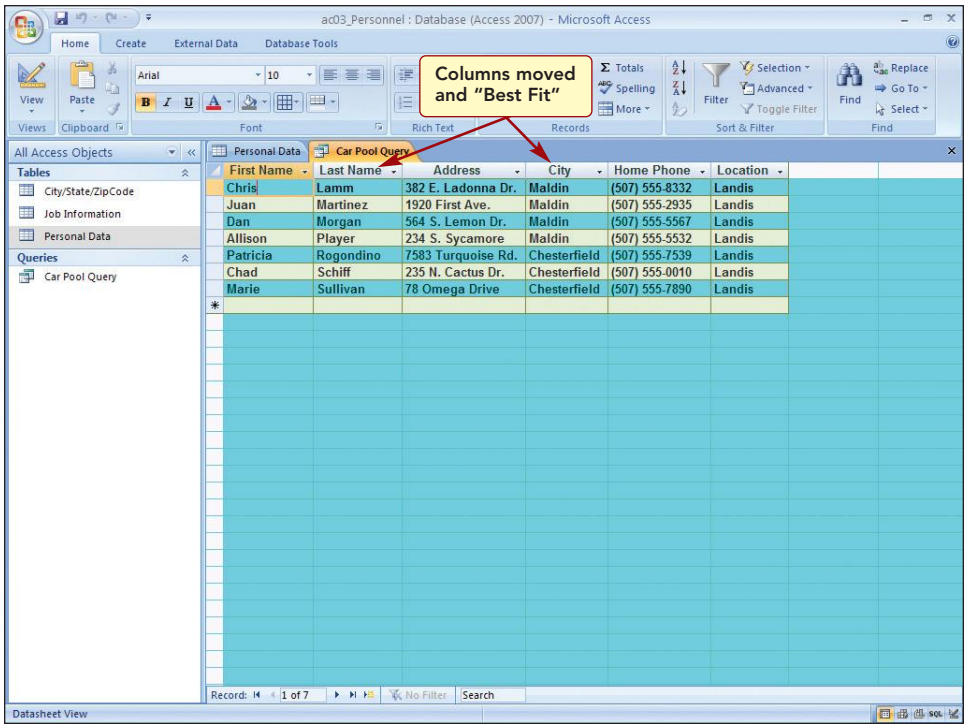


Figure 3.38

This is the information Juan needs to form his car pool. However, as you look at the results, you realize your record should have been included in the list because you live in Maldin and work at the Landis location. You need to determine why your record was not included.

2 **Display the Personal Data table.**

Remove the filter.

Scroll to the bottom of the table to see your record.

You can see that the Personal Data table has 70 records from the record indicator and that your record is the last record. Now, however, you realize that you did not add your information to the Job Location table.

Finding Unmatched Records

You will check the Job Information table to see how many records it contains.

1 **Open the Job Information table.**

Your screen should be similar to Figure 3.39

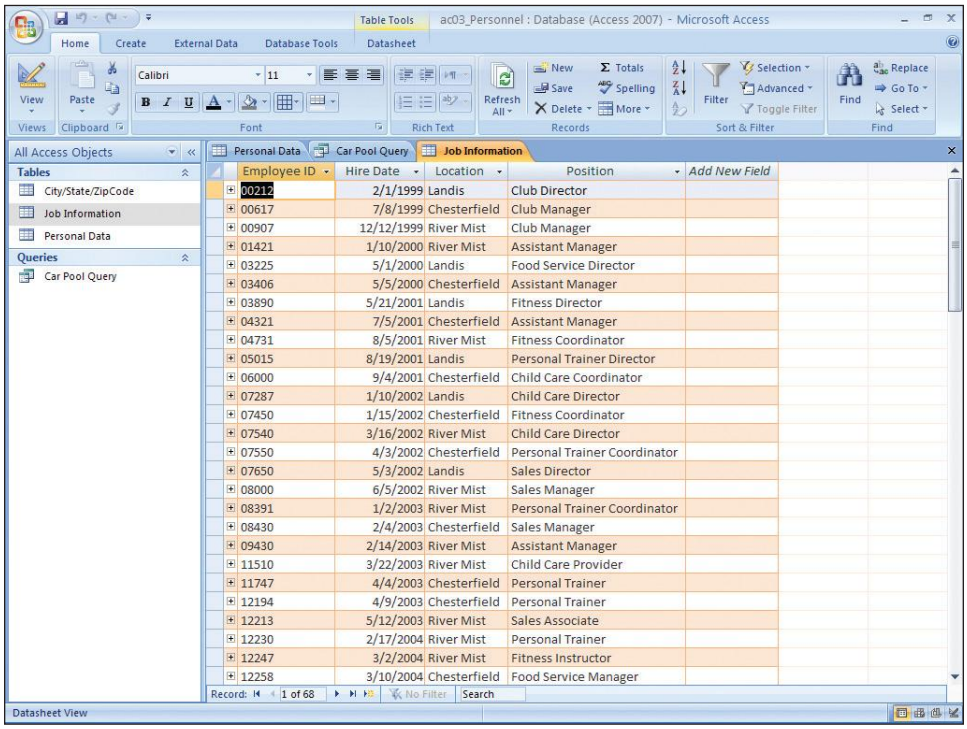


Figure 3.39

This table has 68 records, whereas the Personal Data table has 70. You know your record is one of the missing records, but you need to locate the other missing record. You can do this quickly using the Find Unmatched Query Wizard.

2. Click Query Wizard in the Other group of the Create tab.
   - Choose Find Unmatched Query Wizard.
   - Click OK.

Your screen should be similar to Figure 3.40

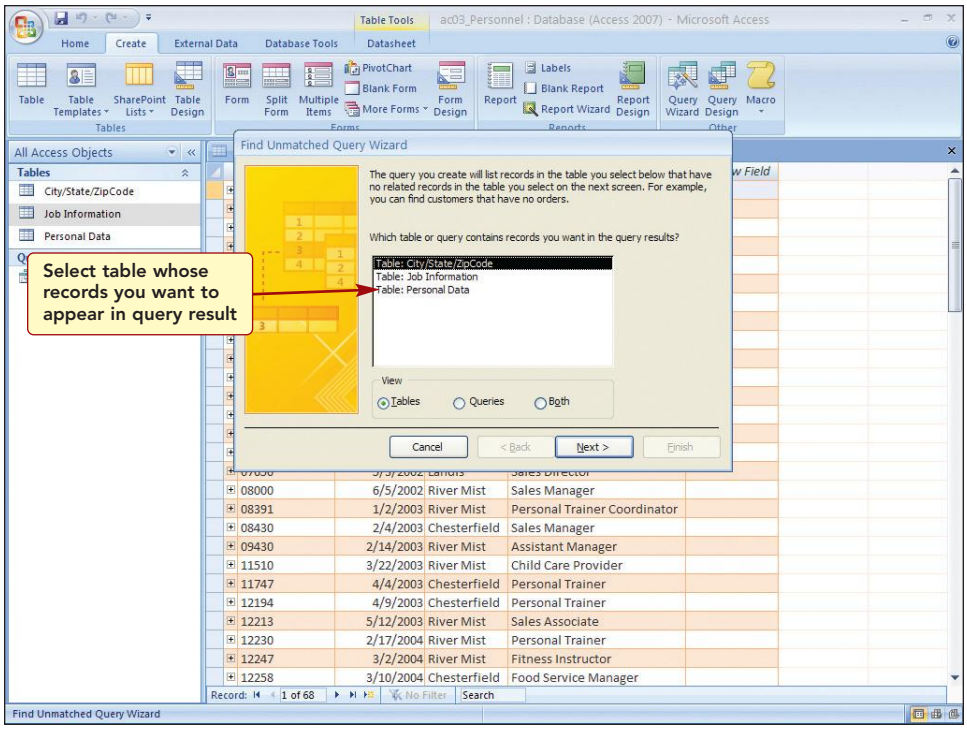


Figure 3.40

In the first wizard dialog box, you select the table that contains records you want to appear in the results. In this case, you will select the Personal Data table first because it is the primary table and has more records than the Job Information table, and these are the records you want to appear in the results. In the second dialog box, you will select the table to compare the first table to. This establishes the join between the tables.

3. Select Table: Personal Data.
   - Click Next >.
   - Select Table: Job Information.
   - Click Next >.

Your screen should be similar to Figure 3.41

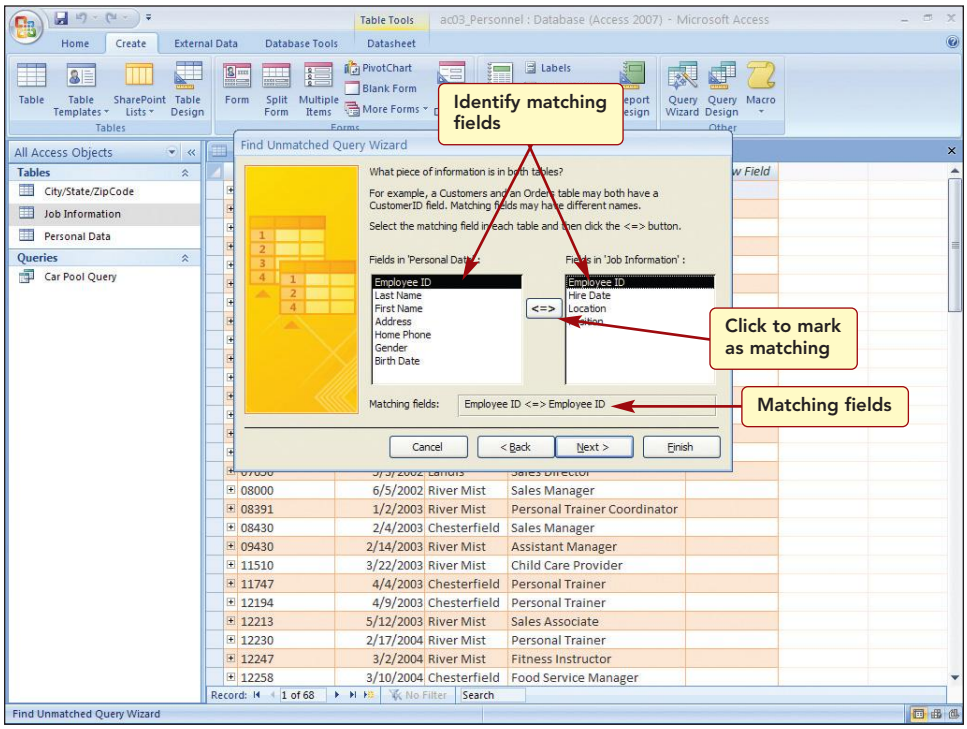


Figure 3.41

The third step is to identify the matching (common) fields. The two highlighted fields, Employee ID, in both tables are already correctly highlighted.

4 Click <=> to mark these fields as the matching fields.

Additional Information
The field names of the selected matching fields appear in the Matching Fields text box.

Click Next >.

Your screen should be similar to Figure 3.42

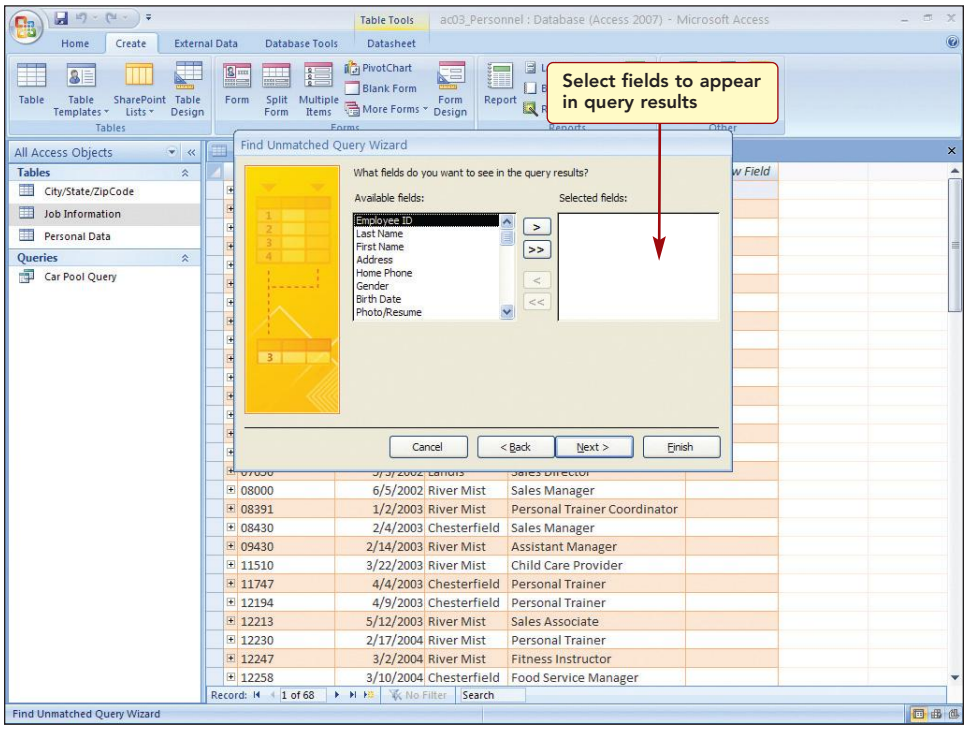


Figure 3.42

Next, you need to identify the fields you want to appear in the query results.

5 Click >> to add all the fields to the Selected Fields list.

Click Next >.

Click Finish.

Your screen should be similar to Figure 3.43

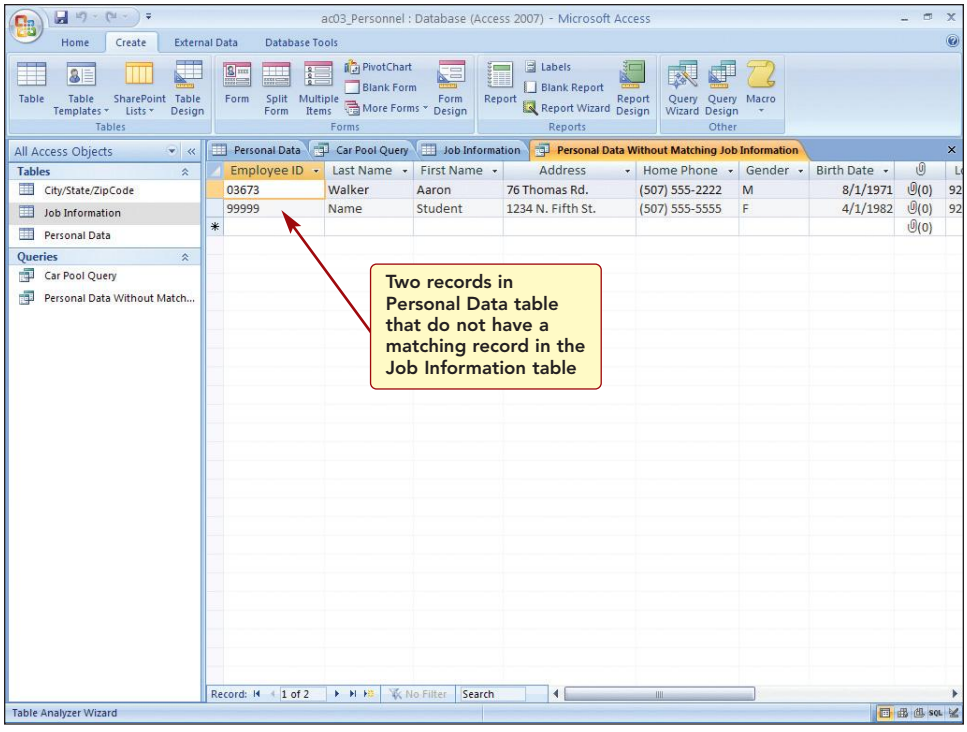


Figure 3.43

The two records in the Personal Data table that do not have matching records in the Job Information table are displayed in the query results. One record is the matching information for your own record that you added earlier to the Personal Data table. Now, you just need to add the information to the Job Information table for these two employees.

6 **Close the Query window.**

- **Add the following records to the Job Information table:**

Employee ID	Hire Date	Location	Position
03673	2/10/2001	River Mist	Greeter
99999	2/25/08	Landis	Human Resources Administrator

- **Best fit the Position field.**

Your screen should be similar to Figure 3.44

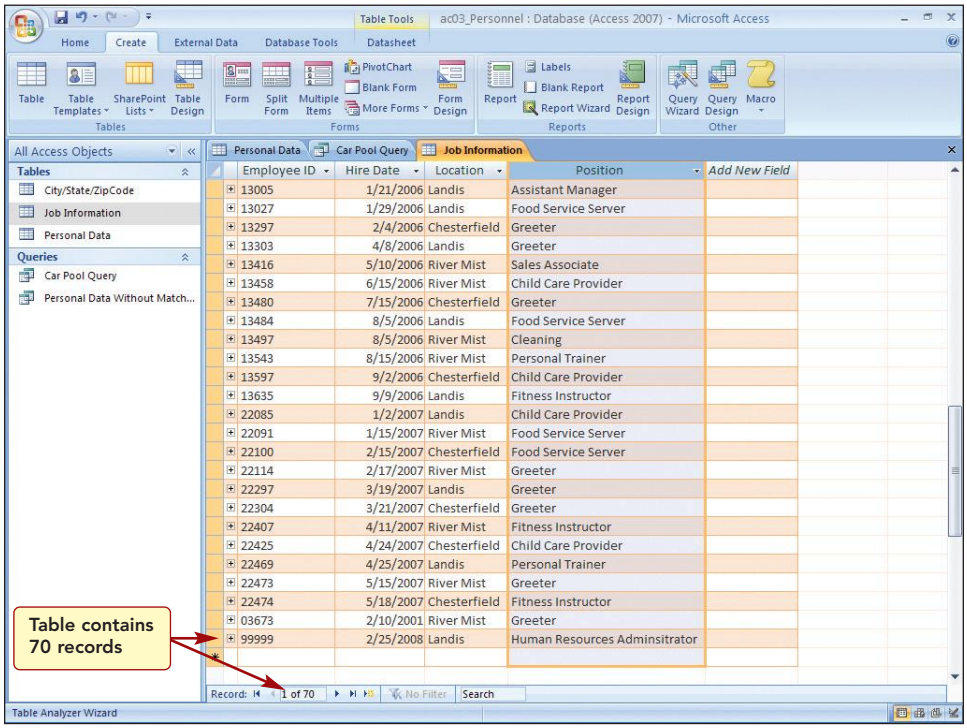


Figure 3.44

Both tables now contain 70 records. Notice that the Unmatched Records query was automatically saved and the object is listed in the Queries group of the Navigation pane. If you were to rerun this query, no results would be located because there are no longer any missing records.

Finally, you want to update all objects that use the Location table as the underlying record source to reflect the addition of the new records.

7 **Display the Car Pool Query datasheet.**

- **Click**  **in the Records group of the Home tab.**

Your screen should be similar to Figure 3.45

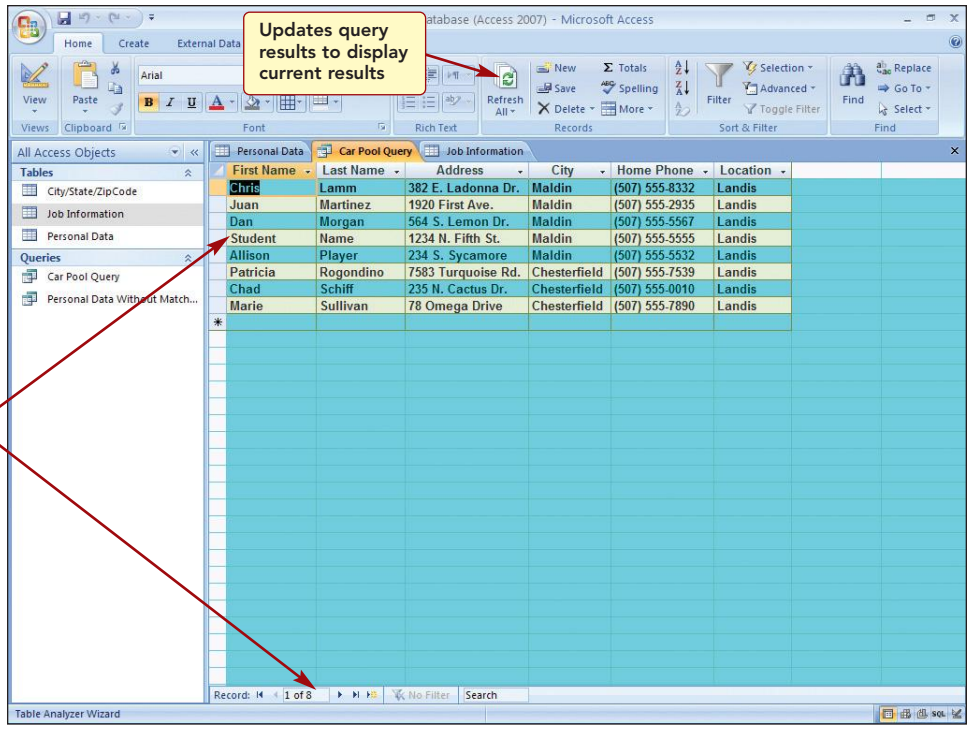


Figure 3.45

The query results list eight records that meet the criteria and now correctly include your record.

Finding Duplicate Records

Next, you want to check the Personal Data table for possible duplicate records. Even though this table uses the Employee ID as the primary key, it is possible to enter the same record with two different IDs. To check for duplication, you will use the Find Duplicates Query Wizard.

1. Click Query Wizard in the Create tab.
2. Click Yes to save the Car Pool Query.
3. Choose Find Duplicates Query Wizard.
4. Click OK.
5. Select Table: Personal Data.
6. Click Next >.

Your screen should be similar to Figure 3.46

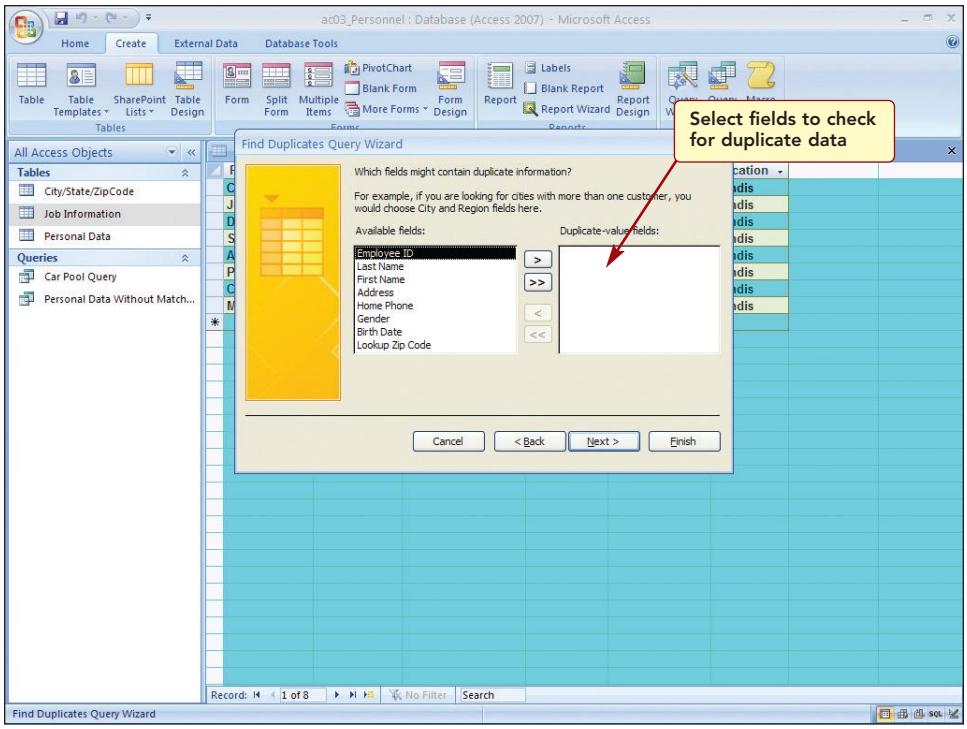


Figure 3.46

In this wizard dialog box, you identify the fields that may contain duplicate data. In this case, you will check the Last Name fields for duplicate values.

2. Add the Last Name field to the Duplicate-value fields list.
3. Click Next >.

Your screen should be similar to Figure 3.47

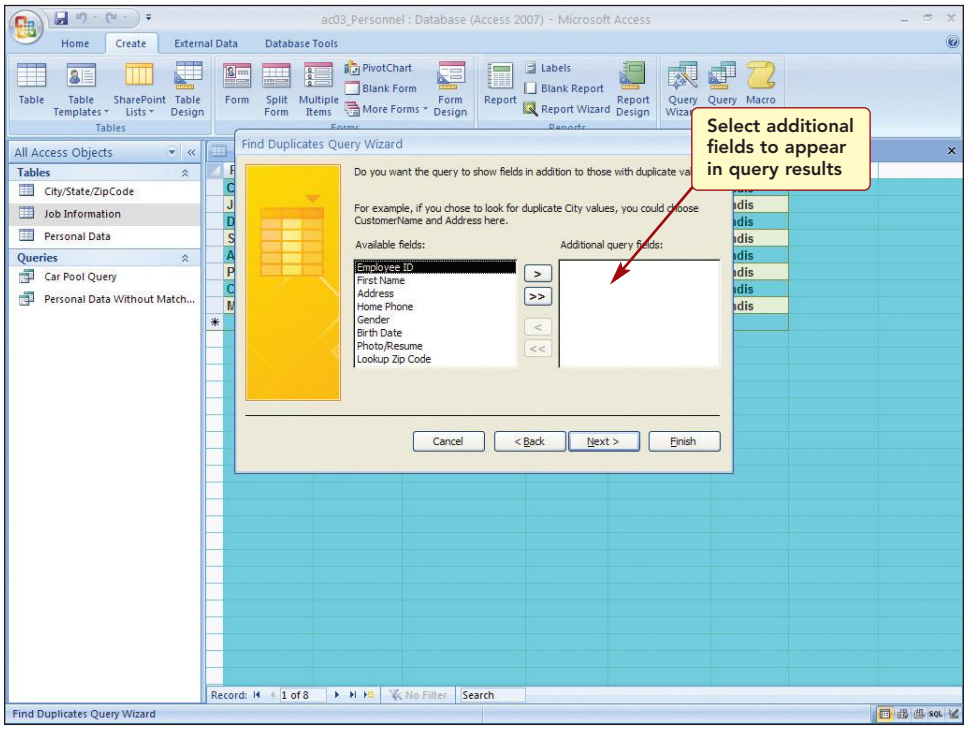


Figure 3.47

Next, you need to identify the additional fields you want to appear in the query results.

3. **Add the First Name, Birth Date, and Gender fields to the Additional Query Fields list.**

- **Click** Next > **.**
- **Click** Finish **.**

Your screen should be similar to Figure 3.48

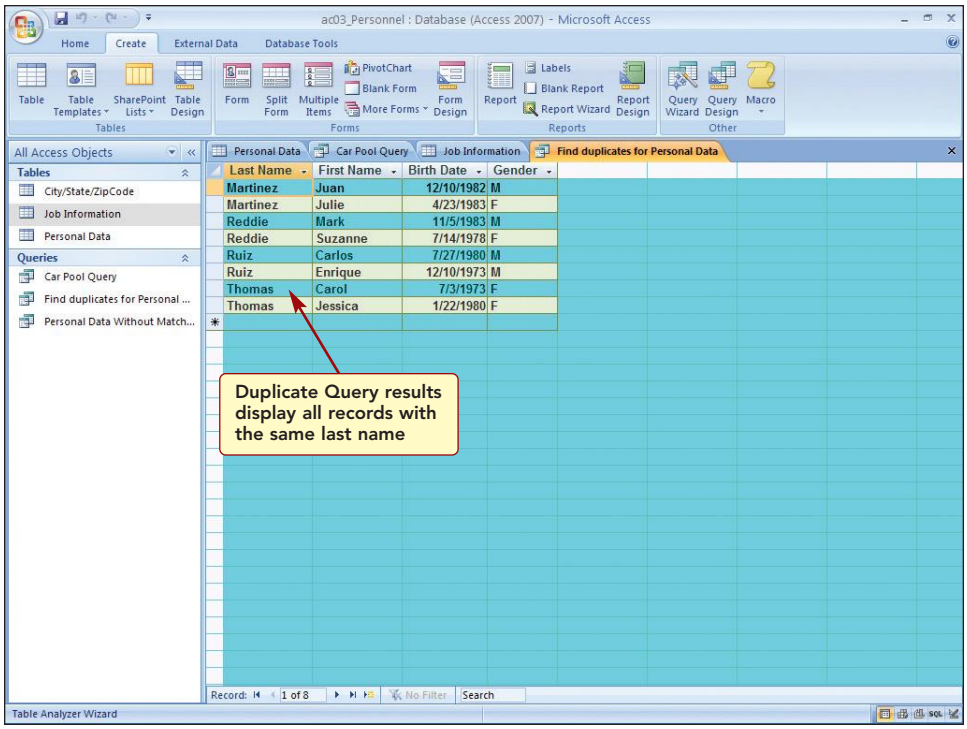


Figure 3.48

All records with the same last name are listed. These all look like valid records, so you will not make any changes.

Creating a Parameter Query

Periodically the club director wants to know the employee number and names of the employees at each club and their job position. To find this information, you will create a simple query and sort the location field to group the records.

To create this query, you will modify the existing Car Pool Query design since it already includes the two tables, Personal Data and Job Information, that you need to use. You will remove the City/State/ZipCode table field list because you do not need any information from that table. Then you will clear the design grid and save the modified query using a new name.

1. **Display the Car Pool Query in Design view.**

- **Right-click on the title bar of the City/State/ZipCode table field list and choose Remove Table from the shortcut menu.**
- **Drag across the top of the six fields in the grid to select them and press** Delete.
- **Click Office Button and choose Save As/Save Object As.**
- **Enter Location Query as the new query name and click** OK.

Your screen should be similar to Figure 3.49

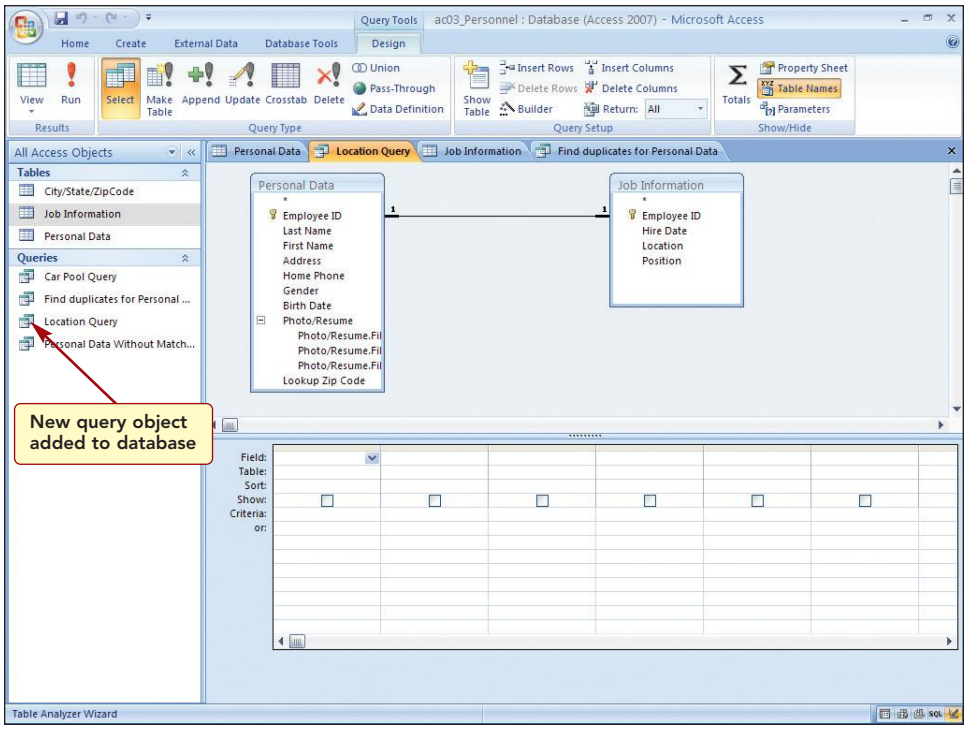


Figure 3.49

The query object is added to the Navigation pane and you are ready to define the query. You will add all the fields from the Personal Data table to the grid and the Location field from the Job Information table.

2. **Double-click * in the Personal Data field list.**

- **Double-click Location in the Job Information table.**
- **Sort the Location field in ascending sort order.**
- **Run the query.**
- **Hide the Navigation pane.**

Your screen should be similar to Figure 3.50

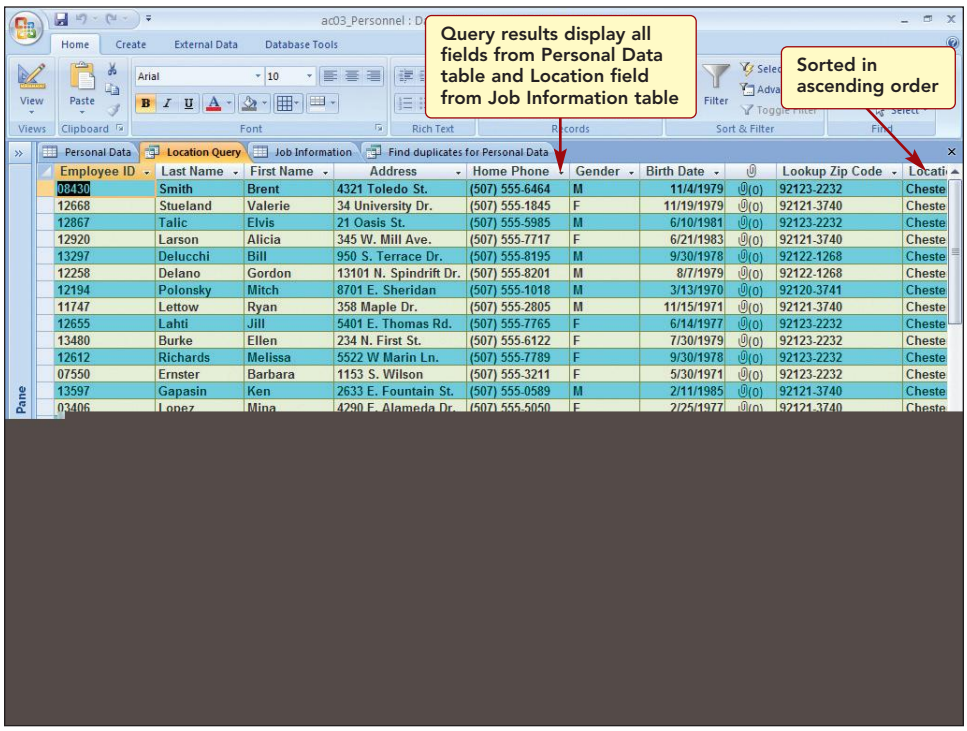


Figure 3.50

All the fields from the Personal Data table and the Location field are displayed. The location is in sorted order. However, because the director wants the information for each location on a separate page when printed, sorting the location field will not work. To display only the records for a single location at a time, you could filter the location field or change the criteria in the location field to provide this information and then print the results.

Another method, however, is to create a parameter query that will display a dialog box prompting you for location information when the query is run. This saves having to change to Design view and enter the specific criteria or applying a filter. Criteria that are entered in the criteria cell are **hard-coded criteria,** meaning they are used each time the query is run. In a parameter query, you enter a **parameter value** in the Criteria cell rather than a specific value. The parameter value tells the query to prompt you for the specific criteria you want to use when you run the query.

Additionally, the director does not need all the information from the Personal Data table, so you will change the design to include only the necessary fields. First, you will change the fields in the design grid to display only the Employee ID and the First and Last Name fields from the Personal Data table.

3 **Display Design view.**

- **Select and delete the Personal Data column in the design grid.**
- **Select the Employee ID, Last Name, and First Name fields in the Personal Data table and drag them to before the Location field in the design grid.**

Having Trouble?
Hold down ⇧Shift while clicking on each field name to select all three.

- **Remove the Sort from the Location field.**
- **Type [Enter Location] in the Location Criteria cell.**

Your screen should be similar to Figure 3.51

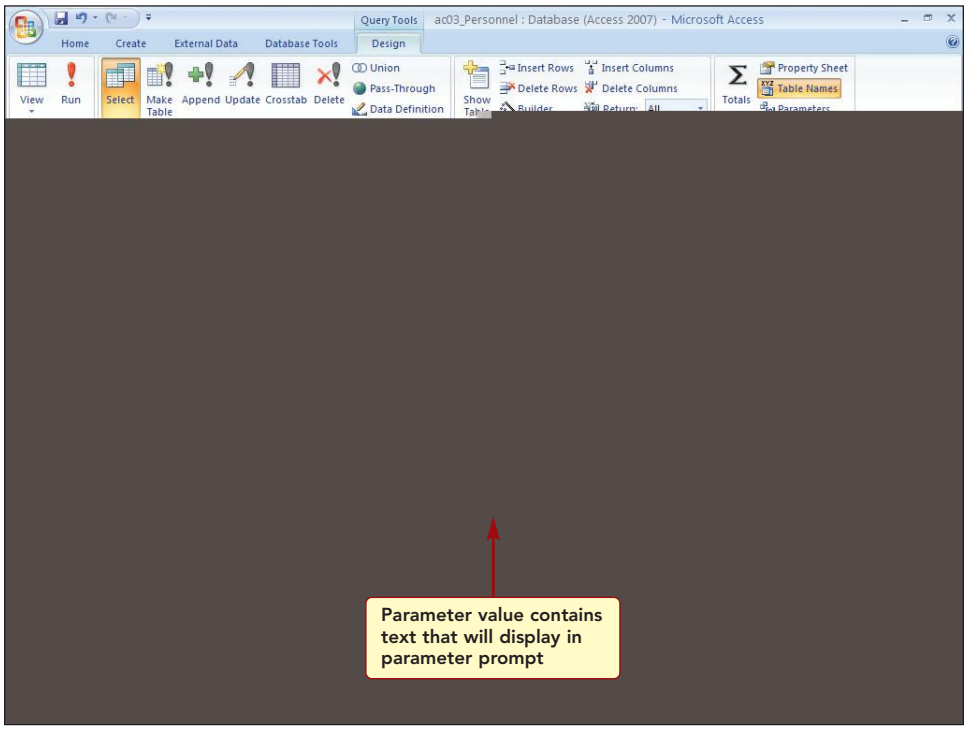


Figure 3.51

The Location criterion you entered is the parameter value. Parameter values are enclosed in square brackets and contain the text you want to appear when the parameter prompt is displayed. The parameter value cannot be a field name, because Access will assume you want to use that particular field and will not prompt for input.

4 **Run the query and type Landis in the Enter Parameter Value dialog box.**

Click OK **.**

Your screen should be similar to Figure 3.52

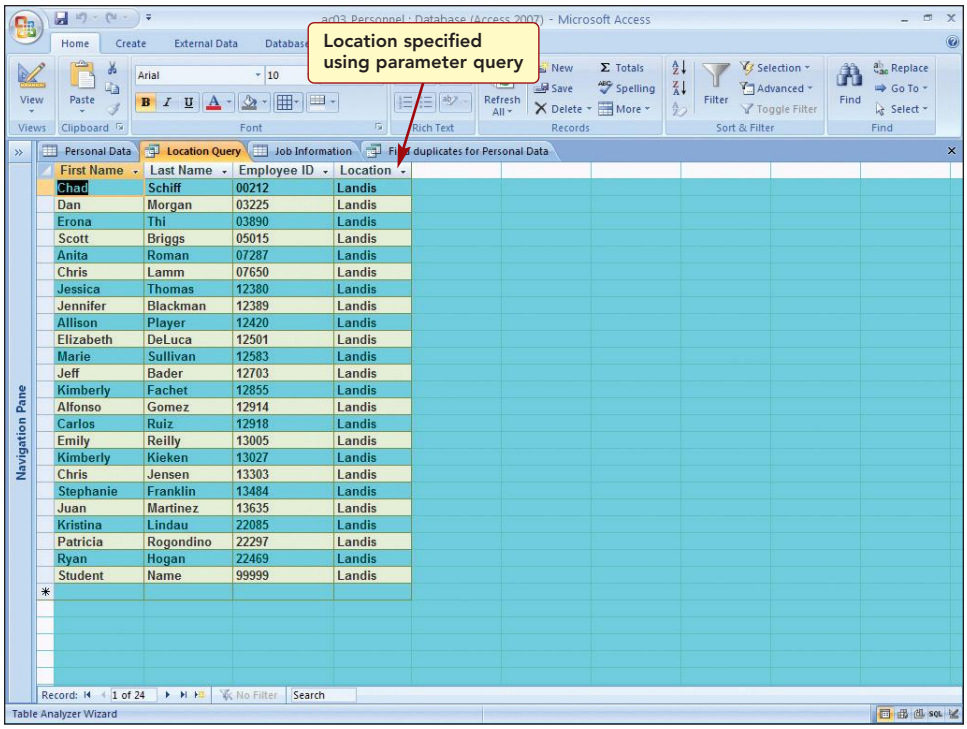


Figure 3.52

Only those records whose location is Landis are displayed. Additionally, only the fields you specified are included in the result. Now, each time you run the query, you simply need to specify the location in the parameter dialog box to obtain results for the different locations.

Displaying a Totals Row

As you look at the query results, you can see the record indicator tells you there are 24 records. The record indicator is a simple count of the total number of records in the table and only appears when you view the datasheet. You decide to display a Totals row in the datasheet that will display this information when you print the datasheet.

In addition to count totals, the Totals row can perform other types of calculations such as averages and sums on a column of data. Calculations that are performed on a range of data are called **aggregate functions.** Because aggregate functions perform calculations, the data type in a column must be a number, decimal, or currency data type. The Personal Data table does not use any of these data types. However, the Count function can be used on all data types.

Additional Information
Some functions can use a Date/Time data type also.

You will add a Totals row and then use the Count aggregate function to display the record count. The Totals row appears below the star (new record) row in the table and remains fixed on the window as you scroll the table. Clicking in a column of the Totals row selects the field to be calculated. Then, you open the drop-down list to select the function you want to use. For text data types, only the Count function is listed.

Additional Information
You will learn more about using the other aggregate functions in later labs.

1. Click Σ Totals in the Records group of the Home tab.
2. Click on the Last Name field in the Totals row.
3. Open the drop-down list and choose Count.

Your screen should be similar to Figure 3.53

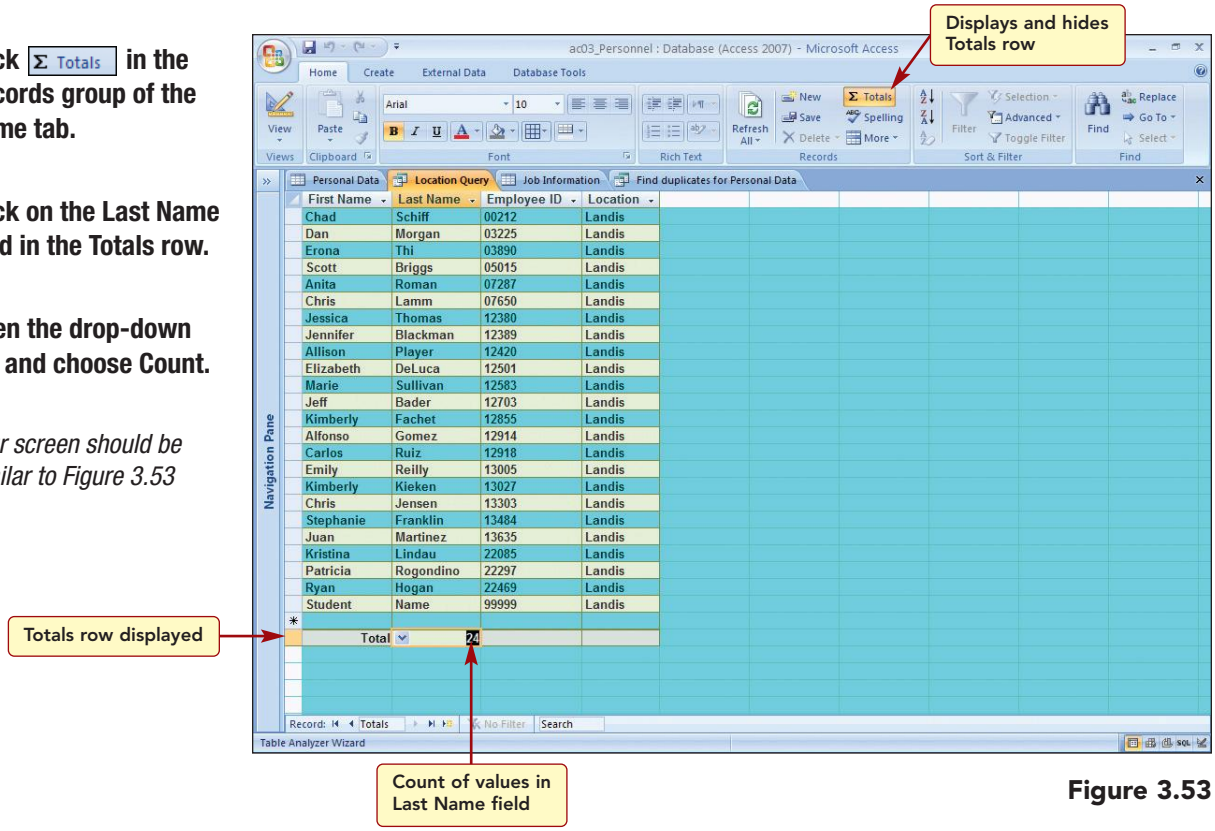


Figure 3.53

Additional Information
If you select a function in the first column of the Totals row, the label is removed and the value displayed.

The Totals row displays 24 as the number of values in the column. The Totals label in the first column identifies the meaning of this value.

You can turn the display of the Totals row on and off any time by clicking Σ Totals. When you redisplay the row, any functions that were selected are displayed again. A Totals row also can be displayed in a table datasheet.

You will print this query datasheet and then close all open objects.

2. Preview and then print the query datasheet.
3. Close the query, saving changes when prompted.
4. Close all remaining open objects, saving when prompted.
5. Display the Navigation pane.

MORE ABOUT

You also can save a filter as a query. To learn about this feature, see "4 Creating and Modifying Queries" in the More About appendix.

Note: If you are running short on time, this is an appropriate point to end your Access session. When you begin again, open the ac03_Personnel database.

Creating Reports

As you know, you can print the table and query datasheets to obtain a simple printout of the data. However, there are many times when you would like the output to look more professional. To do this, you can create custom reports of this information.

Concept 4

Report

4 A **report** is professional-appearing output generated from tables or queries that may include design elements, groups, and summary information. A report can be a simple listing of all the fields in a table, or it might be a list of selected fields based on a query. Reports generally include design elements such as formatted labels, report titles, and headings, as well as different design styles, layouts, and graphics that enhance the display of information. In addition, when creating a report, you can group data to achieve specific results. You can then display summary information such as totals by group to allow the reader to further analyze the data. Creating a report displays the information from your database in a more attractive and meaningful format.

The first step to creating a report is to decide what information you want to appear in the report. Then you need to determine the tables or queries (the report's record source) that can be used to provide this information. If all the fields you want to appear in the report are in a single table, then simply use that table. However, if the information you want to appear in the report is contained in more than one table, you first need to create a query that specifically fits the needs of the report.

There are several different methods you can use to create reports as described in the following table. The method you use depends on the type of report you need to create.

Report Tool	Creates a simple report containing all the fields in the table
Blank Report Tool	Builds a report from scratch in Report Layout view by adding the fields you select from the table
Report Design	Builds a report from scratch in Report Design view by adding the fields you select from the table
Report Wizard	Guides you through the steps to create a report

Using the Report Tool

Although you could give Juan a simple printout of the carpool query results, you decide to create a report of this information. Since the fastest way to create a report is to use the Report tool, you decide to try this method first. This tool uses the selected or displayed table or query object as the report source.

1. **Select the Car Pool Query in the Navigation bar.**

- **Click**  **in the Reports group of the Create tab.**
- **If necessary, click** OK **in response to the informational dialog box.**
- **Hide the Navigation pane**

Your screen should be similar to Figure 3.54

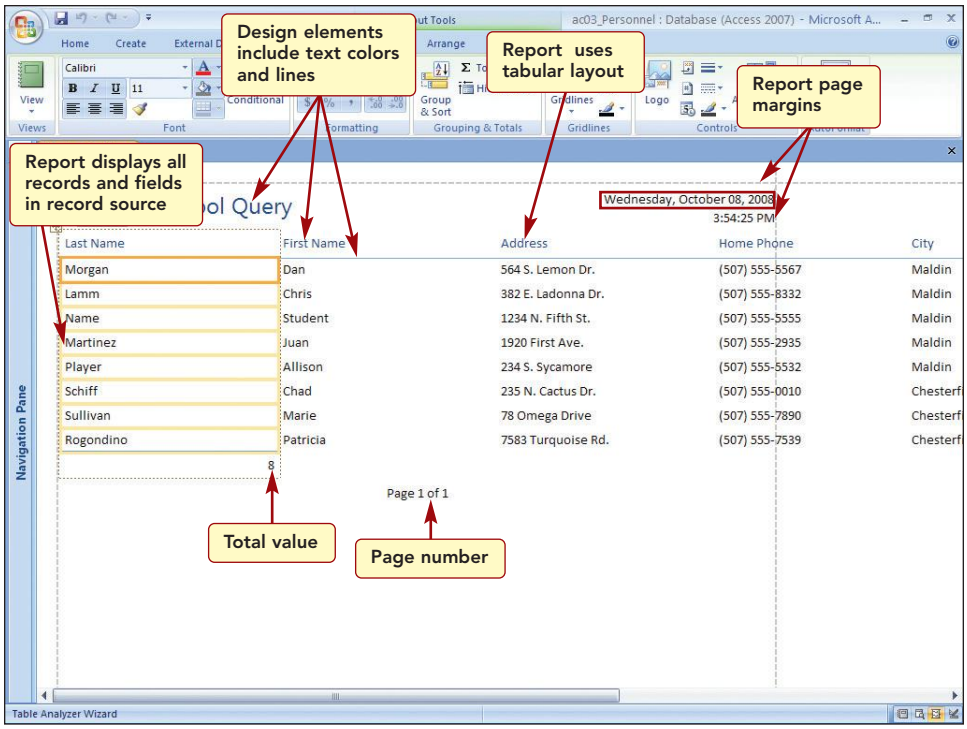


Figure 3.54

The Report tool creates a report that displays all fields and records from the record source in a predesigned report layout and style. It uses a tabular layout in which each field name appears at the top of the column and each record appears in a line, much like in Datasheet view. The fields are displayed in the order they appear in the table. It also displays the object name as the report title and the current date and time in the title area. The report design elements include blue font color for the report title and field names and a horizontal blue line below the field names. The title is also in a larger text size. The last row displays a total value of the number of records in the report. The dotted lines identify the report page margins and show that the Home Phone field data will be split between two pages.

Viewing the Report

The report is displayed in Layout view. As in Form Layout view, you could modify the report design if needed in this view. Instead, you will switch to Report view to see how the report will look when printed.

1. **Click Report View in the Views group of the Report Layout Tools Format tab.**

2. **Scroll to the right to see the last field column.**

Your screen should be similar to Figure 3.55

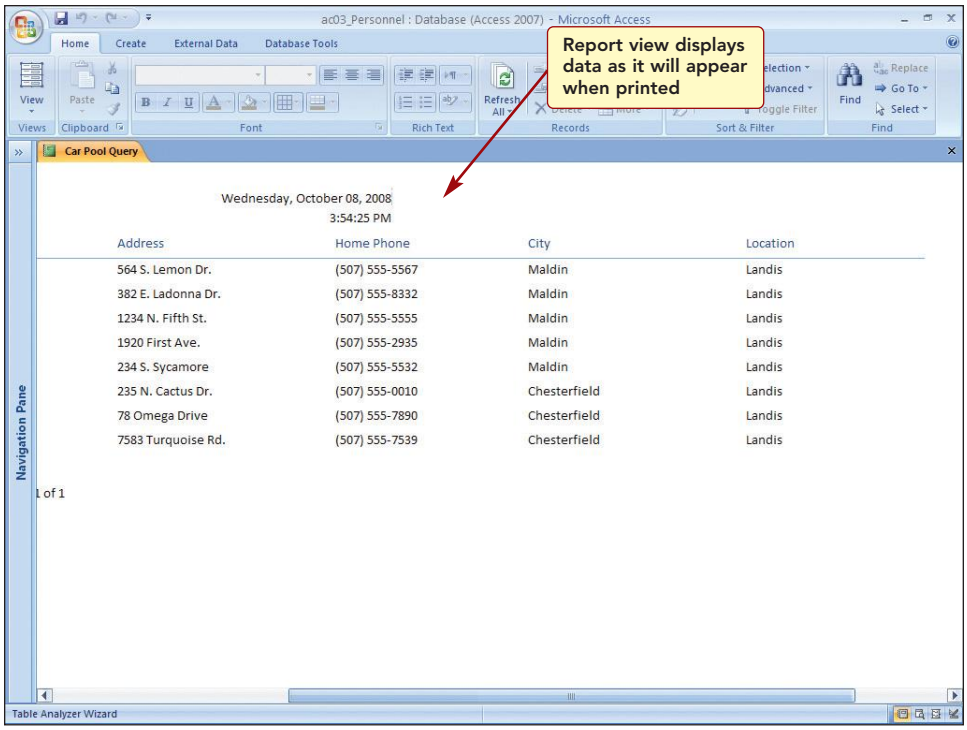


Figure 3.55

Additional Information
The report date and time will reflect the current date and time on your computer.

Report view displays the data in the report as it will appear when printed. It does not show how the data will fit on a page. This view is useful if you want to copy data from the report and paste it into another document such as a Word file. It also can be used to temporarily change what data is displayed in the report, by applying a filter.

The last view you can use is Print Preview. This view will show you exactly how the report will look when printed and can be used to modify the page layout and print-related settings. Another way to display this view is from the object's shortcut menu.

2 **Right-click on the report tab or an empty area of the report and choose Print Preview.**

Click Two Pages **.**

Another Method

You also can right-click an object in the Navigation pane to display this shortcut menu.

Your screen should be similar to Figure 3.56

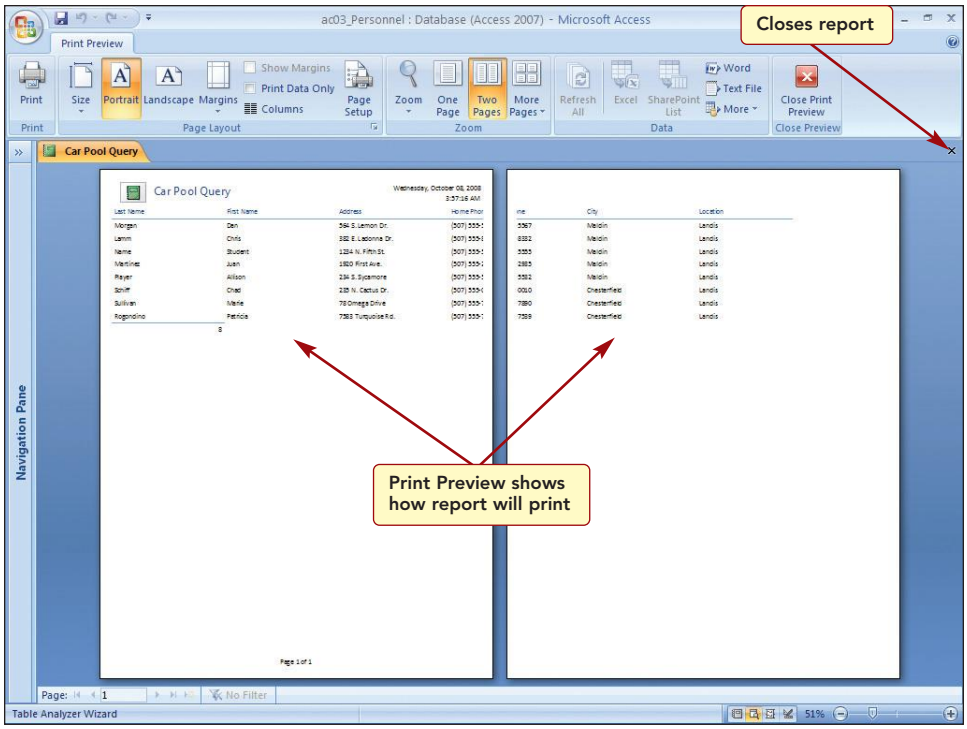


Figure 3.56

It is now easy to see exactly how the report will look when printed. After looking over the report, you decide that although the tabular layout is appropriate for your report, you do not want the report to include all the fields from the query. Rather than modify the report design by removing the unneeded fields, you will close this report without saving it and then use the Report Wizard to create a report that is more appropriate for your needs.

3 **Close Print Preview.**

Click ✕ **to close the report.**

Click No **in response to the dialog box to save the report.**

Using the Report Wizard

Using the Report Wizard, you can easily specify the fields you want to include in the report. The Report Wizard consists of a series of dialog boxes, much like those in the Form and Query Wizards. In the first dialog box, you specify the table or query to be used in the report and add the fields to be included. The Car Pool Query object is already correctly specified as the object that will be used to create the report.

1. Click Report Wizard in the Reports group of the Create tab.
2. Add the First Name field to the Selected Fields list.
3. Add all the remaining fields to the list. Remove the Location field.
4. Click Next >.

Your screen should be similar to Figure 3.57

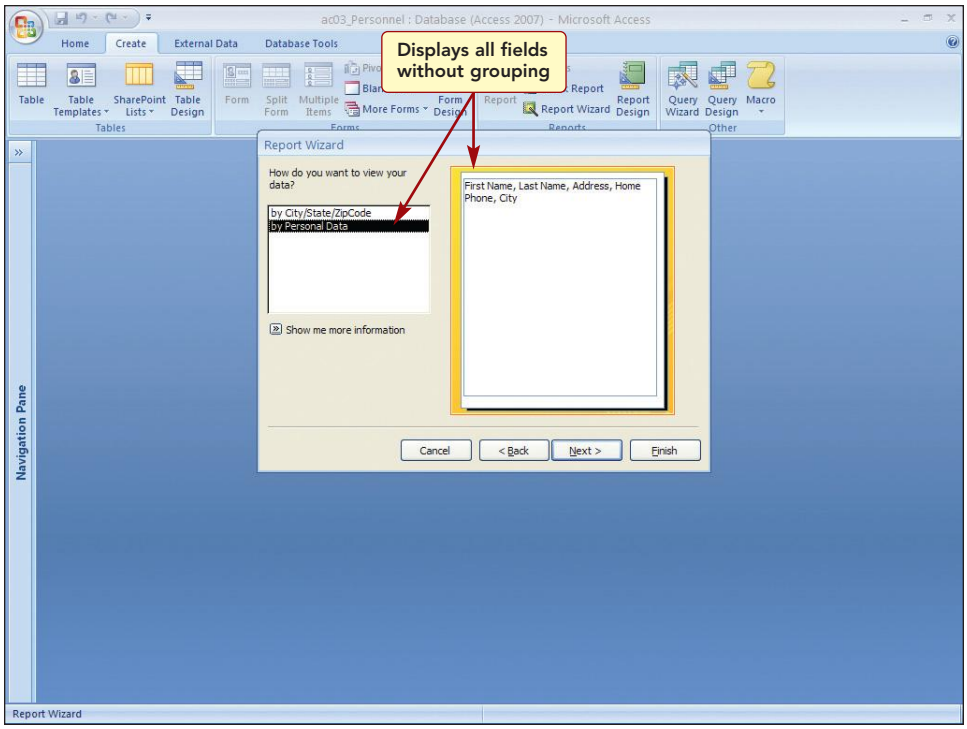


Figure 3.57

This dialog box asks you to decide how to display or group the data in the report based on the relationships between the tables. The selected option, by Personal Data, is appropriate for your needs and allows you to specify the fields you may want to group yourself. In the following dialog box, you will be asked if you want to add any grouping levels to the report. You do not want the report grouped by any category, so you do not need to do anything in this dialog box.

2. Click Next > twice.

Your screen should be similar to Figure 3.58

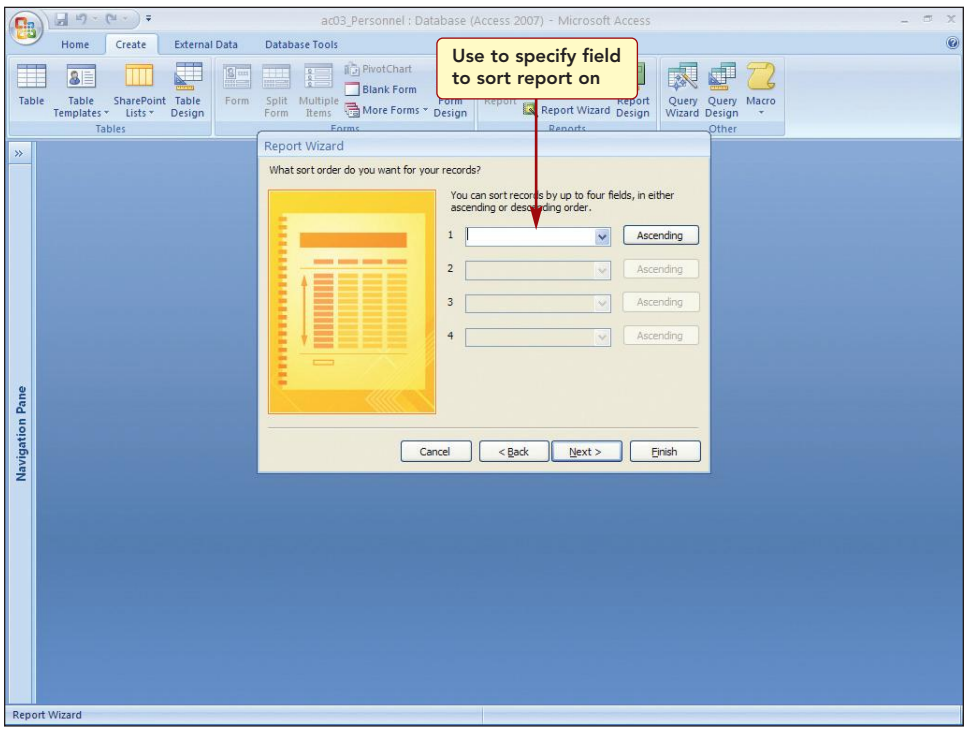


Figure 3.58

In this dialog box, you can specify a sort order for the records. Because the query already specifies the sort order, you do not need to specify this again.

3 Click Next >.

Your screen should be similar to Figure 3.59

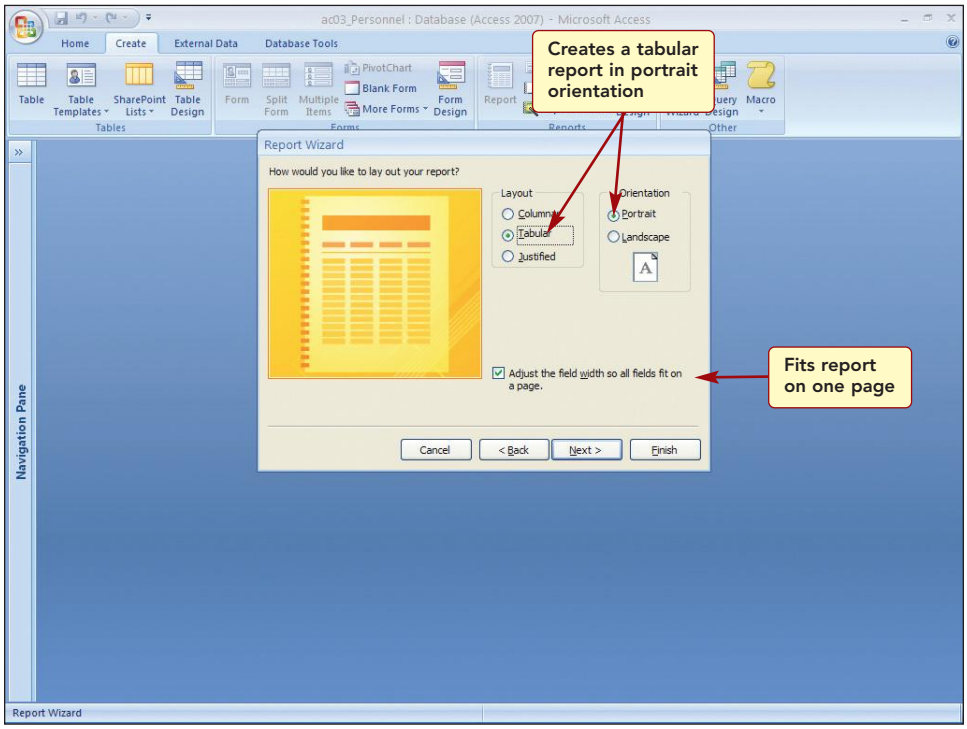


Figure 3.59

Additional Information
Reports use the same layouts as Forms.

This dialog box is used to change the report layout and orientation. The default report settings create a tabular layout using portrait orientation. In addition, the option to adjust the field width so that all fields fit on one page is selected. The default settings are acceptable.

4 Click Next >.

Your screen should be similar to Figure 3.60

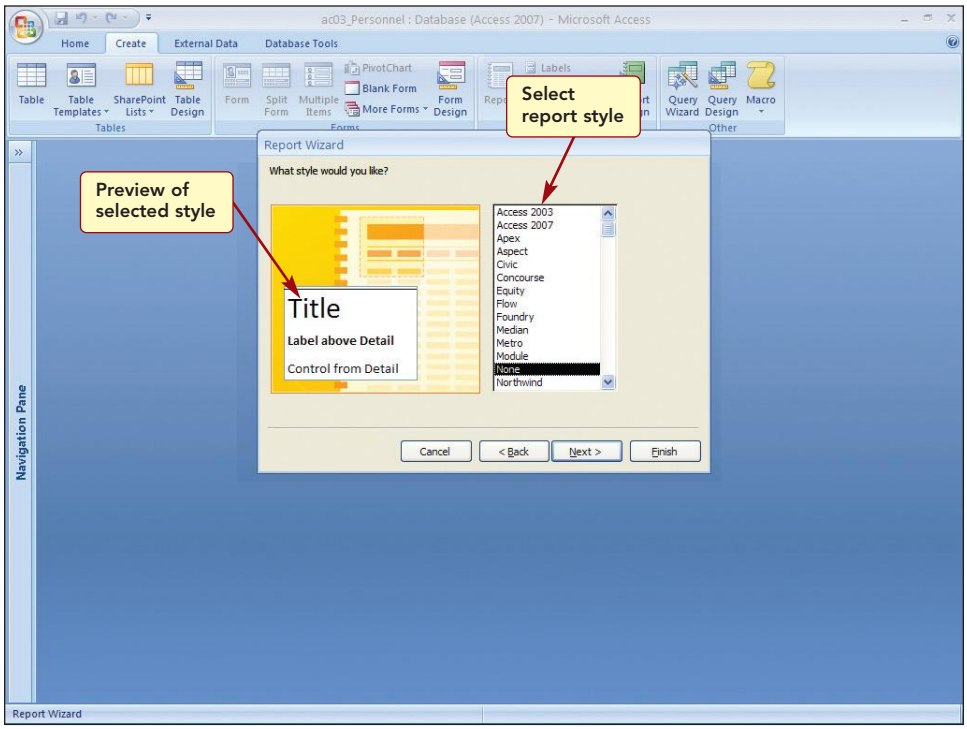


Figure 3.60

From this dialog box, you select a design style for the report. The preview area displays a sample of each style as it is selected.

5. **Select each style to preview the style options.**
   - **Select Northwind.**
   - **Click** Next > **.**

Your screen should be similar to Figure 3.61

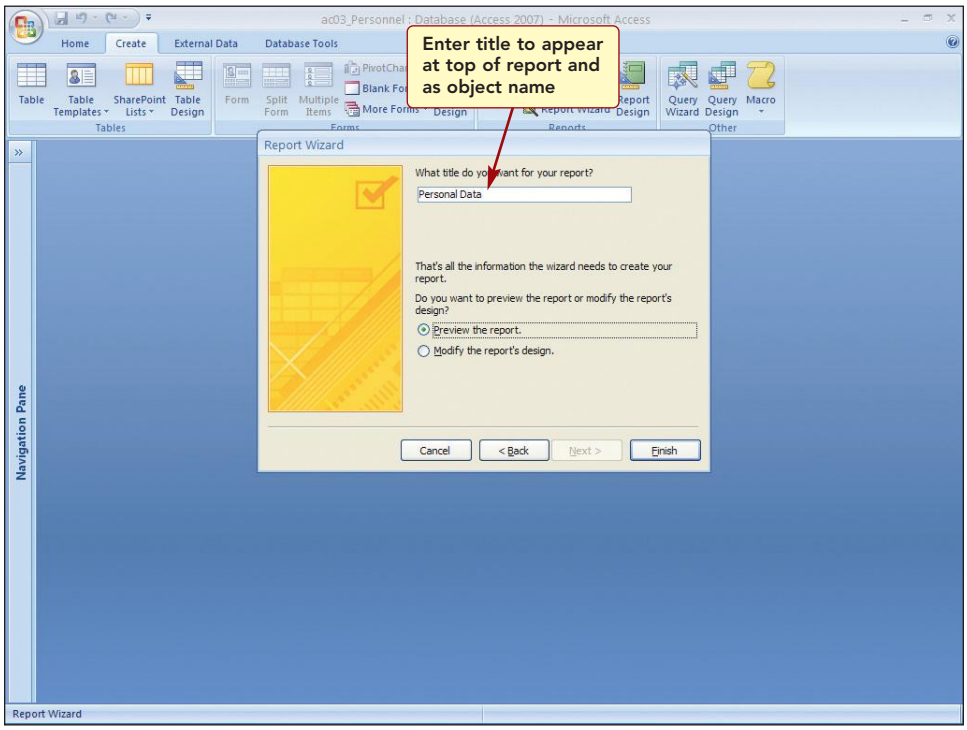


Figure 3.61

The last Report Wizard dialog box is used to add a title to the report and to specify how the report should be displayed after it is created. The only change you want to make is to replace the query name with a more descriptive report title.

6. **Enter Maldin to Landis Car Pool Report as the title.**
   - **Click** Finish **.**

Your screen should be similar to Figure 3.62

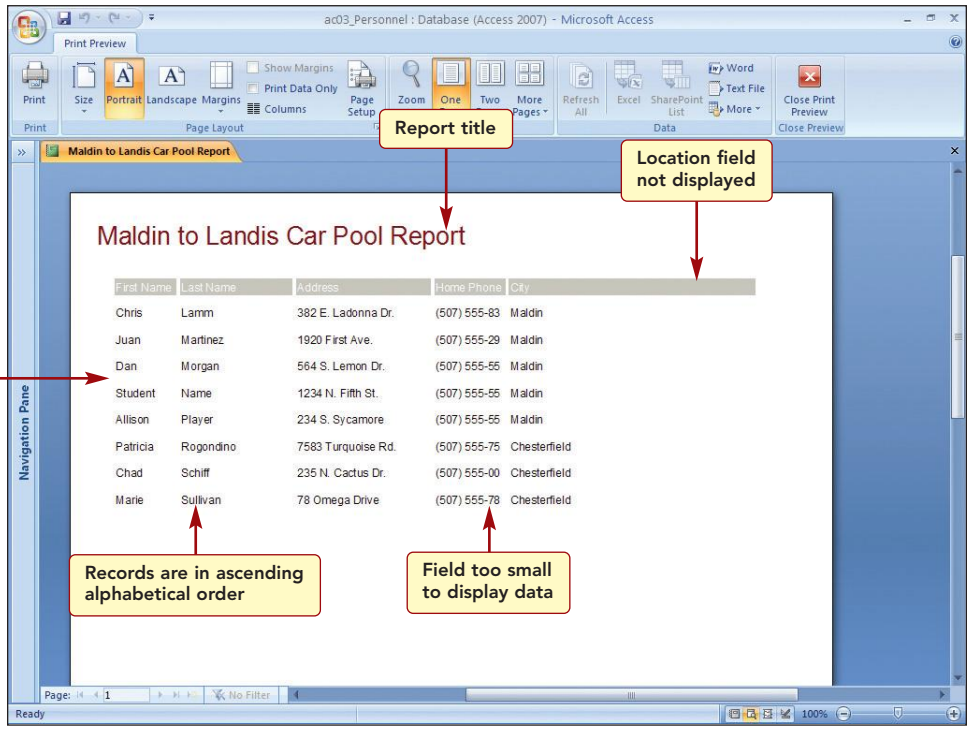


Figure 3.62

In a few moments, the completed report with the data from the resource query is displayed in Print Preview. The report appears in the tabular layout using the Northwind design style. The title reflects the title you specified. The records are in alphabetical order as specified by the query.

However, there are a few problems with the design. The most noticeable is that the City field is much larger than it needs to be and, consequently, the Home Phone field is truncated. Additionally, you want the City field to follow the Address field.

Modifying the Report in Layout View

To make these changes, you need to modify the report design. You can modify a report in either Design view or Layout view. To make these simple changes, you will use Layout view.

1 **Click Layout View in the status bar.**

If necessary, close the Field list pane.

Your screen should be similar to Figure 3.63

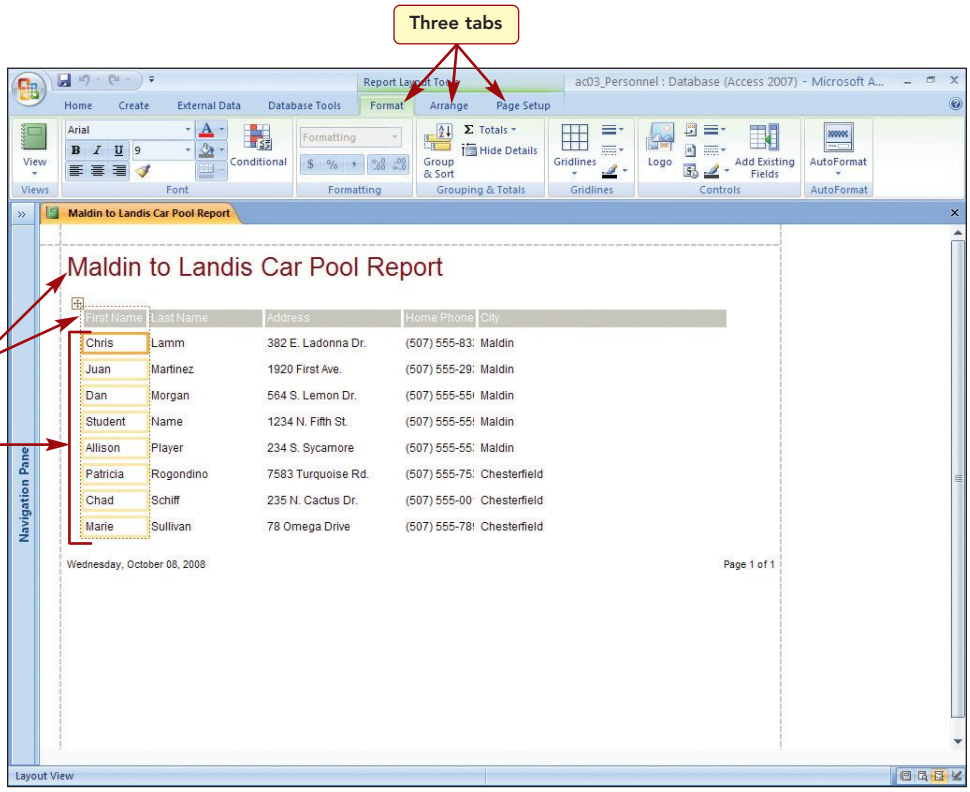


Figure 3.63

In Layout view, three tabs are available to help you modify the report. The Format tab contains commands that are used to make text enhancements such as fonts and colors, as well as to add and modify report design objects. The Arrange tab is used to modify the overall layout of the report or of individual elements. The Page Setup tab is used to control the page layout of the report for printing purposes.

Having Trouble?
See Concept 8 in Lab 2 to review controls.

Just as in forms, each item in the report is a separate control. The field names are label controls and the field information is a text control. The text controls are bound to the data in the underlying table. The field names and report title are unbound label controls. The columnar report layout controls the layout and position of these controls.

The same features you learned when working in Form Layout view are available in Report Layout view. You will begin by sizing the City and Home Phone fields. Then you will move the Home Phone field.

2 **Click on the City field.**

Additional Information
The dotted box around the label and text box controls shows they are a compound control.

- **Reduce the size of the field to fit the contents.**
- **Click on the Home Phone field and increase the size of the field to display the contents.**
- **Drag the Home Phone field object to the right of the City field.**
- **Adjust the size of the fields as in Figure 3.64.**

Your screen should be similar to Figure 3.64

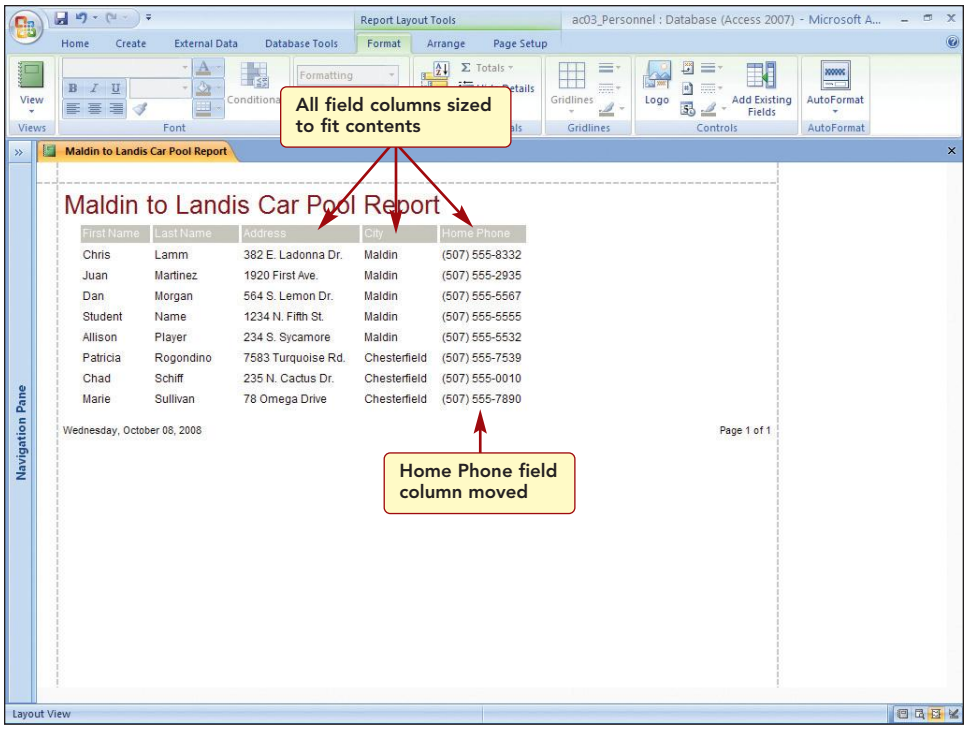


Figure 3.64

The last changes you want to make are to the appearance of the report. You decide to change the report design style to another more colorful style. This feature works similarly to the Form AutoFormat feature. The same selection of report design styles that were available in the wizard are displayed in the AutoFormat gallery.

3 **Click**  **in the AutoFormat group of the Format tab.**

- **Choose Equity.**

Having Trouble?
The design name appears in a ScreenTip when you point to the different designs.

Your screen should be similar to Figure 3.65

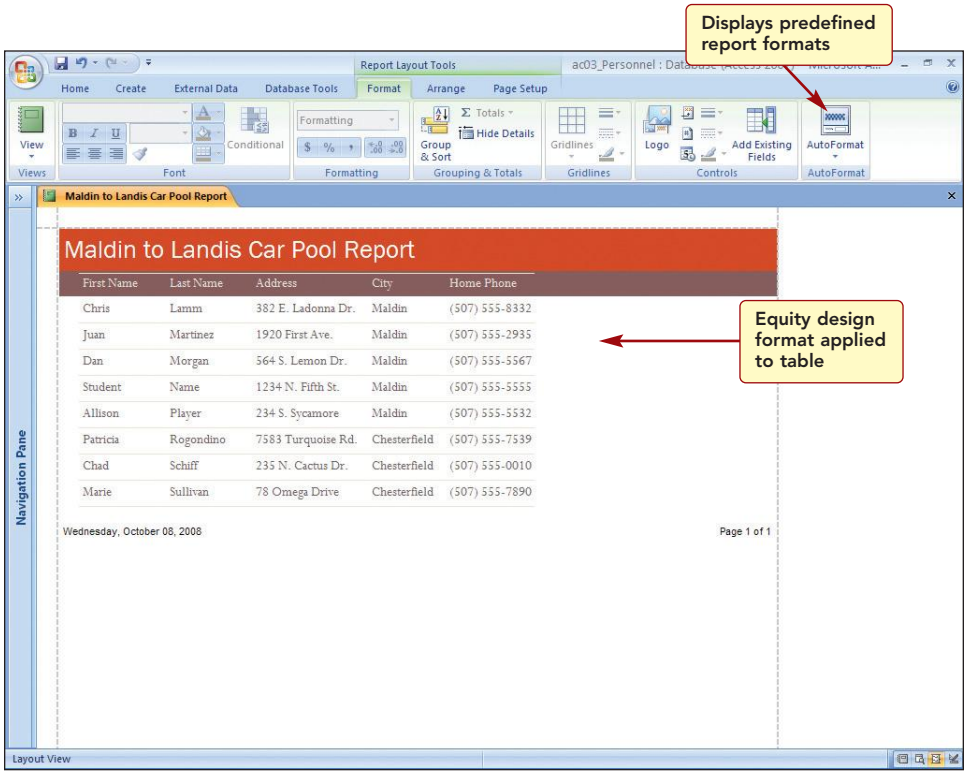


Figure 3.65

The selected design was applied to the report. You are finished making changes to the report and will close and save the report.

4 **Close the report, saving the changes when prompted.**

Display the Navigation pane.

The name of the report you created appears in the Reports category of the Navigation pane.

Modifying a Report in Design View

After seeing how easy it was to create a report for the carpool information, you decide to create a custom report for the job position and location information requested by the club director.

1 **Select the Location Query from the Queries category and click** Report Wizard **in the Create tab.**

Add all the fields to the report.

Click Finish **.**

Enter River Mist as the location and click OK **.**

Your screen should be similar to Figure 3.66

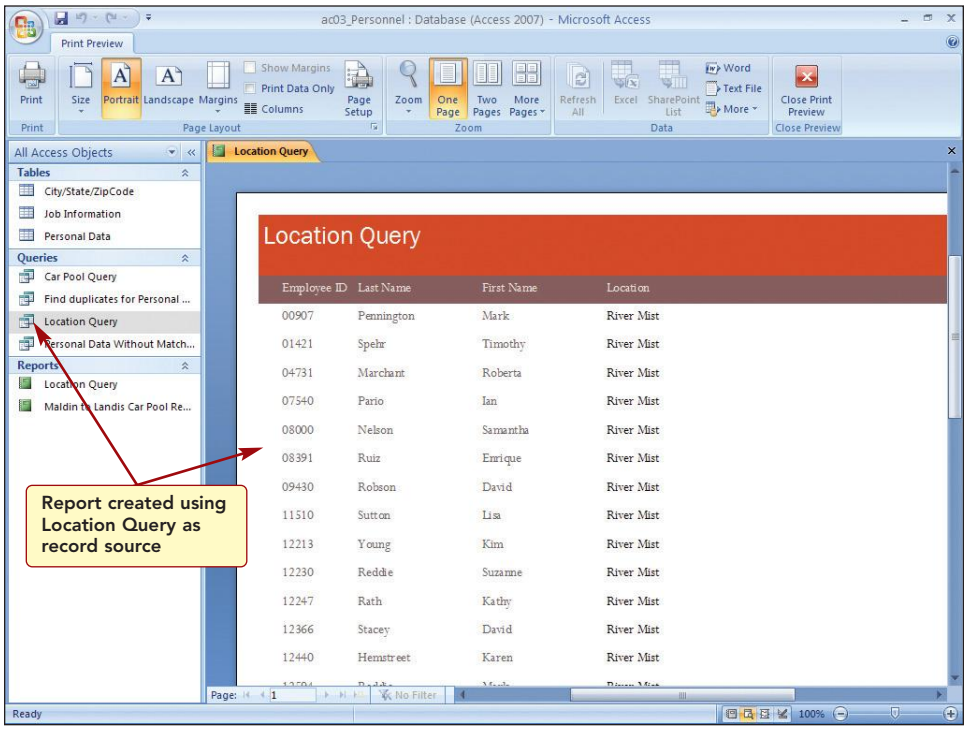


Figure 3.66

Rather than moving through each step of the wizard, if you know that you will be using the default or last-used settings, you can end the wizard at any point. The report displays the specified fields and uses the tabular layout and the Equity design style. This style was used because it was the last style used in the database.

As you look at the report, you realize you forgot to include the Position field. You will modify the query and then add this field in Design view to the report.

2. **Open the Location Query and enter River Mist as the location.**

- **Change to Design view and add the Position field to the design grid.**
- **Click Save in the Quick Access Toolbar to save the query design changes.**
- **Display the Location Query report and click Close Print Preview.**
- **Hide the Navigation pane.**
- **If the Field List pane is not displayed, click Add Existing Fields in the Tools group of the Design tab.**

Another Method

You also can use the shortcut key Alt + F8 to hide and display the Field List pane.

Your screen should be similar to Figure 3.67

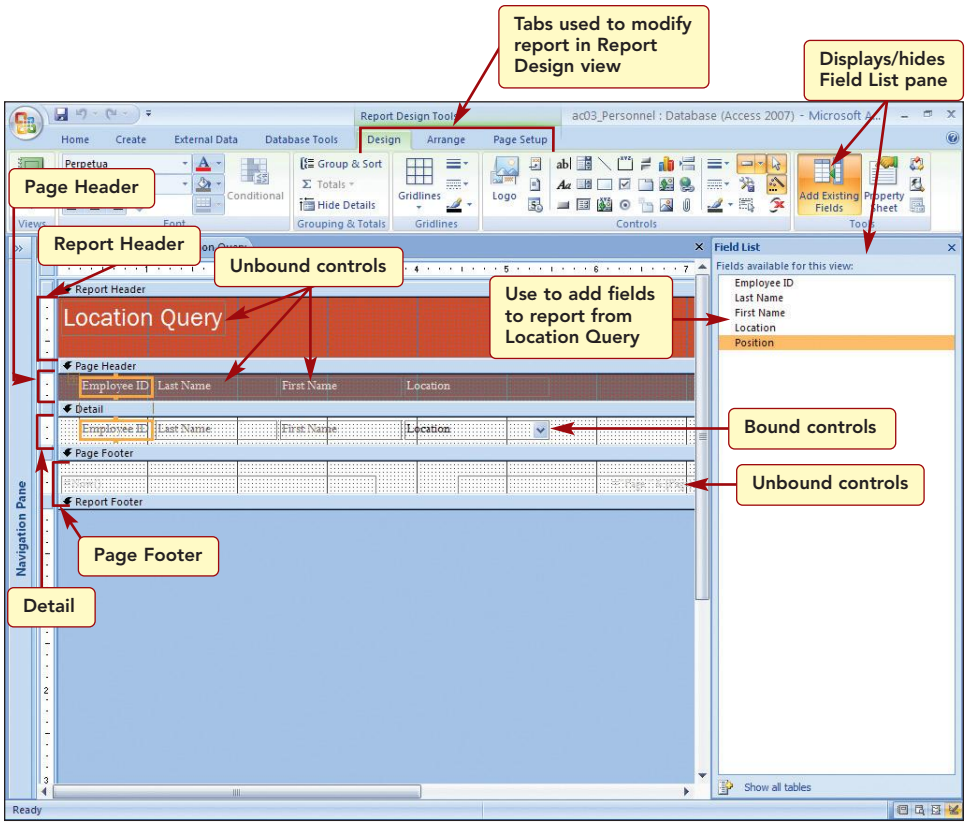


Figure 3.67

The report is displayed in Report Design view. It includes three tabs that help you modify the report. The Design tab contains commands that are used to make text enhancements such as fonts and colors, as well as to add and modify report design objects. The Arrange tab is used to modify the overall layout of the report or of individual elements. The Page Setup tab is used to control the page layout of the report for printing purposes.

Additionally, the Field List task pane displays the field names from the design grid of the Location Query and is used to add fields to the report.

The Report Design window is divided into five sections: Report Header, Page Header, Detail, Page Footer, and Report Footer. The contents of each section appear below the horizontal bar that contains the name of that section. The sections are described in the following table.

Section	Description
Report Header	Contains information to be printed once at the beginning of the report. The report title is displayed in this section.
Page Header	Contains information to be printed at the top of each page. The column headings are displayed in this section.
Detail	Contains the records of the table. The field column widths are the same as the column widths set in the table design.
Page Footer	Contains information to be printed at the bottom of each page such as the date and page number.
Report Footer	Contains information to be printed at the end of the report. The Report Footer section currently contains no data.

The field name controls in the Page Header section are unbound label controls whereas those in the Detail section are bound text controls. The control in the Report Header that displays the report title and those in the Page Footers that display the date and page numbers are unbound controls. Finally, there are other unbound controls that enhance the appearance of the report such as lines, boxes, and pictures.

First you will add the missing field to the report.

3 **Drag the Position field from the Field List to the right of the Location text control and when a vertical orange bar appears, release the mouse to drop it at that location.**

Close the Field List pane.

Additional Information
You also can double-click on the field from the field list to move it into the report design.

Your screen should be similar to Figure 3.68

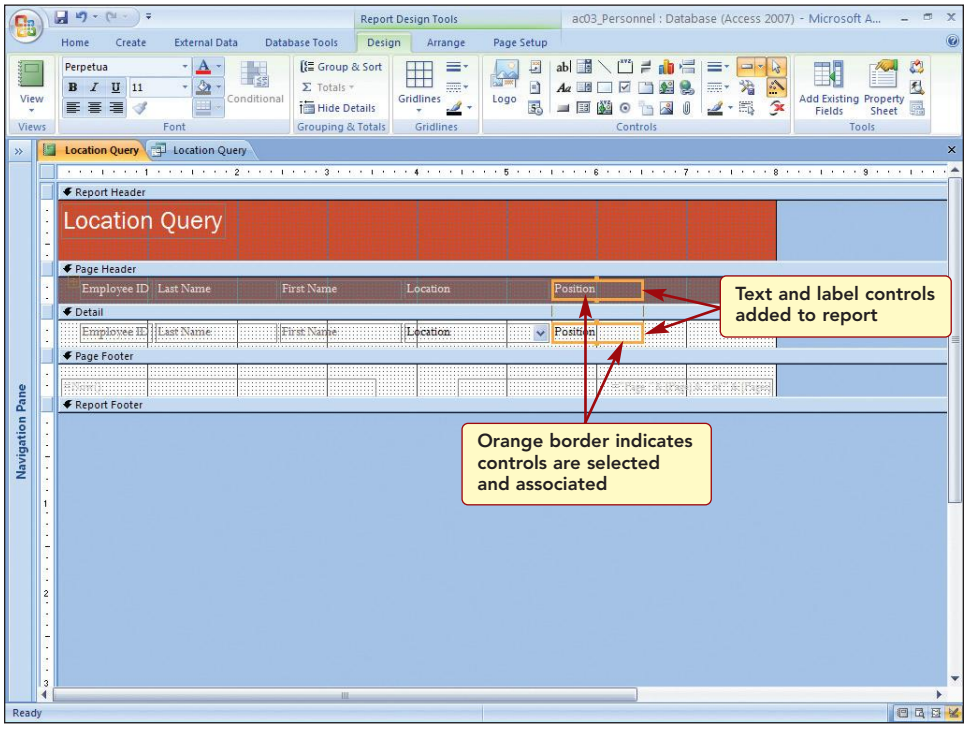


Figure 3.68

Position text and label controls have been added to the report. The Position label control was inserted in the Page Header section and the Position text control in the Detail section. This is because the controls were inserted into the tabular control layout and comply with the horizontal and vertical alignment settings of the layout.

Additional Information
If you want to move a control out of the control layout, it needs to be removed from the group as you did when designing the form.

Both controls are surrounded by an orange border indicating that they are selected and that they are **compound controls.** This means the controls are associated, and that the two controls will act as one when moved. Additionally, the text control is a bound control that is tied to the Position field data.

Another Method
You also can move controls using Ctrl + the directional arrow keys.

Now you want to move the Last Name controls to the right of the First Name controls. Controls can be moved to any location within the control layout by clicking on the control to select it and then dragging it to the new location. The mouse pointer changes to ✥ to indicate that a selected control can be moved.

4 **Select the Last Name text control.**

Point to the control and when the mouse pointer changes to ✥, drag it to the right of the First Name text control.

Your screen should be similar to Figure 3.69

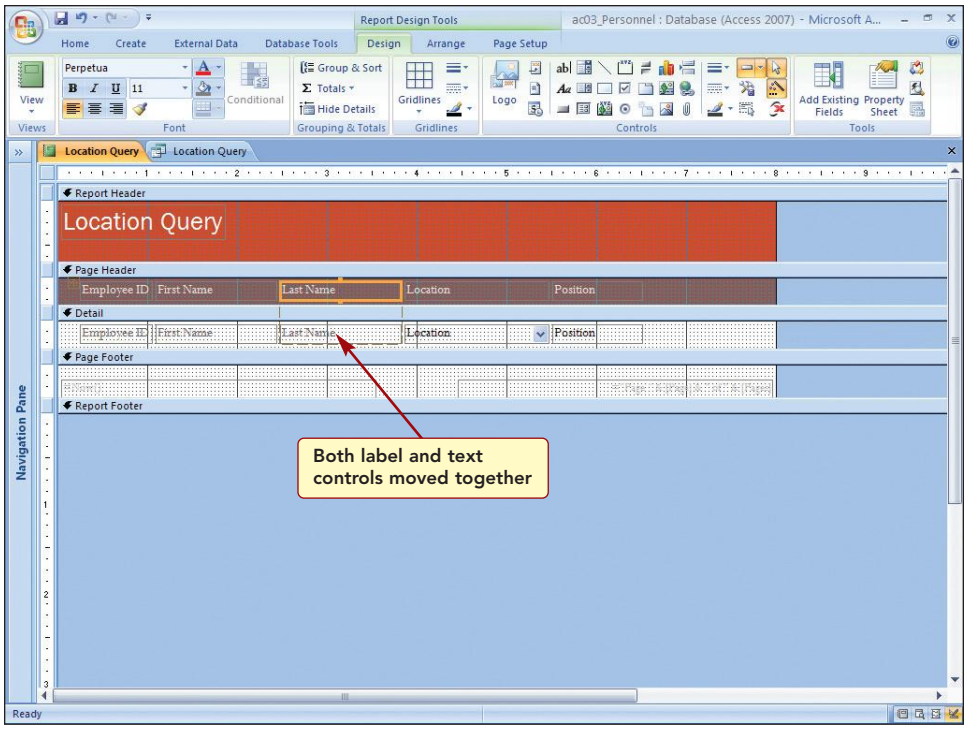


Figure 3.69

Notice that the Last Name label control in the Page Header area also moved and was automatically placed and aligned above the Last Name text control. The controls in both the Page Header and Detail sections are horizontally and vertically aligned and spaced an equal distance apart.

Format Controls

Next, you decide to change the text of the report title and center it over the report. First you will enlarge the title control to extend the width of the report and then center the text within the control.

1. **Select the report title control.**
- **Drag the right edge of the control to the right margin (8" ruler position).**
- **Click Center in the Font group of the Report Design Tools Design tab.**
- **Click in the control to place the cursor in the text and select the text.**
- **Type Landis Job Position Report.**

Having Trouble?
The title text is difficult to see because it is white on a white background when the text is selected.

- **Click outside the report design area to clear the selection.**

Your screen should be similar to Figure 3.70

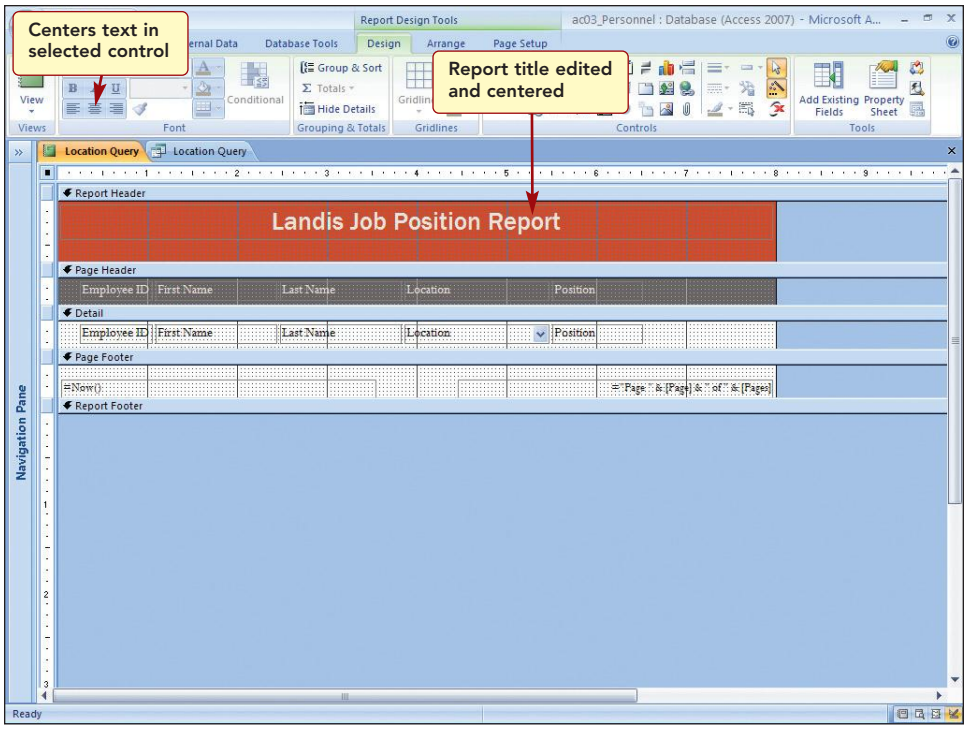


Figure 3.70

The revised title is centered over the report columns. Changing the title text does not change the name of the report object.

Now you want to see the effects of your changes. You will be prompted to enter the location. This time, you will enter Landis as the location because the report title now includes the location.

2 **Switch to Layout view.**

Enter the location of Landis.

Your screen should be similar to Figure 3.71

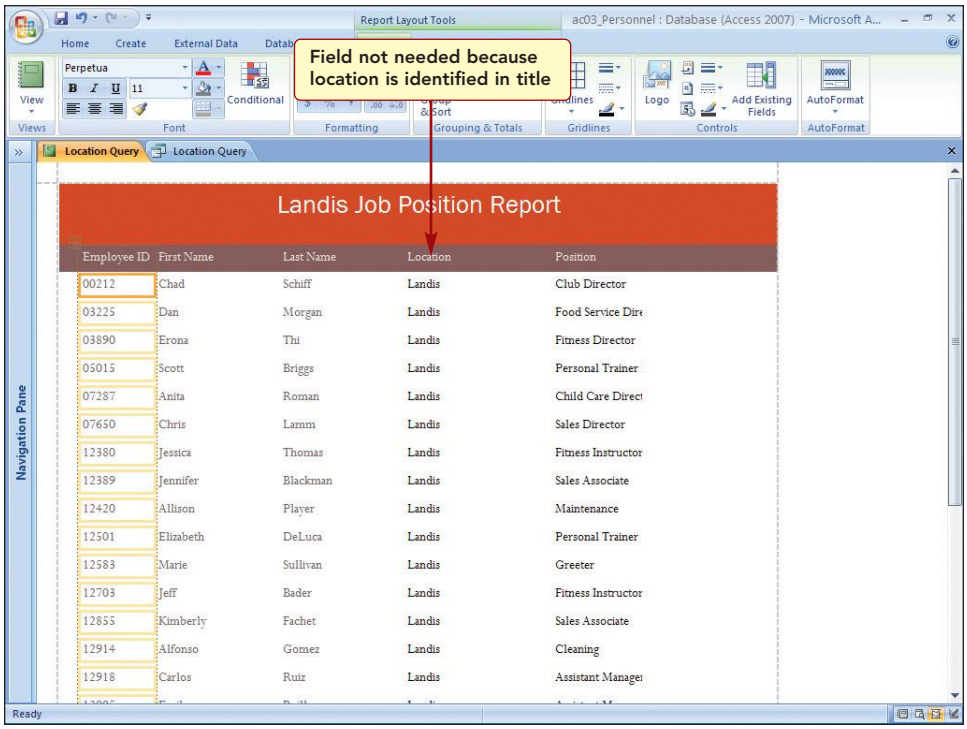


Figure 3.71

The report is really shaping up. However, there are still a few changes you need to make. You want to remove the Location field because the title now identifies the location. Then you will adjust the sizes of the fields to make the report fill more of the width of the page.

Deleting a Field

You will delete the field and resize the other fields in Layout view so you can see the field content and layout while sizing them.

1. **Select the Location field and press Delete.**

- **Increase the size of the Position field to fully display the field contents.**

Having Trouble?

Scroll to the end of the report to make sure that the largest Position name is fully displayed.

- **Increase the size of the Employee ID field to approximately the same size as the name fields.**

Your screen should be similar to Figure 3.72

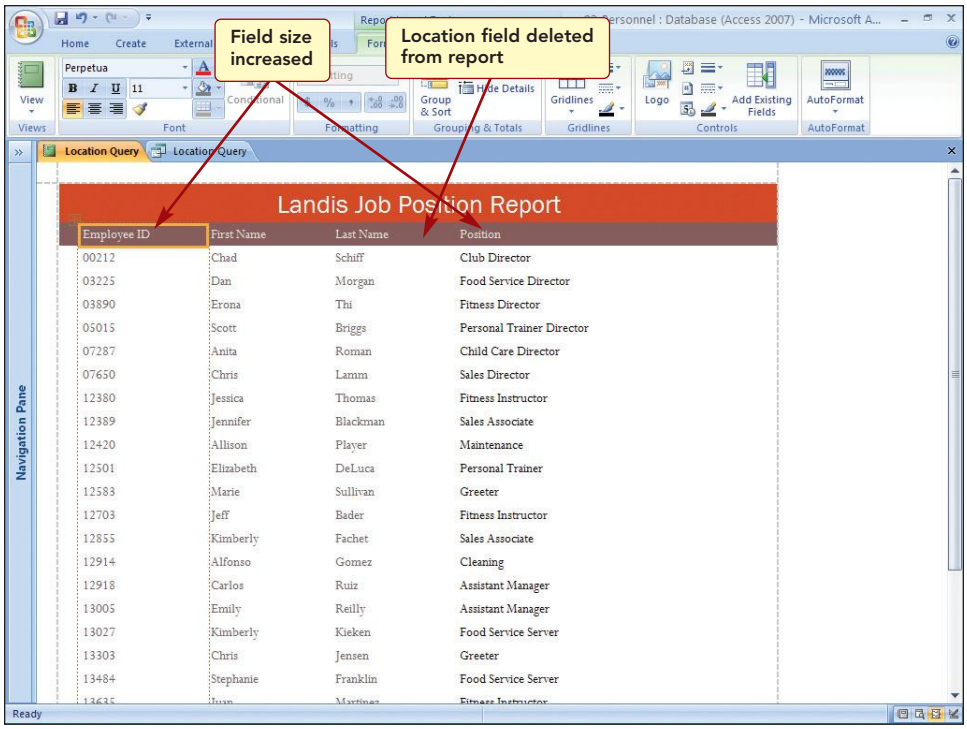


Figure 3.72

Now, each time you run the report, you simply need to change the location in the title to reflect the location you specify as the query parameter.

Sorting and Filtering Data in a Report

You also notice that the records in the report are in Employee ID order. This is because a sort order was not specified in the query or the report when they were created. Just as in a table datasheet, query, or form, you can sort and filter the data that is displayed in a report. You will use these features to sort the records in alphabetical order by last name and display only those records whose job is a fitness instructor.

1. **Right-click on the Last Name field of any record.**
2. **Choose Sort A to Z.**
3. **Right-click on the Position field of any record that displays Fitness Instructor.**
4. **Choose Equals "Fitness Instructor".**

Your screen should be similar to Figure 3.73

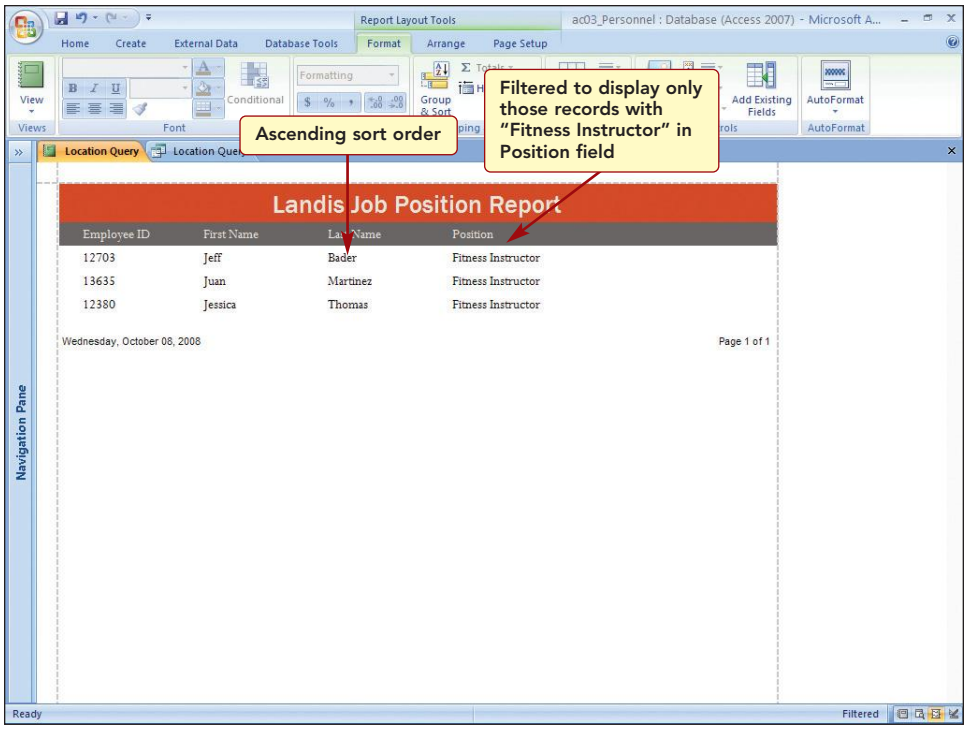


Figure 3.73

Only the three records meeting the filter requirements are displayed in the report. They are in alphabetical order by last name. You will remove the filter but maintain the sorted record order.

2. **Right-click on the Position field of any record.**
3. **Choose Clear filter from Position.**

Additional Information

You also can click Toggle Filter in the Home tab to remove the filter.

All the records are redisplayed again.

Preparing Reports for Printing

You can print the report from any view or even when the report is closed. However, unless you are sure the page settings are correct, it is a good idea to open the report and check its layout in Layout view or Print Preview first. In Layout view, you can easily make any adjustments to the report if you find the changes you make to the page layout affect how the report will print.

Modifying the Page Setup

As you look at the layout of the report on the page, you see the columns are not centered on the page. This is because the first column starts at the default left margin setting of 0.25 inch. You decide to increase the size of the margins, which will push the columns to the right and better center them on the page.

1. **Open the Page Setup tab.**
2. **Click Margins in the Page Layout group.**
3. **Choose Wide.**

Your screen should be similar to Figure 3.74

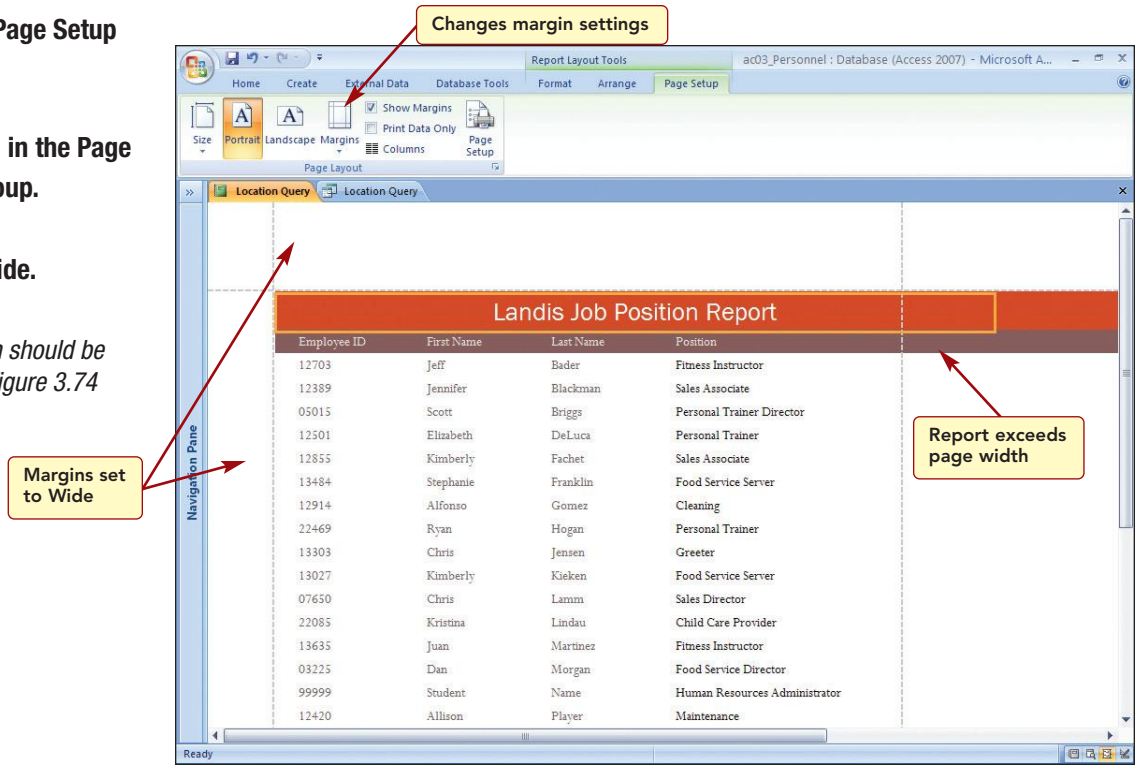


Figure 3.74

The Wide margin option increases the left and right margins to 0.75 inch. The columns now begin at the left margin and the report appears more balanced on the page; however, now the report width exceeds a single page. This is because some of the controls in the report exceed the new page margins. Additionally, the title is no longer centered because the control is wider than the new page width. These problems can be quickly fixed by reducing the size of the controls that are causing the problem. You decide to increase the margins to 1 inch and then make the adjustments to the controls to fit the new page width. To do this, you will set a custom left and right margin.

2. Click Page Setup in the Page Layout group.

- Enter 1 in the Left and Right Margin text boxes.
- Click OK.
- Click on the title control and size the control to fit the new page width.
- Scroll to the bottom of the report and click on the page number control in the footer.
- Reduce the control size (from the right edge) until it is inside the right margin line.
- If the report still exceeds the margins, click on the Position column and reduce the size of the column.
- Scroll to the top of the report.

Your screen should be similar to Figure 3.75

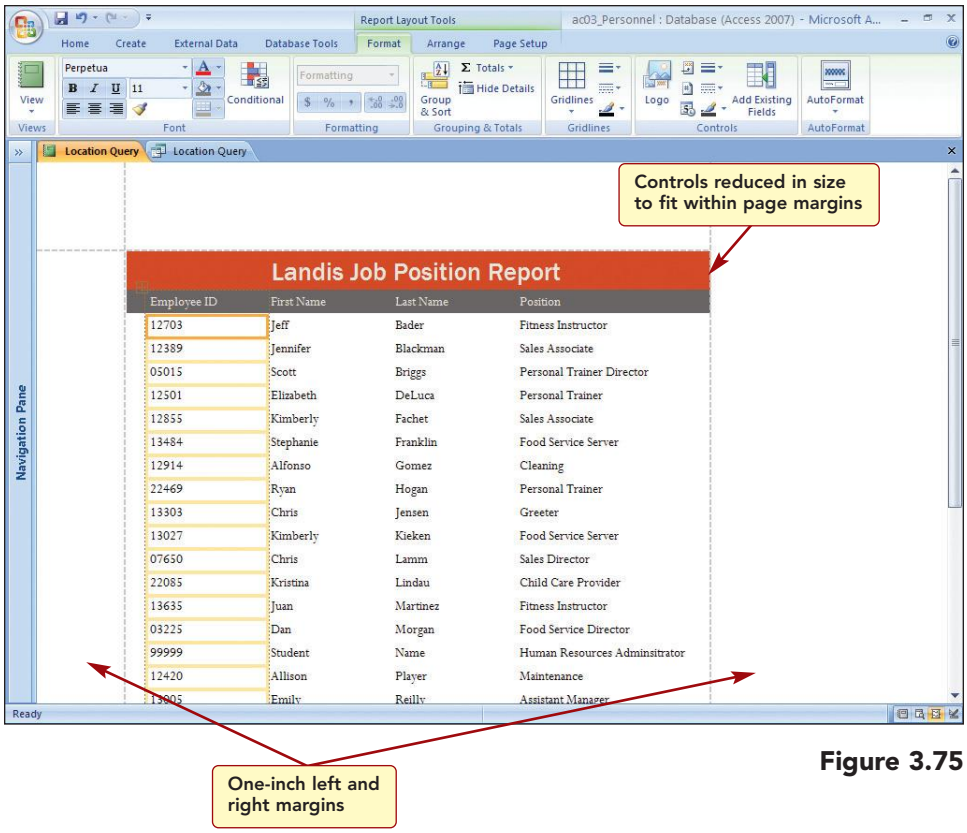


Figure 3.75

Now the columns are spaced attractively across the page. The page layout settings you specify are saved with the report, so unless you make changes to the report design, you only need to set them once.

Previewing and Printing Reports

Although you believe the report is ready to print, you will preview it first and then print it.

1. Click Print Preview in the status bar to change the view to Print Preview.

Additional Information
You also can specify margins and page setup using the same features in the Print Preview ribbon.

- Click Print.
- Specify your printer settings and then print the report.
- Close the report, saving the changes.
- Close the query.
- Open the Navigation pane and rename the Location Query report **Job Position Report**.

Your printed report should look like the one shown in the Case Study at the beginning of the lab.

Printing a Relationships Report

Before exiting Access, you want to print a report that shows the relationships between the tables in your database.

1. Open the Database Tools tab.
- Click Relationships.
- If necessary, click All Relationships to show all table relationships.
- Click Relationship Report in the Tools group of the Relationship Tools Design tab.
- Click Margins and select Last Custom Setting from the drop-down menu.
- Print the report.

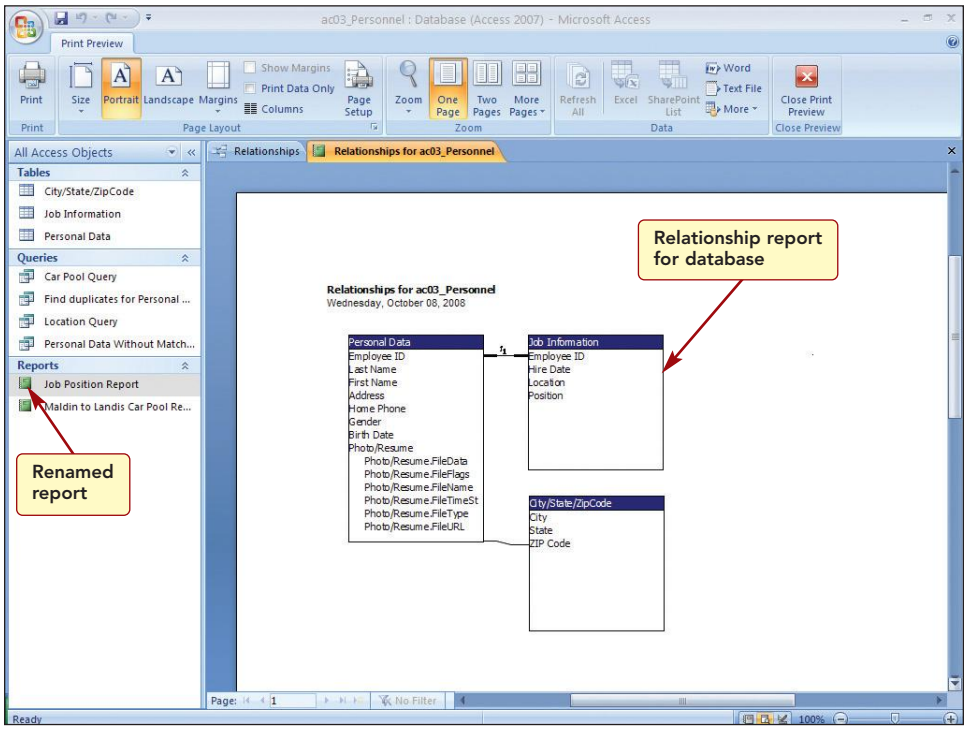


Figure 3.76

Your screen should be similar to Figure 3.76

A preview of how the report will look when printed is displayed on the screen. The database name and creation date are automatically used as the report header. You can print this report as well as save it for future reference.

2. **Close the relationship report without saving it.**

   Close the Relationships window.

Additional Information

A file is fragmented when it becomes too large for your computer to store in a single location on your hard disk. When this happens, the file is split up and stored in pieces in different locations on the disk, making access slower.

Compacting and Backing Up the Database

As you modify a database, the changes are saved to your disk. When you delete data or objects, the database file can become fragmented and use disk space inefficiently. To make the database perform optimally, you should **compact** the database on a regular basis. Compacting makes a copy of the file and rearranges the way that the file is stored on your disk.

1. **Click Office Button and choose Manage/Compact and Repair Database.**

Although it appears that nothing has happened, the database file has been compacted and repaired as needed. It is also a good idea to back up your databases periodically. This will ensure that you have a copy of each database in case of a power outage or other system failure while you are working on a file, or in case you need to access a previous version of a database that you have changed.

2. **Click Office Button and choose Manage/Back Up Database.**

Your screen should be similar to Figure 3.77

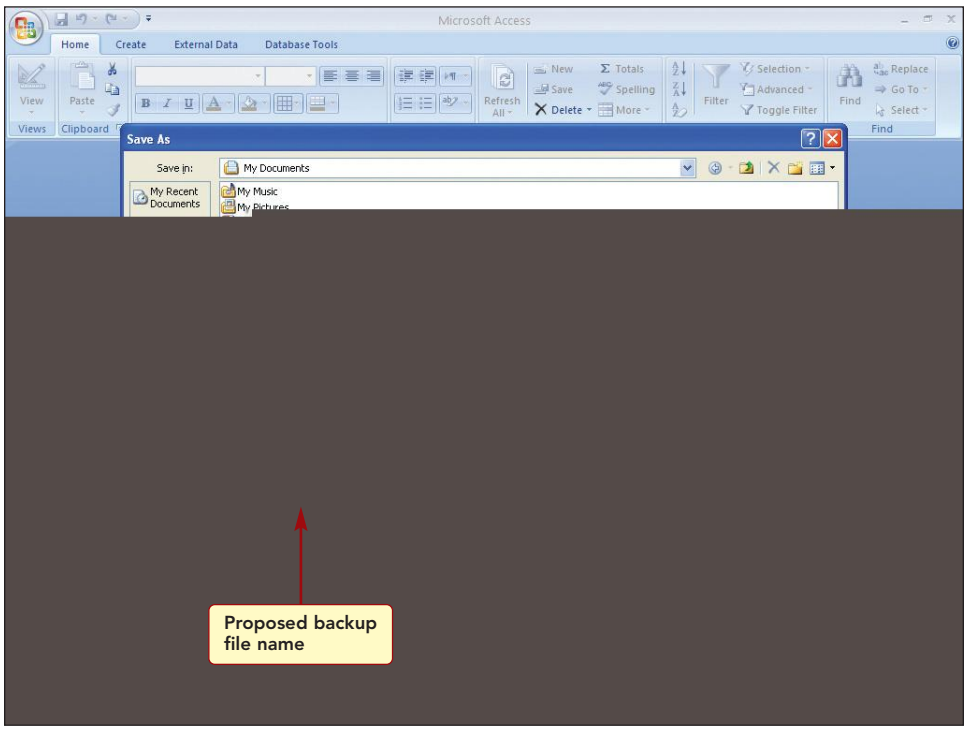


Figure 3.77

The Save As dialog box displays your database name (which in this case is ac03_Personnel) with the current date appended to it. This is a good way to keep track of when you performed the backup on the database, so you will not change this file name.

3. **If necessary, change the Save In location to your data file location.**
   - **Click** Save.
   - **Close the database and exit Access.**

The backup database file has been saved to your data file location. If you need to restore a backed up database, you just change the name of the backup file (so it does not conflict with another file of the same name that you may have created since the backup) and then open it in Access.



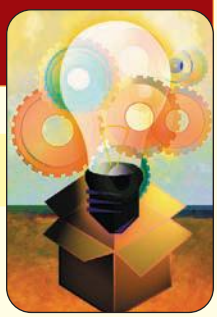
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Database Administrator

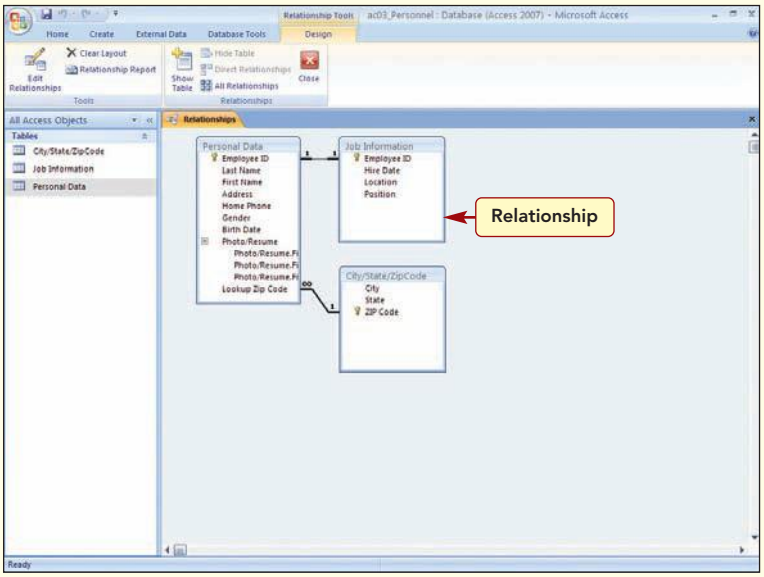
Database administrators are responsible for organizing and maintaining an organization's information resources. This position generally involves training new users to use the database, testing new objects, and backing up the data. As a database administrator, your position also would include safeguarding the system from threats. The typical salary range of a database administrator is $40,000 to $65,000. A bachelor's degree in computer science is typically preferred in addition to practical experience. Demand for skilled database administrators is expected to make it one of the fastest-growing occupations.

Concept Summary



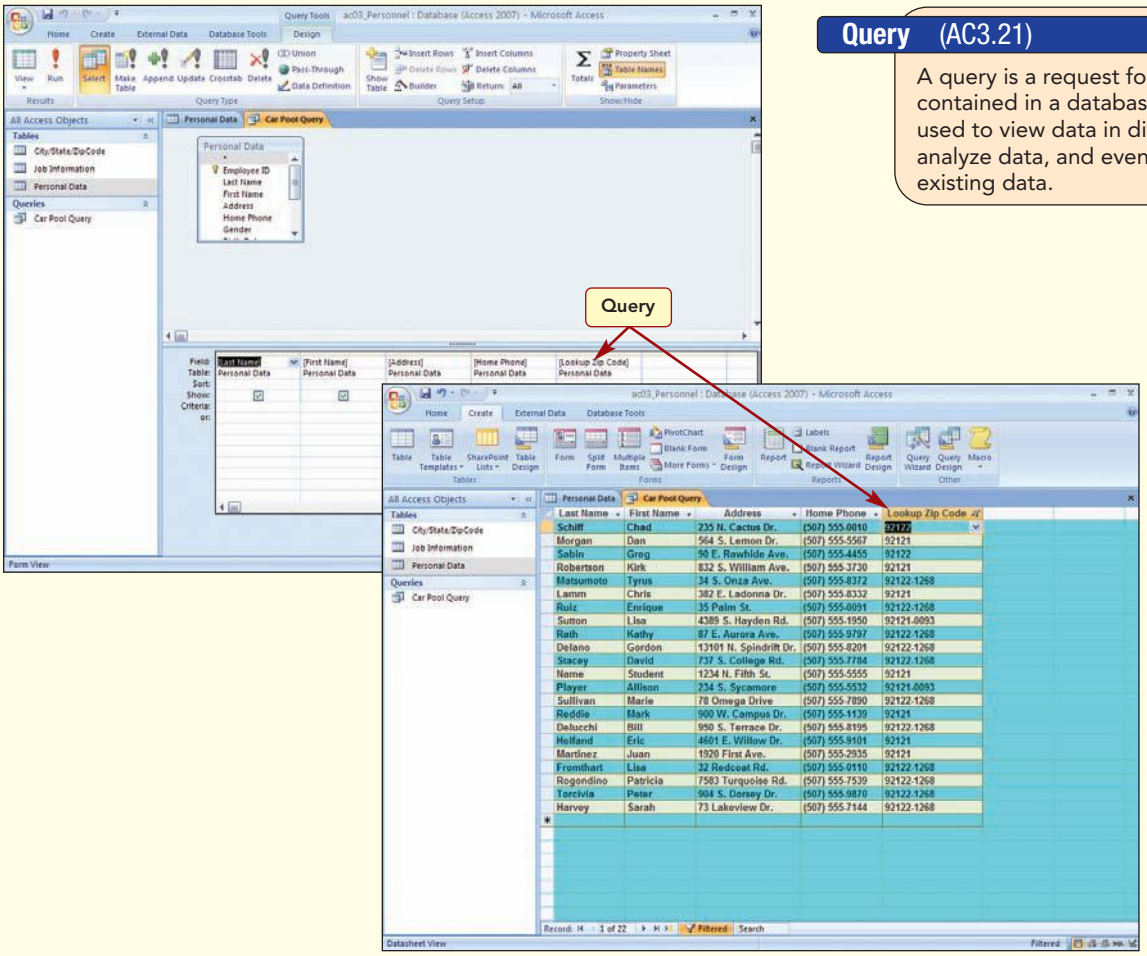
LAB 3

Querying Tables and Creating Reports



Relationship (AC3.14)

A relationship establishes the association between common fields in two tables.



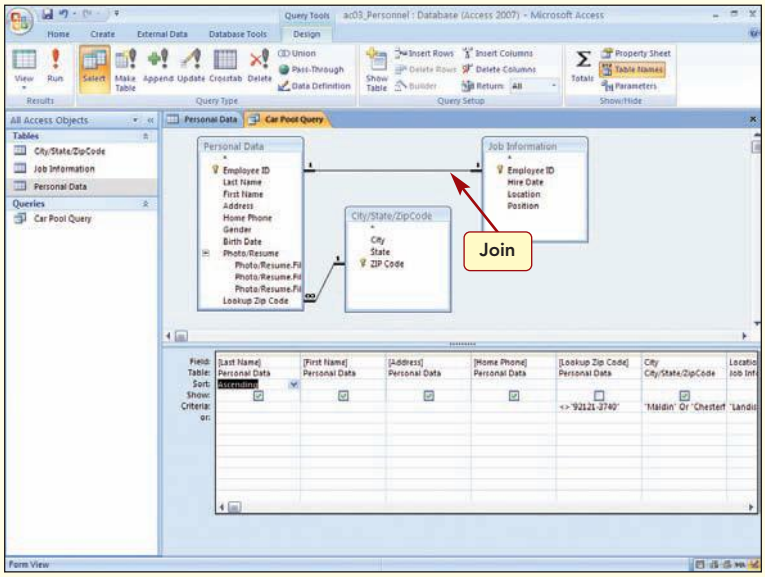
Query (AC3.21)

A query is a request for specific data contained in a database. Queries are used to view data in different ways, to analyze data, and even to change existing data.

Concept Summary

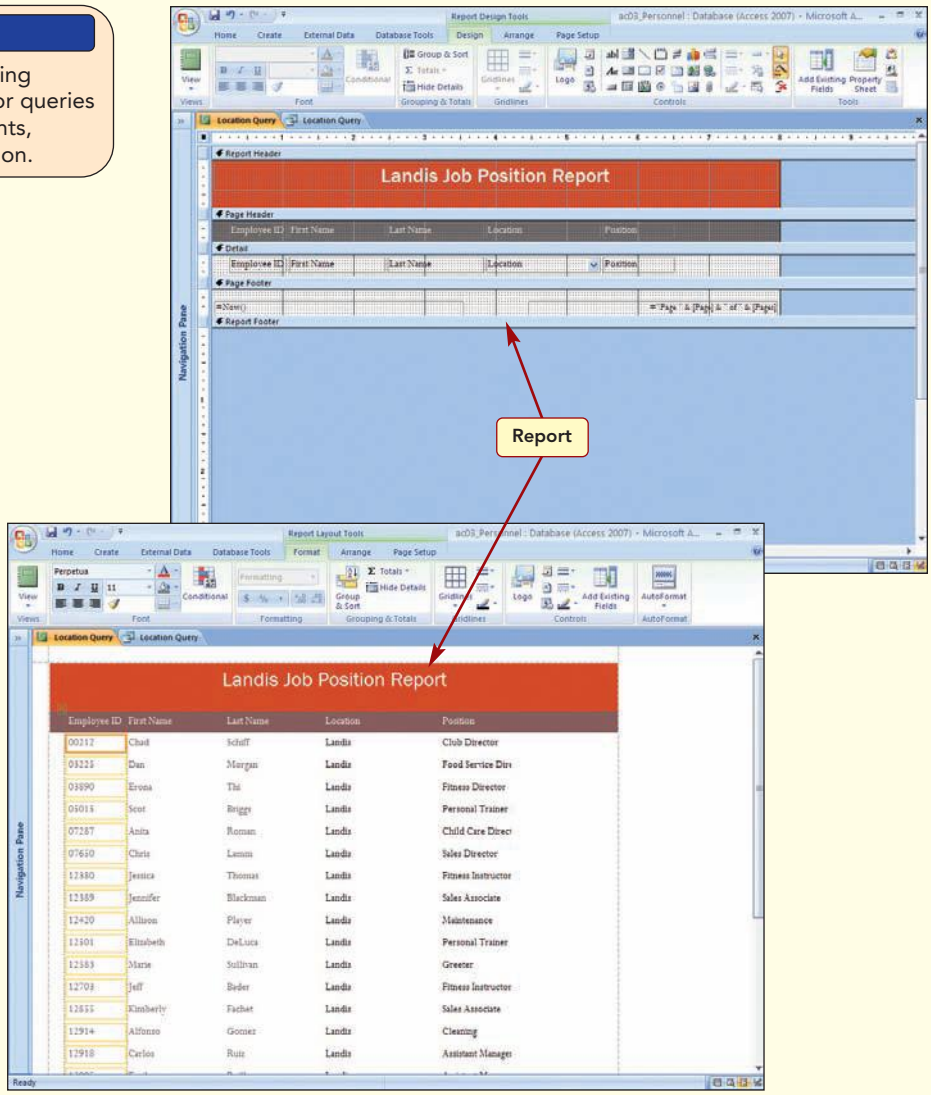
Join (AC3.27)

A join is an association between a field in one table or query and a field of the same data type in another table or query.

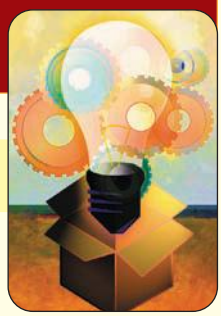


Report (AC3.49)

A report is professional-appearing output generated from tables or queries that may include design elements, groups, and summary information.



Lab Review



LAB 3

Querying Tables and Creating Reports

key terms

Action query AC3.21
aggregate functions AC3.47
AND operator AC3.32
column selector bar AC3.26
common field AC3.14
compact AC3.69
compound control AC3.60
compound criterion AC3.32
criteria AC3.21
criteria expression AC3.30
Crosstab query AC3.21
design grid AC3.26
field list AC3.26
hard-coded criteria AC3.46
inner join AC3.30
join AC3.27
join line AC3.18
junction table AC3.14
many-to-many AC3.14
multitable query AC3.26
one-to-many AC3.14
one-to-one AC3.14
OR operator AC3.32
outer join AC3.30
Parameter query AC3.21
parameter value AC3.46
query AC3.21
referential integrity AC3.14
relationship AC3.14
report AC3.49
row label AC3.26
Select query AC3.21
Show box AC3.26
SQL query AC3.21
unequal join AC3.30

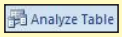
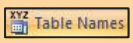
MCAS skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2: Microsoft Certified Applications Specialist (MCAS) for a complete list of the skills that were covered in Lab 3.

command summary

Command	Shortcut	Action
Office Button		
Save As		Saves database object with a new file name
Manage/Back Up Database		Backs up database
Manage/Compact and Repair		Compacts and repairs database file
Home tab		
Views group		
Report View		Displays report in Report view
Report Layout View		Displays report in Layout view
Records group		
		Updates selected object
		Displays/hides Totals row
Create tab		
Reports group		
		Creates a report using all fields in current table
		Creates a report using Report Design view
		Creates a report using the Report Wizard
Other group		
		Creates a query using the Query Wizard
		Creates a query using Query Design view
Database Tools tab		
Show/Hide group		
		Evaluates table design and suggests modifications
		Defines how the data in tables is related

command summary

Command	Shortcut	Action
Analyze group 		Evaluates table design
Query Tools Design tab		
Results group 		Displays query results in Query Datasheet view
Query Setup group 		Displays/hides Show Table dialog box
Show/Hide group 		Displays/hides the Tables row
Report Layout Tools Format tab		
Font group  Center		Centers text in selected control
Controls group 		Displays/hides Add Existing Fields task pane
AutoFormat group 		Applies selected predesigned styles to report
Report Layout Tools Page Setup tab		
Page Layout group 		Sets margins of printed report
		Sets features related to the page layout of printed report

command summary

Command	Shortcut	Action
Report Design Tools Design tab		
Font group Center		Centers text in selected control
		Sizes text in selected control
Tools group 		Displays/hides the Fields List task pane
Relationship Tools Design tab		
Tools group 		Creates a report of the displayed relationships
Print Preview tab		
Page Layout group 		Adjusts margins in printed output

Lab Exercises



matching

Match the numbered item with the correct lettered description.

1. one-to-many	_____	**a.**	intersection of a column and row
2. compact	_____	**b.**	calculations that are performed on a range of data
3. multitable query	_____	**c.**	runs a query and displays a query datasheet
4. aggregate functions	_____	**d.**	a type of table relationship
5. query	_____	**e.**	makes a copy of the file and rearranges the way that the file is stored on your disk
6. cell	_____	**f.**	an association between fields in related tables
7. 	_____	**g.**	used to ask questions about database tables
8. referential integrity	_____	**h.**	query that uses data from more than one table
9. criteria	_____	**i.**	set of limiting conditions
10. parameter value	_____	**j.**	prompts you for the specific criteria you want to use when you run the query

fill-in

Complete the following statements by filling in the blanks with the correct terms.

1. Enforcing _____ ensures that relationships between tables are valid and that related data is not accidentally changed or deleted.
2. The _____ operator narrows the search for records that meet both conditions.
3. A(n) _____ control is used to enter multiple criteria.
4. A(n) _____ is a request for specific data contained in a database.
5. A(n) _____ is used to display the results of a query.
6. A(n) _____ is an association that tells Access how data between tables is related.
7. The _____ is where you enter the settings that define the query.
8. In a report, a(n) _____ is not connected to a field.
9. _____ are the set of limiting conditions used in filters and queries.
10. To be joined, the tables must have at least one _____ field.

true/false

Circle the correct answer to the following statements.

1. Values that tell Access how to filter the criteria in a query are called filter expressions. True False
2. Queries are used to view data in different ways, to analyze data, and to change existing data. True False
3. Reports can be generated from tables only. True False
4. Fields in different tables must have the same name to create a relationship. True False
5. A compound control consists of two controls that are associated. True False
6. A join line shows how different tables are related. True False
7. Related fields are fields that have the same data type and the same kind of information, but different field names. True False
8. A compound criterion is created using the AND operator. True False
9. A Select query is the most common type of query. True False
10. Hard-coded criteria are used each time the query is run. True False

multiple choice

Circle the letter of the correct response.

1. A join line creates a _____ relationship that establishes rules that the data must match to be included in the query results.
   - **a.** permanent
   - **b.** partial
   - **c.** temporary
   - **d.** complete
2. The query _____ is where you enter the settings that define the query.
   - **a.** field list
   - **b.** Show box
   - **c.** design grid
   - **d.** objects
3. The _____ operator is assumed when you enter criteria in multiple fields.
   - **a.** OR
   - **b.** AND
   - **c.** BETWEEN
   - **d.** EQUAL TO

4. A report title is a(n) _____ control because it is not connected to a field.
   a. bound
   b. associated
   c. unbound
   d. text

5. A(n) _____ query prompts you for the specific criteria you want to use when you run the query.
   a. Parameter
   b. SQL
   c. Update
   d. Append

6. _____ view is used to create and modify the structure of a query.
   a. Design
   b. Update
   c. Layout
   d. Datasheet

7. When a file is _____, it uses disk space inefficiently.
   a. broken
   b. fragmented
   c. compacted
   d. repaired

8. _____ view can be used to view the data in a report and modify the report design and layout.
   a. Layout
   b. Design
   c. Print Preview
   d. Datasheet

9. The operator that broadens the filter, because any record meeting either condition is included in the output, is _____.
   a. AND
   b. OR
   c. MOST
   d. ALL

10. Bound and unbound are types of _____.
   a. buttons
   b. forms
   c. properties
   d. controls

Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Scensations Spa Database ★

1. The Scensations Salon and Day Spa offers hair and spa treatments exclusively for women. The owner of the spa is offering a new spa package that would include various anti-aging skin treatments and massages. She wants to send an announcement about this package to her clients who are over the age of 40. You will get this information for her from the client information that is stored in an Access 2007 database file. Your printed report will be similar to that shown here.

   a. Open the database file named ac03_Scensations Spa and the table named Clients.

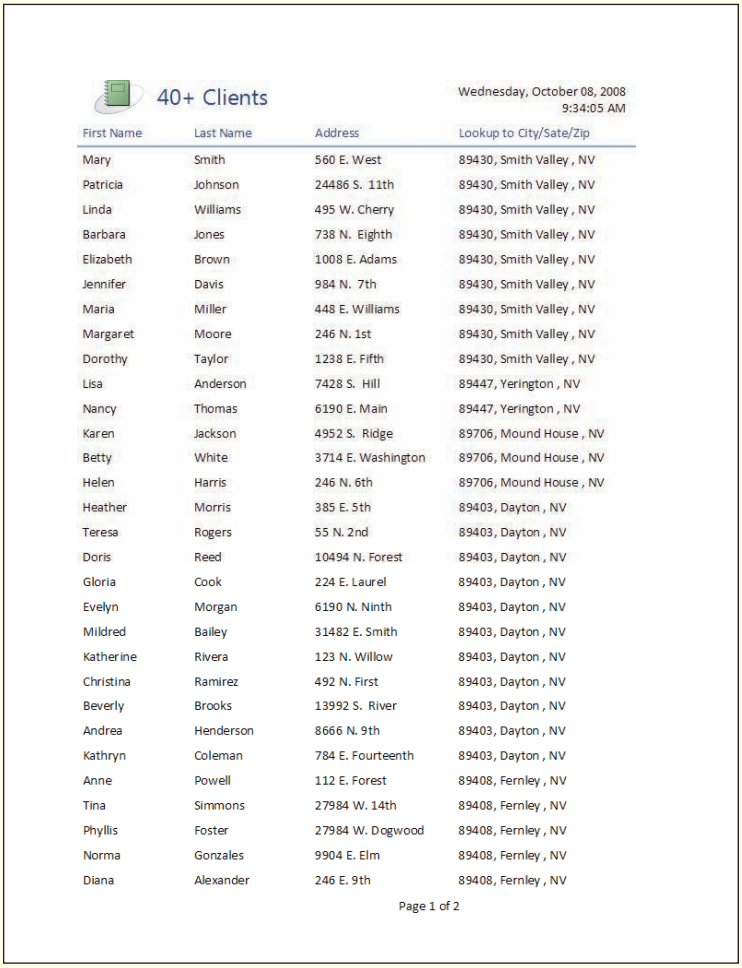
   b. Find and delete any duplicate records using the Last Name field as the field to check for duplicate data.

   c. Use the Table Analyzer Wizard to create a second table containing the City, State, and Zip Code information. Name the new table **City/State/Zip**. Make the Zip Code field the primary key in this table.

   d. Delete the Clients table. Rename Table1 **Clients**. Move the Lookup field after the Address field. Best fit all the fields in the table.

   e. Query the Clients table to display the First Name, Last Name, Address, and City/State/Zip fields for those records with a birth date before 1/1/69.

   f. Display a Totals row showing a count of the Last Name field. Save the query as **40+ Clients**. Print the query results.



40+ Clients

Wednesday, October 08, 2008
9:34:05 AM

First Name	Last Name	Address	Lookup to City/Sate/Zip
Mary	Smith	560 E. West	89430, Smith Valley , NV
Patricia	Johnson	24486 S. 11th	89430, Smith Valley , NV
Linda	Williams	495 W. Cherry	89430, Smith Valley , NV
Barbara	Jones	738 N. Eighth	89430, Smith Valley , NV
Elizabeth	Brown	1008 E. Adams	89430, Smith Valley , NV
Jennifer	Davis	984 N. 7th	89430, Smith Valley , NV
Maria	Miller	448 E. Williams	89430, Smith Valley , NV
Margaret	Moore	246 N. 1st	89430, Smith Valley , NV
Dorothy	Taylor	1238 E. Fifth	89430, Smith Valley , NV
Lisa	Anderson	7428 S. Hill	89447, Yerington , NV
Nancy	Thomas	6190 E. Main	89447, Yerington , NV
Karen	Jackson	4952 S. Ridge	89706, Mound House , NV
Betty	White	3714 E. Washington	89706, Mound House , NV
Helen	Harris	246 N. 6th	89706, Mound House , NV
Heather	Morris	385 E. 5th	89403, Dayton , NV
Teresa	Rogers	55 N. 2nd	89403, Dayton , NV
Doris	Reed	10494 N. Forest	89403, Dayton , NV
Gloria	Cook	224 E. Laurel	89403, Dayton , NV
Evelyn	Morgan	6190 N. Ninth	89403, Dayton , NV
Mildred	Bailey	31482 E. Smith	89403, Dayton , NV
Katherine	Rivera	123 N. Willow	89403, Dayton , NV
Christina	Ramirez	492 N. First	89403, Dayton , NV
Beverly	Brooks	13992 S. River	89403, Dayton , NV
Andrea	Henderson	8666 N. 9th	89403, Dayton , NV
Kathryn	Coleman	784 E. Fourteenth	89403, Dayton , NV
Anne	Powell	112 E. Forest	89408, Fernley , NV
Tina	Simmons	27984 W. 14th	89408, Fernley , NV
Phyllis	Foster	27984 W. Dogwood	89408, Fernley , NV
Norma	Gonzales	9904 E. Elm	89408, Fernley , NV
Diana	Alexander	246 E. 9th	89408, Fernley , NV

Page 1 of 2

g. Use the Report tool to create a report based on the 40+ Clients query.

h. Change the report margins to Normal. Adjust the controls to fit the report on a single page width-wise.

i. Add a new record to the Clients table that includes your name in the first and last name fields and a birth date of 2/11/68.

j. Refresh the query and report to update them.

k. Save the report as **40+ ClientsReport**. Print the report.

l. Compact and repair the database. Back up the database.

m. Close the database, saving as needed, and exit Access.

EchoPlex Reports ★

2. Your vinyl record hobby has grown into a full-fledged online business catering to collectors across the globe. With the database you created (Step-by-Step Exercise 5 of Lab 2), you will enhance the inventory system you created with two new queries. The database you designed to help control inventory has made shipping orders easier than it was in the past, but you would like to make additional changes to help in this process. You would like to create a query that will help you determine which titles move quickly, so that future purchasing is more on target. Your completed query will be similar to that shown here.



Shipping List 10/8/2008

Title	Artist	Sold Price	Shipped
Four Walls Bending	Emily Bezar	$35.00	N
Now or Never	Student Name	$16.00	N
Imagine	John Lennon	$76.00	N
Total	3	**$127.00**	

a. Open the database file named ac02_EchoPlex that you modified in Step-by-Step Exercise 5 of Lab 2. Open the Records table.

b. Make **N** the default value for the Shipped field. Save the changes to the table.

c. You have sold Fleetwood Mac's *Rumours* for $16.00. Change the record accordingly. Enter **Y** in the Shipped field. You also have sold John Lennon's *Imagine* for $76.00. Adjust the record and leave N in the Shipped field.

d. Using the Records form, add the following new records to the table:

ID		
Title	Four Walls Bending	Now or Never
Artist	Emily Bezar	[Your Name]
Condition	Good	Poor
Purchase Price	$15.00	$4.00
Sold Price	$35.00	$16.00
Shipped	N	N
Comments		
Attachments		

e. Create a query that displays inventory that has a sold price but has not been shipped yet. Include the Title, Sold Price, and Shipped fields. Name the query **Shipping List**. Add the Artist field after the Title field to the query. Best fit the query datasheet columns. Display a Total row with a count in the Artist field column and a Sum in the Sold Price column. Print the query results.

f. Close all objects. Compact and repair the database. Exit Access.

Downtown Internet Café Inventory ★★

3. The Inventory database you created for the Downtown Internet Café (Lab 1, Step-by-Step Exercise 4) has been in use several weeks now and is working well. During this time, you have modified the table design and added more information to the table. Evan, the owner, has asked you to submit a daily report on all low-quantity items so he can place the necessary orders. You will use the database to monitor inventory levels and respond to Evan's request. First you decide to run a query to find the low-stock items, and then you can generate the requested report from the query. Your completed report should look similar to the report below.



Stock Report

Supplier	Description	In Stock	Special Order?	Contact	Phone Number	E-mail
ABC Restaurant Supply	Sugar	26	N	Richard Price	(206) 555-0037	brs@email.net
ABC Restaurant Supply	Cups-large	27	N	Richard Price	(206) 555-0037	brs@email.net
ABC Restaurant Supply	Cups-medium	28	N	Richard Price	(206) 555-0037	brs@email.net
ABC Restaurant Supply	Cups-small	29	N	Richard Price	(206) 555-0037	brs@email.net
Aquatics	Bottled water	14	N	Lee Branson	(207) 555-1122	thirst@net.com
By Design	T-Shirts	12	Y	Anna Parker	(502) 555-6973	design@email.
Cuppa Jo	Italian Roast	12	N	Student Name	(206) 555-9090	jo@dial.com
Cuppa Jo	Espresso	11	Y	Student Name	(206) 555-9090	jo@dial.com
Cuppa Jo	Kona coffee	10	N	Student Name	(206) 555-9090	jo@dial.com
Tea and Toast, Inc.	Darjeeling Tea	13	Y	Mavis Dunhill	(206) 555-6001	tea@net.com

a. Open the database file named ac03_Café Inventory. Open the Stock table to view its content. Replace the contact name for Cuppa Jo with your name in the Suppliers table.

b. Use the Query Wizard to create a query based on the Stock table. Include all fields, except Item, in their current order. Name the query **Low Stock**.

c. In Query Design view, enter the criteria to display only those records with an In Stock value less than 30, and run the query.

d. Upon reviewing the datasheet, you realize that it needs to include the contact name, phone, and e-mail addresses for Evan to use when he places orders. Add these fields to the query design.

e. Use the Report Wizard to create a report based on the Low Stock query. Include all the fields in the order listed. Select Supplier as the only sort field. Select the Tabular layout and a design style of your choice. Name the report **Stock Report**.

f. In Report Layout view, change the report design to Opulent. Change the title font color to a color of your choice. Adjust the column widths as needed to appropriately display the data. Center the data in the Special Order column. Change the margin setting to Normal and resize or move any controls that cause the report to overlap to a second page.

g. Preview and print the report. Close the Report window, saving the changes.

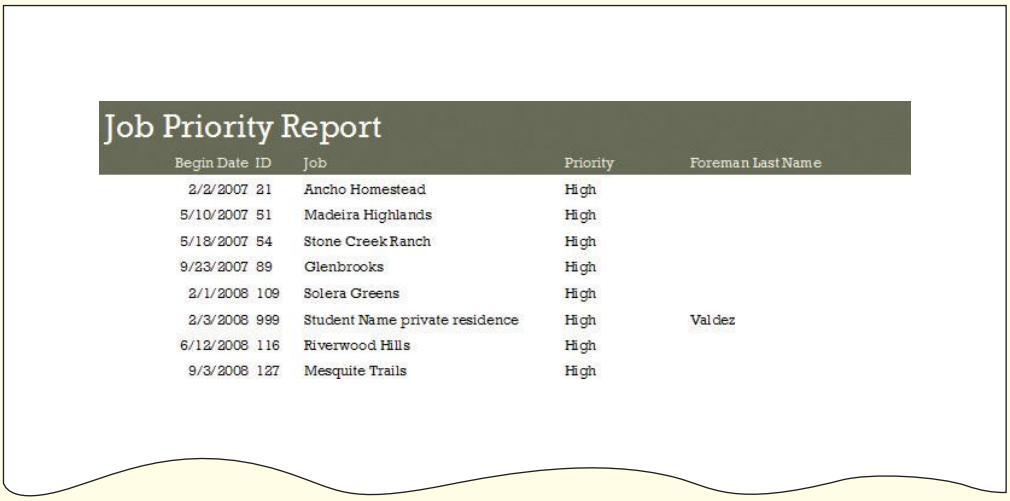
h. Compact and repair the database.

i. Back up the database. Exit Access.

Kodiak Construction Reports ★★



4. The database you created for Kodiak Construction (Step-by-Step Exercise 4 of Lab 2) has been very well received. Now that the database has been in use for a few months, several new requests have been made. You will create a query and a report to fulfill these requests. Your completed report should look similar to the report below.



Job Priority Report

Begin Date	ID	Job	Priority	Foreman Last Name
2/2/2007	21	Ancho Homestead	High	
5/10/2007	51	Madeira Highlands	High	
5/18/2007	54	Stone Creek Ranch	High	
9/23/2007	89	Glenbrooks	High	
2/1/2008	109	Solera Greens	High	
2/3/2008	999	Student Name private residence	High	Valdez
6/12/2008	116	Riverwood Hills	High	
9/3/2008	127	Mesquite Trails	High	

a. Open the database file named ac02_Kodiak Construction that you modified in Step-by-Step Exercise 4 of Lab 2.

b. Create a Parameter query named **Priority** that displays all fields from the Jobs table that have a high priority.

c. Create a report using the Priority query for those jobs with a high priority. Include the ID, Job, Priority, Begin Date, and Foreman Last Name fields. Sort the report by Begin Date. Use the tabular layout in portrait orientation and the Foundry style. Name the report **Job Priority Report**.

d. Change the page margins to Wide. Adjust the size of the report controls in Layout view to appropriately display the data on one page.

e. Preview and print the report.

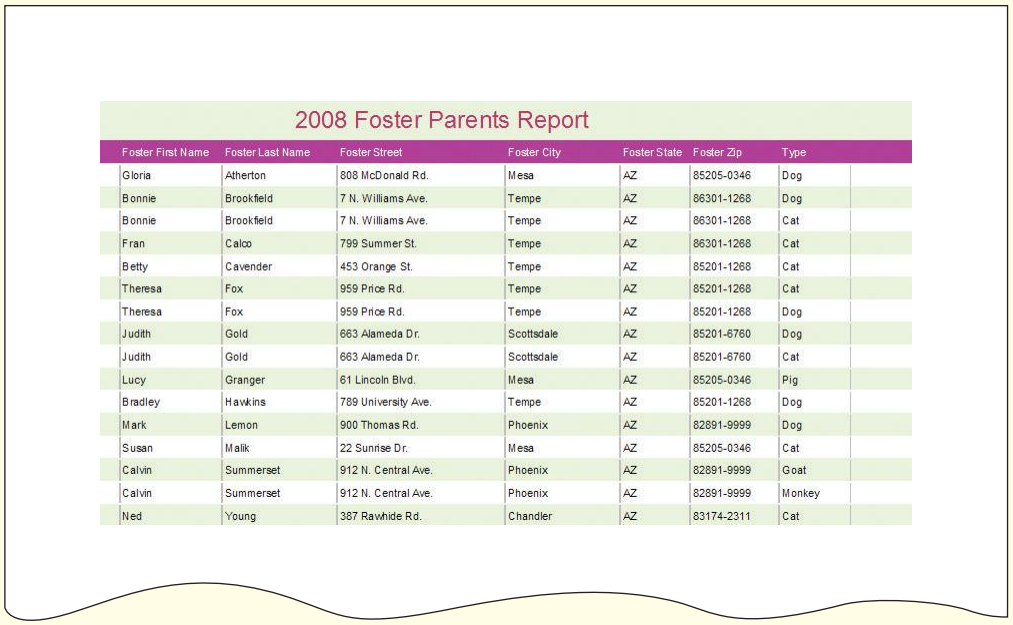
f. Close all objects.

g. Display the database relationships. Edit relationships as needed. Enforce referential integrity for all relationships. Create and print a relationships report.

h. Compact and repair the database. Save the changes and exit Access.

ARF Reports ★★★

5. The Animal Rescue Foundation volunteers are successfully using the database you created to enter information for all the rescued animals. Meanwhile, you created another table containing information about the foster homes (including names, addresses, and phone numbers). The Animal Rescue Foundation management has now asked you for a report, shown below, of all animals placed in foster homes in the past year (2008) and the names and addresses of those providing foster care, so the appropriate thank you notes can be sent. Your completed report will be similar to the report shown here.



2008 Foster Parents Report

Foster First Name	Foster Last Name	Foster Street	Foster City	Foster State	Foster Zip	Type
Gloria	Atherton	808 McDonald Rd.	Mesa	AZ	85205-0346	Dog
Bonnie	Brookfield	7 N. Williams Ave.	Tempe	AZ	86301-1268	Dog
Bonnie	Brookfield	7 N. Williams Ave.	Tempe	AZ	86301-1268	Cat
Fran	Calco	799 Summer St.	Tempe	AZ	86301-1268	Cat
Betty	Cavender	453 Orange St.	Tempe	AZ	85201-1268	Cat
Theresa	Fox	959 Price Rd.	Tempe	AZ	85201-1268	Cat
Theresa	Fox	959 Price Rd.	Tempe	AZ	85201-1268	Dog
Judith	Gold	663 Alameda Dr.	Scottsdale	AZ	85201-6760	Dog
Judith	Gold	663 Alameda Dr.	Scottsdale	AZ	85201-6760	Cat
Lucy	Granger	61 Lincoln Blvd.	Mesa	AZ	85205-0346	Pig
Bradley	Hawkins	789 University Ave.	Tempe	AZ	85201-1268	Dog
Mark	Lemon	900 Thomas Rd.	Phoenix	AZ	82891-9999	Dog
Susan	Malik	22 Sunrise Dr.	Mesa	AZ	85205-0346	Cat
Calvin	Summerset	912 N. Central Ave.	Phoenix	AZ	82891-9999	Goat
Calvin	Summerset	912 N. Central Ave.	Phoenix	AZ	82891-9999	Monkey
Ned	Young	387 Rawhide Rd.	Chandler	AZ	83174-2311	Cat

a. Open the database file named ac03_ARF3. Open both tables to review their content.

b. Find and delete any duplicate records in the Fosters table using the Last Name field as the field to check for duplicate data. Delete the duplicate records that have the highest Foster ID number.

c. Add your name as a new foster parent with the ID number 999.

d. To generate the requested information, you need to add a new field to the Rescues table that identifies the foster person that was assigned to the animal. Instead of checking the Fosters table to find the number and then entering the number in the Rescues table, you will make the new field a Lookup field that will display values from the Fosters table.

In Design view, add the **Foster ID#** field after the ID# field of the Rescues table. Select Lookup Wizard from the Data Type list. Select the following options from the LookUp Wizard:

- Look up values in a table.
- Use the Fosters table
- Display the Foster ID, Foster Last Name, and Foster First Name fields.
- Sort by the last and first names.
- Clear the Hide Key column option.
- Select Foster ID as the value to store.
- Use the Foster ID# field name.

e. Switch to Datasheet view. Now you need to enter the Foster ID for all animals that were sent to a foster home. Query the datasheet to display only those records with a 2008 foster date or F in the Status column. Display the Foster ID, Status, and Foster Date columns only. From the Foster ID drop-down list, select a foster name for each record. Select your name as the foster parent for the last animal.

f. Next you will modify the query to display the information you need in the report. Add the Fosters tables to the query grid. Delete the Foster ID field from the grid. Add the following fields from the tables specified in the order listed below.

Rescues table

- Type

Fosters table

- Foster First Name
- Foster Last Name
- Foster Street
- Foster City
- Foster State
- Foster Zip

g. Sort the Foster Last Name column in ascending order. Hide the Status field. Run the query and review the resulting datasheet. Save the query as **2008 Foster Parents**.

h. Use the Report Wizard to create a report based on the 2008 Foster Parents query you just saved. Include the following fields in the order listed below:

- Foster First Name
- Foster Last Name
- Foster Street
- Foster City
- Foster State
- Foster Zip
- Type

i. View the data by Rescues, use the tabular layout, landscape orientation, and the Apex style. Name the report **2008 Foster Parents Report**.

j. Center the Report Header control at the top of the page. Change the design style to another of your choice. Change the page margin setting to Wide. Size the controls as needed to enhance the report appearance and fit the entire report on a single page.

k. Preview and then print the report. Close the report window, saving the changes you made.

l. Compact and repair the database.

m. Back up the database and exit Access.

on your own

Timeless Treasures Report ★

CONTINUING EXERCISES

1. The owners of Timeless Treasures have decided to expand their offerings to include vintage clocks as well as watches. Open the database file Timeless Treasures that you worked on in Lab 2, On your Own exercise 5. Revisit the Web to obtain information on vintage clocks. Create a second table in the database with the same fields as the Watches table to use for maintaining the clock inventory. Name this table **Clocks**. Enter 10 records in the new table. Create an inventory report called **Timeless Treasures Watches Inventory** that displays the identification number, description, price and quantity on hand fields of information. Use a design style and layout of your choice. Modify the report design as needed to improve its appearance. Create the same report for the Clocks table and name it **Timeless Treasures Clocks Inventory**. Preview and print both reports. Compact and back up the database.

P&P W2 Forms ★

2. As an administrative assistant at Parker & Pisaño, Inc., you are responsible for sending out W2 forms to all of the employees. Create a database named P&P Employees and a table named **Employees** that includes fields for the employee ID number, first and last names and home contact information (Street, City, State, Zip Code and Phone). Enter 15 records in the table. Include your name as the employee name in one of the records. Then use this table to create a query that includes only the employee first and last name and home address fields of information. Sort the query by last name. Save the query as **Employee Addresses**. Create a report named **Employee Addresses** using the query as the record source. Use a design style and layout of your choice. Modify the report design as needed to improve its appearance. Compact and back up the database.

Learnsoft Developers ★★

3. Learnsoft Inc. develops computer-based curriculum for grades K-8. The company uses a database to track which software titles that have been worked on by the project managers. The program manager for the Learnsoft company wants a report of this information so he can use it for the employee reviews the following week. Open the database file ac03_Learnsoft and the table named Software. Add a new field named Project Manager before the Release Date field to include the name of the project manager for each title. Make this field a Lookup list field that will lookup the names of the five project managers. (Use names of your choice, but include your name as one of the project managers.) Complete the data for this field by selecting a project manager for each record. Assign your name as project manager to one of

the records with a release date in 2010. Create a report named **Project Manager Report** that shows the titles, subject and project manager names for the years 2009 through 2010. Use a design style and layout of your choice. Modify the report design as needed to improve its appearance. Compact and back up the database.

ARF Adoptions Report ★★★

4. The Animal Rescue Foundation would like you to create a report showing foster information. Open the database file ac03_ARF3 and the Rescues table. Add a new field before the Foster Date field named Foster Parent. Make it a Lookup field to the Foster ID field in the Fosters table. Edit the relationship to enforce referential integrity. Open the Fosters table and change the name for Foster ID F-001 to your name. For each record in the Rescues table that has a Foster Date entry, specify a Foster Parent by selecting a Foster ID. Make sure to include your Foster ID in at least one record. Add the Foster Parent field to above the Foster Date field in the ARF Animals form. Create a query that displays all fields from the Rescues table except the Photo Attachment field and the Foster First Name and Foster Last Name fields from the Fosters table. Sort the query by Foster Parent. Display the Foster First Name and Foster Last Name fields after the Foster Parent field. Name the query **Animal-Foster Query**. Create a report based on the Animal-Foster query that shows the Foster Date, Foster First Name, Foster Last Name, Type, Gender, Age and Name. Use a design style and layout of your choice. Modify the report design as needed to improve its appearance. Name the report **Foster Report**. Preview and print the report.

EMP Expense Account Report ★★



5. One of the department managers at EMP Enterprises has requested a report showing who in her department has submitted an expense reimbursement request but has not yet been paid. You decide this would be a good report to generate for all departments. In the EMP Enterprises database, open the Employee Expenses table you updated in On Your Own Exercise 2 of Lab 2. Create a one-to-many relationship between the Employee Info table and the Employee Expenses table based on the Employee ID fields. Enforce referential integrity and select the Cascade Update option. Create a query that displays all fields from both tables, sorted by Department. View the query results. Modify the query to not show the Employee ID field and to display only those employees who have not been paid. Apply an ascending sort to the Submission Date field. Save the query as **Pending Payment**. Use the Report Wizard to create a report named **Open Expense Requests** based on the Pending Payment query. Use a design style and layout of your choice. Modify the report design as needed to improve its appearance. Preview and print the report. Compact and back up the database.

Working Together 1: Exporting Data

Case Study

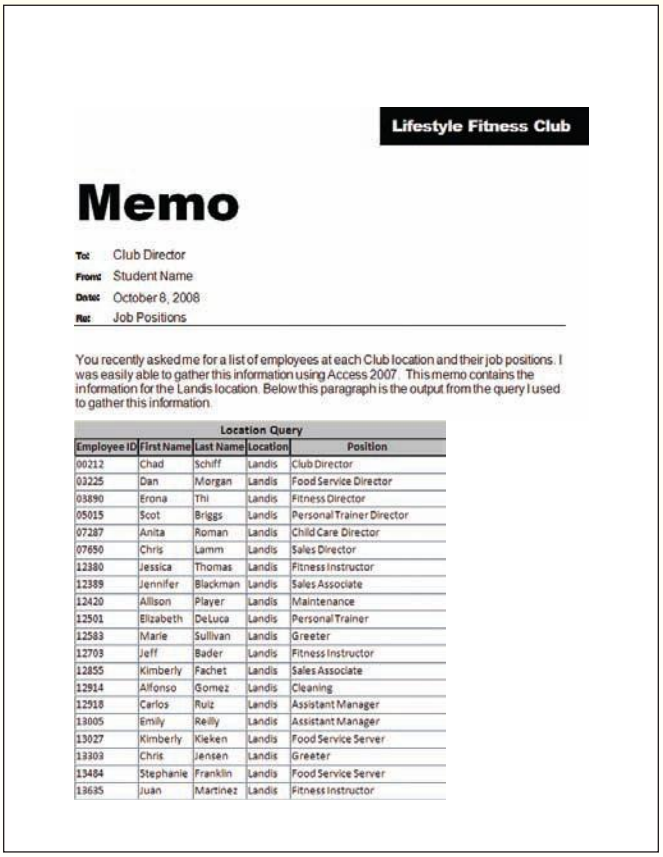
Lifestyle Fitness Club

Periodically, the club director wants to know the names of the employees at each club and their job position. You created a parameter query to obtain this information and then a custom report to display it professionally. Now you want to provide this information to the director.

You will learn about exporting Access data to Excel and Word using the Export Wizard. Then you will learn how to copy and paste objects and selections between Access and Word to create a memo to the director.

Your memo containing a copy of the query results and the report generated by Access will look like the one shown here.

Note: This tutorial assumes that you already know how to use Office Word 2007 and that you have completed Lab 3 of Access 2007.



Lifestyle Fitness Club

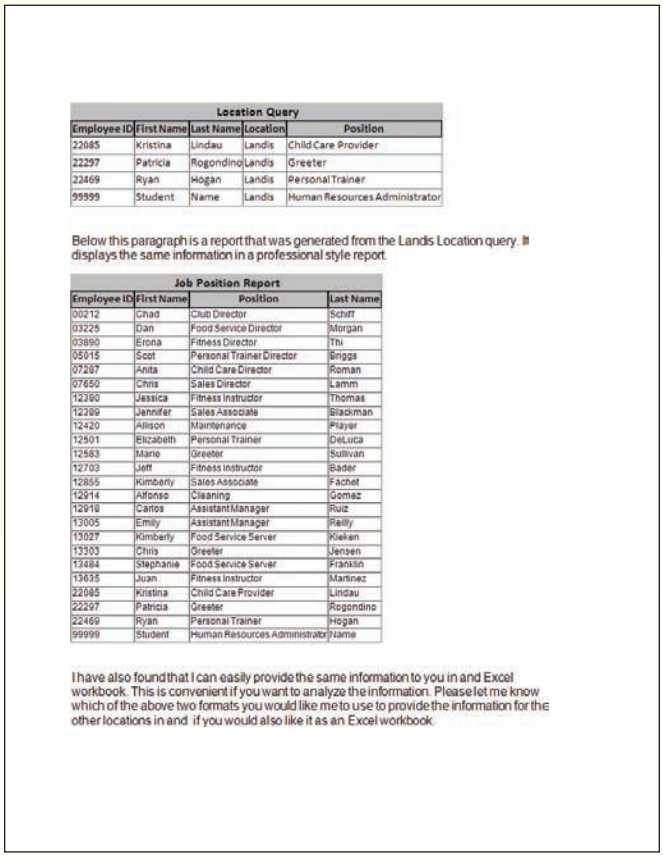
Memo

To: Club Director
From: Student Name
Date: October 8, 2008
Re: Job Positions

You recently asked me for a list of employees at each Club location and their job positions. I was easily able to gather this information using Access 2007. This memo contains the information for the Landis location. Below this paragraph is the output from the query I used to gather this information.

Location Query

Employee ID	First Name	Last Name	Location	Position
00212	Chad	Schiff	Landis	Club Director
03225	Dan	Morgan	Landis	Food Service Director
03890	Erona	Thi	Landis	Fitness Director
05015	Scot	Briggs	Landis	Personal Trainer Director
07287	Anita	Roman	Landis	Child Care Director
07650	Chris	Lamm	Landis	Sales Director
12380	Jessica	Thomas	Landis	Fitness Instructor
12389	Jennifer	Blackman	Landis	Sales Associate
12420	Allison	Player	Landis	Maintenance
12501	Elizabeth	DeLuca	Landis	Personal Trainer
12583	Marie	Sullivan	Landis	Greeter
12703	Jeff	Bader	Landis	Fitness Instructor
12855	Kimberly	Fachet	Landis	Sales Associate
12914	Alfonso	Gomez	Landis	Cleaning
12918	Carlos	Ruiz	Landis	Assistant Manager
13005	Emily	Reilly	Landis	Assistant Manager
13027	Kimberly	Kieken	Landis	Food Service Server
13303	Chris	Jensen	Landis	Greeter
13484	Stephanie	Franklin	Landis	Food Service Server
13635	Juan	Martinez	Landis	Fitness Instructor



Location Query

Employee ID	First Name	Last Name	Location	Position
22085	Kristina	Lindau	Landis	Child Care Provider
22297	Patricia	Rogondino	Landis	Greeter
22469	Ryan	Hogan	Landis	Personal Trainer
99999	Student	Name	Landis	Human Resources Administrator

Below this paragraph is a report that was generated from the Landis Location query. It displays the same information in a professional style report.

Job Position Report

Employee ID	First Name	Position	Last Name
00212	Chad	Club Director	Schiff
03225	Dan	Food Service Director	Morgan
03890	Erona	Fitness Director	Thi
05015	Scot	Personal Trainer Director	Briggs
07287	Anita	Child Care Director	Roman
07650	Chris	Sales Director	Lamm
12380	Jessica	Fitness Instructor	Thomas
12389	Jennifer	Sales Associate	Blackman
12420	Allison	Maintenance	Player
12501	Elizabeth	Personal Trainer	DeLuca
12583	Marie	Greeter	Sullivan
12703	Jeff	Fitness Instructor	Bader
12855	Kimberly	Sales Associate	Fachet
12914	Alfonso	Cleaning	Gomez
12918	Carlos	Assistant Manager	Ruiz
13005	Emily	Assistant Manager	Reilly
13027	Kimberly	Food Service Server	Kieken
13303	Chris	Greeter	Jensen
13484	Stephanie	Food Service Server	Franklin
13635	Juan	Fitness Instructor	Martinez
22085	Kristina	Child Care Provider	Lindau
22297	Patricia	Greeter	Rogondino
22469	Ryan	Personal Trainer	Hogan
99999	Student	Human Resources Administrator	Name

I have also found that I can easily provide the same information to you in and Excel workbook. This is convenient if you want to analyze the information. Please let me know which of the above two formats you would like me to use to provide the information for the other locations in and if you would also like it as an Excel workbook.

MORE ABOUT



To learn how to save database objects as other file types, see "5 Presenting and Sharing Data" in the More About appendix.

Exporting Data

There are often circumstances when you will want to provide data from an Access database to someone else to use. The process of copying this information to a file outside the database is called **exporting.** There are a variety of methods you can use, depending upon the type of output needed. The most common export types are described below:

Export to	Description
Excel	Creates a copy of the selected data, table, query, or form object and stores the copy in an Excel worksheet.
Word	Creates a copy of the selected data, table, query, form, or report, including formatting, in a new Word (*.rtf) file.
Access database	Creates a copy of the table definition and data or just the table definition in another Access database.
Text file	Creates a copy of the selected data, table, query, form, or report, approximating formatting if possible, in a new text file (*.txt) document.
SharePoint site	Creates a copy of a table or query and stores it on a SharePoint site as a list.

MORE ABOUT



To learn about exporting to another Access database, see "2.2 Create Tables" in the More About appendix.

The director does not have Access 2007 installed on his computer, so you need to export the data in either Word 2007 or Excel 2007 format. You will try both methods to see what the output in each application looks like.

The Export Wizard is used for all types of exports. In addition, in some cases, you can copy and paste an object in another application. The file that you export from is the **source file** and the file that is created is the **destination file.**

Exporting to Excel 2007

Additional Information
Only one object can be exported at a time.

Additional Information
If you want to export a selection, you need to open the object and select the records you want to export.

When exporting to Excel, the database file you want to copy from must be open in Access. Then you select the object you want to export. The Export Wizard can copy selected data, a table, a query, or a form object, but it cannot export a report to Excel. Because you cannot export a report, you will export the Job Positions query instead.

1. **Start Access 2007 and open the database file acwt1_Personnel from your data file location.**
2. **If necessary, respond appropriately to the Security Warning.**
3. **Select the Location Query in the Navigation pane.**
4. **Click Excel in the Export group of the External Data tab.**

Your screen should be similar to Figure 1

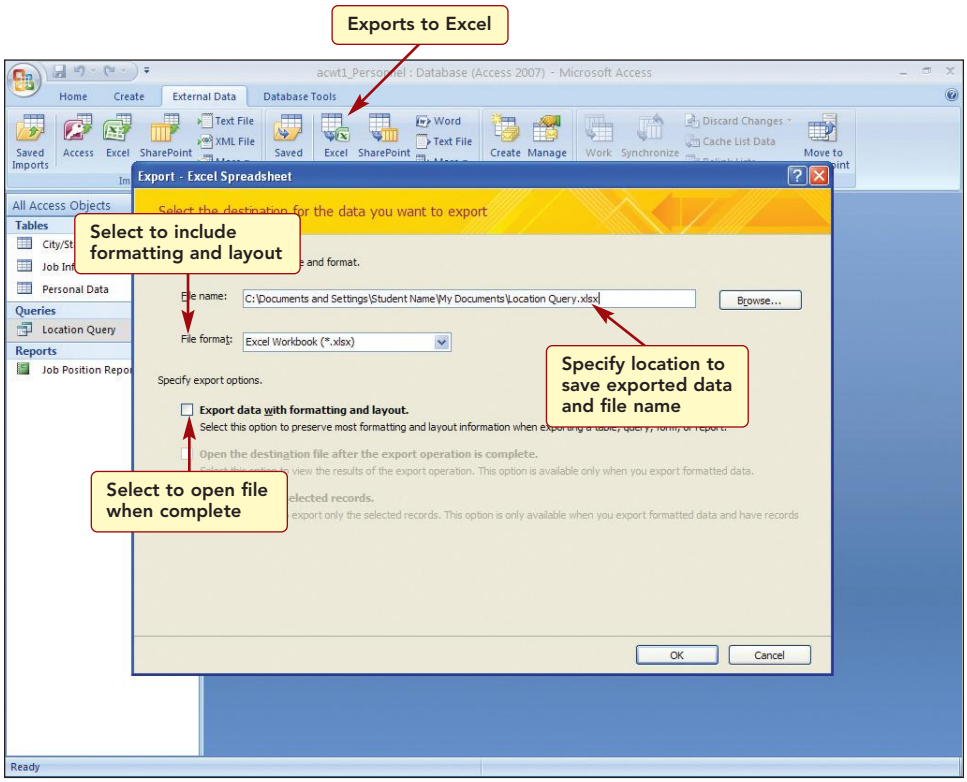


Figure 1

In the first Export - Excel Spreadsheet wizard dialog box, you specify the name of the destination file and the file format. The default file format of an Excel 2007 workbook file is acceptable; however, you need to change the file location and name. In addition, you want to include the formatting from the query object and want to see the new Excel workbook file after it is created. Because the query is a parameter query, you also will be asked to enter the location you want to copy to the destination.

2. **Click** Browse... **and specify your data file location as the location to save the file.**

- **Enter the file name** Landis Job Positions **and click** Save **.**
- **Choose Export data with formatting and layout.**
- **Choose Open the destination file after the export operation is complete.**
- **Click** OK **.**
- **Enter** Landis **in the Parameter Value dialog box.**
- **Click** OK **.**
- **If necessary, maximize the Excel application window.**

Your screen should be similar to Figure 2

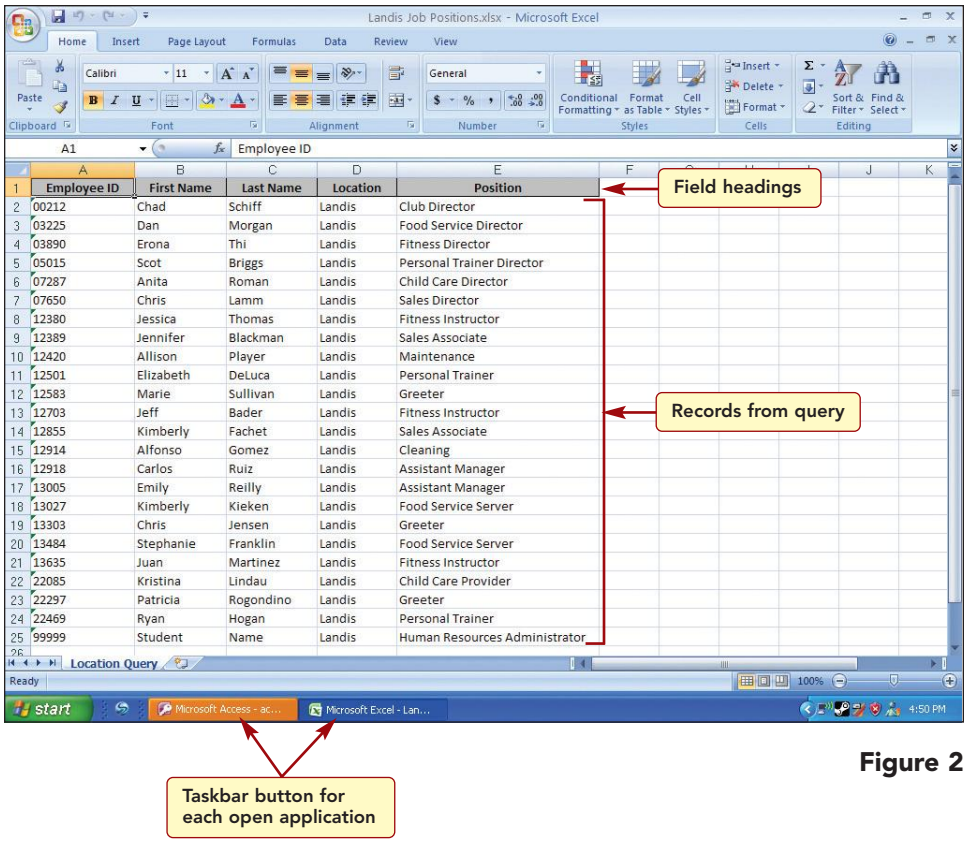


Figure 2

Now there are two applications open, Excel and Access, and application buttons for both open windows are displayed in the taskbar. The Excel 2007 application window is displayed and the exported data has been copied into a worksheet of the new workbook file. The field headings appear formatted in the first row of the worksheet and each following row is a record from the query datasheet. Notice that the Microsoft Access button in the taskbar is flashing. This is to tell you that the wizard is not yet done.

3. **Click on the Microsoft Access button in the taskbar to switch to the Access application window.**

Your screen should be similar to Figure 3

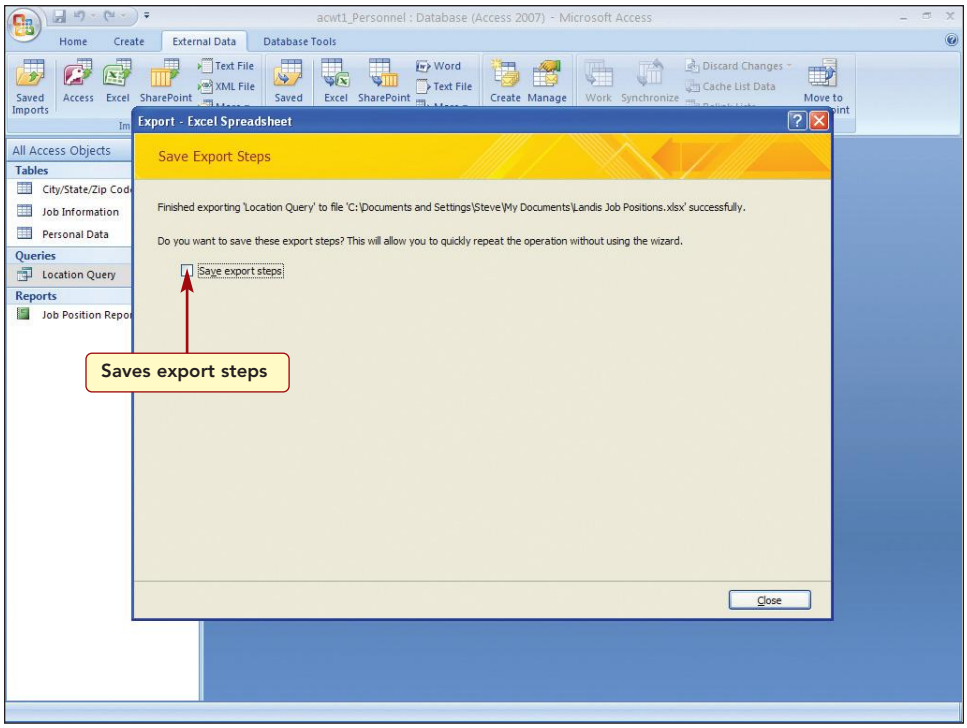


Figure 3

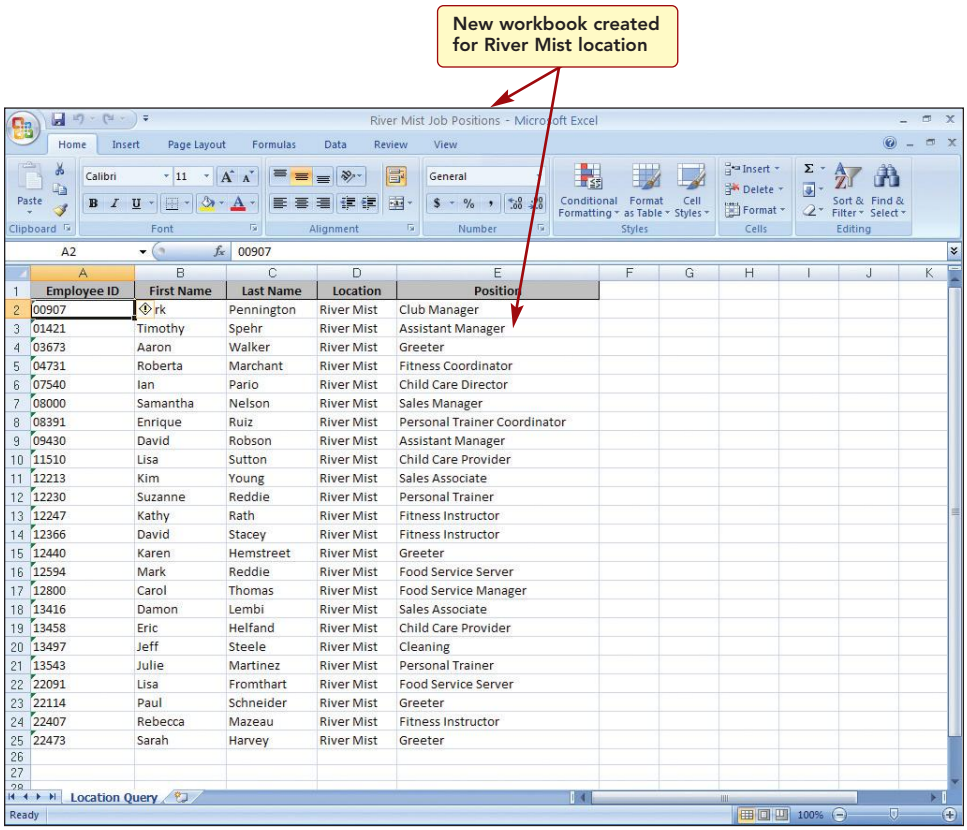
The final step tells you the export has been completed successfully and asks if you want to save the export steps. Saving the steps is useful if you think you will be running the same export operation on a routine basis. Since you need to repeat this operation for each location, you will save the steps using the suggested name. The wizard also can add a reminder for you in Outlook to run the export if you need to generate the results on a routine basis. You will not include this feature at this time.

Next, you will rerun the export operation to export the River Mist location data by selecting the name of the saved export steps from a list of saved exports. You also will need to edit the file name to reflect the location data and to save the exported data to a new file.

4 **Choose Save export steps.**

- **Click** Save Export.
- **Click** Saved Exports **in the Export group.**
- **Select Landis in the path and change it to** River Mist.
- **Click** Run.
- **Enter** River Mist **as the location parameter.**
- **Click** OK.

Your screen should be similar to Figure 4



Employee ID	First Name	Last Name	Location	Position
00907	rk	Pennington	River Mist	Club Manager
01421	Timothy	Spehr	River Mist	Assistant Manager
03673	Aaron	Walker	River Mist	Greeter
04731	Roberta	Marchant	River Mist	Fitness Coordinator
07540	Ian	Pario	River Mist	Child Care Director
08000	Samantha	Nelson	River Mist	Sales Manager
08391	Enrique	Ruiz	River Mist	Personal Trainer Coordinator
09430	David	Robson	River Mist	Assistant Manager
11510	Lisa	Sutton	River Mist	Child Care Provider
12213	Kim	Young	River Mist	Sales Associate
12230	Suzanne	Reddie	River Mist	Personal Trainer
12247	Kathy	Rath	River Mist	Fitness Instructor
12366	David	Stacey	River Mist	Fitness Instructor
12440	Karen	Hemstreet	River Mist	Greeter
12594	Mark	Reddie	River Mist	Food Service Server
12800	Carol	Thomas	River Mist	Food Service Manager
13416	Damon	Lembi	River Mist	Sales Associate
13458	Eric	Helfand	River Mist	Child Care Provider
13497	Jeff	Steele	River Mist	Cleaning
13543	Julie	Martinez	River Mist	Personal Trainer
22091	Lisa	Fromthart	River Mist	Food Service Server
22114	Paul	Schneider	River Mist	Greeter
22407	Rebecca	Mazeau	River Mist	Fitness Instructor
22473	Sarah	Harvey	River Mist	Greeter

Figure 4

A separate workbook file was created and contains the data for the River Mist location. Now, all the Excel features can be used to analyze the data in the worksheets. After exporting each location to a workbook, you could combine the workbooks by copying the worksheet data from each worksheet into one workbook file.

5 **Close both workbook files and exit the Excel application.**

- **Click** OK **to acknowledge the export is finished.**
- **Close the Manage Data Tasks dialog box.**

Exporting to Word 2007

Next, you will try exporting the Job Position Report to a Word document. When you use the Export Wizard to do this, a copy of the object's data is inserted into a Microsoft Word Rich Text Format file (.rtf).

1. **Select the Job Position Report in the Navigation pane.**
- **Click Word in the Export group.**
- **If necessary, change the file location to your data file location.**

Having Trouble?
The report will be saved using the default file name of Job Position Report.

- **Choose Open the destination files after the export operation is complete.**
- **Click OK.**
- **Enter Landis in the Enter Parameter Value dialog box.**
- **Click OK.**

Your screen should be similar to Figure 5

Having Trouble?
If WordPad is the open application, this is because your system has associated .rtf file types with this application. You could close WordPad and open the document in Word 2007.

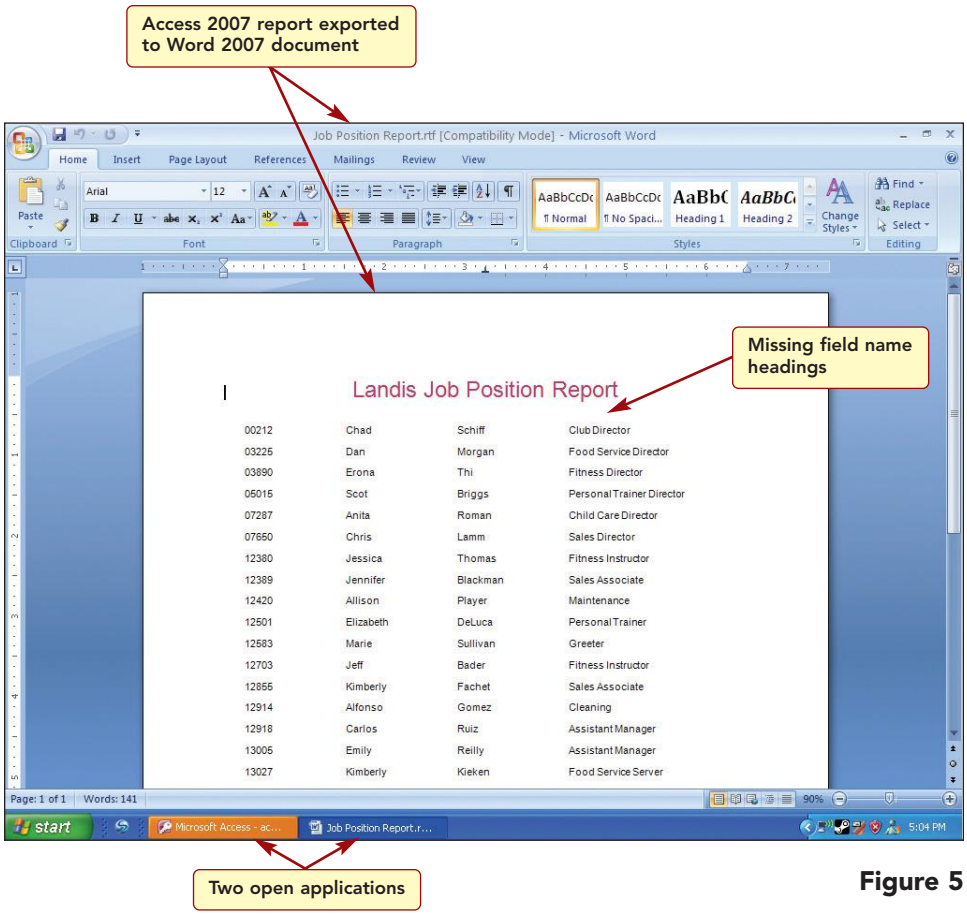


Figure 5

Now there are two applications open, Word 2007 and Access 2007, and application buttons for both open windows are displayed in the taskbar. The Word 2007 application window is displayed and the exported data has been copied into a document file and saved as Job Positions Report. The report resembles the Access report as closely as possible. The problem with the exported report is that the field name headings are missing.

Again, the Microsoft Access button in the taskbar is flashing. This time you will not save the steps.

2. **Switch to the Access application window.**

   Click Close **to close the Export Wizard.**

Copying a Query Object to Word 2007

Finally, you decide to try copying an Access object to an existing Word document without using the Export Wizard. To do this, you use Copy and Paste or drag and drop between the Access and Word applications to copy a database object.

You have already started a memo to the club director about the Job Position query and report you created.

1. **Switch to the Word application window and close the Job Position Report document.**

   Open the document acwt1_Job Positions**.**

   In the memo header, replace Student Name with your name.

   Your screen should be similar to Figure 6

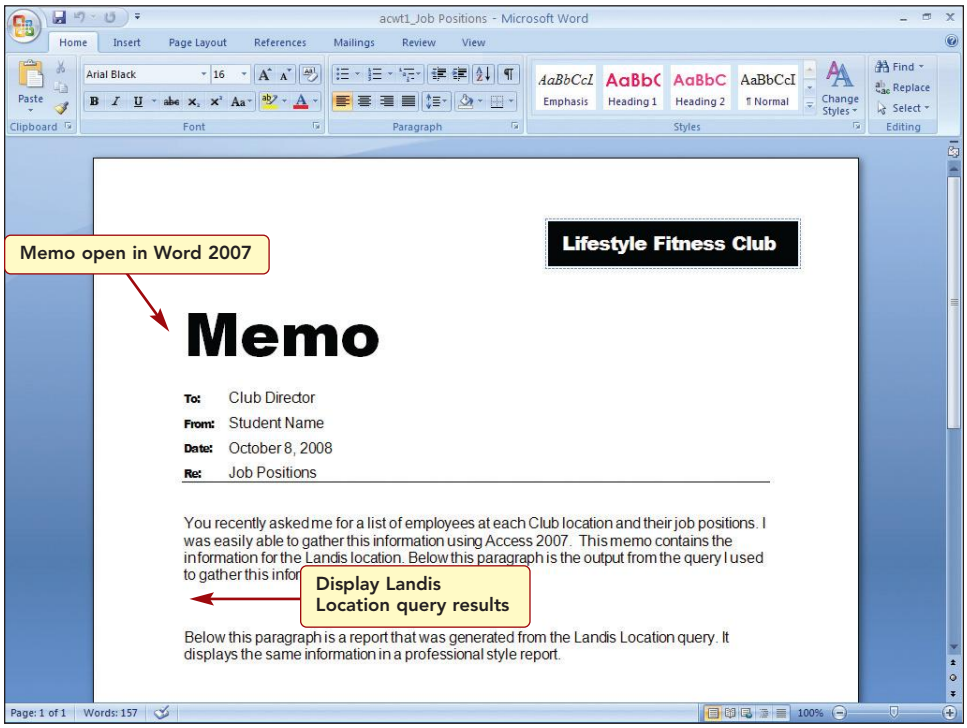


Figure 6

This document contains the text of the memo to the director. Below the first paragraph, you want to copy the output from the Landis Location query results using drag and drop. To do this, both applications must be open and visible, which you will do by tiling the application windows.

2. **Right-click on a blank area of the taskbar to open the shortcut menu.**

Having Trouble?

If your taskbar is hidden, point to the thin line at the bottom of the screen to redisplay it.

- **Choose Tile Windows Vertically.**
- **Click in the Word application window.**

Your screen should be similar to Figure 7

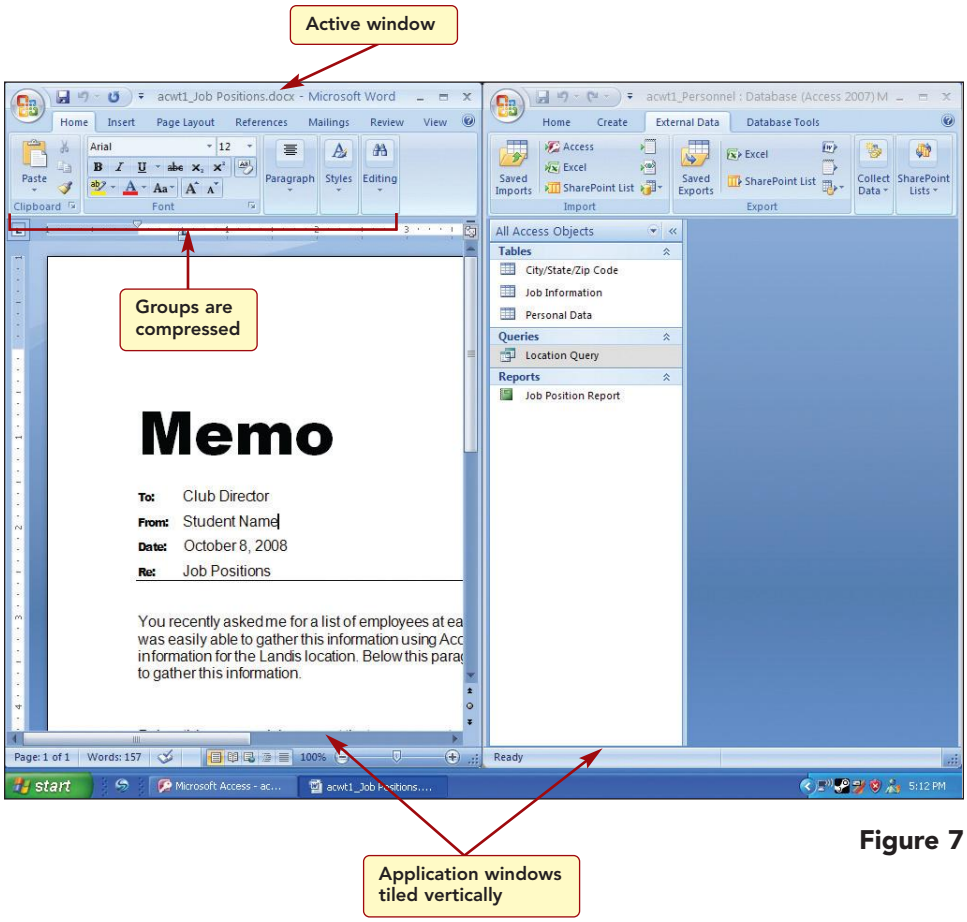


Figure 7

You can now see the contents of both the Access and Word applications. The Word document contains the insertion point and the window title bar text is not dimmed, which indicates that it is the **active window,** or the window in which you can work. Simply clicking on the other document makes it active. Because the windows are side by side and there is less horizontal space in each window, the Ribbon groups are compressed. To access commands in these groups, simply click on the group button and the commands appear in a drop-down list.

You will copy the query results to below the first paragraph of the memo.

3 **Select the Location Query in the Access Navigation pane.**

- **Drag the selected object to the blank line below the first paragraph of the memo.**

Having Trouble?
An insertion point appears and the mouse pointer is when you can release the mouse.

- **Enter Landis as the Location parameter and click** OK **.**
- **Click in the Word document to deselect the table.**
- **Scroll the document to see the table.**

Your screen should be similar to Figure 8

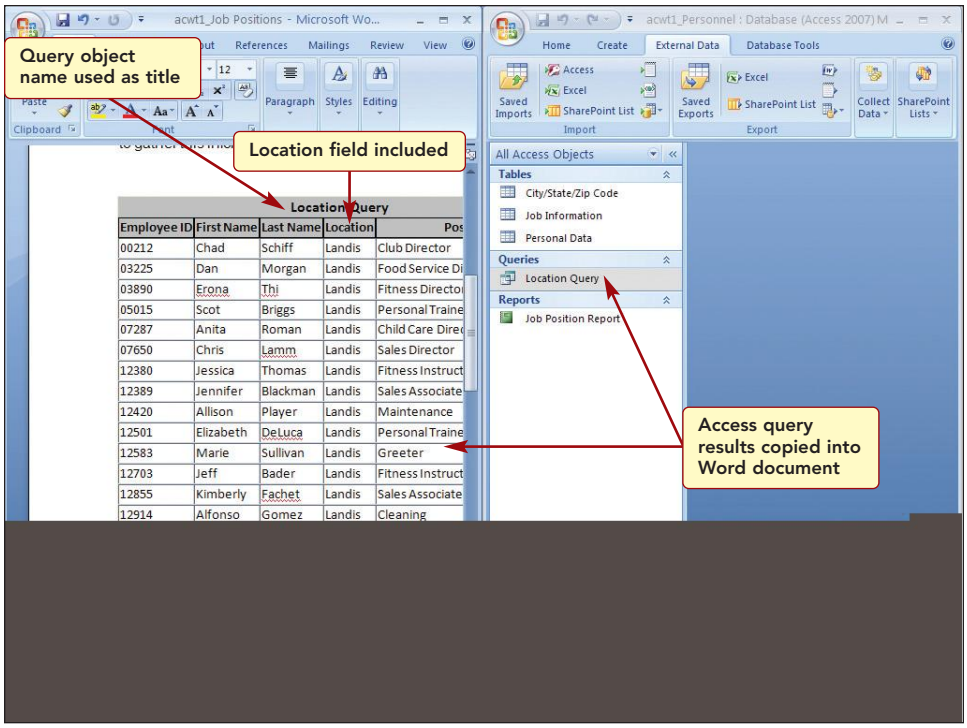


Figure 8

The query results have been copied into the Word document as a table that can be edited and manipulated within Word. The formatting associated with the copied object also is included. However, the title is the same as the query name and the Location field is displayed. To change this, you could edit the title and then delete the table column using Word 2007.

Copying a Report

Instead, you want to copy the report into the memo to see how it will look. To copy report data, you run the report in Access and then use copy and paste to copy the contents to a Word document.

1. **Open the Job Position Report in Access using Landis as the location.**

- **Hide the Navigation pane.**
- **Select the report title and drag downward along the left edge of the rows to select the entire report, excluding the footer information.**
- **Open the Home tab and click Copy in the Clipboard group.**

Your screen should be similar to Figure 9

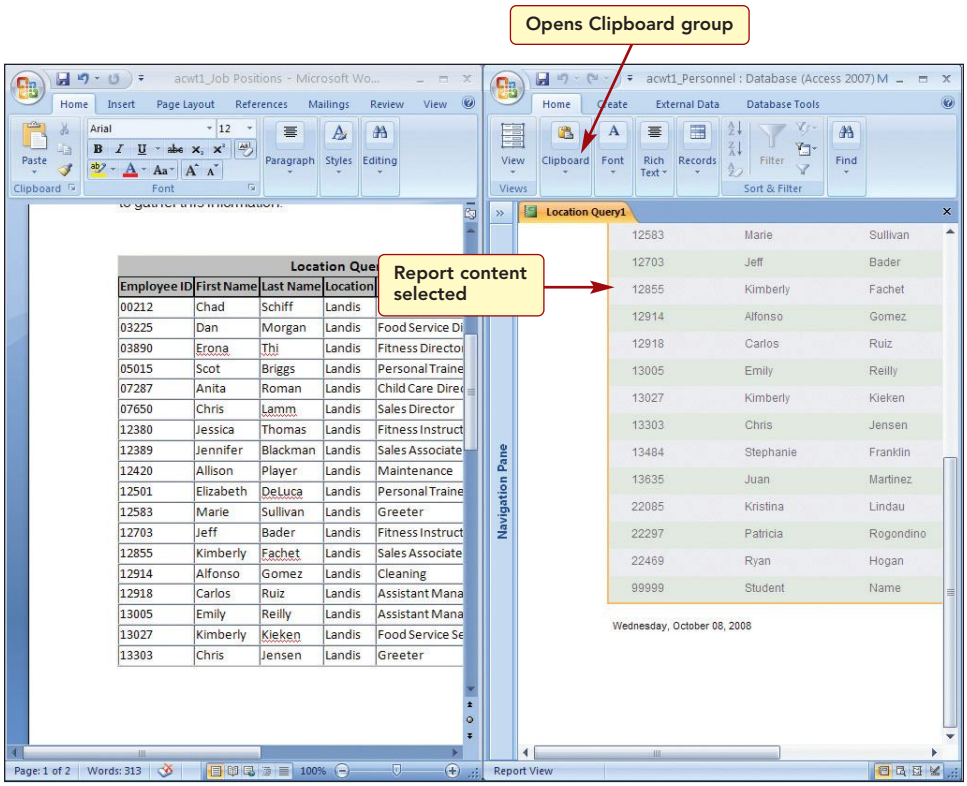


Figure 9

Next, you need to select the location in the memo where you want the copied data inserted.

2 Scroll the Word document and click on the blank line between the second and third paragraphs.

Click Paste in the Home tab.

Scroll the document to see the report.

Your screen should be similar to Figure 10

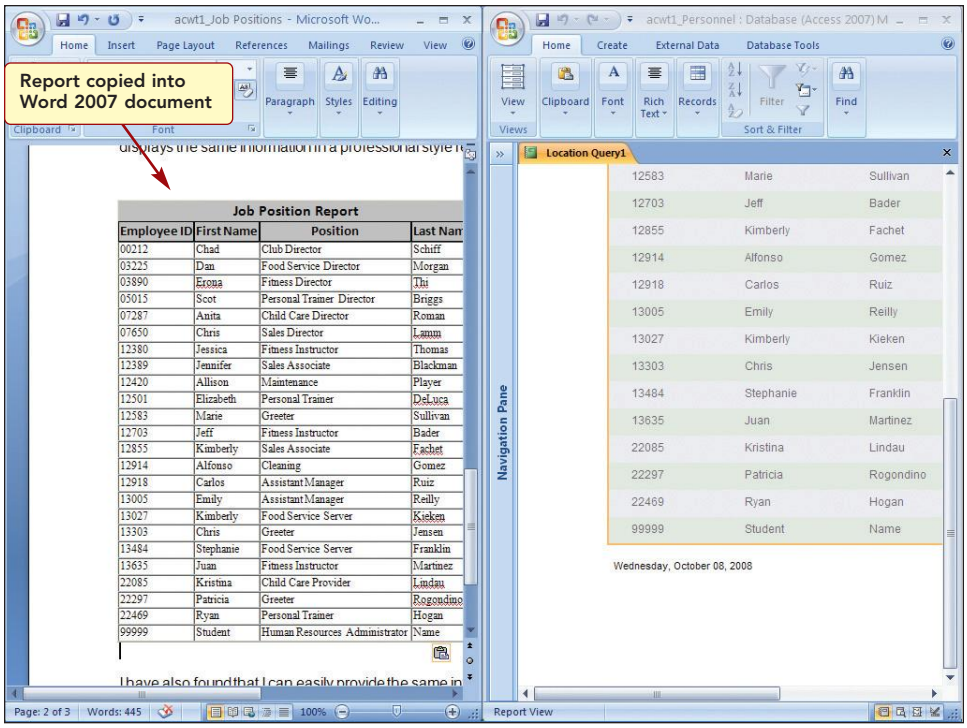


Figure 10

The copied report is similar to the copied query, except the correct title was included and the Location row is not included as specified by the report settings.

3 Close the report in Access.

Click No to not save the copied data that was placed on the Clipboard.

Display the Navigation pane.

Undo the tiled windows.

Having Trouble?
Choose Undo Tile from the taskbar shortcut menu.

Exit Access.

Delete the blank line above both tables in the memo.

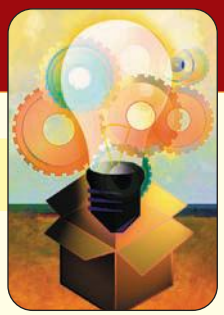
Save the memo as Job Positions.

Preview, and then print the memo.

Exit Word.

Your printed memo should look similar to the one shown in the Case Study at the beginning of this lab.

Lab Review



WORKING TOGETHER 1

Exporting Data

key terms

active window ACWT1.9
destination file ACWT1.2
export ACWT1.2
source file ACWT1.2

MCAS skills

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment. See Reference 2: Microsoft Certified Applications Specialist (MCAS) for a complete list of the skills that were covered in this lab.

command summary

Command	Shortcut	Action
Home tab		
Clipboard group		
Copy	Ctrl + C	Copies selection to Clipboard
External Data tab		
Saved Exports		View and run saved exports
Excel		Exports selected object to an Excel workbook
Word		Exports selected object to a Rich Text Format file

Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Spa Marketing Memo ★

CONTINUING EXERCISES

1. The Scensations Salon and Spa database has been used extensively. The owner asked you for a list of clients who are over the age of 40 to get an idea of how much interest there would be in an anti-aging spa package she is considering offering. You already filtered the Clients table to locate this information and now want to include the results in a memo to Latisha. The first page of the memo is shown here.

a. Open the ac03_Scensations Spa database file and the Clients table that you modified in Step-by-Step Exercise 1 of Lab 3. Display the results of the 40+ Clients query.

b. Start Word 2007 and enter the following text in a new document.

To: Latisha Pine

From: [Your Name]

Date: [current date]

Here is the information you requested on the clients who are over the age of 40:

c. Select the query results and copy them into the Word document.

d. Save the memo as 40+ Spa Clients. Print the memo.

e. Close the document and exit Word.

f. Close the table and database.

To: Latisha Pine
From: Student Name
Date: Current Date

Here is the information you requested on the clients who are over the age of 40:

40+ Clients

First Name	Last Name	Address	Lookup to City/Sate/Zip
Mary	Smith	560 E. West	89430, Smith Valley, NV
Patricia	Johnson	24486 S. 11th	89430, Smith Valley, NV
Linda	Williams	495 W. Cherry	89430, Smith Valley, NV
Barbara	Jones	738 N. Eighth	89430, Smith Valley, NV
Elizabeth	Brown	1008 E. Adams	89430, Smith Valley, NV
Jennifer	Davis	984 N. 7th	89430, Smith Valley, NV
Maria	Miller	448 E. Williams	89430, Smith Valley, NV
Margaret	Moore	246 N. 1st	89430, Smith Valley, NV
Dorothy	Taylor	1238 E. Fifth	89430, Smith Valley, NV
Lisa	Anderson	7428 S. Hill	89447, Yerington, NV
Nancy	Thomas	6190 E. Main	89447, Yerington, NV
Karen	Jackson	4952 S. Ridge	89706, Mound House, NV
Betty	White	3714 E. Washington	89706, Mound House, NV
Helen	Harris	246 N. 6th	89706, Mound House, NV
Heather	Morris	385 E. 5th	89403, Dayton, NV
Teresa	Rogers	55 N. 2nd	89403, Dayton, NV
Doris	Reed	10494 N. Forest	89403, Dayton, NV
Gloria	Cook	224 E. Laurel	89403, Dayton, NV
Evelyn	Morgan	6190 N. Ninth	89403, Dayton, NV
Mildred	Bailey	31482 E. Smith	89403, Dayton, NV
Katherine	Rivera	123 N. Willow	89403, Dayton, NV
Christina	Ramirez	492 N. First	89403, Dayton, NV
Beverly	Brooks	13992 S. River	89403, Dayton, NV
Andrea	Henderson	8666 N. 9th	89403, Dayton, NV
Kathryn	Coleman	784 E. Fourteenth	89403, Dayton, NV
Anne	Powell	112 E. Forest	89408, Fernley, NV
Tina	Simmons	27984 W. 14th	89408, Fernley, NV
Phyllis	Foster	27984 W. Dogwood	89408, Fernley, NV
Norma	Gonzales	9904 E. Elm	89408, Fernley, NV
Diana	Alexander	246 E. 9th	89408, Fernley, NV
Annie	Russell	123 E. 3rd	89408, Fernley, NV
Emily	Diaz	330 N. 3rd	89408, Fernley, NV

Low Stock Analysis ★★

2. Evan, the owner of the Downtown Internet Café, continues to be impressed with the cafe's inventory database (Step-by-Step Exercise 3 of Lab 3). He has asked you for a list of all special-order items and how many of these items are currently in stock. He wants this information as an Excel 2007 worksheet so that he can further analyze the data. You will provide this information by exporting the data from Access 2007 to Excel 2007. Your completed worksheet of this data should be similar to that shown here.

Description	In Stock	Special Order?	Supplier
Powdered cream	31	Y	ABC Restaurant Supply
T-Shirts	10	Y	By Design
Decaf Viennese	33	Y	Pure Processing
Decaf Sumatra	35	Y	Pure Processing
Business cards	43	Y	Pro Printing
Coffee mints	30	Y	Sweet Stuff
French Roast	47	Y	Café Ole
Guatamala coffee	45	Y	Cuppa Jo
Java coffee	46	Y	Cuppa Jo
Arabian coffee	47	Y	Cuppa Jo
Espresso	11	Y	Cuppa Jo
Darjeeling Tea	13	Y	Tea and Toast, Inc.

a. Open the ac03_Cafe Inventory database that you modified in Step-by-Step Exercise 3 of Lab 3.

b. Create a new query named Special Orders that will display items with Y in the Special Order? field, and include the Description, In Stock, Special Order?, and Supplier fields (in that order). Run the query. Save the query.

c. Export the data to Excel using the file name Special Orders. Close the workbook file.

d. Save the export steps.

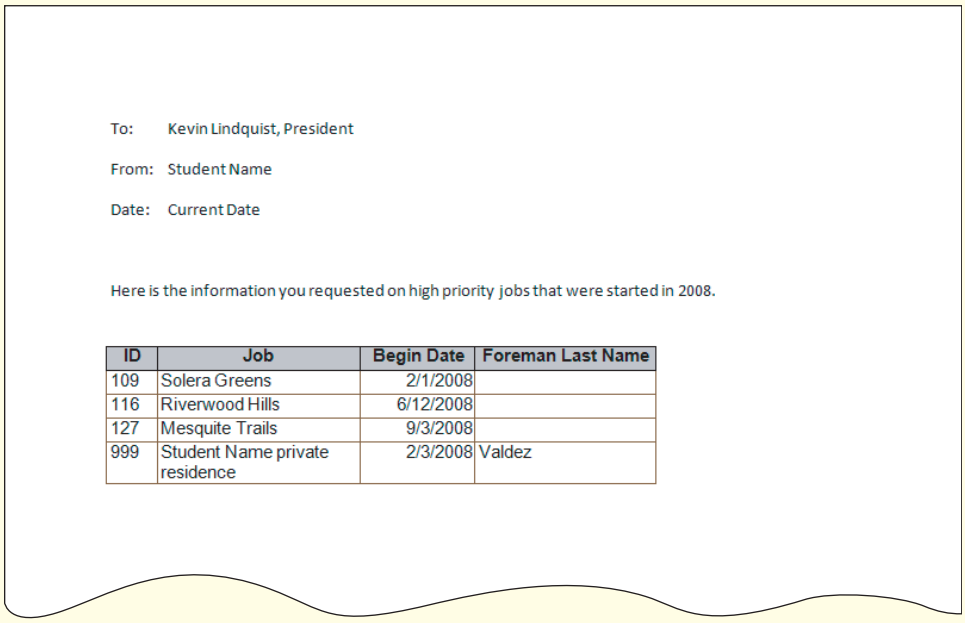
e. Change the In-Stock in the query for T-Shirts to **10** and Coffee mints to **30**. Rerun the export using the saved steps, replacing the Special Orders file.

f. Print the worksheet. Exit Excel.

g. Save the query. Close the table and database.

Top Priority Jobs Memo ★★

3. The Job Priority report you created for Kodiak Construction needs to be sent to the company president. (See Step-by-Step Exercise 4 of Lab 3.) You want to include a brief note with the report and decide to export the report to a memo you create using Word. Your completed memo should be similar to that shown here.



To: Kevin Lindquist, President

From: Student Name

Date: Current Date

Here is the information you requested on high priority jobs that were started in 2008.

ID	Job	Begin Date	Foreman Last Name
109	Solera Greens	2/1/2008	
116	Riverwood Hills	6/12/2008	
127	Mesquite Trails	9/3/2008	
999	Student Name private residence	2/3/2008	Valdez

a. Open the ac02_Kodiak Construction database and the Priority query showing the high-priority jobs that you created in Step-by-Step Exercise 4 of Lab 3. Modify the query to show only the ID, Job, Begin Date, and Foreman Last Name fields and beginning dates of 2008 only.

b. Export the Priority query results to a Word document named Kodiak Top Priority.

c. Enter the following text above the table in the document.

To: Kevin Lindquist, President

From: [Your Name]

Date: [current date]

Here is the information you requested on high priority jobs that were started in 2008.

d. Apply formatting of your choice to the table. Size and center the table appropriately.

e. Save the memo. Print the document.

f. Save the query changes. Close the table and database.

Overview of Microsoft Office PowerPoint 2007

What Is a Presentation Program?

You are in a panic! Tomorrow you are to make a presentation to an audience and you want it to be good. To the rescue comes a powerful tool: graphics presentation programs. These programs are designed to help you create an effective presentation, whether to the board of directors of your company or to your fellow classmates. An effective presentation gets your point across clearly and in an interesting manner.

Graphics presentation programs are designed to help you produce a high-quality presentation that is both interesting to the audience and effective in its ability to convey your message. A presentation can be as simple as overhead transparencies or as sophisticated as an onscreen electronic display. Graphics presentation programs can produce black-and-white or color overhead transparencies, 35 mm slides, onscreen electronic presentations called screen shows, Web pages for Web use, and support materials for both the speaker and the audience.

The graphics presentation program includes features such as text handling, outlining, graphing, drawing, animations, clip art, and multimedia support. With a few keystrokes, the user can quickly change, correct, and update the presentation. In addition, graphics presentation programs suggest layouts for different types of presentations and offer professionally designed templates to help you produce a presentation that is sure to keep your audience's attention.

Office PowerPoint 2007 Features

Creating an effective presentation is a complicated process. Graphics presentation programs help simplify this process by providing assistance in the content development phase, as well as in the layout and design phase. In addition, these programs produce the support materials you can use when making a presentation to an audience.

The content development phase includes deciding on the topic of your presentation, the organization of the content, and the ultimate message you want to convey to the audience. As an aid in this phase, PowerPoint 2007 helps you organize your thoughts based on the type of presentation you are making. Several common types of presentations sell a product or idea, suggest a strategy, or report on the progress of a program. Based on the type of presentation, the program suggests ideas and organization tips. For example, if you are making a presentation on the progress of a sales campaign, the program would suggest that you enter text on the background of the sales campaign as the first page, called a slide; the

current status of the campaign as the next slide; and accomplishments, schedule, issues and problems, and where you are heading on subsequent slides.

The layout for each slide is the next important decision. Again, PowerPoint 2007 helps you by suggesting text layout features such as title placement, bullets, and columns. You also can incorporate graphs of data, tables, organizational charts, clip art, and other special text effects in the slides.

PowerPoint 2007 also includes professionally designed themes to further enhance the appearance of your slides. These themes include features that standardize the appearance of all the slides in your presentation. Professionally selected combinations of text and background colors, common typefaces and sizes, borders, and other art designs take the worry out of much of the design layout.

After you have written and designed the slides, you can use the slides in an onscreen electronic presentation or a Web page for use on the Web. An onscreen presentation uses the computer to display the slides on an overhead projection screen. When you use this type of presentation, you can use the rehearsal feature that allows you to practice and time your presentation. The length of time to display each slide can be set and your entire presentation can be completed within the allotted time. A presentation also can be modified to display on a Web site and run using a Web browser. Finally, you can package the presentation to a CD for distribution.

Using PowerPoint 2007, you also can print out the materials you have created. You can print an outline of the text showing the titles of the slides and main text but not the art. The outline allows you to check the organizational logic of your presentation. You also can print speaker notes to which you can refer while making your presentation. These notes generally consist of a small printout of each slide with any notes on topics you want to discuss while the slides are displayed. Finally, you can create printed handouts of the slides for the audience. The audience can refer to the slide and make notes on the handout page as you speak.

Case Study for Office PowerPoint 2007 Labs

You have volunteered at the Animal Rescue Foundation, a nonprofit organization that rescues unwanted animals from local animal shelters and finds foster homes for them until a suitable adoptive family can be found. With your computer skills, you have been asked to create a powerful and persuasive presentation to entice the community to volunteer.

The organization has recently purchased the 2007 Microsoft Office Suite. You will use the graphics presentation program Microsoft Office PowerPoint 2007 to create two new presentations. The first will be used to promote the volunteer group, Animal Angels, and the second will be used during the orientation program for new volunteers.

Lab 1: You use PowerPoint to enter and edit the text for the volunteer presentation. You also learn how to reorganize the presentation and enhance it with different text attributes and by adding a picture. Finally, you learn how to run a slide show and print handouts.

Lab 2: You learn about many more features to enhance the appearance of your slides. These include changing the slide theme and color scheme and adding clip art, animation, and sound. You also learn how to add transition effects to make the presentation more interesting. Finally, you create speaker notes to help you keep your cool during the presentation.

Lab 3: You create a new presentation for the volunteer orientation by modifying and expanding an existing presentation, using text from a Word outline, and inserting slides from another presentation. You will use several specialized tools to create a column chart of data and an organization chart of the management structure of the Foundation. You also learn how to save the new presentation as a Web page.

Working Together: Demonstrates the sharing of information between users by sending the presentation out for review. First you learn how to enter, edit, and respond to comments. Then you will copy a graphic created in Word into a slide. Finally, you will embed a copy of the presentation in a letter that you plan to send by e-mail.

Before You Begin

To the Student

The following assumptions have been made:

- The Microsoft Office PowerPoint 2007 program has been installed on your computer system.
- You have the data files needed to complete the series of PowerPoint 2007 Labs and practice exercises. These may be supplied by your instructor and are also available at the online learning center Web site found at www.mhhe.com/oleary.
- You have completed the McGraw-Hill Windows Labs or you are already familiar with how to use Windows and a mouse.

To the Instructor

A complete installation of Microsoft Office 2007 is required in which all components are available to students while completing the labs. In several labs, an online connection to the Web is needed to fully access a feature.

Please be aware that the following settings are assumed to be in effect for the Office PowerPoint 2007 program. These assumptions are necessary so that the screens and directions in the labs are accurate. These settings are made using  Office Button/ PowerPoint Options in the categories shown below.

Popular

- The Mini Toolbar feature is active.
- The Live Preview feature is enabled.
- Show feature descriptions in ScreenTips is selected.
- ClearType is on.
- Language is set to English (US).

Proofing

- All AutoCorrect options are on.
- All AutoFormat options are on.
- SmartTags is off.
- Ignore words in Uppercase is on.
- Ignore words that contain numbers is on.
- Ignore Internet and file addresses is on.
- Flag repeated words is on.
- Check spelling as you type is on.

Advanced/Editing options

- Both editing options are on.
- Maximum number of undos is 20.

Advanced/Cut, Copy, and Paste

- Both options are on.

Advanced/Display

- All options are on with the following settings:
  - Show 17 Recent Documents.
  - Open documents using this view is set to The view saved in the file.

Advanced/Slide Show

- All options are on.

Advanced/Print

- Print in background is on.

Advanced/When printing this document

- Use the most recently used print settings is on.

Advanced/Save

- Link sounds with file size greater than 100 KB.

Advanced/General/Web Options

- General tab
  - Add slide navigation controls is on.
    - Colors: White text on black.
  - Resize graphics to fit browser window is on.
- Browsers tab
  - Target browsers is set to Internet Explorer 4.0 or later.
  - Save new Web pages as Single File Web Pages is on.
- Files tab
  - All options are on.

- Pictures tab
  - Screen size is set to 800 × 600.
- Encoding
  - Save this document as Western European (Windows).
- Fonts
  - Default font is set to English/Western European/Other Latin script.
  - Proportional font is Times New Roman 12 pt.
  - Fixed-width font is Courier New 10 pt.

Customize

- The Quick Access Toolbar displays the Save, Undo, and Redo buttons.

Finally, the feature to access Online Help is on. (From the Help window, open the Connection Status menu and choose Show Content from Office Online.)

All figures in the manual reflect the use of a display monitor set at 1024 by 768 and the Windows XP operating system. If other monitor display settings are used, there may be more or fewer lines of information displayed in the windows than in the figures. If the Windows Vista operating system is used, some features may look slightly different.

Instructional Conventions

Hands-on instructions you are to perform appear as a sequence of numbered steps. Within each step, a series of bullets identifies the specific actions that must be performed. Step numbering begins over within each topic heading throughout the lab.

Commands

Commands that are initiated using a command button and the mouse appear following the word "Click." The icon (and the icon name if the icon does not include text) is displayed following "Click." If there is another way to perform the same action, it appears in an Another Method margin note when the action is first introduced as shown in Example A.

As you become more familiar with the application, commands will appear as shown in Example B.

Example A

1. **Select the text "Join Animal Angels".**
2. **Open the Home tab.**
3. **Click B Bold in the Font group.**

Another Method
The keyboard shortcut is Ctrl + B.

Example B

1. Select the text "Join Animal Angels".
2. Click **B** Bold.

OR

1. Bold the text "Join Animal Angels".

File Names and Information to Type

Plain blue text identifies file names you need to select or enter. Information you are asked to type appears in blue and bold. (See Example C.)

Example C

1. Open the presentation file pp01_Volunteers.
2. Select slide 2 in the Slides pane.
3. Type Topics of Discussion in the title placeholder.

Office Button

Office Button commands that you are to perform appear following the word "Choose." The Office Button icon will precede the instructions. Items that need to be selected will follow the word "Select" and will appear in black text. You can select items with the mouse or directional keys. Initially these commands will appears as in Example A. As you become more familiar with the application, commands will appear as shown in Example B.

Example A

1. Click Office Button.
2. Choose Open.
3. Select My Documents from the Look In drop-down menu.
4. Select pp01.Volunteers.
5. Click Open.

Example B

1. Choose Office Button/Open.
2. Choose pp01.Volunteers.

OR

1. Open the file pp01.Volunteers.

Creating a Presentation

LAB 1

Objectives

After completing this lab, you will know how to:

1. Use a template to create a presentation.
2. View and edit a presentation.
3. Save, close, and open a presentation.
4. Check spelling.
5. Delete, move, and insert slides.
6. Size and move placeholders.
7. Run a slide show.
8. Change fonts and formatting.
9. Insert pictures and clip art.
10. Preview and print a presentation.

Case Study

Animal Rescue Foundation

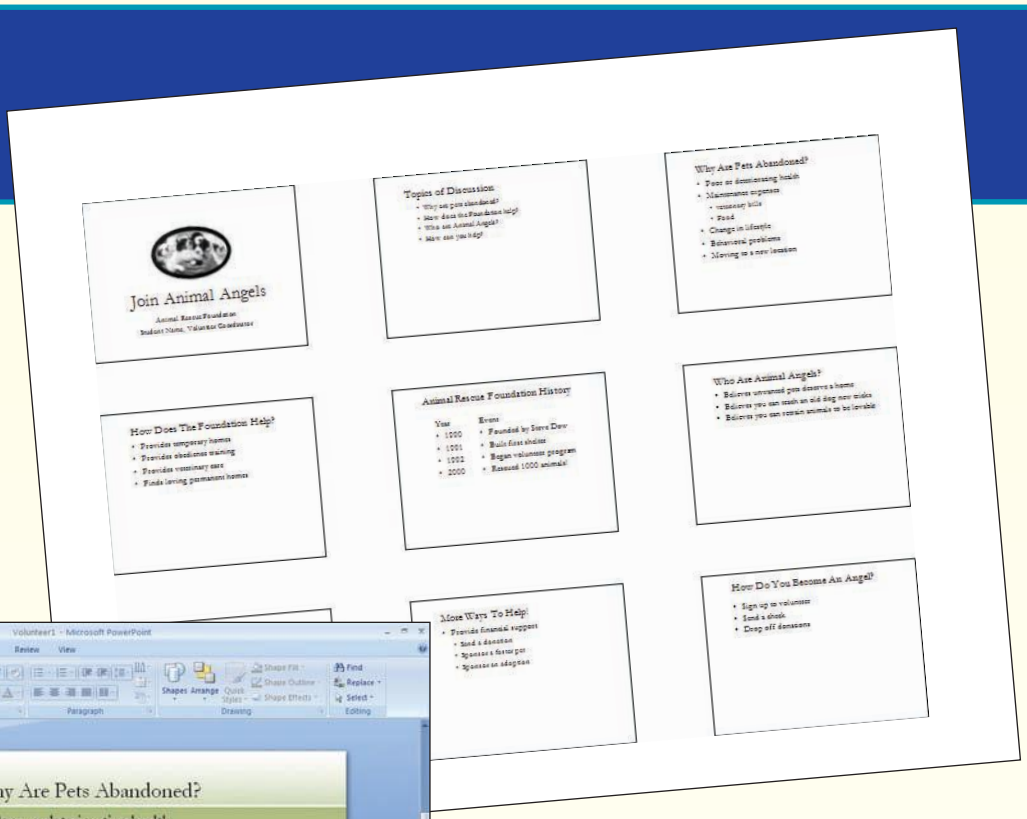
You are the Volunteer Coordinator at the local Animal Rescue Foundation. This nonprofit organization rescues unwanted pets from local animal shelters and finds foster homes for them until a suitable adoptive family can be found. The agency has a large volunteer group called the Animal Angels that provides much-needed support for the foundation.

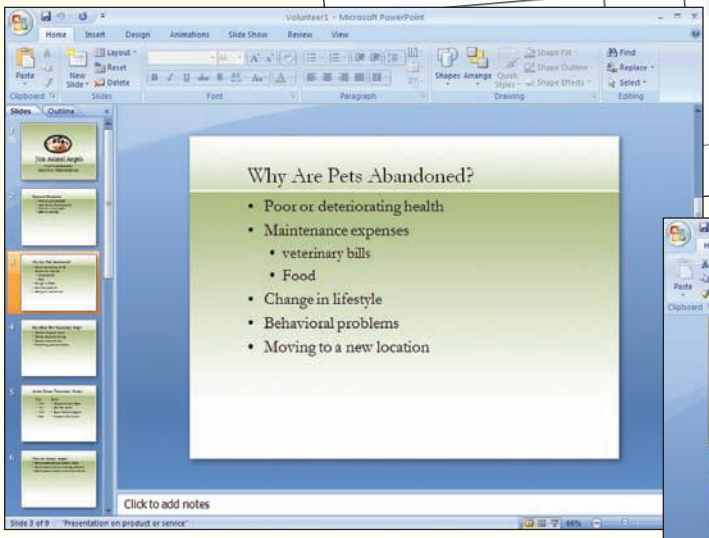
The agency director has decided to launch a campaign to increase community awareness about the foundation. As part of the promotion, you have been asked to create a powerful and persuasive presentation to entice more members of the community to join Animal Angels.



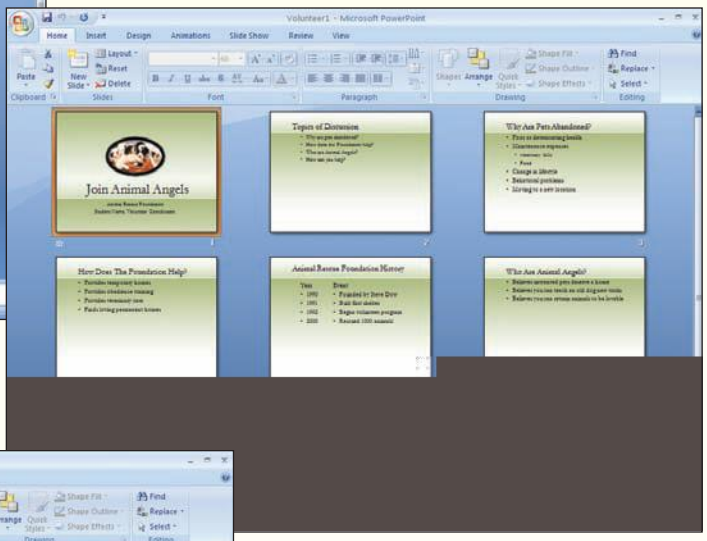
The agency director has asked you to preview the presentation at the weekly staff meeting tomorrow and has asked you to present a draft of the presentation by noon today.

To help you create the presentation, you will use Microsoft Office PowerPoint 2007, a graphics presentation application that is designed to create presentation materials such as slides, overheads, and handouts. Using Office PowerPoint 2007, you can create a high-quality and interesting onscreen presentation with pizzazz that will dazzle your audience.

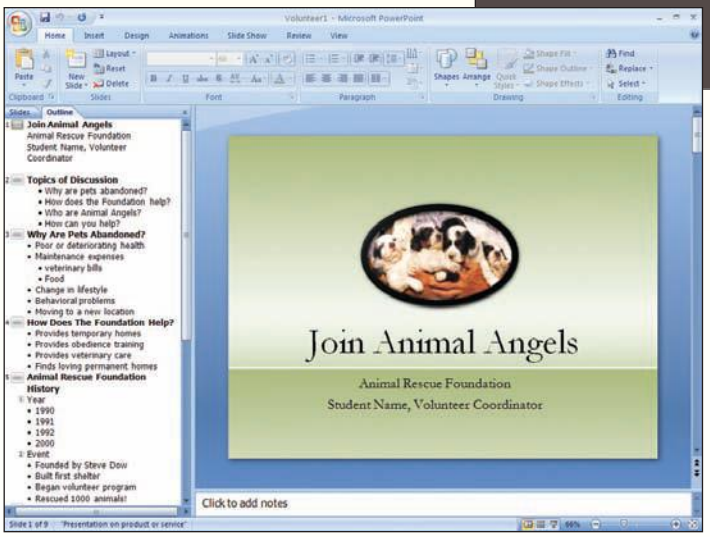




Each main topic in your presentation should have a supporting slide with a title and bulleted points.



The presentation can be reorganized easily by adding, deleting, and moving slides.



Enhance the presentation with the addition of graphics and text colors.

Concept Preview

The following concepts will be introduced in this lab:

1. **Slide** A slide is an individual "page" of your presentation.
2. **Template** A template is a file containing predefined settings that can be used as a pattern to create many common types of presentations.
3. **Spelling Checker** The spelling checker locates all misspelled words, duplicate words, and capitalization irregularities as you create and edit a presentation, and proposes possible corrections.
4. **AutoCorrect** The AutoCorrect feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.
5. **Layout** Layouts define the position and format for objects and text that will be added to a slide. A layout contains placeholders for the different items such as bulleted text, titles, charts, and so on.
6. **Font and Font Size** A font, also commonly referred to as a typeface, is a set of characters with a specific design. The designs have names such as Times New Roman and Courier. Each font has one or more sizes.
7. **Graphics** A graphic is a nontext element or object such as a drawing or picture that can be added to a slide.
8. **Stacking Order** Stacking order is the order in which objects are inserted into different layers of the slide.

Introducing Office PowerPoint 2007

The Animal Rescue Foundation has just installed the latest version of the Microsoft Office Suite of applications, Office 2007, on their computers. You will use the graphics presentation program Microsoft Office PowerPoint 2007, included in the office suite, to create your presentation. Using this program, you should have no problem creating the presentation in time for tomorrow's staff meeting.

Starting Office PowerPoint 2007

1. **Start the Office PowerPoint 2007 application.**
2. **If necessary, maximize the window.**

Having Trouble?
See "Common Office 2007 Interface Features," page I.10, for information on how to start the application and use features that are common to all 2007 Office applications.

Your screen should be similar to Figure 1.1

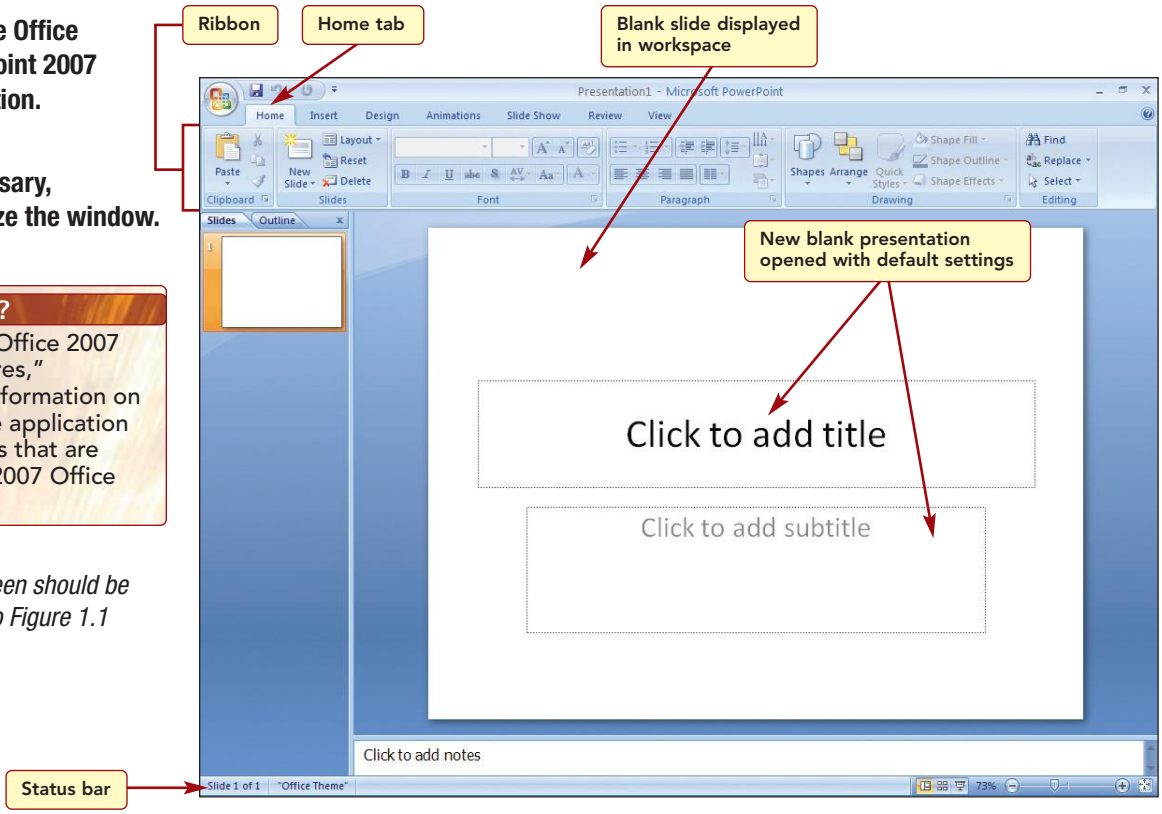


Figure 1.1

Additional Information
Because the Office 2007 applications remember settings that were on when the program was last exited, your screen may look slightly different.

The PowerPoint application window includes the Ribbon located below the title bar that consists of seven tabs. These tabs contain the commands and features you will use to create and modify a presentation.

The large area below the Ribbon is the **workspace** where your presentations are displayed as you create and edit them. The workspace currently displays a blank slide.

Concept 1

Slide

1 A **slide** is an individual "page" of your presentation. The first slide of a presentation is the title slide, which is used to introduce your presentation. Additional slides are used to support each main point in your presentation. The slides give the audience a visual summary of the words you speak, which helps them understand the content and keeps them entertained. The slides also help you, the speaker, organize your thoughts and prompt you during the presentation.

The status bar at the bottom of the window displays the slide indicator, messages and information about various PowerPoint settings, buttons to change the document view, and a window zoom feature. The slide indicator identifies the number of the slide that is displayed in the workspace of the total number of slides in the presentation. You will learn about the other features of the status bar shortly.

Developing New Presentations

During your presentation, you will present information about the Animal Rescue Foundation and why someone should want to join the Animal Angels volunteer group. As you prepare to create a new presentation, you should follow several basic steps: plan, create, edit, enhance, and rehearse.

Step	Description
Plan	The first step in planning a presentation is to understand its purpose. You also need to find out the length of time you have to speak, who the audience is, what type of room you will be in, and what kind of audiovisual equipment is available. These factors help to determine the type of presentation you will create.
Create	To begin creating your presentation, develop the content by typing your thoughts or notes into an outline. Each main idea in your presentation should have a supporting slide with a title and bulleted points.
Edit	While typing, you will probably make typing and spelling errors that need to be corrected. This is one type of editing. Another type is to revise the content of what you have entered to make it clearer, or to add or delete information. To do this, you might insert a slide, add or delete bulleted items, or move text to another location.
Enhance	You want to develop a presentation that grabs and holds the audience's attention. Choose a design that gives your presentation some dazzle. Wherever possible, add graphics to replace or enhance text. Add effects that control how a slide appears and disappears, and that reveal text in a bulleted list one bullet at a time.
Rehearse	Finally, you should rehearse the delivery of your presentation. For a professional presentation, your delivery should be as polished as your materials. Use the same equipment that you will use when you give the presentation. Practice advancing from slide to slide and then back in case someone asks a question. If you have a mouse available, practice pointing or drawing on the slide to call attention to key points.

After rehearsing your presentation, you may find that you want to go back to the editing phase. You may change text, move bullets, or insert a new slide. Periodically, as you make changes, rehearse the presentation again to see how the changes affect your presentation. By the day of the presentation, you will be confident about your message and at ease with the materials.

During the planning phase, you have spoken with the foundation director regarding the purpose of the presentation and the content in general. The purpose of your presentation is to educate members of the community about the organization and to persuade many to volunteer. In addition, you want to impress the director by creating a professional presentation.

Creating a Presentation

When you first start PowerPoint, a new blank presentation is opened. It is like a blank piece of paper that already has many predefined settings. These settings, called **default settings,** are generally the most commonly used settings and are stored as a presentation template.

Concept 2

Template

2 A **template** is a file containing predefined settings that can be used as a pattern to create many common types of presentations. Templates include features that control the slide color scheme, the type and size of bullets and fonts, placeholder sizes and positions, background designs and fills, and other layout and design elements. Every PowerPoint presentation is based on a template. The default settings for a basic blank presentation are stored in the default design template file. Whenever you create a new presentation using this template, the same default settings are used.

Many other templates that are designed to help you create professional-looking presentations are also available within PowerPoint and in the Microsoft Office Template Gallery on the Microsoft Office Web site. They include design templates, which provide a design concept, fonts, and color scheme; and content templates, which suggest content for your presentation based on the type of presentation you are making. You also can design and save your own presentation templates.

Several methods can be used to create a presentation. The first method is to start with a blank presentation that has minimal design elements and add your own content and design changes. Another is to use one of the many supplied design templates as the basis for your new presentation. A third is to save the design elements of an existing presentation as a custom template and then use it as the basis for your new presentation. Finally, you can open an existing presentation and modify the design and content as needed for the new presentation.

Using a Template

Because this is your first presentation created using PowerPoint, you decide to use one of the supplied templates.

1 **Click Office Button.**

Choose New.

Your screen should be similar to Figure 1.2

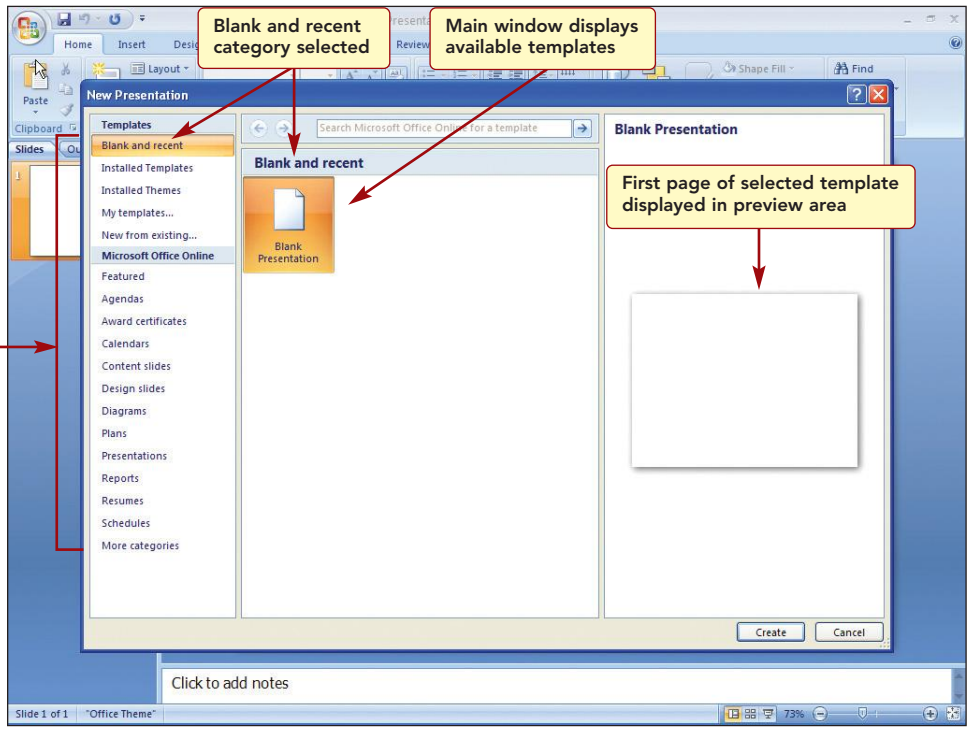


Figure 1.2

Having Trouble?

If you do not have an Internet connection or are unable to locate the "Presentation on product or service" template, choose New from existing and select the file pp01_Products from your data file location. Then skip to the next section, Viewing the Presentation.

The left side of the New Presentation dialog box displays the template categories. Currently, the Blank and recent category is selected. The middle area, or main window, displays templates available from the selected category. Your screen might display a single option as in Figure 1.2, or it might show additional options. The right side of the dialog box displays a preview area presenting the first page of the selected template.

When you change categories, the main window displays the content associated with that category. For example, the Installed templates category accesses templates that are already installed on your computer. The Microsoft Office Online group lists categories of template types that are available from Microsoft online. You want to look at the online templates.

2 **Choose Presentations from the Microsoft Office Online category.**

Scroll the list in the main window and select "Business"

Scroll the Business options in the main window and select "Presentation on product or service."

Your screen should be similar to Figure 1.3

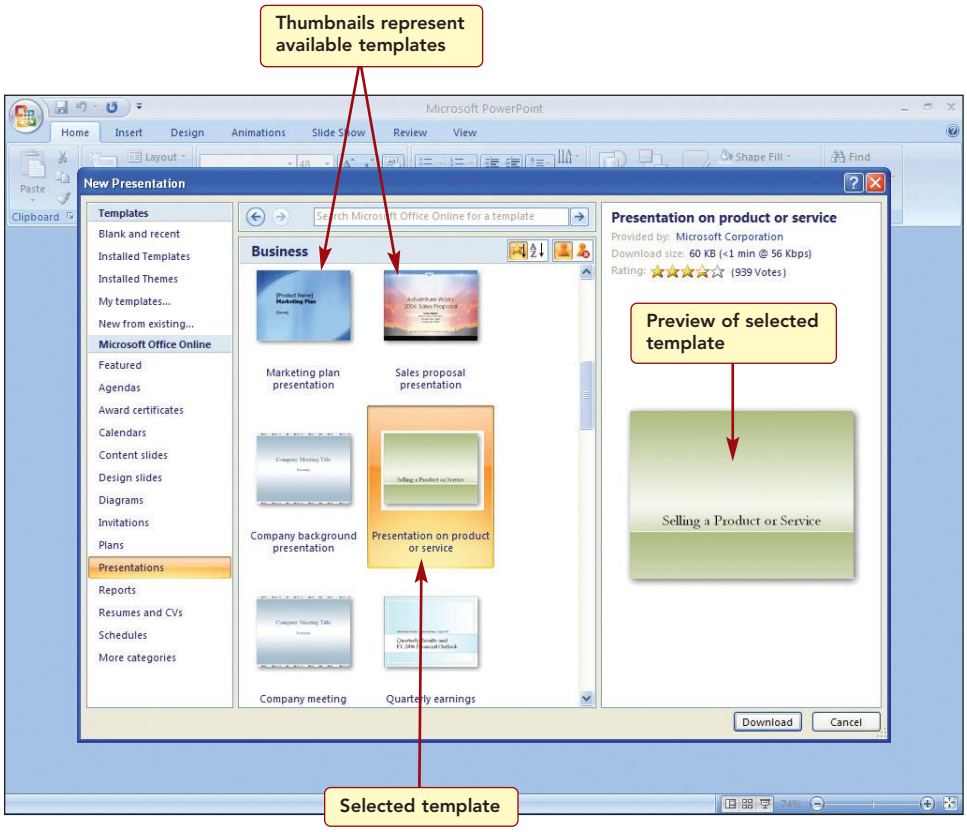


Figure 1.3

Small images, called **thumbnails,** representing the first slide in each design template are displayed in alphabetical order by name. When a template is selected, the preview area displays a larger image of the thumbnail and information about the template.

You think this design looks good and decide to begin your presentation for the volunteers using the template.

3. Click Download.

- If the Microsoft Office Genuine Advantage dialog box appears, click Continue.
- If necessary, close the Help window.

Your screen should be similar to Figure 1.4

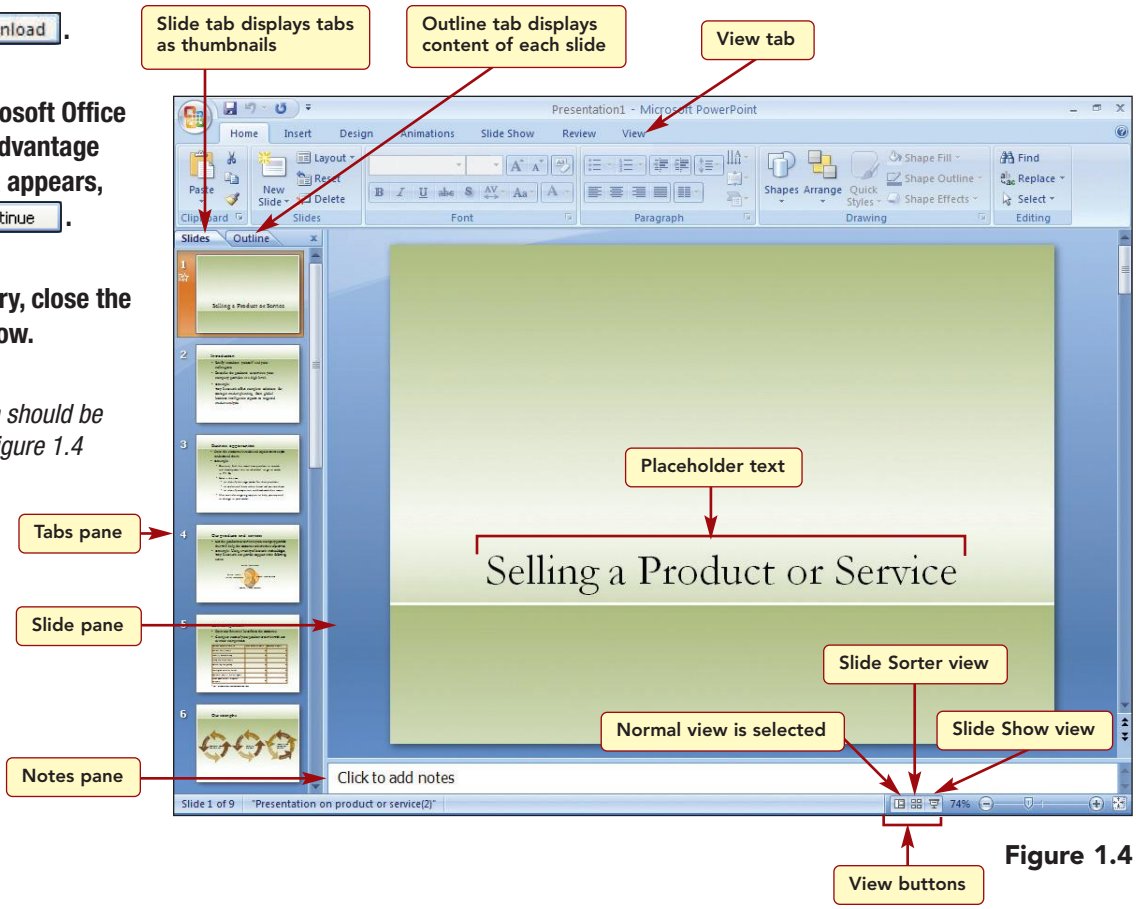


Figure 1.4

The template file is downloaded and opened in PowerPoint.

Viewing the Presentation

The first slide in the presentation is displayed in the workspace. The colors and design displayed in the new presentation are part of the template. It also contains sample text, called **placeholder text,** which suggests the content for the slide. This text will be replaced by the information you want to appear in the slide.

The presentation is initially displayed in Normal view. A **view** is a way of looking at a presentation. PowerPoint provides several views you can use to look at and modify your presentation. Depending on what you are doing, one view may be preferable to another. The commands to change views are located on the View tab. In addition, the three view buttons in the status bar can be used to switch quickly from one view to another. The three main views are described in the following table.

View	Button	Description
Normal		Provides three working areas of the window that allow you to work on all aspects of your presentation in one place.
Slide Sorter		Displays a miniature of each slide to make it easy to reorder slides, add special effects such as transitions, and set timing between slides.
Slide Show		Displays each slide in final form using the full screen space so you can practice or present the presentation.

Using Normal View

Additional Information
You can adjust the size of each pane by dragging the splitter bar that borders each pane. You can make the thumbnails larger or smaller by changing the width of the tabs pane. If it gets too small, the tab names are replaced by icons.

Normal view is displayed by default because it is the main view you use while creating a presentation. Normal view has four working areas: Outline tab, Slides tab, Slide pane, and Notes pane. These areas allow you to work on all components of your presentation in one convenient location. The **Outline tab** displays the text content of each slide in outline format and the **Slides tab** displays each slide as a thumbnail. You can switch between the Slides and Outline tabs by clicking on the tab. The **Slide pane** displays the selected slide. The **Notes pane** includes space for you to enter notes that apply to the current slide.

1. **If necessary, click on the Slides tab to open it.**
2. **Scroll the Slides tab to view the rest of the slides.**
3. **Click on the last slide in the Slides tab.**

Your screen should be similar to Figure 1.5

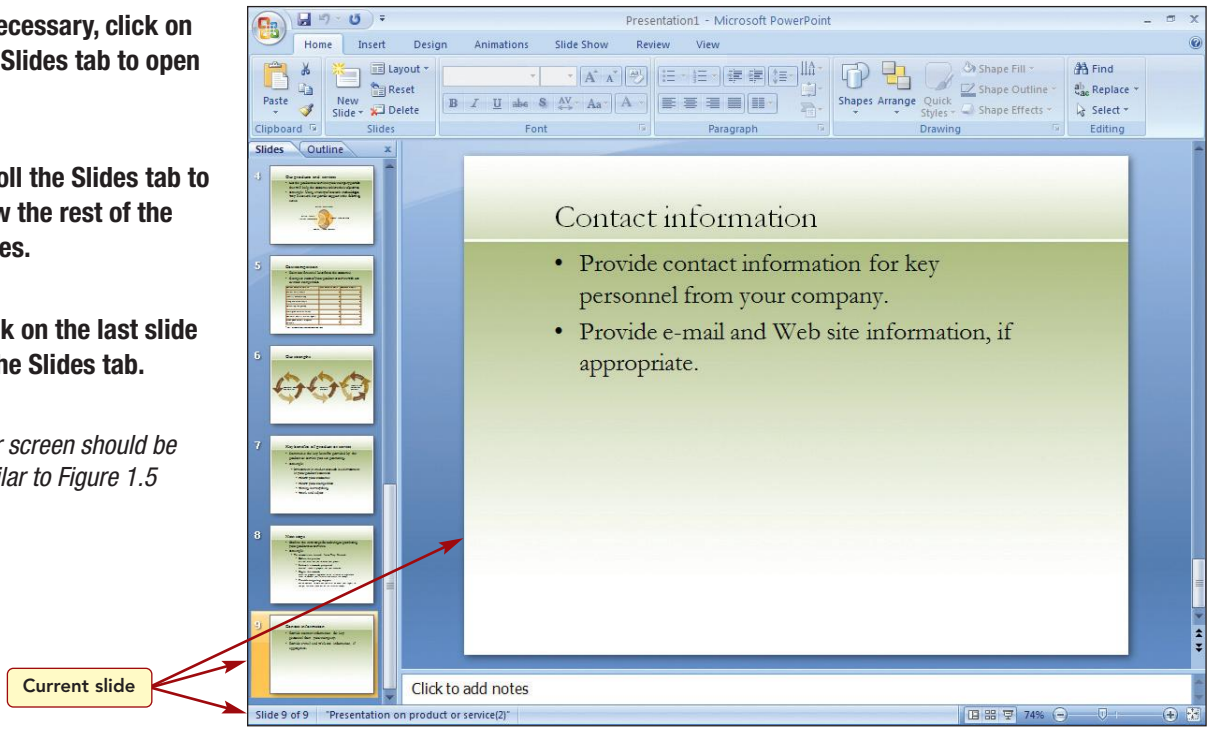


Figure 1.5

Clicking on the thumbnail selects the slide, making it the current slide, and displays it in the Slide pane. The **current slide** is the slide that will be affected by any changes you make. The presentation has a total of nine slides. The status bar displays the number of the current slide, the total number of slides, and the name of the design template used.

2 **Click on the Outline tab to open it.**

Another Method

You also can press Ctrl + Shift + Tab to switch between the Slide and Outline tabs.

Additional Information

The size of the Outline tab increases automatically to display the text.

Your screen should be similar to Figure 1.6

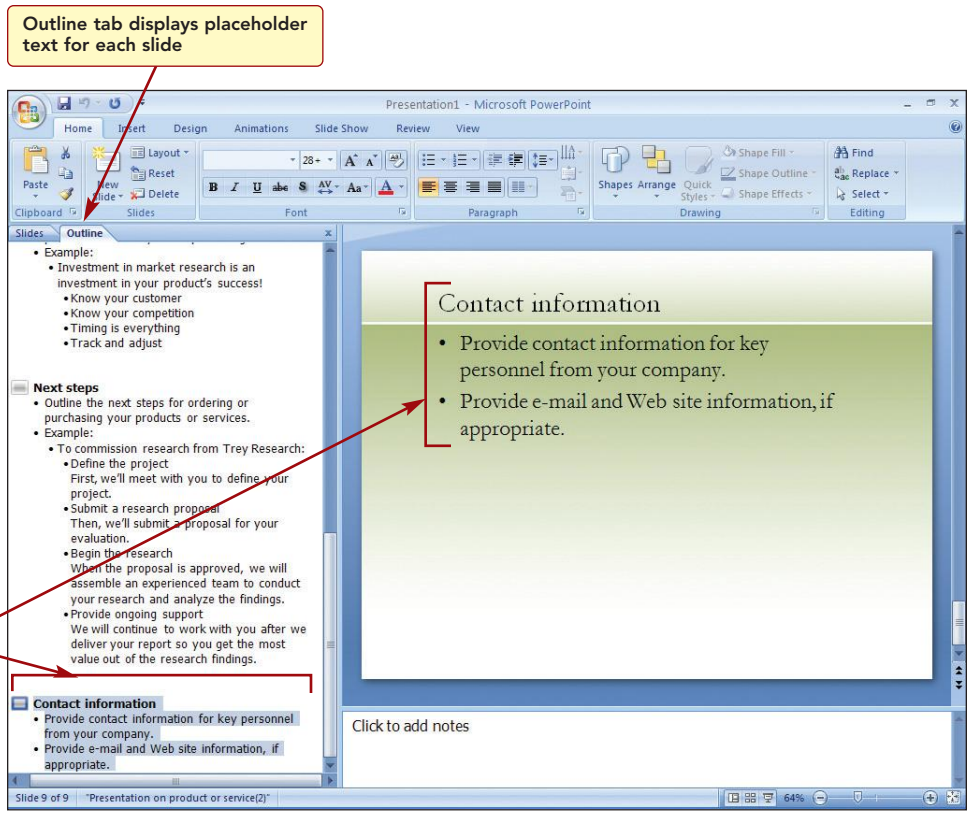


Figure 1.6

The Outline tab displays the placeholder text for each slide in the presentation. The sample text suggests the content for each slide to help you organize your presentation's content. To the left of each slide title is a number that identifies each slide.

Using Slide Sorter View

The second main view that is used while creating a presentation is Slide Sorter view. This view also displays thumbnails of the slides.

1 Click Slide Sorter.

Having Trouble?
Pointing to a view button displays its name in a ScreenTip.

Click on slide 1.

Another Method
You also could Switch to Slide Sorter view by clicking Slide Sorter in the Presentation Views group of the View tab.

Your screen should be similar to Figure 1.7

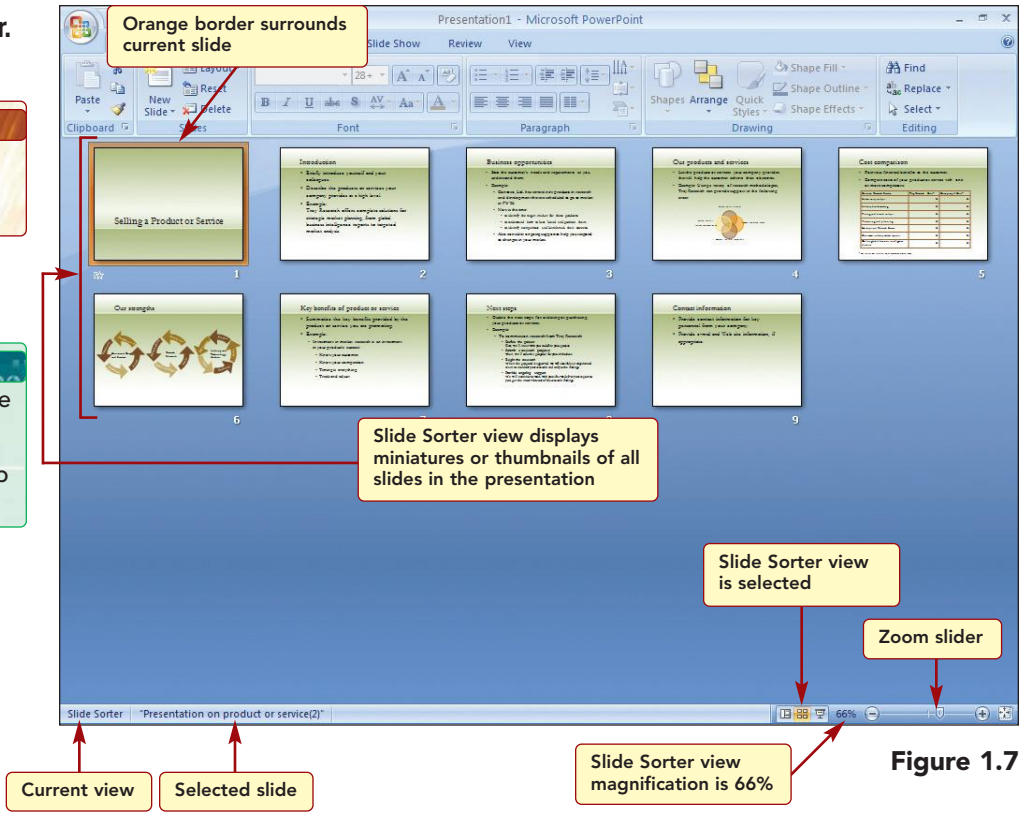


Figure 1.7

This view displays a miniature of each slide in the window. Clicking on a thumbnail selects the slide and makes it the current slide. The currently selected slide, slide 1, appears with an orange border around it.

Because the thumbnails of each slide are small, it is difficult to see the content. You will increase the magnification of the window to make it easier to read each slide. To do this, the zoom feature is used to change the amount of information displayed in the window by "zooming in" to get a close-up view or "zooming out" to see more of the document at a reduced view. Initially the Slide Sorter view magnification is 66%. In this view, you can increase the onscreen magnification to 100% or decrease it to as little as 20%. The zoom setting for each view is set independently and remains in effect until changed to another zoom setting.

You will "zoom in" on the slides so you can read the content.

Another Method
You also can click Zoom on the View tab to specify the zoom settings.

2 **Drag the zoom slider all the way to the right to increase the zoom to 100%.**

Your screen should be similar to Figure 1.8

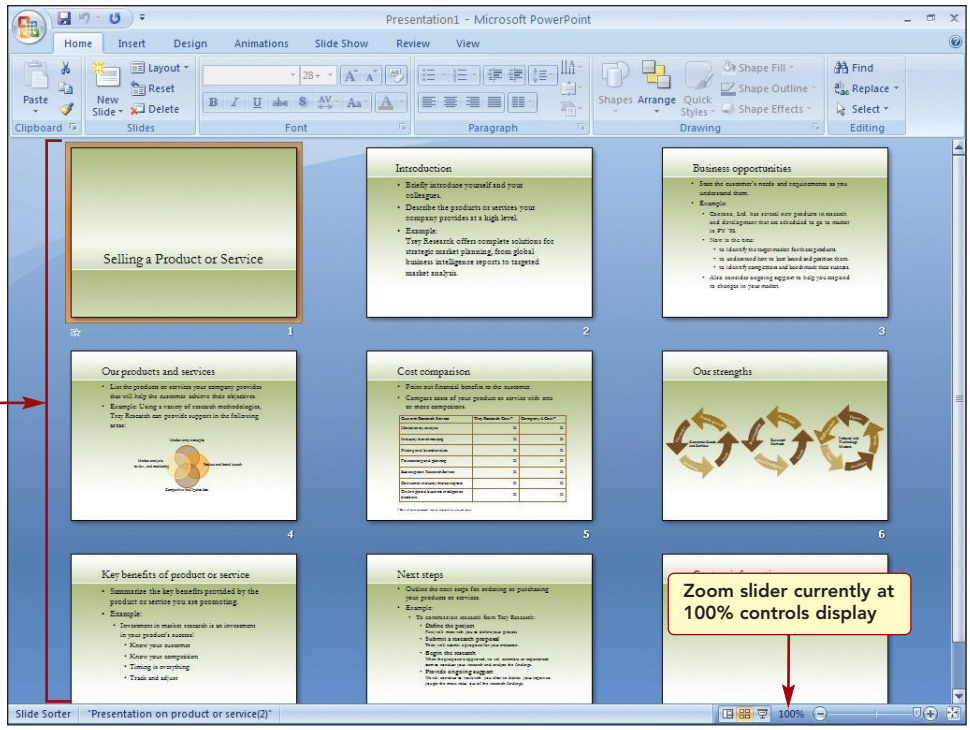


Figure 1.8

Additional Information

You also can click the ⊕ or ⊖ on the zoom slider to increase or decrease the zoom percentage by 10 percent increments.

At this zoom percentage, the slides are much larger and easier to read. This view is particularly useful for rearranging slides to improve the flow and organization of the presentation.

Editing a Presentation

After beginning your presentation using the template, you need to replace the sample content with the appropriate information for your presentation. Editing involves making text changes and additions to the content of your presentation. It also includes making changes to the organization of content. This can be accomplished quickly by rearranging the order of bulleted items on slides as well as the order of slides.

Navigating and Selecting Text

While editing, you will need to move to specific locations in the text. You can use the mouse to move to selected locations simply by clicking on the location. An insertion point I appears to show your location in the text. You also can use the arrow keys located on the numeric keypad or the directional keypad to move the insertion point. The keyboard directional keys used to move within text are described in the following table.

Key	Movement
→	One character to right
←	One character to left
↑	One line up
↓	One line down
Ctrl + →	One word to right
Ctrl + ←	One word to left
Home	Left end of line
End	Right end of line

Additional Information

You can use the directional keys on the numeric keypad or the dedicated directional keypad area. If you use the numeric keypad, make sure the Num Lock feature is off; otherwise numbers will be entered in the document. The Num Lock indicator light above the keypad is lit when on. Press Num Lock to turn it off.

Holding down a directional key or key combination moves the insertion point quickly in the direction indicated, saving multiple presses of the key. Many of the insertion point movement keys can be held down to execute multiple moves.

While editing, you also may need to select text. To select text using the mouse, first move the insertion point to the beginning or end of the text to be selected, and then drag when the mouse pointer is an I-beam to highlight the text you want selected. You can select as little as a single letter or as much as the entire document. To remove highlighting and deselect text, simply click anywhere in the document.

You also can quickly select a block of text, such as a word or line. The following table summarizes the mouse techniques used to select standard blocks.

To Select	Procedure
Word	Double-click in the word.
Sentence	Press Ctrl and click within the sentence.
All text in a bullet	Triple-click in the bulleted text.
Multiple lines and bullets	Drag up or down across the lines.

You also can select text with the keyboard keys shown in the following table.

Keyboard	Action
Shift + →	Selects the next space or character.
Shift + ←	Selects the previous space or character.
Ctrl + Shift + →	Selects the next word.
Ctrl + Shift + ←	Selects the last word.
Ctrl + Shift + ↑	Selects text going backward.
Ctrl + Shift + ↓	Selects text going forward.
Ctrl + A	Selects the entire document.

Using the Outline Tab

One way to make text-editing changes is to use the Outline tab in Normal view. The first change you want to make is to enter a title for the presentation on slide 1. First, you will select the sample title text on the slide and delete it.

1 **Click Normal to switch to Normal view.**

Another Method

You also could switch to Normal view by clicking in the View tab.

- **If necessary, scroll the Outline tab to the top to display the text for slide 1.**
- **With the mouse pointer at the end of the text for slide 1, select the text "Selling a Product or Service" using the keyboard combination Shift + ←.**
- **Press Delete.**

Your screen should be similar to Figure 1.9

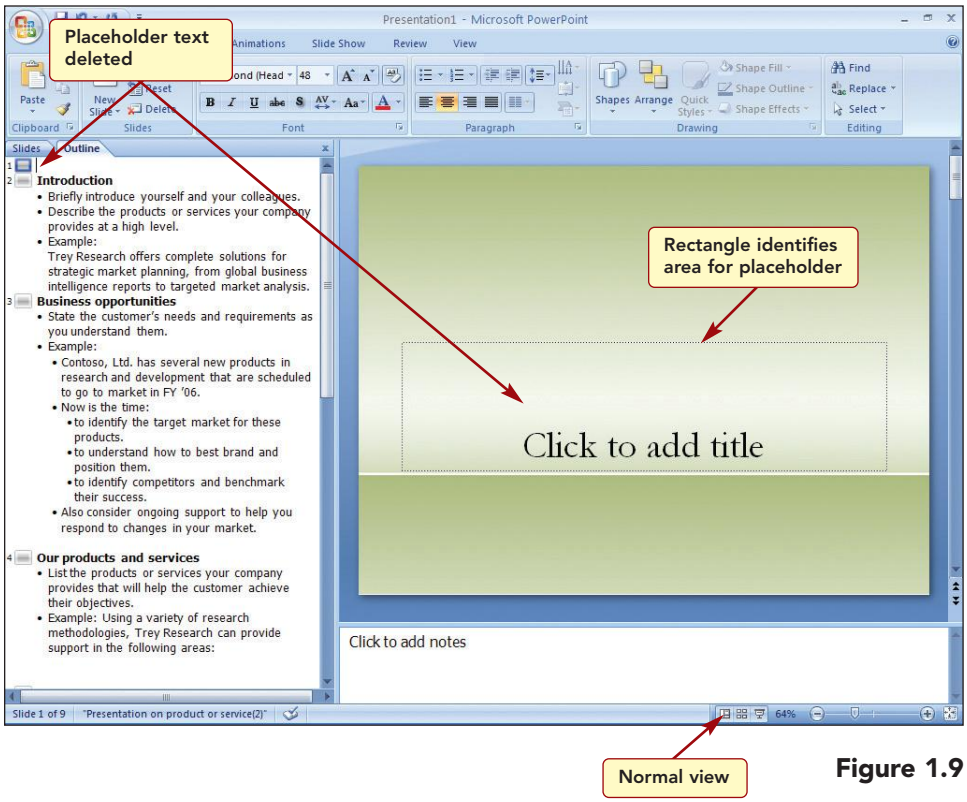


Figure 1.9

The sample text is deleted. Notice, however, that the slide still displays an outline rectangle and the default placeholder text, "Click to add title." The rectangle identifies the location of a **placeholder,** an element that is designed to contain specific types of items or **objects** such as the slide title text, bulleted item text, charts, tables, and pictures. Each slide can have several different types of placeholders. This slide has only one placeholder for the presentation title.

To enter the title, you can type it in the outline or on the slide. Since the insertion point is already in the Outline tab, you will enter the text in this area.

2 **Type Join Animal Angels.**

Having Trouble?

If you make a typing error, press Backspace to delete the characters back to the error and retype the entry.

- **Press Ctrl + ↵Enter to add a subtitle line.**
- **Type Animal Rescue Foundation.**

Your screen should be similar to Figure 1.10

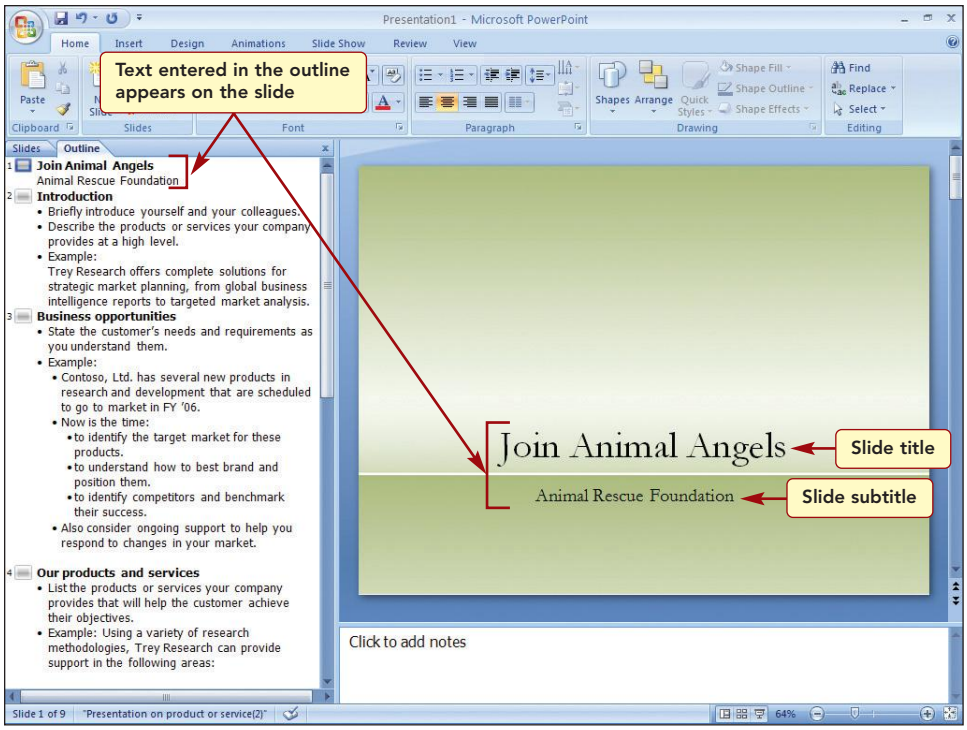


Figure 1.10

As you enter the new text in the Outline tab, it also appears in the slide displayed in the Slide pane. When entering the title for a slide, it is a common practice to use title case, in which the first letter of most words is capitalized.

Additional Information

If you click the slide icon to the right of the slide number, all text on the slide is selected.

The next change you want to make is in the Introduction slide. The sample text recommends that you introduce yourself and describe the company products and services. You will replace the sample text next to the first bullet with the text for your slide. In the Outline tab, you can select an entire paragraph and all subparagraphs by pointing to the left of the line and clicking when the mouse pointer is a ✣.

3 **Click on the first bullet of slide 2 in the Outline tab when the mouse pointer is a ✥.**

Having Trouble?

If you accidentally drag selected text, it will move. To return it to its original location, click Undo on the Quick Access toolbar immediately.

Type Your Name, Volunter (this word is intentionally misspelled) Coordinator.

Your screen should be similar to Figure 1.11

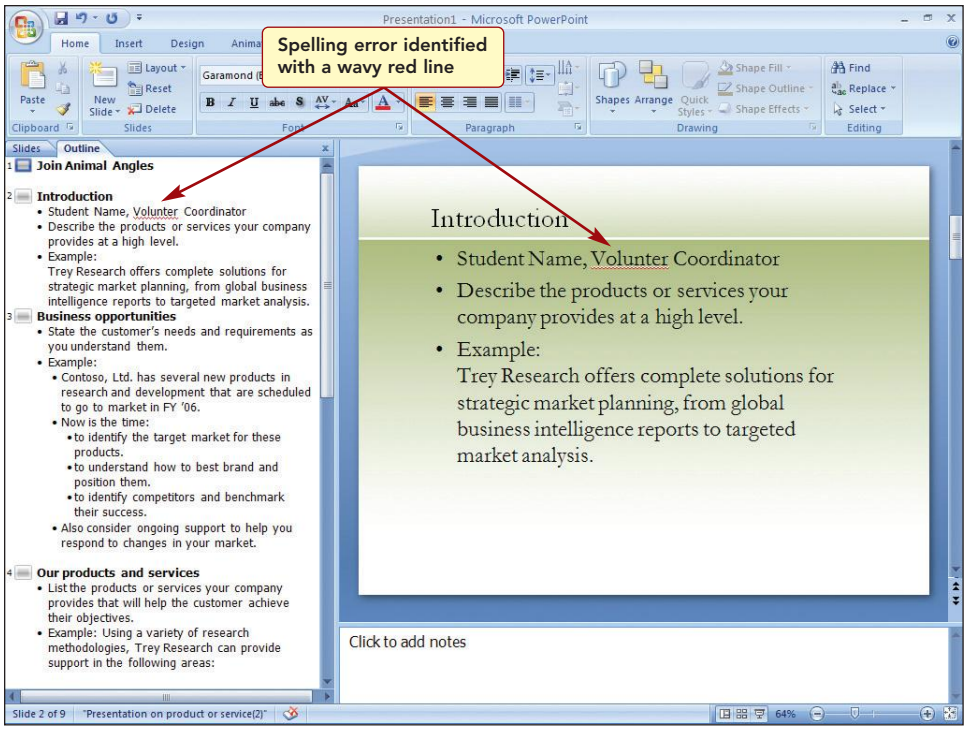


Figure 1.11

As soon as you pressed a key, the selected text was deleted and replaced with the text you typed. Also, as you enter text, the program checks each word for accuracy. In this case, a spelling error was located.

Correcting Errors

PowerPoint identified the word as misspelled by underlining it with a wavy red line.

Concept 3

Spelling Checker

3 The **spelling checker** locates all misspelled words, duplicate words, and capitalization irregularities as you create and edit a presentation, and proposes possible corrections. This feature works by comparing each word to a dictionary of words. If the word does not appear in the **main dictionary** or in a **custom dictionary**, it is identified as misspelled. The main dictionary is supplied with the program; a custom dictionary is one you can create to hold words you commonly use, such as proper names and technical terms, but are not included in the main dictionary.

If the word does not appear in either dictionary, the program identifies it as misspelled by displaying a red wavy line below the word. You can then correct the misspelled word by editing it. Alternatively, you can display a list of suggested spelling corrections for that word and select the correct spelling from the list to replace the misspelled word in the presentation.

To quickly correct the misspelled word, you can select the correct spelling from a list of suggested spelling corrections displayed on the shortcut menu.

1 **Right-click on the misspelled word in the Outline tab to display the shortcut menu.**

Your screen should be similar to Figure 1.12

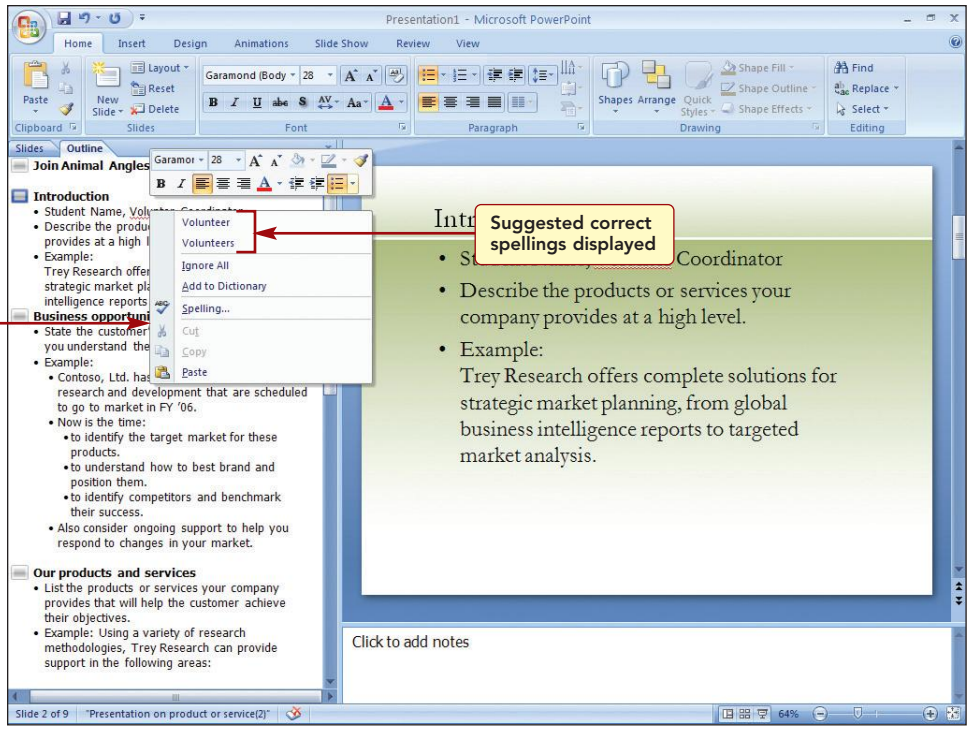


Figure 1.12

Additional Information

Sometimes Spelling Checker cannot suggest replacements because it cannot locate any words in its dictionary that are similar in spelling. Other times the suggestions offered are not correct. If either situation happens, you must edit the word manually.

The shortcut menu displays two suggested correct spellings. The menu also includes several related menu options described below.

Option	Effect
Ignore All	Instructs PowerPoint to ignore the misspelling of this word throughout the rest of this session.
Add to Dictionary	Adds the word to the custom dictionary list. When a word is added to the custom dictionary, PowerPoint will always accept that spelling as correct.
Spelling	Opens the Spelling dialog box to check the entire presentation.

Additional Information

The spelling checker works just as it does in the other 2007 Microsoft Office applications.

You will replace the word with the correct spelling and then enter the information for the second bullet.

2. **Choose "Volunteer."**

- **Select the text in the second bullet on slide 2 in the Outline tab.**
- **Press** Delete.
- **Select the text in the Example bullet in the Outline tab.**
- **Type volunter (this word is intentionally misspelled) opportunities.**

Your screen should be similar to Figure 1.13

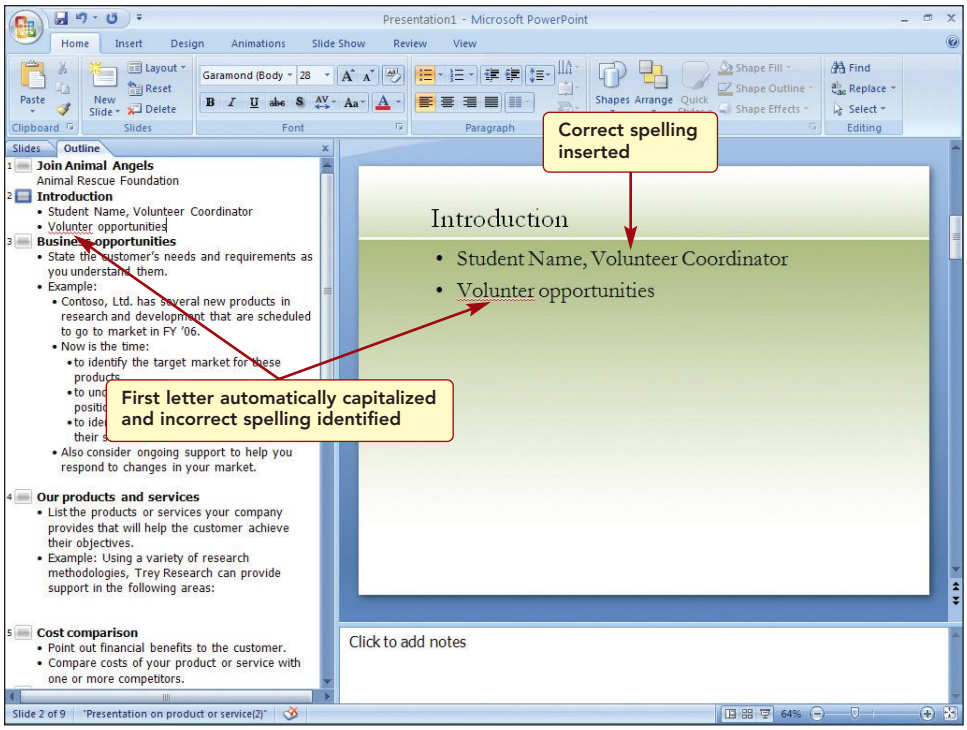


Figure 1.13

Additional Information

Bulleted items in a presentation are capitalized in sentence case format. Ending periods, however, are not included.

Notice that the first letter of "Volunter" was automatically capitalized. This is part of the AutoCorrect feature of PowerPoint. Also notice that the incorrect spelling is indicated. As before, we could correct the spelling using the shortcut menu; however, this time we will use another approach.

Concept 4

AutoCorrect

4 The **AutoCorrect** feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry. The AutoCorrect feature automatically inserts proper capitalization at the beginning of sentences and in the names of days of the week. It also will change to lowercase letters any words that were incorrectly capitalized due to the accidental use of the Caps Lock key. In addition, it also corrects many common typing and spelling errors automatically.

One way the program makes corrections automatically is by looking for certain types of errors. For example, if two capital letters appear at the beginning of a word, the second capital letter is changed to a lowercase letter. If a lowercase letter appears at the beginning of a sentence, the first letter of the first word is capitalized. If the name of a day begins with a lowercase letter, the first letter is capitalized.

Another way the program makes corrections is by automatically replacing a misspelled word with the correct spelling in situations where the spelling checker offers only one suggested spelling correction. Autocorrect also checks all words against the AutoCorrect list, a built-in list of words that are commonly spelled incorrectly or typed incorrectly. If it finds the entry on the list, the program automatically replaces the error with the correction. For example, the typing error "aboutthe" is automatically changed to "about the" because the error is on the AutoCorrect list. You also can add words to the AutoCorrect list that you want to be corrected automatically. Any such words are added to the list on the computer you are using and will be available to anyone who uses the machine after you.

Editing in the Slide Pane

You will correct the spelling of Volunter in the Slide pane because the text in the Outline tab is small and it is easier to work with it in the slide. Simply clicking on the slide pane makes it the active area.

1 **Click anywhere in the bulleted text in the Slide pane.**

Your screen should be similar to Figure 1.14

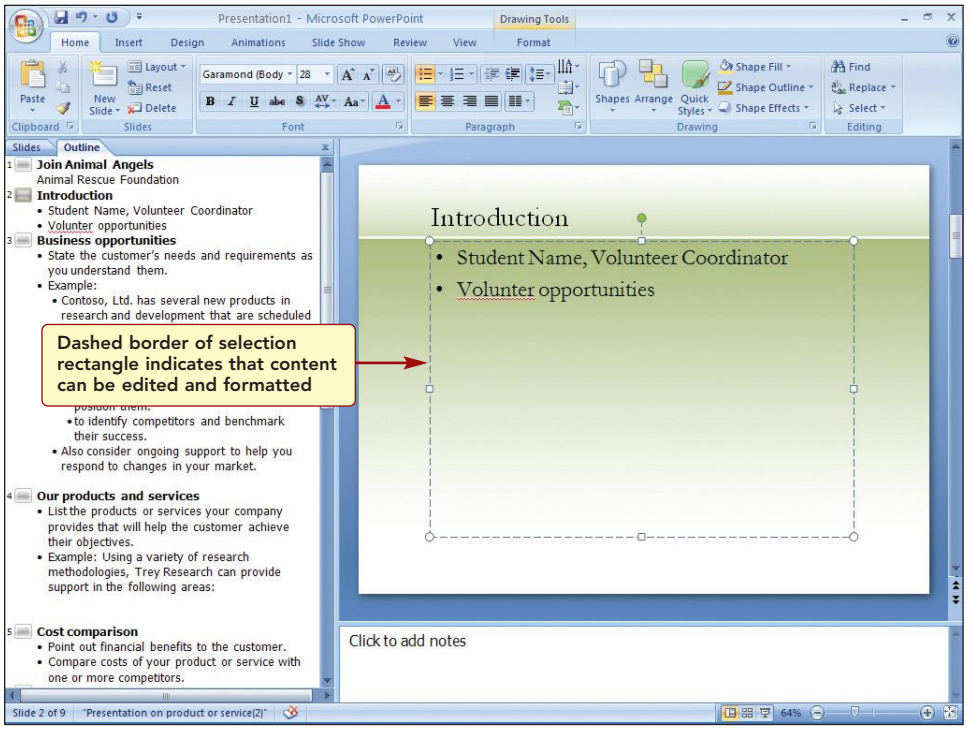


Figure 1.14

Additional Information
A solid-border selection rectangle indicates that you can format the box itself. Clicking the dashed-line border changes it to a solid border.

Notice the bulleted list placeholder is surrounded with a **selection rectangle.** The dashed-line border of the selection rectangle indicates that you can enter, delete, select, and format the object inside the placeholder. Because this placeholder contains text, an insertion point is displayed to show your location in the text and to allow you to select and edit the text. Additionally, the mouse pointer appears as a I to be used to position the insertion point.

Now, you will correct the spelling of the word. You can position the insertion point anywhere within the text by clicking on the location where you want it to appear.

2. **Click between the "t" and the "e" in the misspelled word in the slide pane.**

   Type e.

   Click at the end of the line.

   Your screen should be similar to Figure 1.15

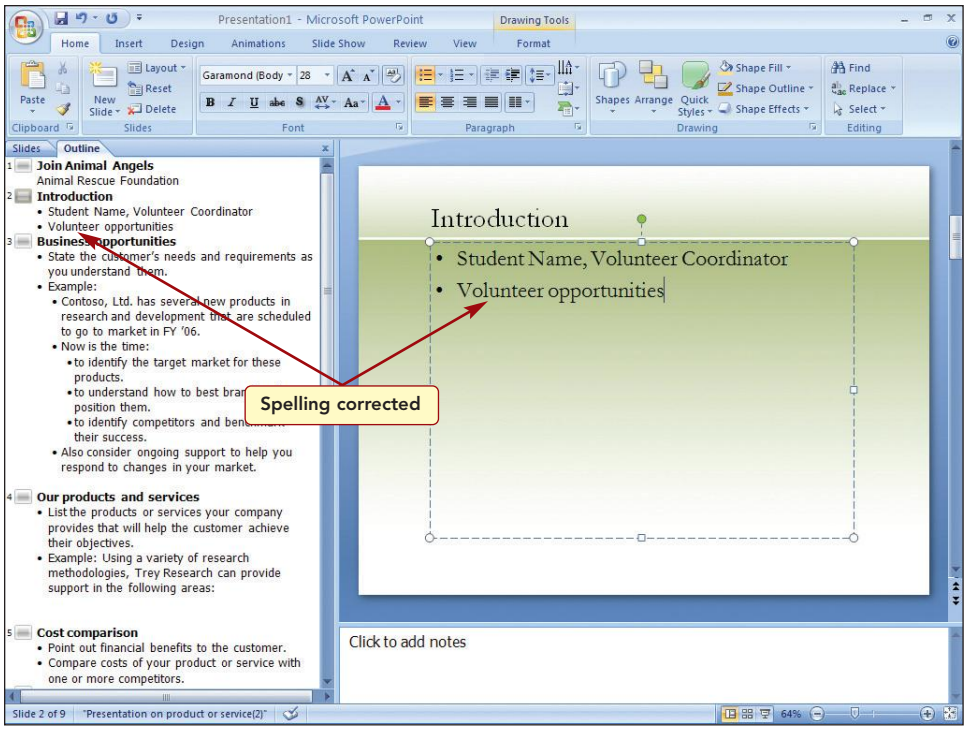


Figure 1.15

The spelling has been corrected and the word is no longer identified as misspelled.

Deleting a Slide

You are now ready to enter the text for the next slide in your presentation by entering the three main topics of discussion. As you look at the suggested content for slide 3, you decide to delete the slide and use slide 4 instead.

1. **In the Outline tab, click anywhere on slide 3.**

2. **Click Delete in the Slides group of the Home tab.**

Another Method
You also could choose Delete Slide from the shortcut menu.

3. **In the Outline tab, click anywhere on the new slide 3.**

Your screen should be similar to Figure 1.16

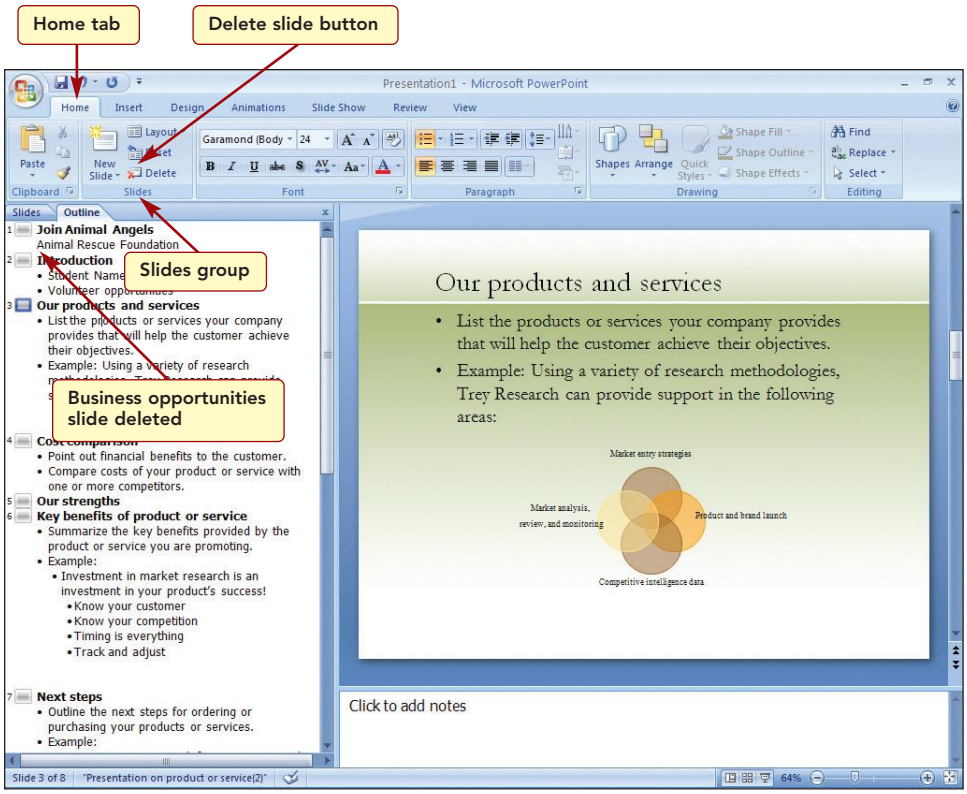


Figure 1.16

The slide is deleted and all following slides are renumbered.

Selecting and Editing Text

You want to enter a new title, Topics of Discussion, with three bulleted items describing the topics to be discussed. Two placeholder bullets with sample text are displayed. You will edit these and add a third bullet. To indicate which placeholder to work with, you click on it to select it.

1. **Click on the sample title text in the Slide pane to select the title placeholder.**
- **Triple-click on the sample text to select the entire line.**
- **Type Topics of Discussion.**
- **Click anywhere on the bulleted list placeholder.**
- **Drag to select all the text in the placeholder.**

Another Method

You also can click Select and choose Select All in the Editing Group on the Home tab or the shortcut key Ctrl + A to select everything in the placeholder box.

- **Type Why are pets abandoned?.**
- **Press Enter.**
- **Type How can you help?.**
- **Press Enter.**
- **Type How does the Foundation help?.**

Having Trouble?

If you accidentally insert an extra bullet and blank line, press Backspace twice to remove them.

Your screen should be similar to Figure 1.17

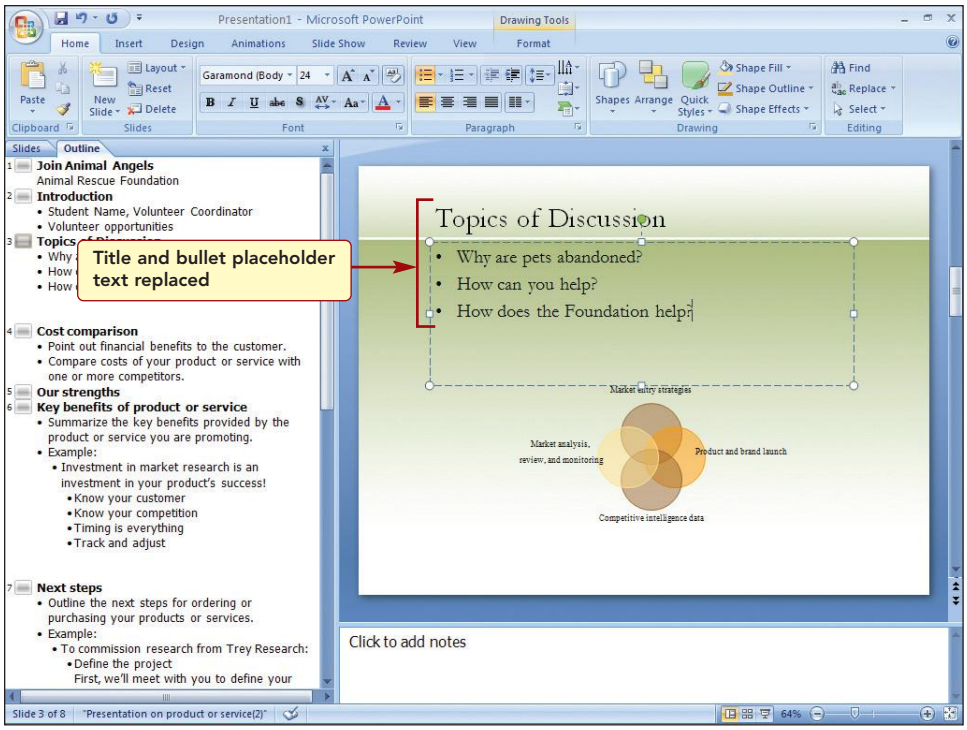


Figure 1.17

Finally, you want to delete the graphic element on the slide. Notice the graphic does not appear in the Outline tab.

2. **Click on the graphic in the Slide pane to select it.**

- **Click in the Clipboard group of the Home tab.**

Your screen should be similar to Figure 1.18

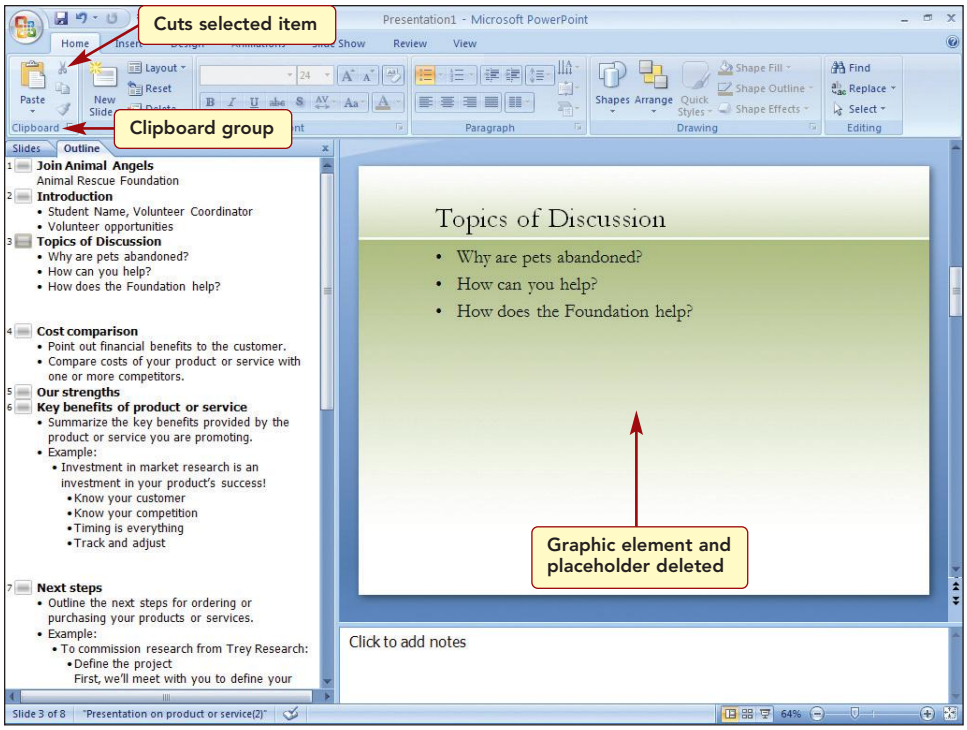


Figure 1.18

The placeholder and its contents have been deleted.

Moving Bulleted Items

You realize that you entered the topics in the wrong order. You want the last item to be the second item in the list. A bulleted point can be moved easily by selecting it and dragging it to a new location. You will move the bulleted item on the current line up one line.

1. **Select all the text in the third bulleted item in the Slide pane.**

- **Drag the selection to the beginning of the second bulleted item and release the mouse button.**

Additional Information

The mouse pointer appears as when you drag to move the item.

Your screen should be similar to Figure 1.19

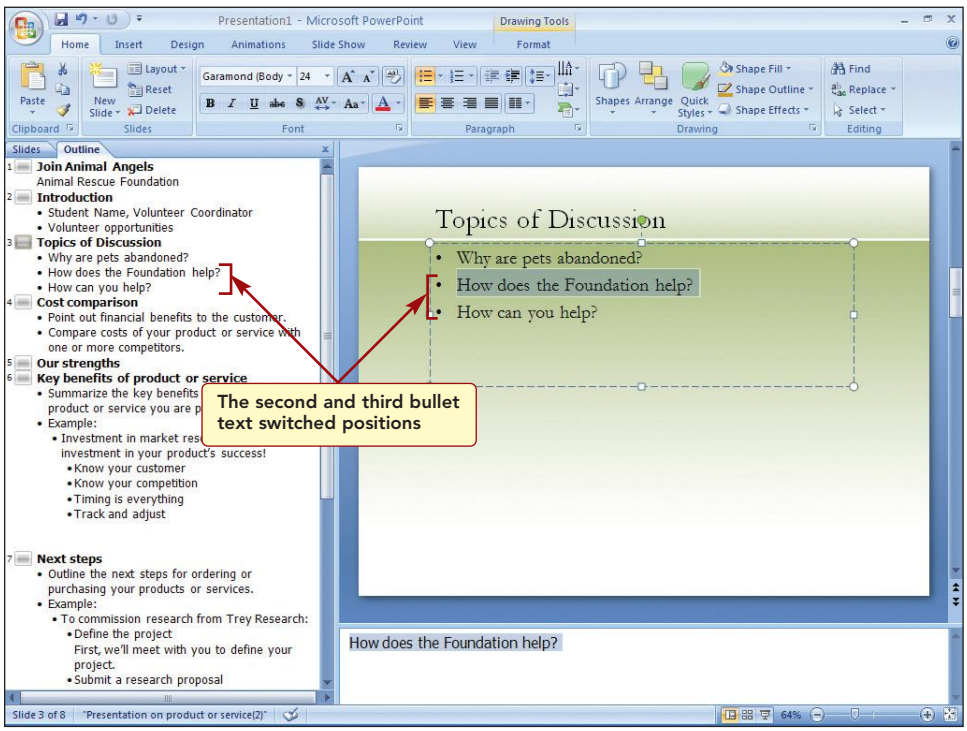


Figure 1.19

The third bullet is now the second bulleted item in the list. You also can drag and move bulleted items in the Outline tab in the same manner.

Moving among Slides

Next, you want to add text for the next few slides. Because you plan to do most of the editing in the Slide pane, you will switch to the Slides tab and increase the width of the tabs pane. This tab makes it easy to move from one slide to another.

1. **Open the Slides tab.**
2. **Point to the right border of the tabs pane. With the mouse pointer shaped as ↔ drag to the right to increase the width of the pane as in Figure 1.20.**
3. **Click on slide 4 in the Slides tab to display it in the Slide pane.**

Your screen should be similar to Figure 1.20

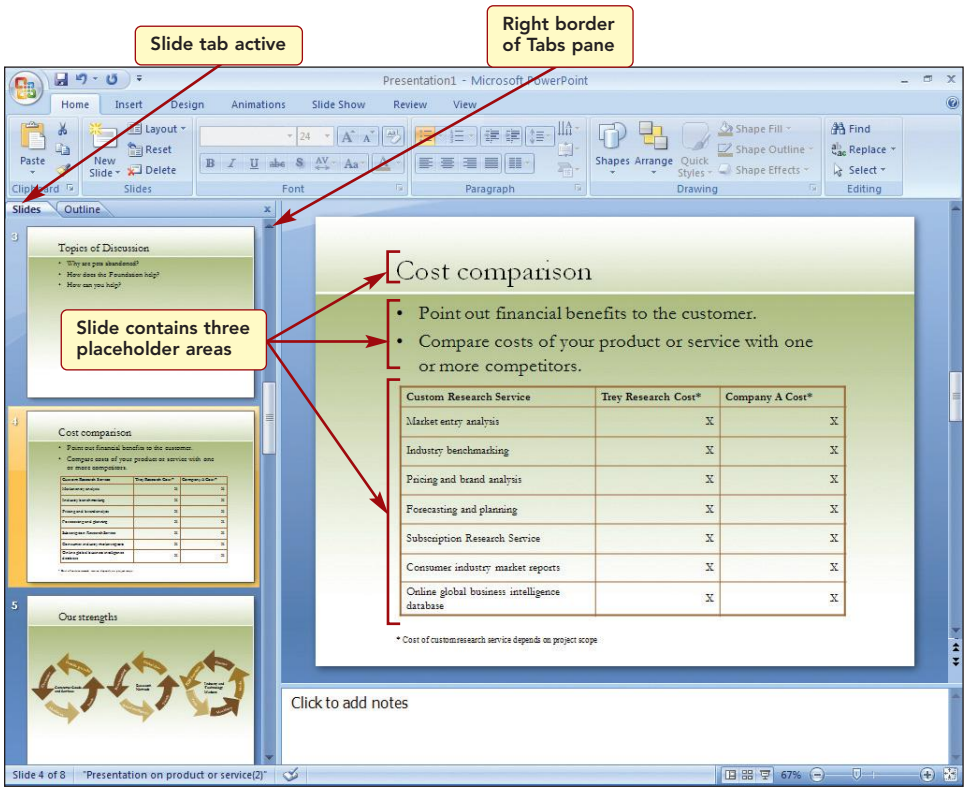


Figure 1.20

This slide contains three placeholder areas: title, bullets, and a table. You decide to take a quick look at the other slides in the presentation before deciding which slides to use. In addition to clicking on the slide in the Outline and Slides tabs, the following features can be used to move to other slides in Normal view.

To Display	Action
Previous slide	Click ▲ Click above scroll box Press Page Up
Next slide	Click ▼ Click below scroll box Press Page Down
Any slide	Drag the Slide pane's scroll box until the ScreenTip displays the slide you want to view



2 **Click ▼ Next Slide to display slide 5.**

Having Trouble?

The ▲ Previous Slide and ▼ Next Slide buttons are located at the bottom of the Slide pane's vertical scroll bar.

Press Page Down to display slide 6.

Click below the scroll box twice to display slides 7 and 8.

Your screen should be similar to Figure 1.21

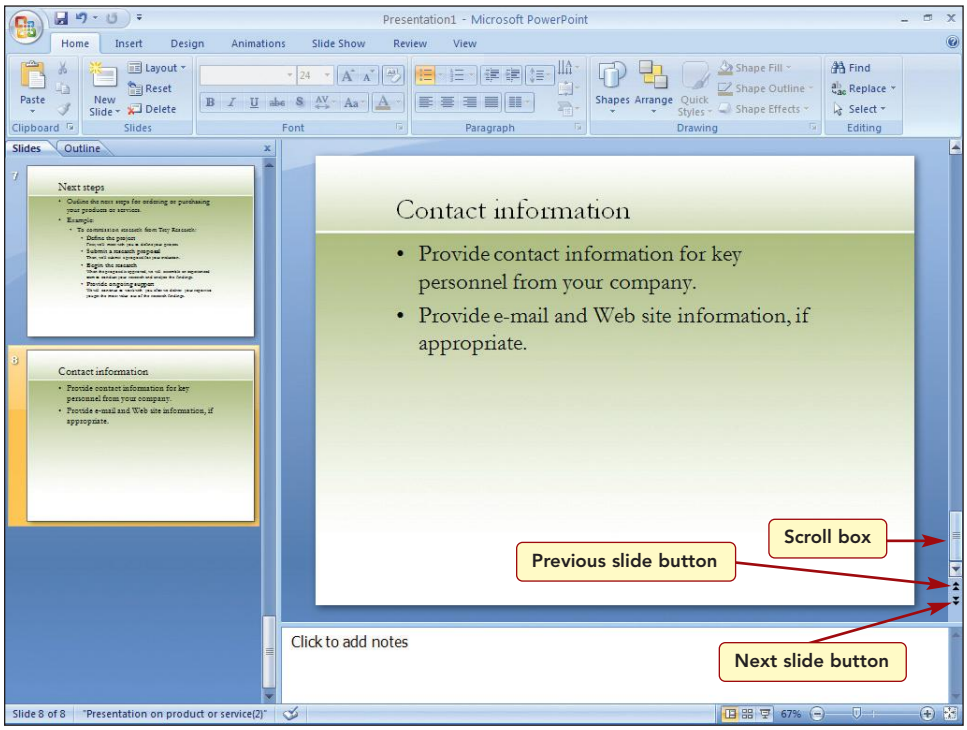


Figure 1.21

After looking at all the sample slides, you decide to use slide 6 as the basis for the next three slides in the presentation.

Moving and Copying Slides

You will move slide 6 above slide 4 and then make two copies of this slide.

1. **Select slide 6 in the Slides tab.**

- **Drag it above slide 4 in the Slides tab.**

Additional Information

A solid horizontal line identifies the location where the slide will be placed when you stop dragging.

- **Click Copy in the Clipboard group on the Home tab.**
- **Click Paste in the Clipboard group two times.**

Another Method

The keyboard shortcut to Copy is Ctrl + C and the shortcut to Paste is Ctrl + V.

- **Select slide 4 in the Slides tab.**

Your screen should be similar to Figure 1.22

Another Method

You also could use New Slide in the Slides group and select Duplicate selected slides to copy a slide.

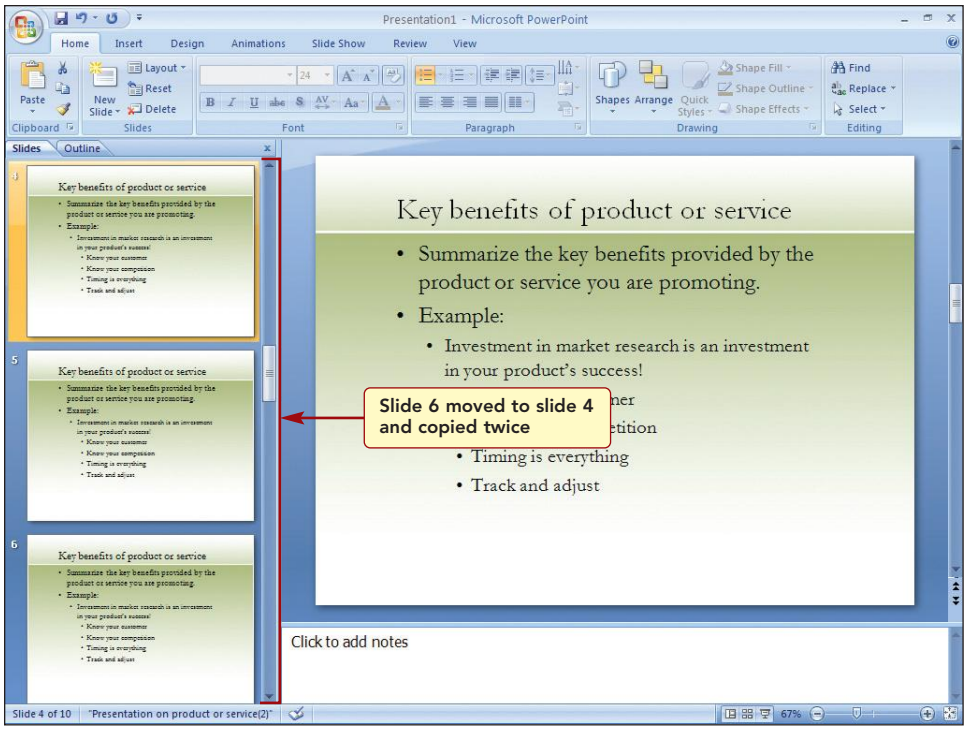


Figure 1.22

There are now three slides with the same content. The copied slides are inserted directly below the slide that was selected.

Now you are ready to enter the text for the next three slides.

2. **Replace the sample title text in slide 4 with Why are Pets Abandoned?.**

- **Select all the text in the bullet text placeholders and enter the following bullets:**
  - **Poor or deteriorating health**
  - **Maintenance expenses**
  - **Change in lifestyle**
  - **Behavioral problems**
  - **Moving to a new location**

Your screen should be similar to Figure 1.23

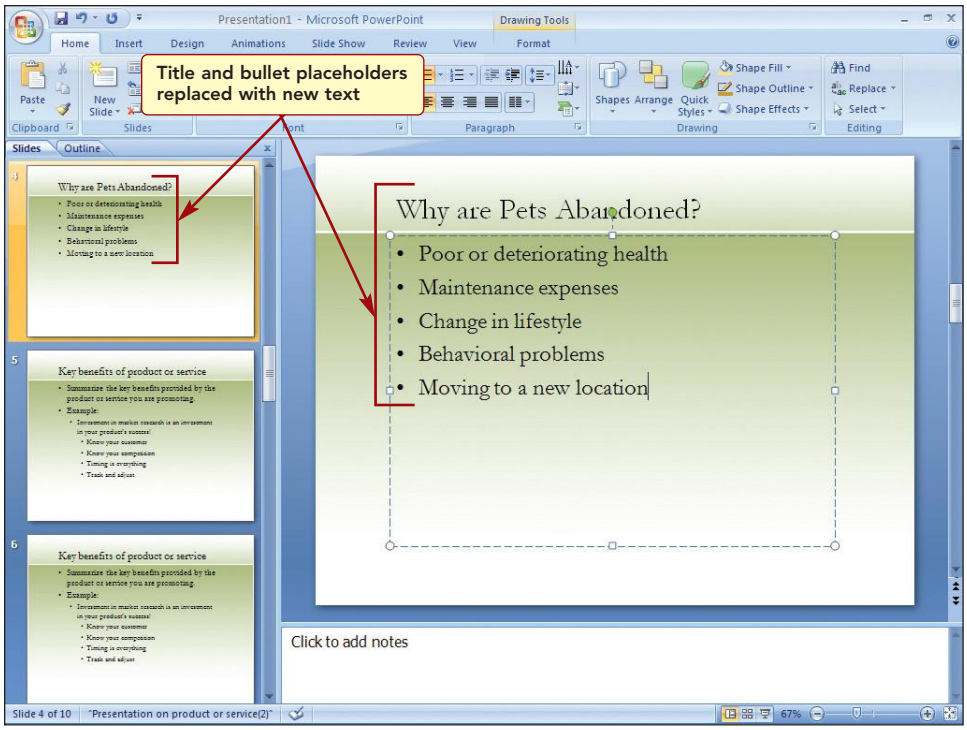


Figure 1.23

In the next slide, you will enter information about how people can help the Animal Rescue Foundation.

3. **Select slide 5.**

- **Replace the sample title text with How Can You Help?.**
- **Select all the text in the bulleted text placeholder.**
- **Type Donate your time and talent.**
- **Press** ↵Enter.

Your screen should be similar to Figure 1.24

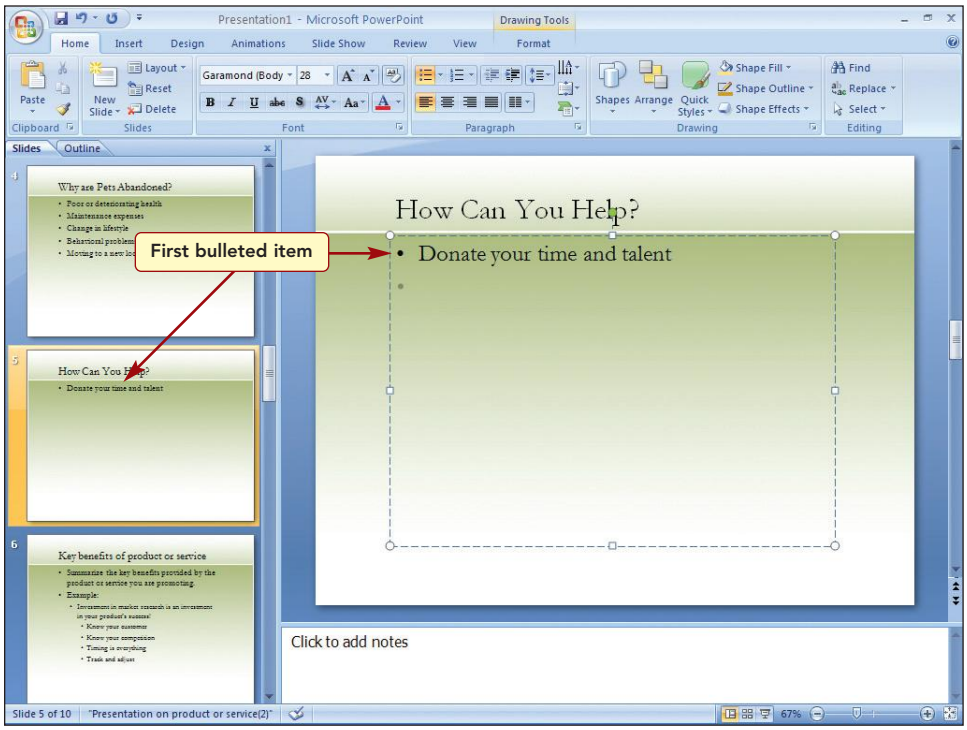


Figure 1.24

Demoting and Promoting Bulleted Items

You want the next bulleted item to be indented below the first bulleted item. Indenting a bulleted point to the right **demotes** it, or makes it a lower or subordinate topic in the outline hierarchy.

1. **Press** Tab.
2. **Type Become a foster parent.**
3. **Press** Enter.
4. **Type Work at adoption fairs.**
5. **Press** Enter.

Your screen should be similar to Figure 1.25

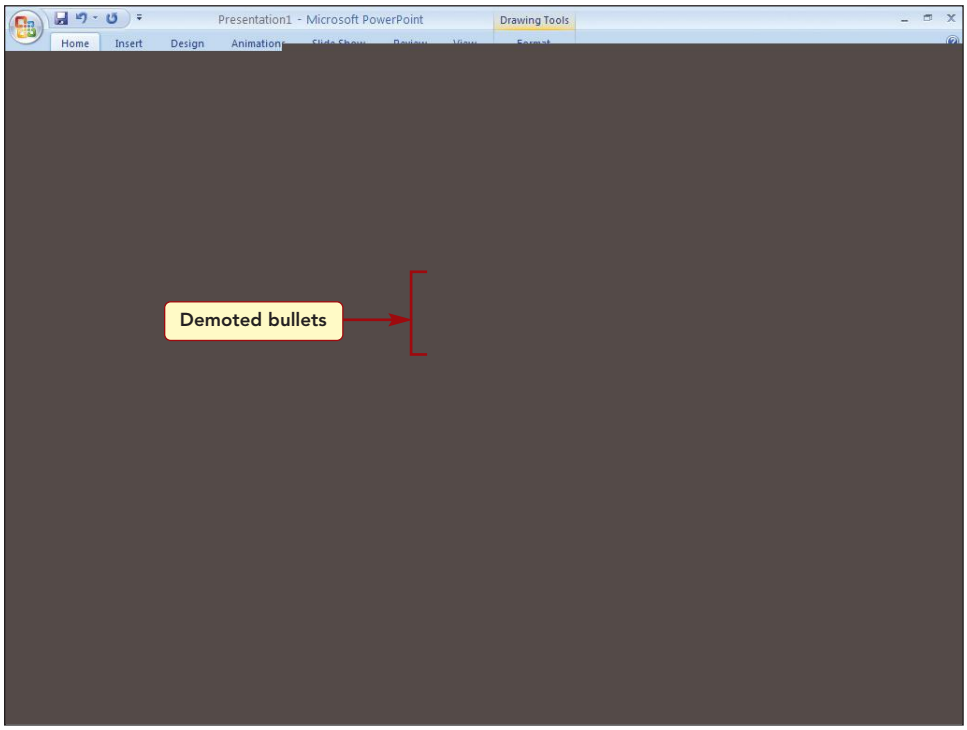


Figure 1.25

When you demote a bulleted point, PowerPoint continues to indent to the same level until you cancel the indent. Before entering the next item, you want to remove the indentation, or **promote** the line. Promoting a line moves it to the left, or up a level in the outline hierarchy.

2. **Press** Shift + Tab.

- **Type Donate new or used items.**
- **Press** Enter.
- **Enter the next two bulleted items:**

  Crates and pads

  Collars, leads, and other items

Your screen should be similar to Figure 1.26

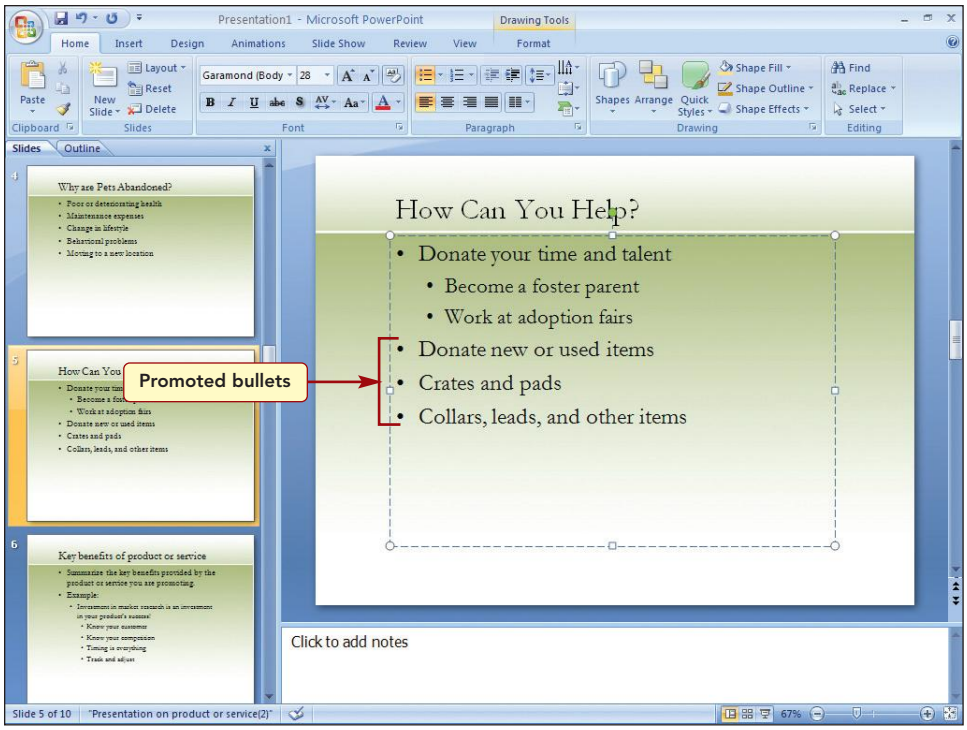


Figure 1.26

You also can promote or demote bulleted items after the text has been entered. The insertion point must be at the beginning of the line to be promoted or demoted or all the text must be selected. You will demote the last two bulleted items.

3. **Select the two bulleted items "Crates and pads" and "Collars, leads, and other items."**

- **Press** Tab.
- **Move to the end of "Collars, leads, and other items."**
- **Press** Enter.

Your screen should be similar to Figure 1.27

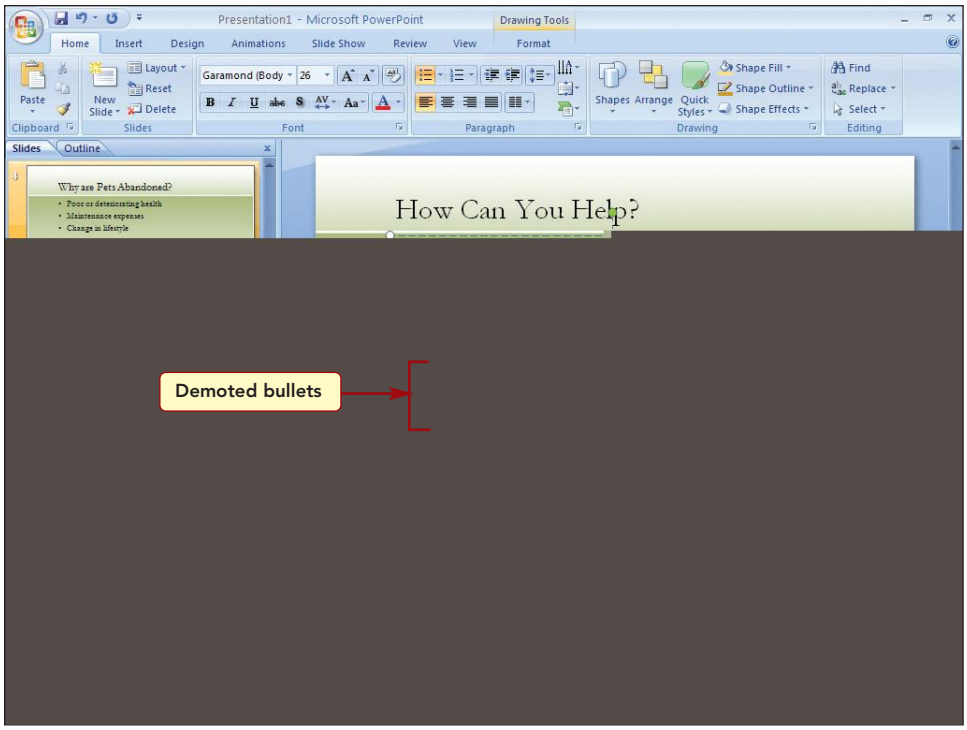


Figure 1.27

The last two items have been demoted. Next you will add more items to the bulleted list.

4. **Type Provide financial support.**

   Press Enter.

   Enter the following three bulleted items:

   Send a donation

   Sponsor a foster pet

   Sponsor an adoption

   Promote the "Provide financial support" bullet.

   Your screen should be similar to Figure 1.28

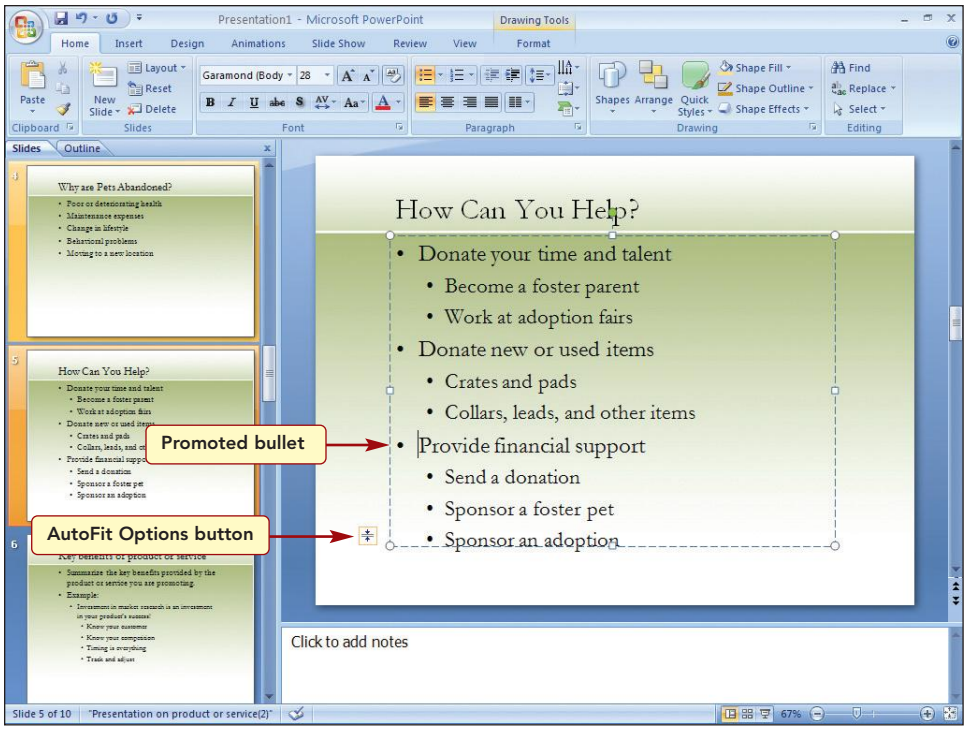


Figure 1.28

As you continued entering more bulleted items, the slide has become very full. Also notice that the AutoFit Options button appears at the bottom left corner of the placeholder. It contains options that allow you to control the AutoFit feature and to handle any over-spilling text. The AutoFit feature will automatically adjust the line spacing and text size as needed to display the content inside the placeholder appropriately. Currently, this feature is off in this template.

5. **Click AutoFit Options.**

   Choose AutoFit Text to Placeholder.

   Your screen should be similar to Figure 1.29

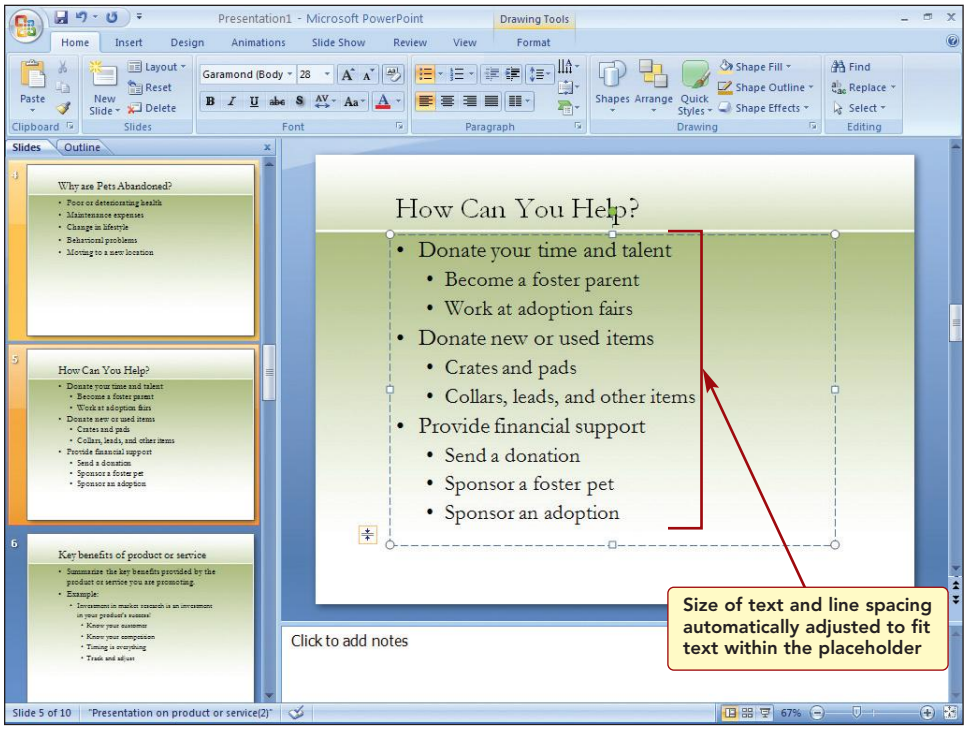


Figure 1.29

Now that the AutoFit Text to Placeholder option is on, the text size and line spacing of the bulleted items have been reduced to display the text more comfortably on the slide. If you were to add more text or increase or decrease the size of the placeholder, the AutoFit feature would continue to adjust the text size and spacing.

Splitting Text between Slides

Generally, when creating slides, it is a good idea to limit the number of bulleted items on a slide to six. It also is recommended that the number of words on a line should not exceed five. In this case, because there are 10 bulleted items on this slide, you decide to split the slide content between two slides.

1. **Click AutoFit Options.**
2. **Choose Split Text Between Two Slides.**
3. **Scroll the tabs pane so that slides 5 and 6 are visible.**

Your screen should be similar to Figure 1.30

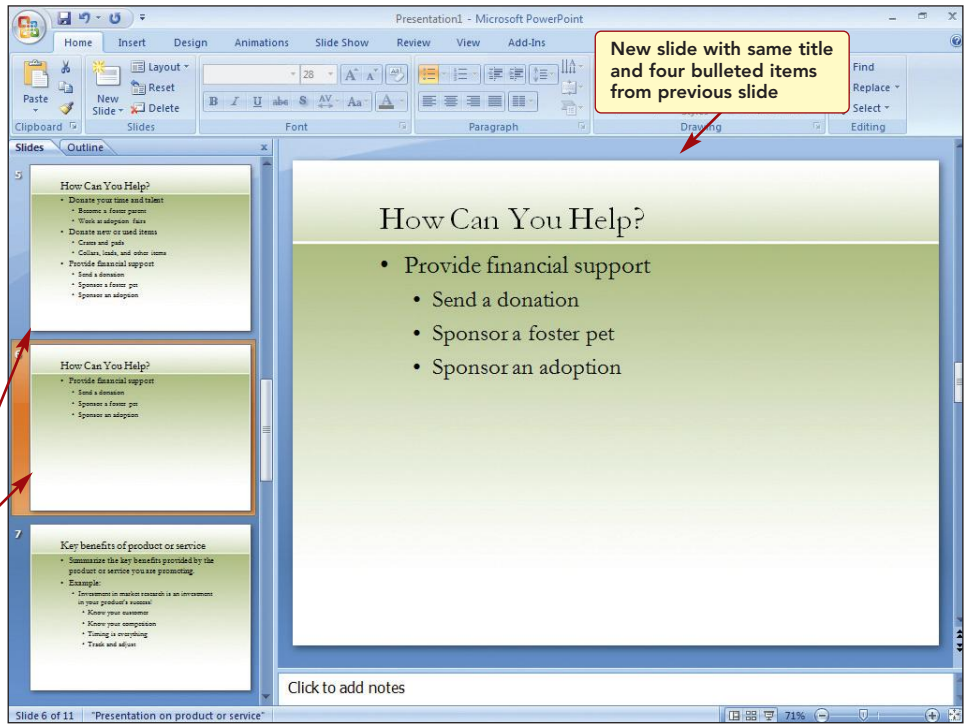


Figure 1.30

Having Trouble?
You may have noticed that in the tabs pane slide 5 still displays the four bullet items. Do not be concerned. The four bullets have been removed; however, the tabs pane has not been updated to reflect the change.

A new slide containing the same title as the previous slide and four of the bulleted items from the previous slide are inserted into the presentation. You will edit the slide title of slide 6.

2. **Replace the title text with More Ways To Help!.**

Your screen should be similar to Figure 1.31

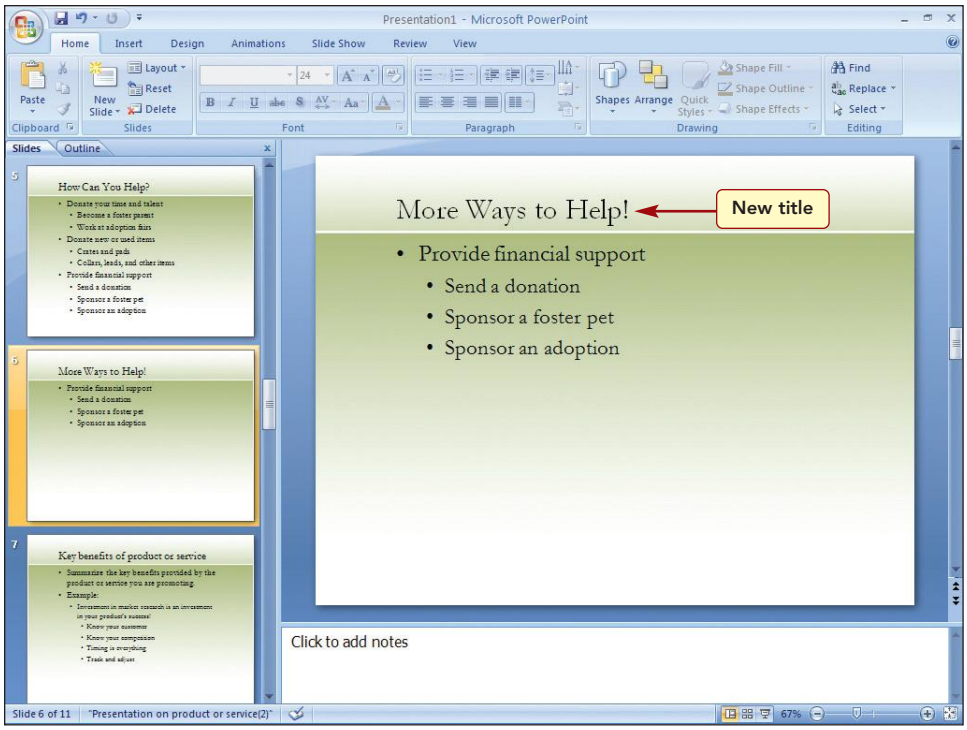


Figure 1.31

Saving, Closing, and Opening a Presentation

You have just been notified about an important meeting that is to begin in a few minutes. Before leaving for the meeting, you want to save the presentation. As you enter and edit text to create a new presentation, the changes you make are immediately displayed onscreen and are stored in your computer's memory. However, they are not permanently stored until you save your work to a file on a disk. After a presentation is saved as a file, it can be closed and opened again at a later time to be edited further.

As a backup against the accidental loss of work caused by a power failure or other mishap, Office 2007 includes an **AutoRecover** feature. When this feature is on, as you work you may see a pulsing disk icon briefly appear in the status bar. This icon indicates that the program is saving your work to a temporary recovery file. The time interval between automatic saving can be set to any period you specify; the default is every 10 minutes. When you start up again, the recovery file containing all changes you made up to the last time it was saved by AutoRecover is opened automatically. You then need to save the recovery file. If you do not save it, it is deleted when closed. While AutoRecover is a great feature for recovering lost work, it should not be used in place of regularly saving your work.

Saving the Presentation

You will save the work you have done so far on the presentation. The Save or Save As commands on the Office Button menu are used to save files. The Save command or the Save button on the Quick Access toolbar will save the active file using the same file name by replacing the contents of the existing file with the document as it appears on your screen. The Save As

command allows you to save a file with a new file name and/or to a new location. This action leaves the original file unchanged. When a presentation is saved for the first time, either command can be used. It is especially important to save a new presentation very soon after you create it because the AutoRecover feature does not work until a file name has been specified.

1 **Click Save on the Quick Access toolbar.**

Your screen should be similar to Figure 1.32

Having Trouble?
If your system uses Windows Vista, your dialog box features will be slightly different.

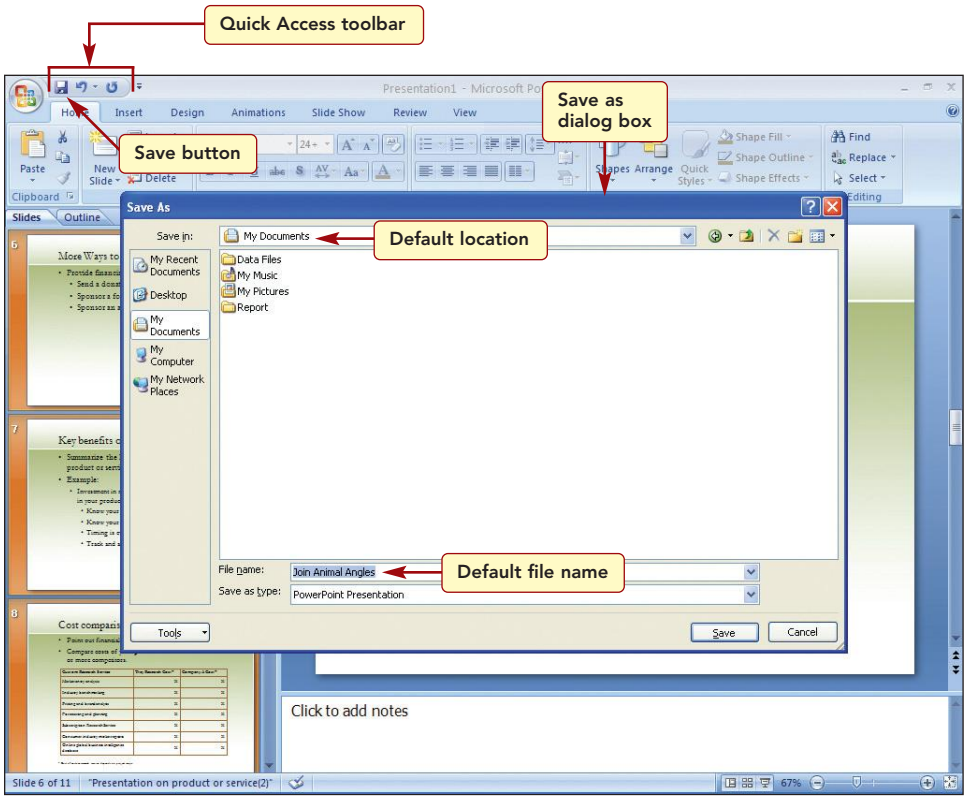


Figure 1.32

Additional Information
Windows documents can have up to 256 characters in the file name. Names can contain letters, numbers, and spaces; the symbols /, \, ?, :, *, ", <, > cannot be used.

The Save As dialog box is displayed, in which you specify the location to save the file and the file name. The Save In list box displays the default location where files are stored. The File Name text box displays the title from the first slide as the default file name. You will change the location to the location where you save your files and the file name. Notice that the default name is highlighted, indicating that it is selected and will be replaced as you type the new name.

2 Type **Volunteer**.

Additional Information
The file name can be entered in either uppercase or lowercase letters and will appear exactly as you type it.

- **Open the Save In list box and select the location where you will save your files.**

Having Trouble?
Click the text box arrow to open the drop-down list.

Having Trouble?
If you are saving to a disk and an error message is displayed, check that your disk is properly inserted in the drive and click OK.

Your screen should be similar to Figure 1.33

Having Trouble?
If your dialog box displays file extensions, it simply means that your Windows program has this option activated and no action is required on your part.

Additional Information
If your system uses Windows NT, My Network Places is Network Neighborhood.

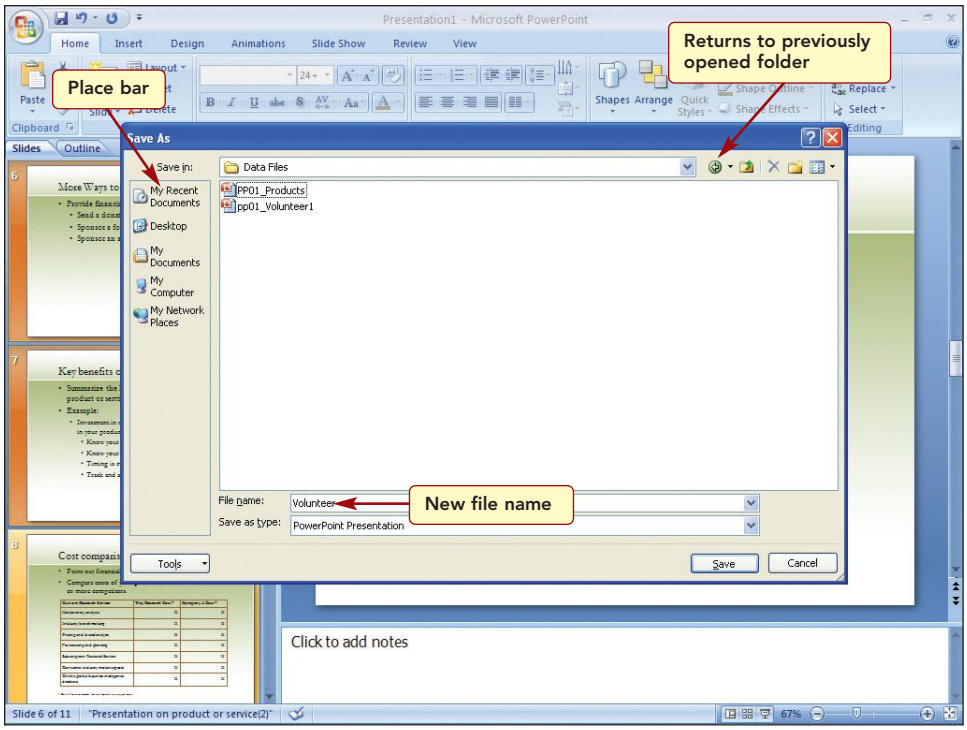


Figure 1.33

The large list box displays the names of any PowerPoint files (if any) stored in that location. Only PowerPoint presentation files are listed, because the selected file type in the Save As Type list box is Presentation. Presentation files have a default file extension of .pptx.

You also can select the save location from the Places bar along the left side of the dialog box. The icons bring up a list of recently accessed files and folders, the contents of the My Documents and Favorites folders, the Windows desktop, and folders that reside on a network or Web through the My Network Places. Selecting a folder from one of these lists changes to that location. You also can click the Back button in the toolbar to return to folders that were previously opened during the current session.

3 **Click Save.**

Your screen should be similar to Figure 1.34

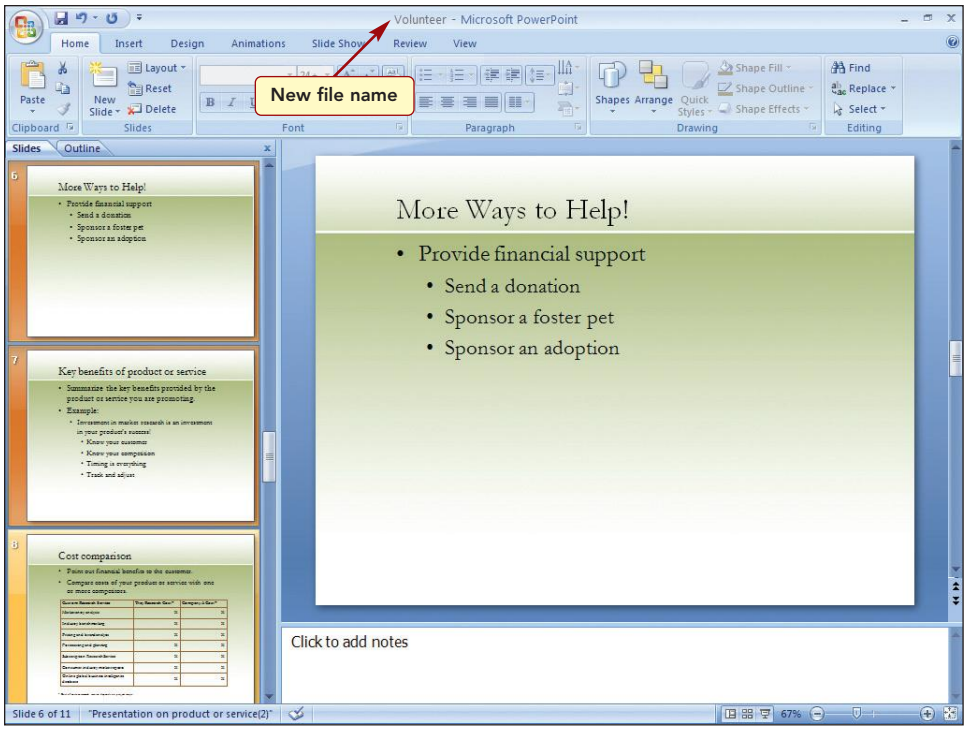


Figure 1.34

The new file name is displayed in the window title bar. The presentation is now saved in a new file named Volunteer. The view in use at the time the file is saved also is saved with the file.

Closing a Presentation

You are now ready to close the file.

1 **Click Office Button and choose Close.**

Your screen should be similar to Figure 1.35

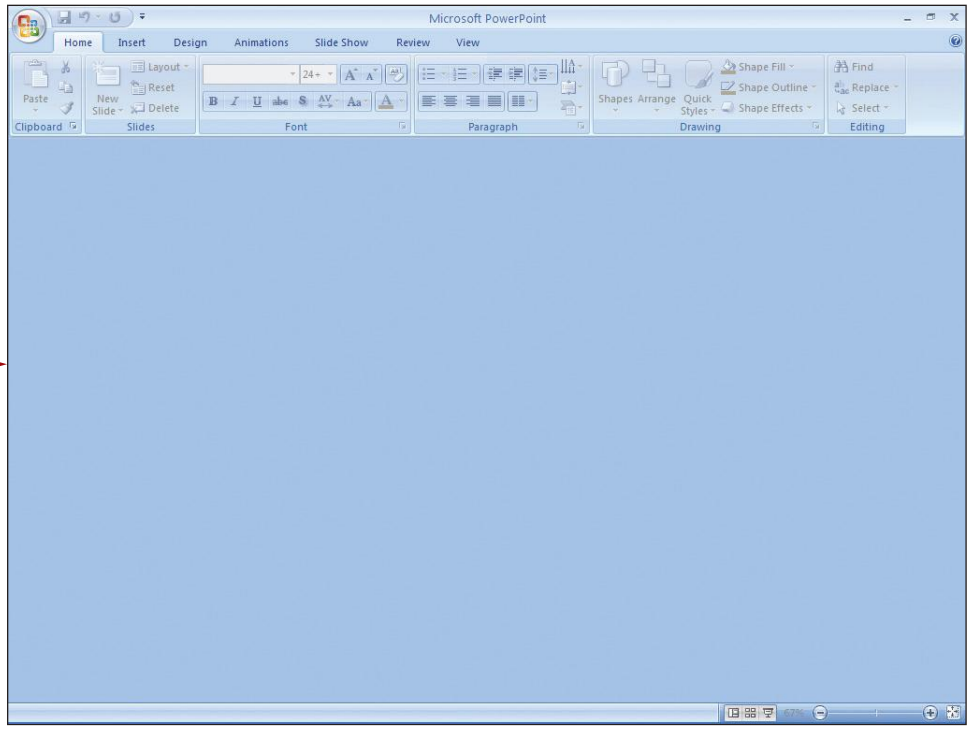


Figure 1.35

The presentation is closed, and an empty workspace is displayed. Always save your slide presentation before closing a file or leaving the PowerPoint program. As a safeguard against losing your work if you forget to save the presentation, PowerPoint will remind you to save any unsaved presentation before closing the file or exiting the program.

Note: If you are ending your lab session now, click Office Button, then choose Exit PowerPoint to exit the program.

Opening an Existing Presentation

After returning from your meeting, you continued to work on the presentation. You revised the content of several of the slides and added information for several new slides. Then you saved the presentation using a new file name. You will open this file to see the changes and will continue working on the presentation.

1. **Click Office Button and choose Open.**

Another Method
The keyboard shortcut to open a file is Ctrl + O.

2. **If necessary, select the location containing your data files from the Look In drop-down list box.**

3. **Select** pp01_Volunteer1**.**

Your screen should be similar to Figure 1.36

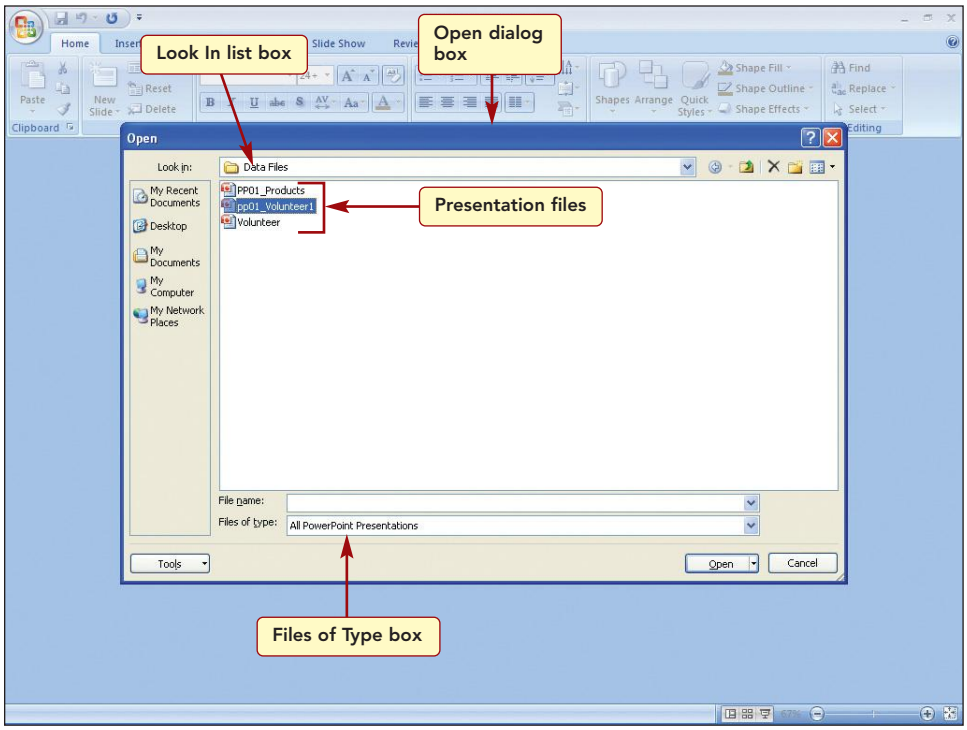


Figure 1.36

Additional Information
The Office Button/New command opens a blank new presentation. You also can quickly open a recently used file by selecting it from the Recent Documents list in the Office Button menu.

In the Open dialog box, you specify the location and name of the file you want to open. The Look In drop-down list box displays the last specified location, in this case the location where you saved the Volunteer presentation. The large list box displays the names of PowerPoint presentation files only, as specified by the setting in the Files of Type box. As in the Save As dialog box, the Places bar can be used to quickly access recently used files.

You will open the selected file next.

2 Click Open.

Another Method

You also could double-click the file name to both select it and choose Open.

- **Open the Outline tab.**
- **Replace Student Name in slide 1 with your name.**
- **Scroll the Outline tab to see the additional content that has been added to the presentation.**

Your screen should be similar to Figure 1.37

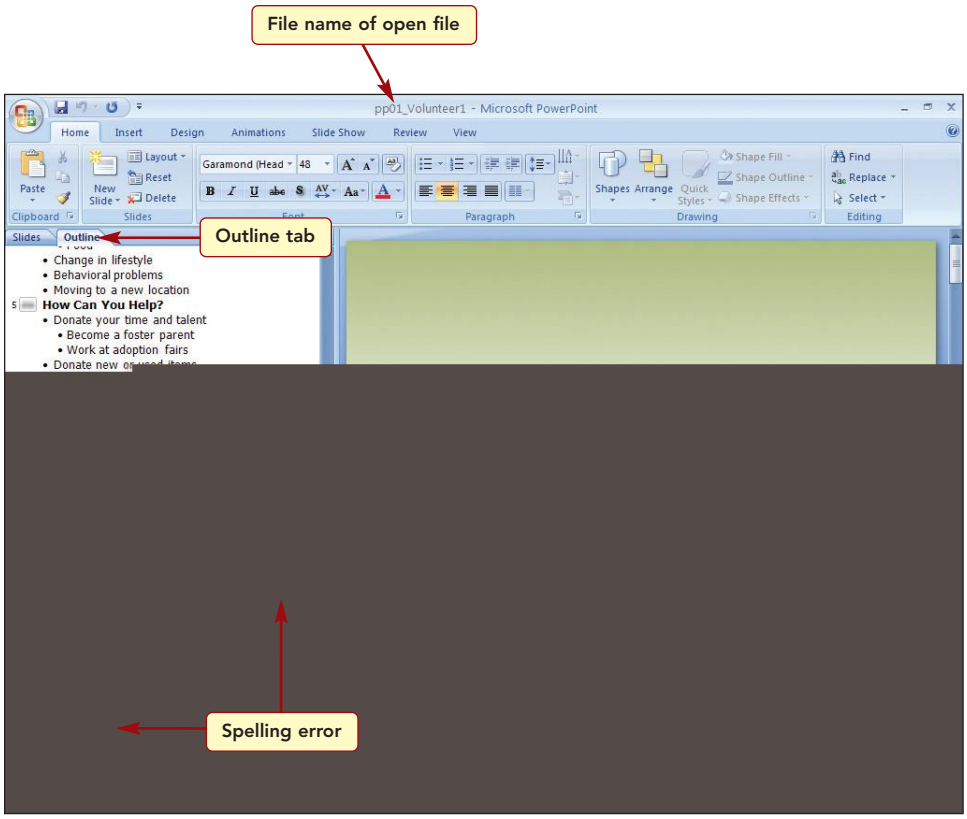


Figure 1.37

The presentation now contains 10 slides, and all the sample text has been replaced with text for the volunteer recruitment presentation, except for slide 10.

Checking Spelling

As you entered the information on the additional slides, you left some typing errors uncorrected. To correct the misspelled words and grammatical errors, you can use the shortcut menu to correct each individual word or error, as you learned earlier. However, in many cases you may find it more efficient to wait until you are finished writing before you correct any spelling or grammatical errors. Rather than continually breaking your train of thought to correct errors as you type, you can check the spelling on all slides of the presentation at once by running the spelling checker.

1 **Open the Review Tab.**

Click Spelling.

Another Method

The keyboard shortcut to check spelling is F7.

Your screen should be similar to Figure 1.38

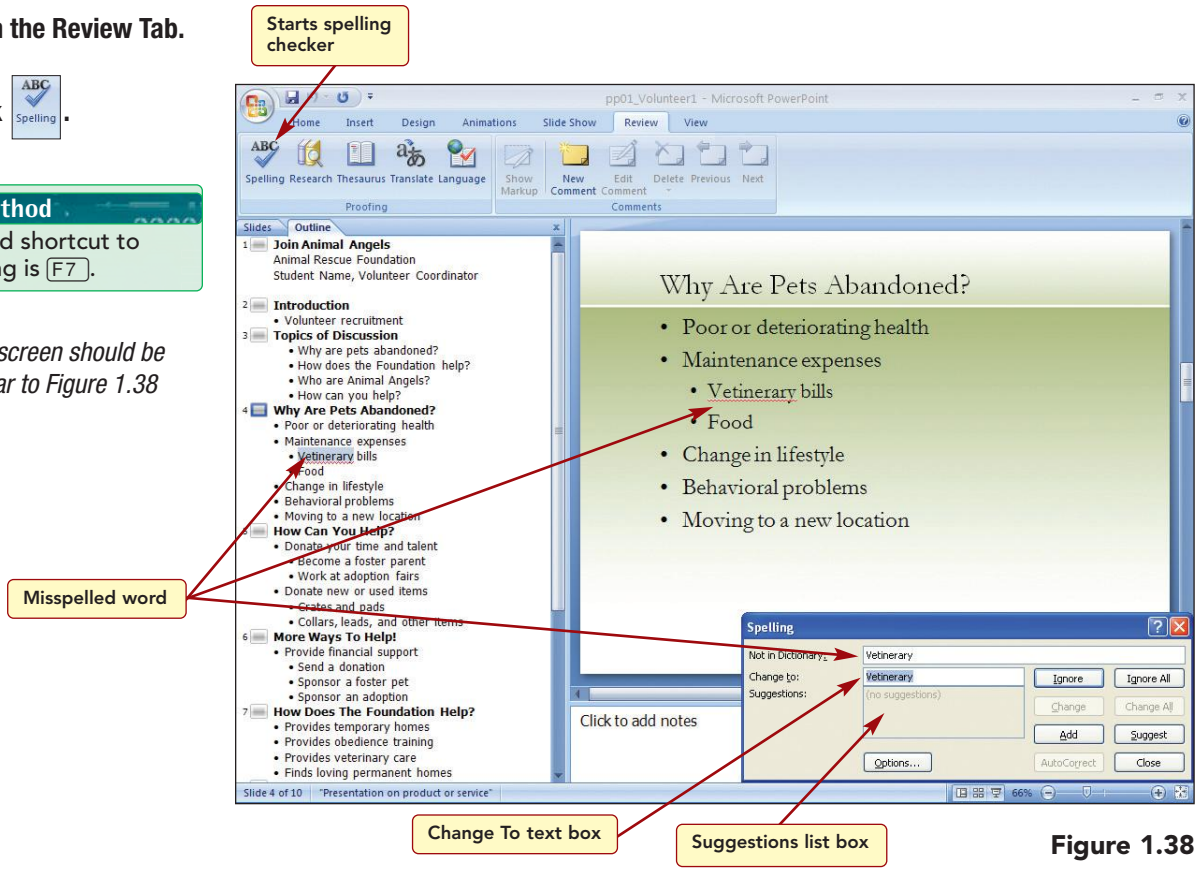


Figure 1.38

Additional Information

The spelling checker identifies many proper names and technical terms as misspelled. To stop this from occurring, use the Add Words To option to add those names to the custom dictionary.

The program jumps to slide 4; highlights the first located misspelled word, "Vetinerary," in the Outline pane; and opens the Spelling dialog box. The Spelling dialog box displays the misspelled word in the Not in Dictionary text box. The Suggestions list box typically displays the words the spelling checker has located in the dictionary that most closely match the misspelled word.

In this case, the spelling checker does not display any suggested replacements because it cannot locate any words in the dictionaries that are similar in spelling. If there are no suggestions, the Not in Dictionary text box simply displays the word that is highlighted in the text. When none of the suggestions is correct, you must edit the word yourself by typing the correction in the Change To text box.

2 Type **Veterinary** in the Change To text box.

Click Change.

Additional Information

The replacement text must be entered exactly as you want it to appear, including capitalization.

Additional Information

You also can edit words directly in the presentation and then click Resume to continue checking spelling.

Your screen should be similar to Figure 1.39

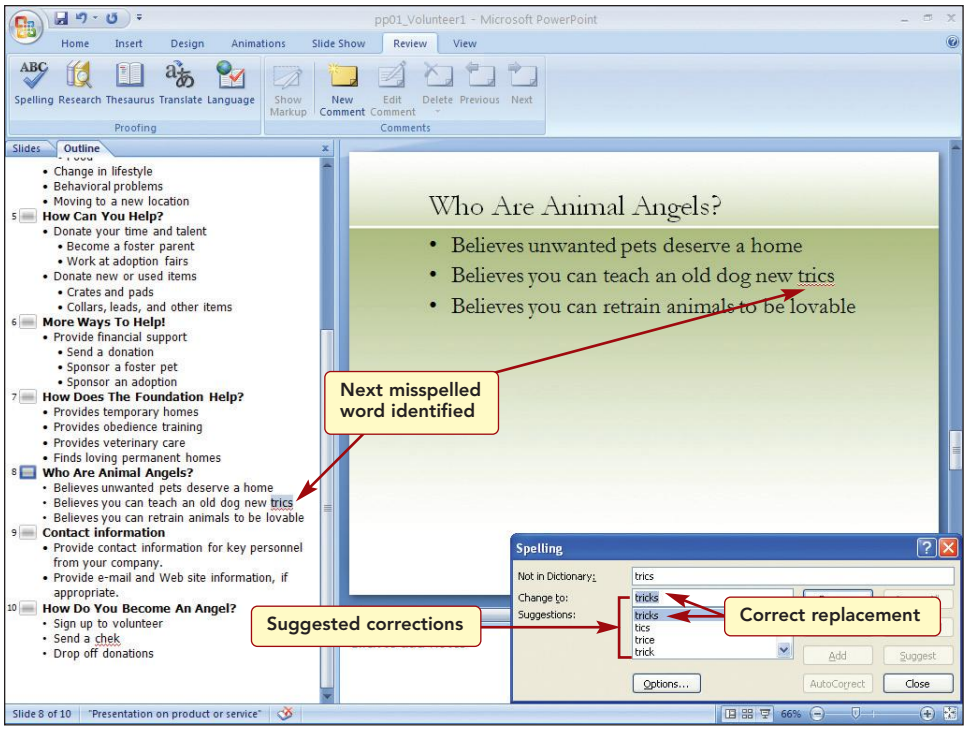


Figure 1.39

Having Trouble?

If necessary, move the dialog box to see the located misspelled word.

The corrected replacement is made in the slide. After the Spelling dialog box is open, the spelling checker continues to check the entire presentation for spelling errors. The next misspelled word, "trics," is identified. In this case, the suggested replacement is correct.

3. Click Change.
   - Correct any other located spelling errors as needed.
   - Click OK in response to the message telling you that the spelling check is complete.
   - Choose Office Button, then Save As to save the revised presentation as Volunteer1 to your solution file location.

Your screen should be similar to Figure 1.40

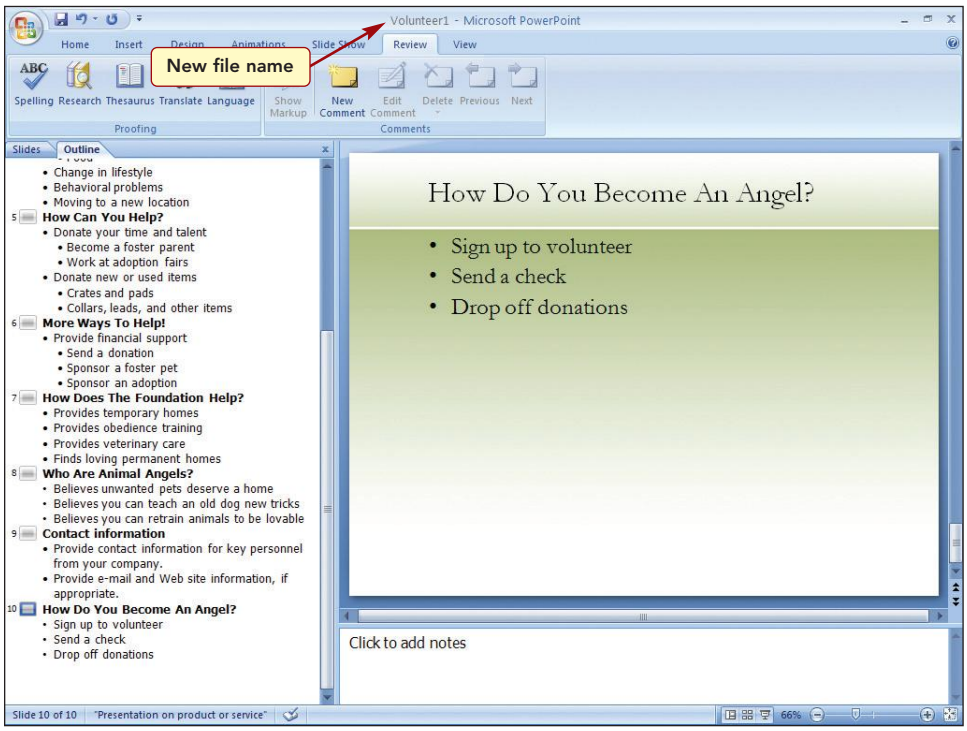


Figure 1.40

Working with Slides

To get a better overall picture of all slides in the presentation, you will switch to Slide Sorter view.

1. Click Slide Sorter.
   - Set the zoom to 90%.

Your screen should be similar to Figure 1.41

Having Trouble?
Do not be concerned if your screen displays a different number of slides per row. This is a function of your monitor settings.

Additional Information
The current slide does not change when you switch views.

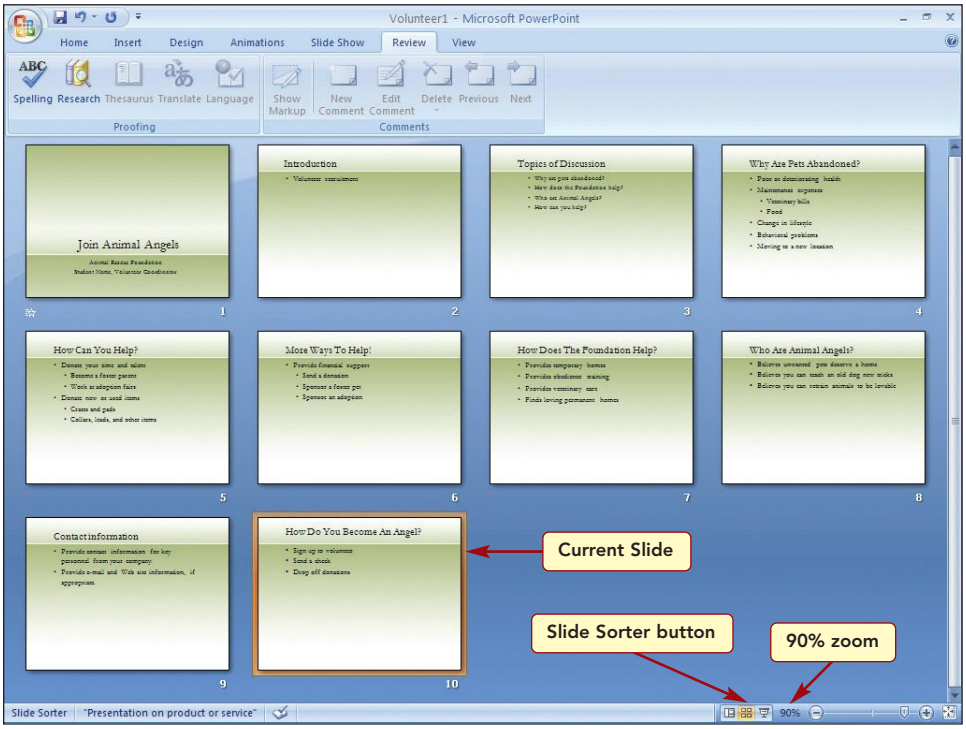


Figure 1.41

Viewing the slides side by side helps you see how your presentation flows. You realize that the second slide is no longer necessary because you added your name to the opening slide. You also decide to delete slide 9 because you plan to add the contact information to slide 10. As you continue to look at the slides, you can now see that slides 7 and 8 are out of order and do not follow the sequence of topics in the Topics of Discussion slide.

Selecting and Deleting Slides

You will delete slides 2 and 9. In this view, it is easy to select and work with multiple slides at the same time. To select multiple slides, hold down Ctrl while clicking on each slide to select it.

1. **Select slide 2, hold down Ctrl, and click on slide 9.**
2. **Press Delete.**

Additional Information

You can use the shortcut key Delete to delete a slide in Slide Sorter view and in the Slides tab. However, in the Outline tab and the Slide pane, using Delete deletes text or placeholder content.

Your screen should be similar to Figure 1.42

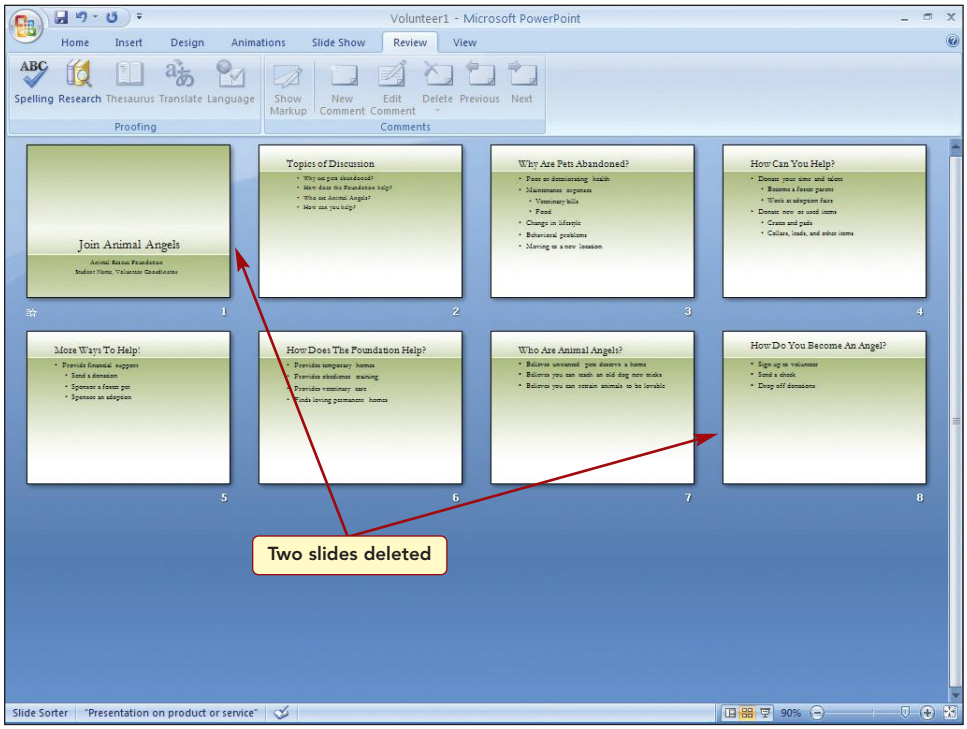


Figure 1.42

The slides have been deleted, and all remaining slides have been appropriately renumbered.

Moving Slides

Now you want to correct the organization of the slides by moving slides 6 and 7 before slide 4. To reorder a slide in Slide Sorter view, you drag it to its new location using drag and drop. As you drag the mouse, an indicator line appears to show you where the slide will appear in the presentation. When the indicator line is located where you want the slide to be placed, release the mouse button. You will select both slides and move them at the same time.

1. **Select slides 6 and 7.**

- **Point to either selected slide and drag the mouse until the indicator line is displayed before slide 4.**

Additional Information

The mouse pointer appears as when you drag to move a slide.

- **Release the mouse button.**

Another Method

You also can use the Cut and Paste commands in the Clipboard group on the Home tab to move slides in Slide Sorter view.

Your screen should be similar to Figure 1.43

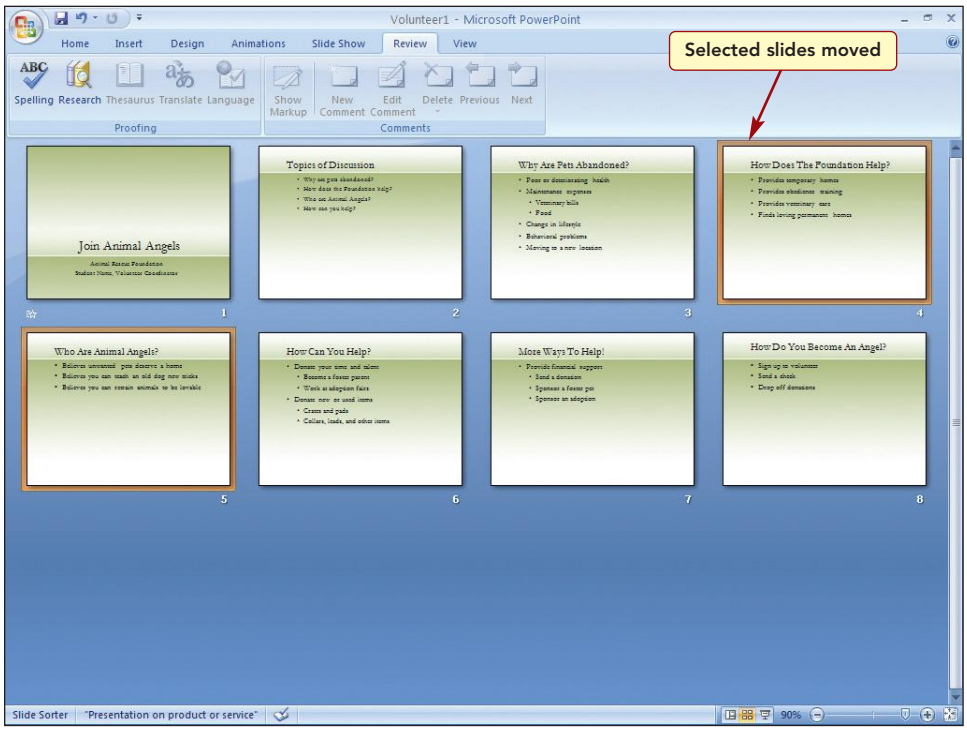


Figure 1.43

The slides now appear in the order you want them.

Inserting Slides

During your discussion with the foundation director, it was suggested that you add a slide showing the history of the organization. To include this information in the presentation, you will insert a new slide after slide 4.

1 **Click in the space before slide 5.**

Additional Information
The indicator line shows you where the new slide will be inserted.

- **Open the Home tab.**
- **Click**  **in the Slides group.**

Another Method
You also can use the keyboard shortcut Ctrl + M to insert a blank slide.

- **Switch to Normal view and open the Slides tab.**

Your screen should be similar to Figure 1.44

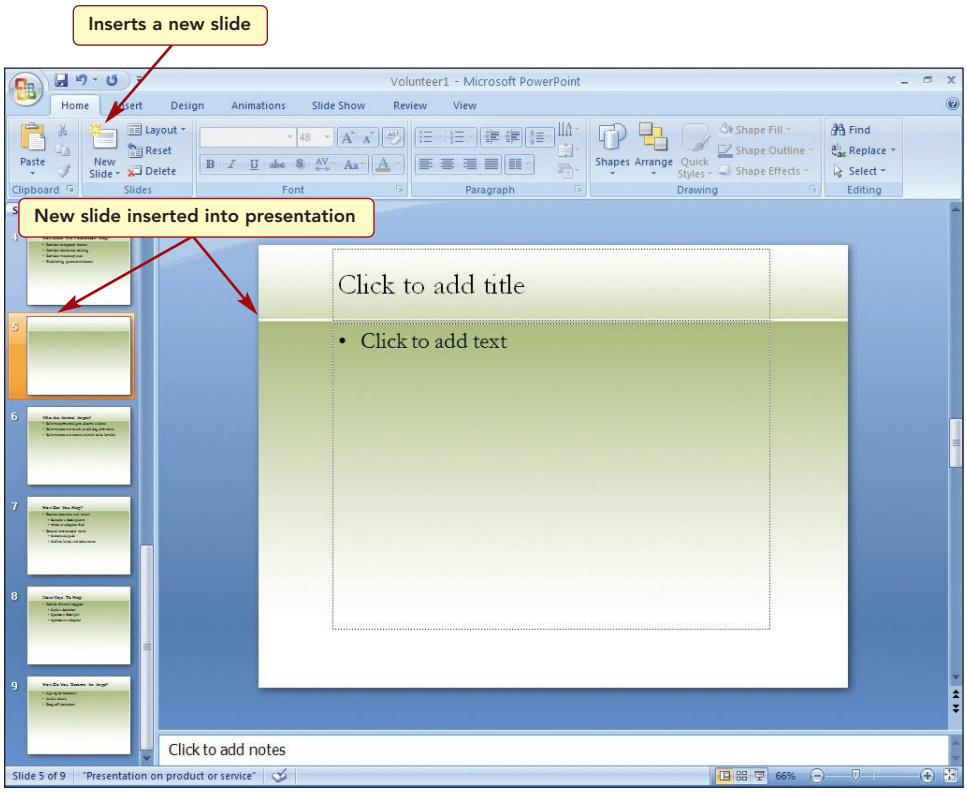


Figure 1.44

A blank new slide is inserted. It has the same design elements as the other slides in the presentation.

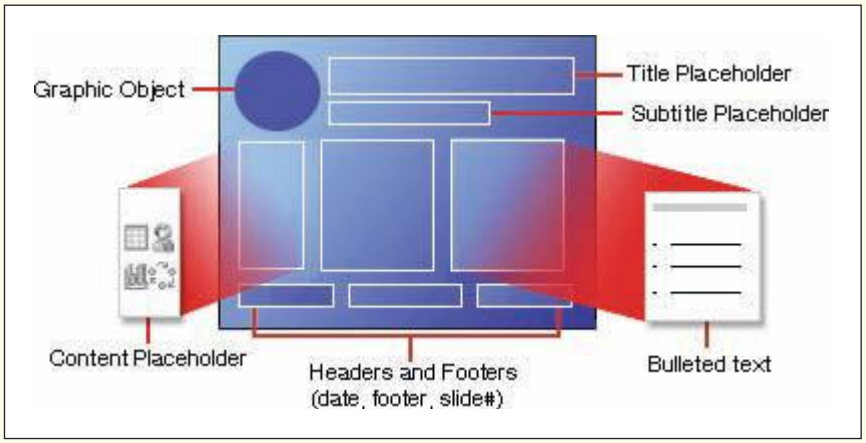
Selecting the Slide Layout

The new slide is inserted with the default Title and Text layout. You need to change the layout to accommodate the changes you discussed with the director.

Concept 5

Layout

5 **Layouts** define the position and format for objects and text that will be added to a slide. A layout contains placeholders for the different items such as bulleted text, titles, charts, graphics, and so on. For example, there are text layouts that include placeholders for a title and bulleted text, and content layouts that include placeholders for a table, diagram, chart, or clip art. Many layout elements that can be included on a slide are shown in the following diagram.



You can change the layout of an existing slide by selecting a new layout. If the new layout does not include placeholders for objects that are already on your slide (for example, if you created a chart and the new layout does not include a chart placeholder), you do not lose the information. All objects remain on the slide and the selected layout is automatically adjusted by adding the appropriate type of placeholder for the object. Alternatively, as you add new objects to a slide, the layout automatically adjusts by adding the appropriate type of placeholder. You also can rearrange, size, and format placeholders on a slide any way you like to customize the slide's appearance.

To make creating slides easy, use the predefined layouts. The layouts help you keep your presentation format consistent and, therefore, more professional.

PowerPoint includes 11 predefined layouts. The number of layouts that are available varies with the template you are using.

1 **Click Layout in the Slides group.**

Your screen should be similar to Figure 1.45

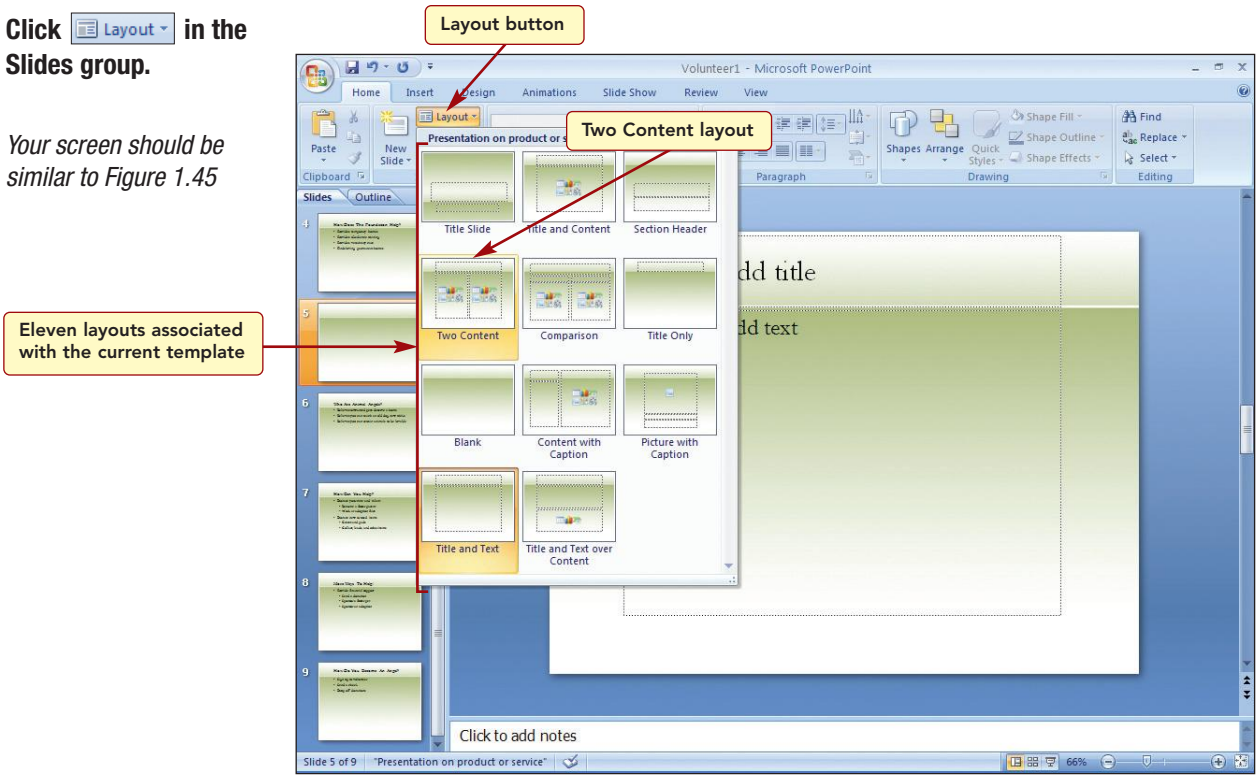


Figure 1.45

The 11 layouts associated with the current template are displayed. Because this slide will contain two columns of text about the history of the organization, you will use the Two Content layout.

2 **Choose Two Content.**

Your screen should be similar to Figure 1.46

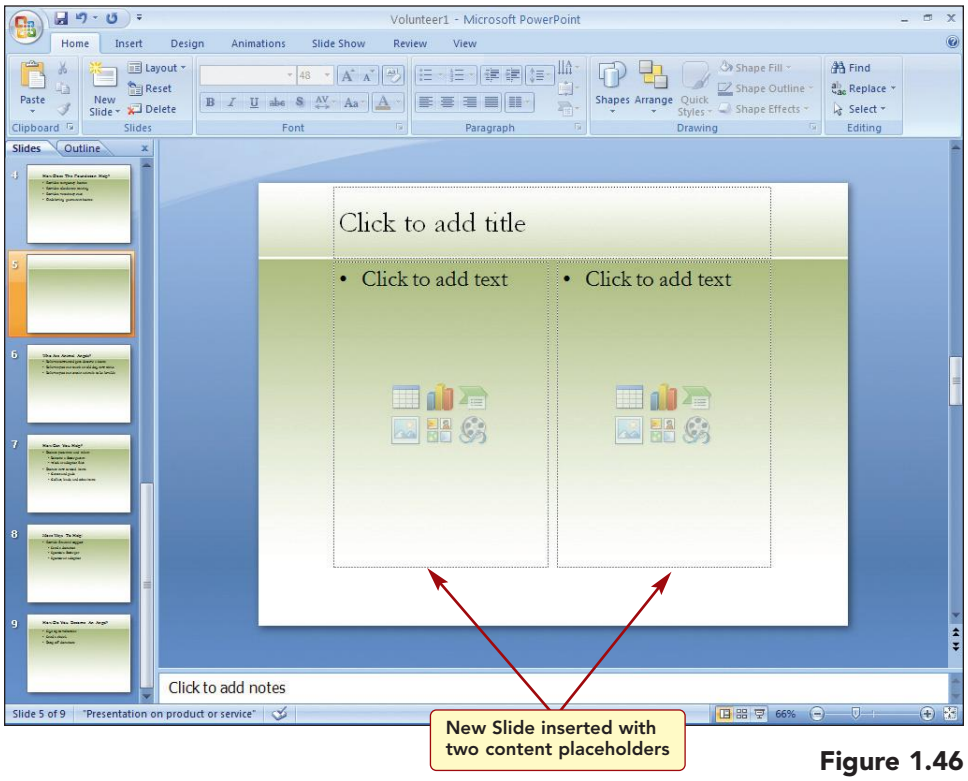


Figure 1.46

Another Method

You could insert a new slide and specify the layout in one step by selecting the layout from the New Slide drop-down menu.

The slide displays the three placeholders created by the Two Content layout. Unlike the template slides, the placeholders on the inserted slide do not contain sample text. When you select the placeholder, you can simply type in the text without having to select or delete any sample text.

You will add text to the slide presenting a brief history of the Animal Rescue Foundation. First, you will enter the slide title and then the list of dates and events.

3 **Click in the title placeholder.**

- **Type Animal Rescue Foundation History.**
- **Click in the left text placeholder.**
- **Type Year.**
- **Press ↵Enter.**
- **Continue entering the information shown below. Remember to press ↵Enter to create a new line.**

  1990
  1991
  1992
  2000

- **In the same manner, enter the following text in the right text placeholders:**

  Event
  Founded by Steve Dow
  Built first shelter
  Began volunteer program
  Rescued 1000 animals!

Your screen should be similar to Figure 1.47

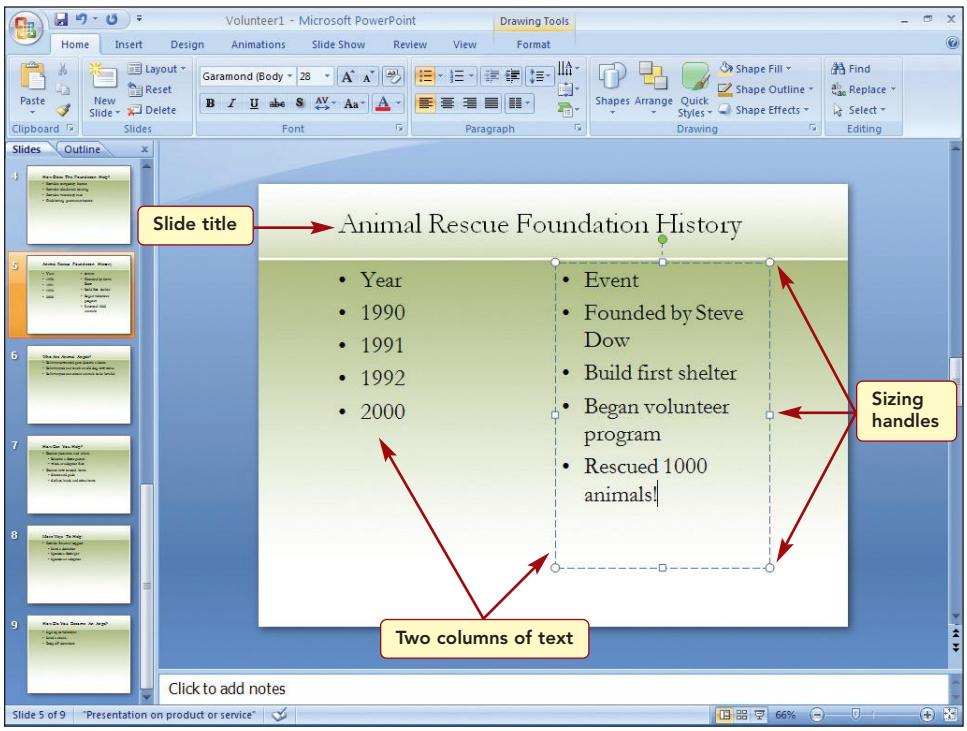


Figure 1.47

The left placeholder is too big for its contents and the right is too small, forcing some items to wrap to a second line. To correct the size, you can adjust the size of the placeholders.

Sizing a Placeholder

The four circles and squares that appear at the corners and sides of a selection rectangle are **sizing handles** that can be used to adjust the size of the placeholder. Dragging the corner sizing handles will adjust both the height and width at the same time, whereas the center handles adjust the associated side borders. When you point to the sizing handle, the mouse pointer appears as ⤡, indicating the direction in which you can drag the border to adjust the size.

1. **On the right placeholder, drag the left-center sizing handle to the left until each item appears on one line.**

2. **Select the left text placeholder and drag the right-center sizing handle to the left (see Figure 1.48).**

Your screen should be similar to Figure 1.48

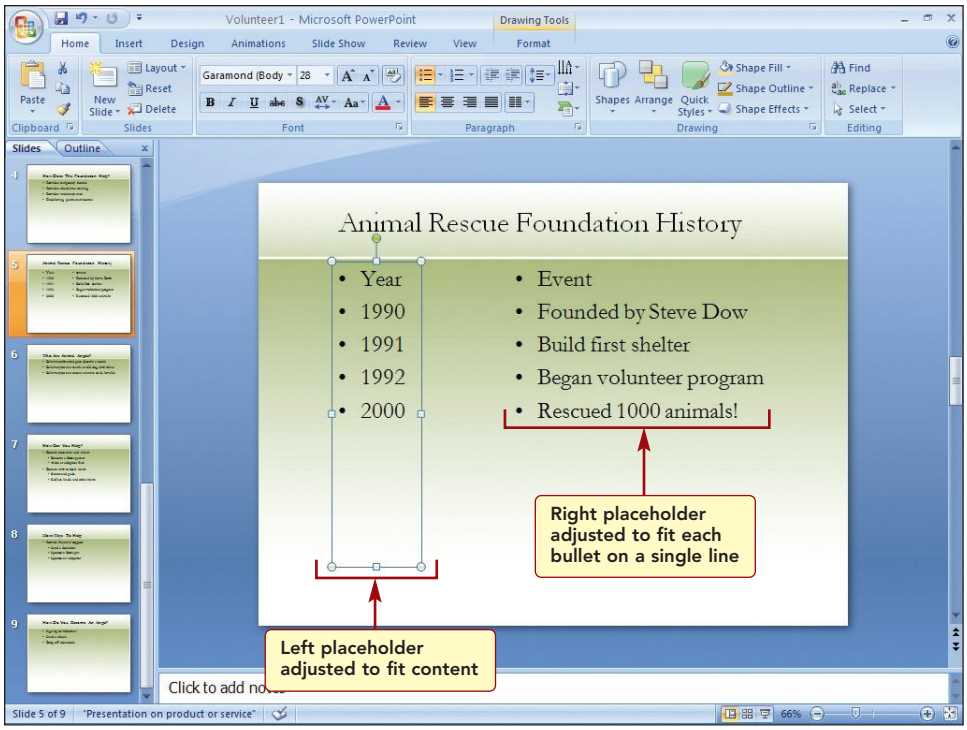


Figure 1.48

Moving a Placeholder

Next, you want to move the Year column placeholder closer to the Event column. Then you want to move both placeholders so they appear more centered in the space. An object can be moved anywhere on a slide by dragging the selection rectangle. The mouse pointer appears as ✥ when you can move a placeholder. As you drag the placeholder, a dotted outline is displayed to show your new location.

1. **Point to one edge of the Year column selection rectangle (not a handle) until the mouse pointer appears as ✥ and drag the selected placeholder to the right, closer to the Event column.**

- **With the left placeholder still selected, hold down Ctrl while clicking on the right placeholder to select both.**

- **Drag the selected placeholders to the left to their new location as shown in Figure 1.49.**

- **Save your changes to the presentation using the same file name.**

Your screen should be similar to Figure 1.49

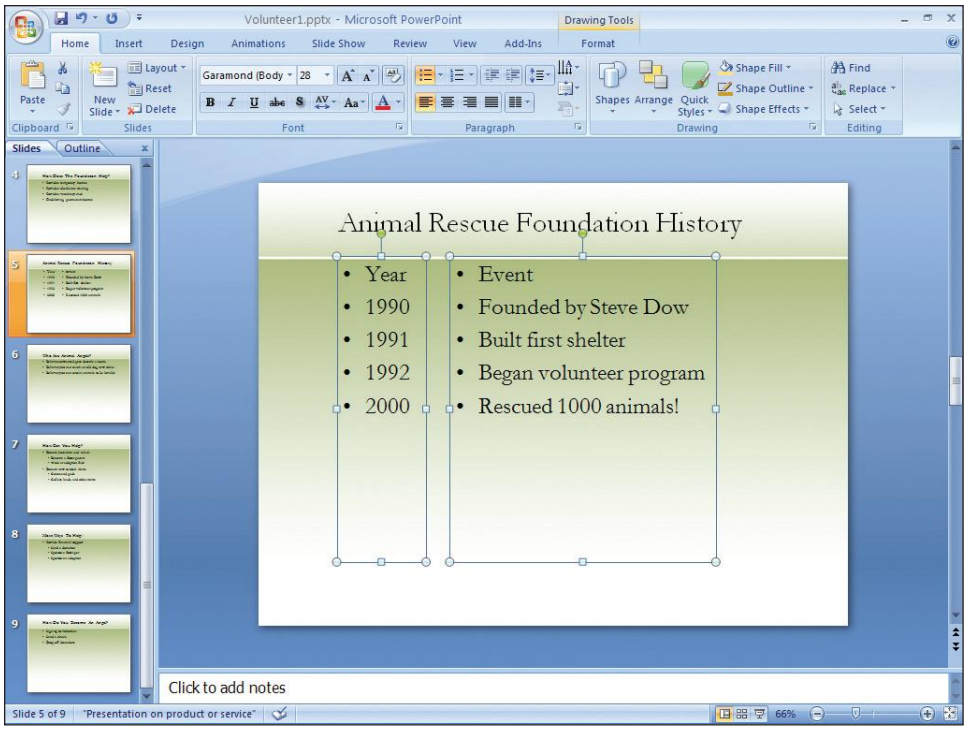


Figure 1.49

Rehearsing a Presentation

Now that the slides are in the order you want, you would like to see how the presentation would look when viewed by an audience. Rather than set up the presentation as you would to present it for an audience, a simple way to rehearse a presentation is to view it electronically on your screen as a slide show. A **slide show** displays each slide full screen and in order. While the slide show is running, you can plan what you want to say to supplement the information provided on the slides.

Using Slide Show View

When you view a slide show, each slide fills the screen, hiding the PowerPoint application window, so you can view the slides as your audience would. You will begin the slide show starting with the first slide.

1 **Select slide 1 in the Slides tab.**

Click Slide Show (in the Status bar).

Additional Information

Using Slide Show runs the slide show beginning with the currently selected slide.

Another Method

You also can use From Beginning or From Current Slide on the Slide Show tab or the shortcut keys F5 and Shift + F5 respectively to start the slide show.

Your screen should be similar to Figure 1.50

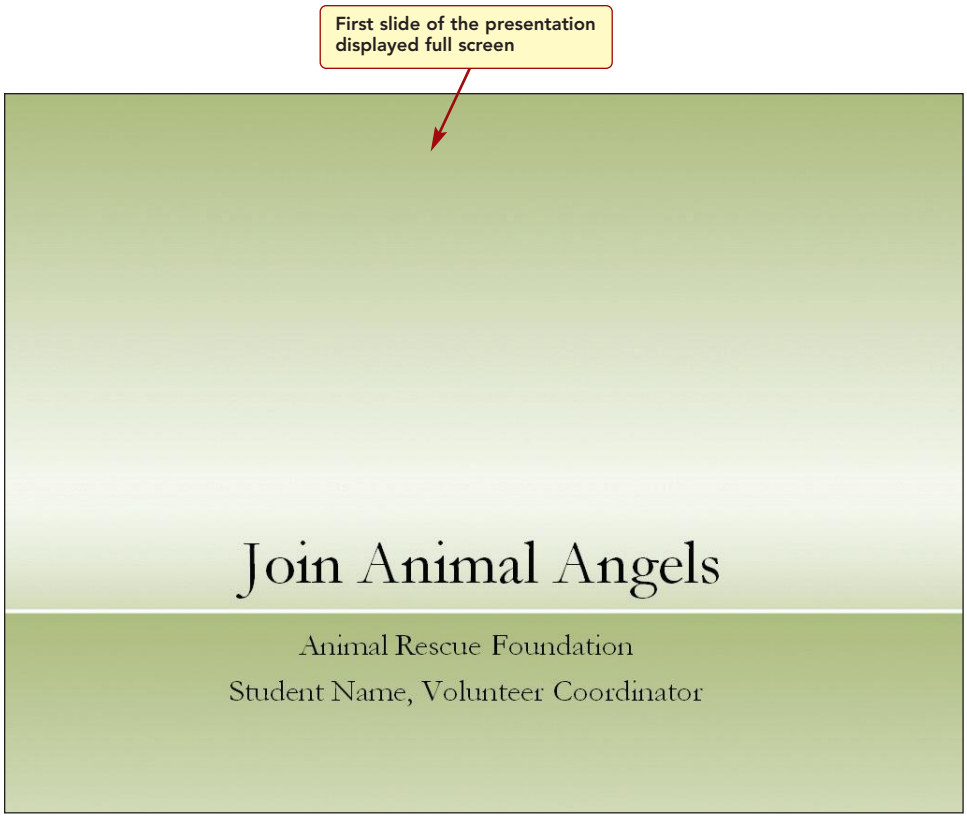


Figure 1.50

The presentation title slide is displayed full screen, as it will appear when projected on a screen using computer projection equipment. Did you notice that the first slide displayed with a special effect? This feature was included in the template as part of the template design. You will learn about special effects in Lab 2.

The easiest way to see the next slide is to click the mouse button. You also can use the keys shown below to move to the next or previous slide.

Next Slide	Previous Slide
Spacebar	Backspace
Enter	
→	←
↓	↑
Page Down	Page Up
N (for Next)	P (for Previous)

You also can select Next, Previous, or Last Viewed from the shortcut menu. Additionally, moving the mouse pointer in Slide Show displays the Slide Show toolbar in the lower-left corner of the window. Clicking ← or → moves to the previous or next slide and ☰ opens the shortcut menu.

2 **Click to display the next slide.**

- **Using each of the methods described, slowly display the entire presentation.**
- **When the last slide displays a black window, click again to end the slide show.**

Additional Information

You can press Esc or use End Show on the shortcut menu at any time to end the slide show.

Your screen should be similar to Figure 1.51

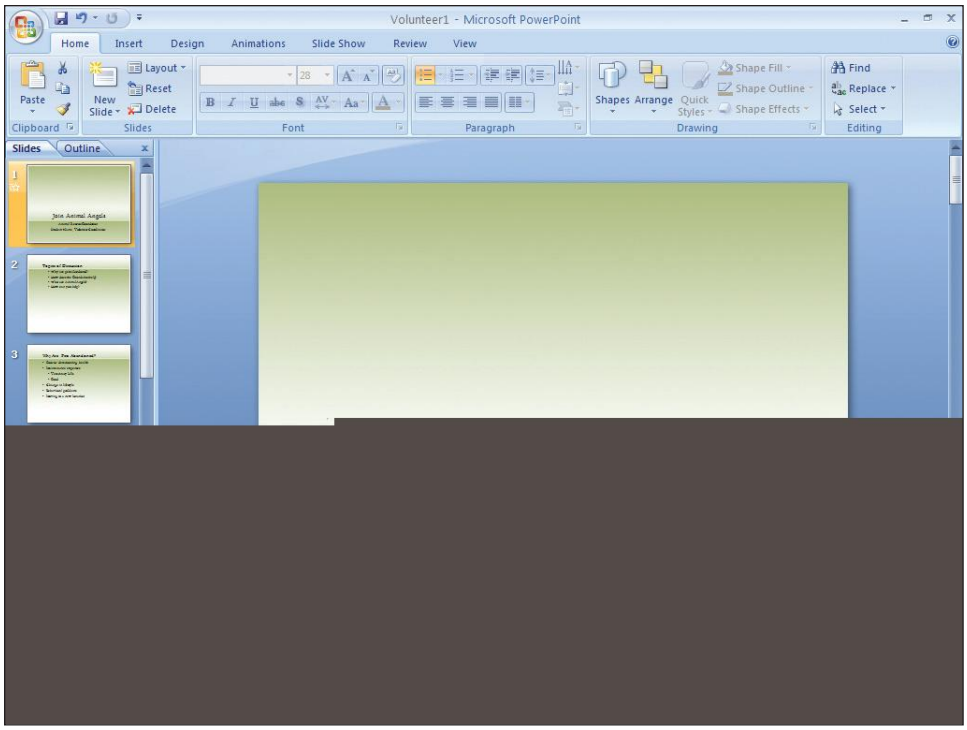


Figure 1.51

After the last slide is displayed, the program returns to the view you were last using, in this case Normal view.

Formatting Slide Text

While looking at the slide show, you decide that the title slide needs to have more impact. You also want to remove the bullets from the items on the history slide. Enhancing the appearance of the slide to make it more readable or attractive is called **formatting.** The design template you are using already includes many formatting features.

Applying different formatting to characters and paragraphs can greatly enhance the appearance of the slide. **Character formatting** features affect the selected characters only. They include changing the character style and size, applying effects such as bold and italics, changing the character spacing, and adding animated text effects. **Paragraph formatting** features affect an entire paragraph. A paragraph is text that has a carriage return from pressing ↵Enter at the end of it. Each item in a bulleted list, title, and subtitle is a paragraph. Paragraph formatting features include the position of the paragraph or its alignment between the margins, paragraph indentation, spacing above and below a paragraph, and line spacing within a paragraph.

Changing Fonts

First, you will improve the appearance of the presentation title by changing the font of the title text.

Concept 6

Font and Font Size

6 A **font,** also commonly referred to as a **typeface,** is a set of characters with a specific design. The designs have names such as Times New Roman and Courier. Using fonts as a design element can add interest to your presentation and give your audience visual cues to help them find information quickly.

There are two basic types of fonts: serif and sans serif. **Serif fonts** have a flair at the base of each letter that visually leads the reader to the next letter. Two common serif fonts are Roman and Times New Roman. Serif fonts generally are used for text in paragraphs. **Sans serif fonts** do not have a flair at the base of each letter. Arial and Helvetica are two common sans serif fonts. Because sans serif fonts have a clean look, they are often used for headings in documents. It is good practice to use only two or three different fonts in a presentation because too many can distract from your presentation content and can look unprofessional.

Each font has one or more sizes. **Font size** is the height and width of the character and is commonly measured in **points,** abbreviated pt. One point equals about 1/72 inch, and text in most documents is 10 pt or 12 pt.

Several common fonts in different sizes are shown in the following table.

Font Name	Font Type	Font Size
Calibri	Sans serif	This is 10 pt. This is 16 pt.
Courier New	Serif	This is 10 pt. This is 16 pt.
Garamond	Serif	This is 10 pt. This is 16 pt.

To change the font before typing the text, use the command and then type. All text will appear in the specified setting until another font setting is selected. To change a font setting for existing text, select the text you want to change and then use the command. If you want to apply font formatting to a word, simply move the insertion point to the word and the formatting is automatically applied to the entire word.

1. **Select the text "Join Animal Angels" in the Slide pane on slide 1.**

Your screen should be similar to Figure 1.52

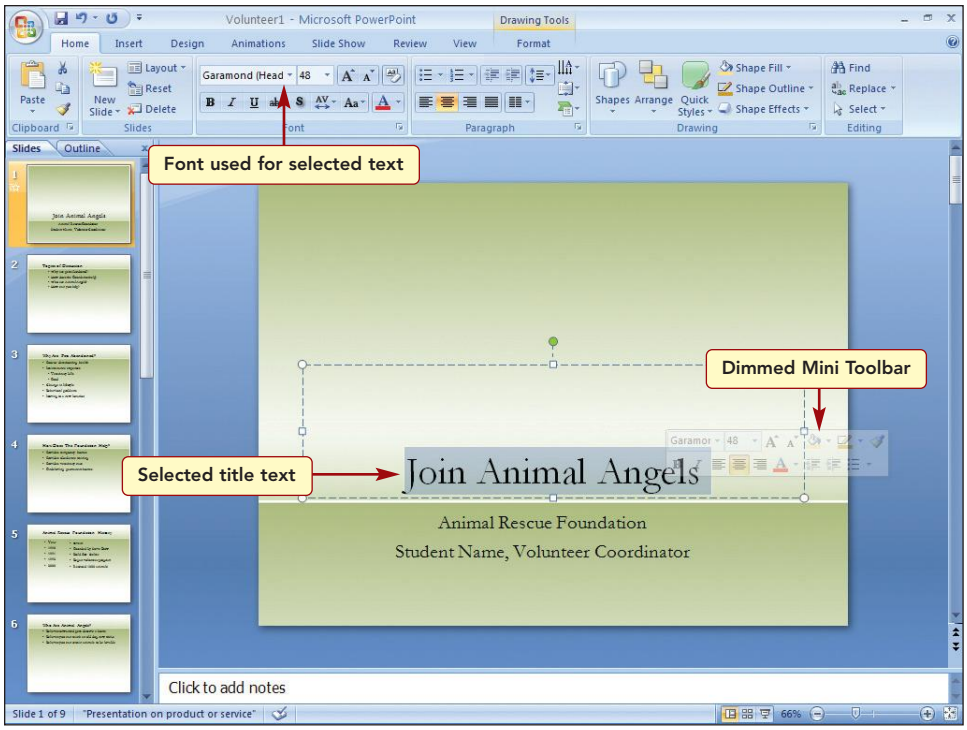


Figure 1.52

Additional Information

The font used in the title is Garamond (Headings), as displayed in the Garamond (Head Font button. It is automatically used in all headings in this template.

The PowerPoint Mini Toolbar appears dimmed whenever you select text. If you want to use it, point to it and it is no longer dimmed. It includes a variety of text formatting options that are also available on the Ribbon. Because the Mini Toolbar appears next to the selected text, it is often quicker and more convenient to choose commands from the Mini toolbar.

You want to change the font to a design that has a less serious appearance.

2. **Point to the Mini Toolbar.**
   - **Open the Garamor Font drop-down list.**
   - **Scroll the list and choose Comic Sans MS.**

Another Method

You also could use Garamond (Head Font in the Font group of the Home tab to change the font.

Your screen should be similar to Figure 1.53

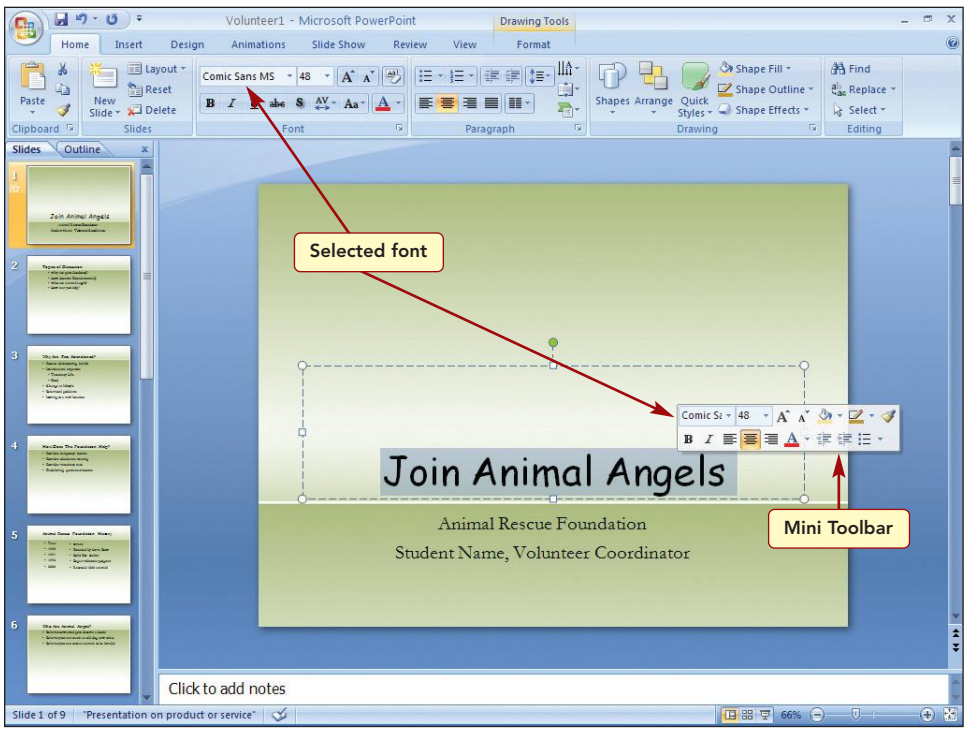


Figure 1.53

The text has changed to the new font style, and the Font button displays the font name used in the current selection.

Changing Font Size

The title text is also a little smaller than you want it to be.

1 **Click Increase Font Size in the Mini Toolbar twice.**

Another Method

You also could use click in the Font group of the Home tab, use the keyboard shortcut Ctrl + Shift + > or select a size from the 48 Font Size drop-down menu in the Font group of the Home tab to increase the font size.

Your screen should be similar to Figure 1.54

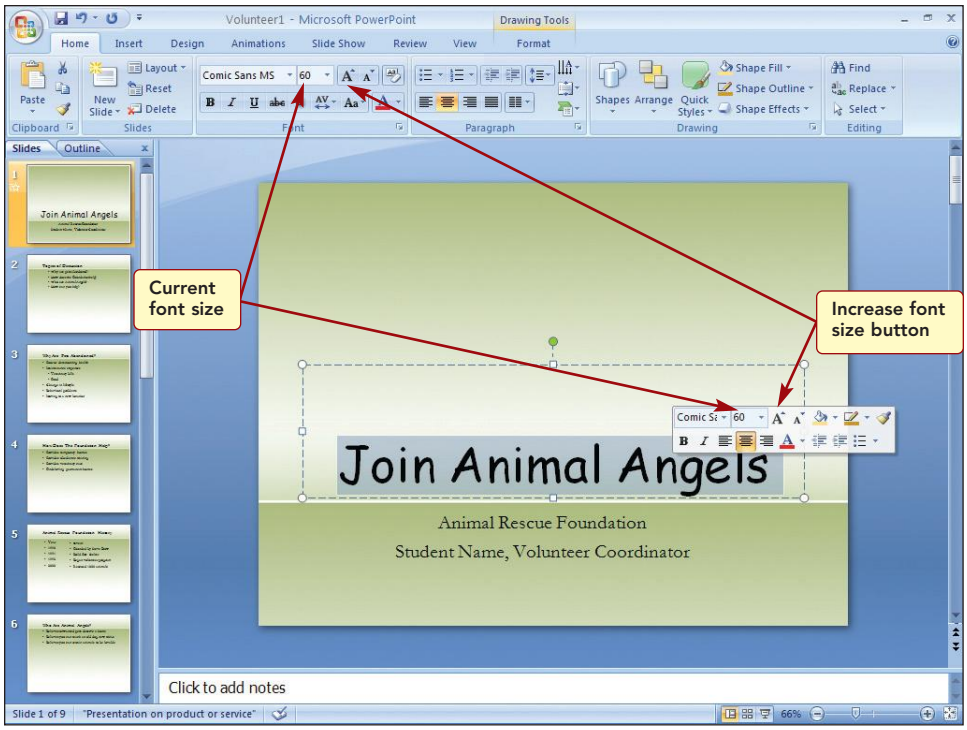


Figure 1.54

Additional Information

Use Decrease Font Size or Ctrl + Shift + < to incrementally decrease the point size of selected text.

The font size increased from 48 points to 54 points and then to 60 points. The Font Size button displays the point size of the current selection.

Adding and Removing Bullets

Additional Information

If a selection includes text in several different sizes, the smallest size appears in the Font Size button followed by a + sign.

Next, you want to remove the bullets from the items on the history slide. You can quickly apply and remove bullets using Bullets in the Paragraph group on the Home tab. This button applies the bullet style associated with the design template you are using. Because the placeholder items already include bullets, using this button will remove them.

1. **Select slide 5.**

2. **Select both content placeholders.**

Having Trouble?
Hold down Ctrl while clicking on the placeholders to select both.

3. **Click Bullets from the Paragraph group in the Home tab to remove all bullets.**

Your screen should be similar to Figure 1.55

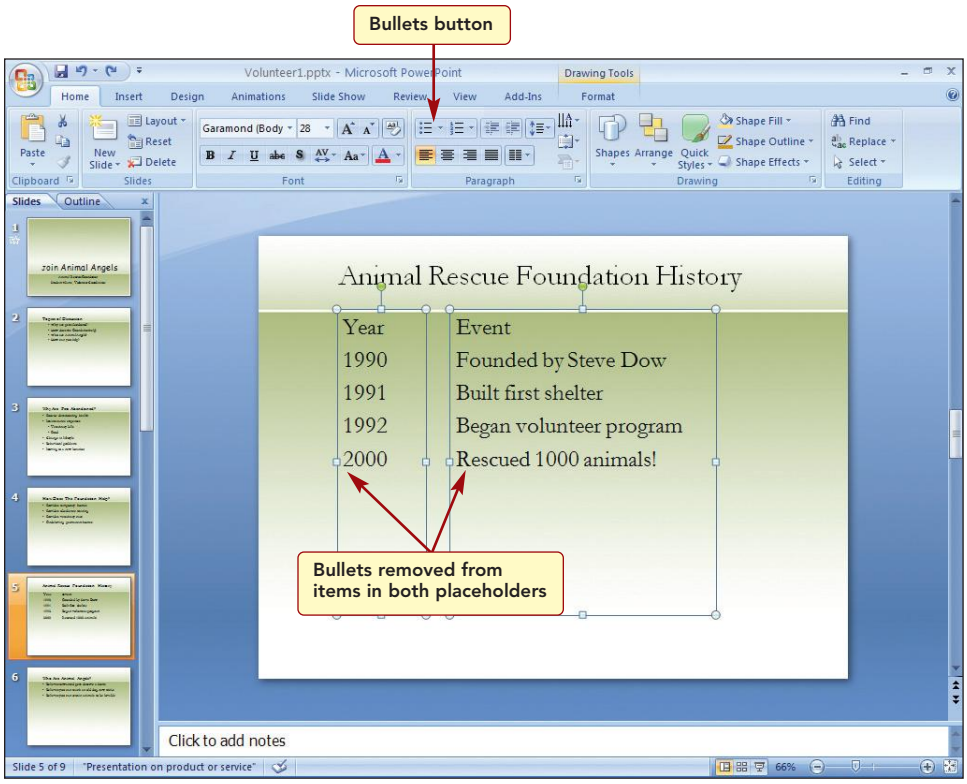


Figure 1.55

The bullets are removed from all the items in both placeholders. Now, however, you think it would look better to add bullets back to the four items under each column heading.

1. **Select the four years in the left column.**

2. **Click Bullets from the Paragraph group in the Home tab.**

3. **Apply bullets to the four events in the right column.**

4. **Click outside the selected object to deselect it.**

5. **Save the presentation again.**

Your screen should be similar to Figure 1.56

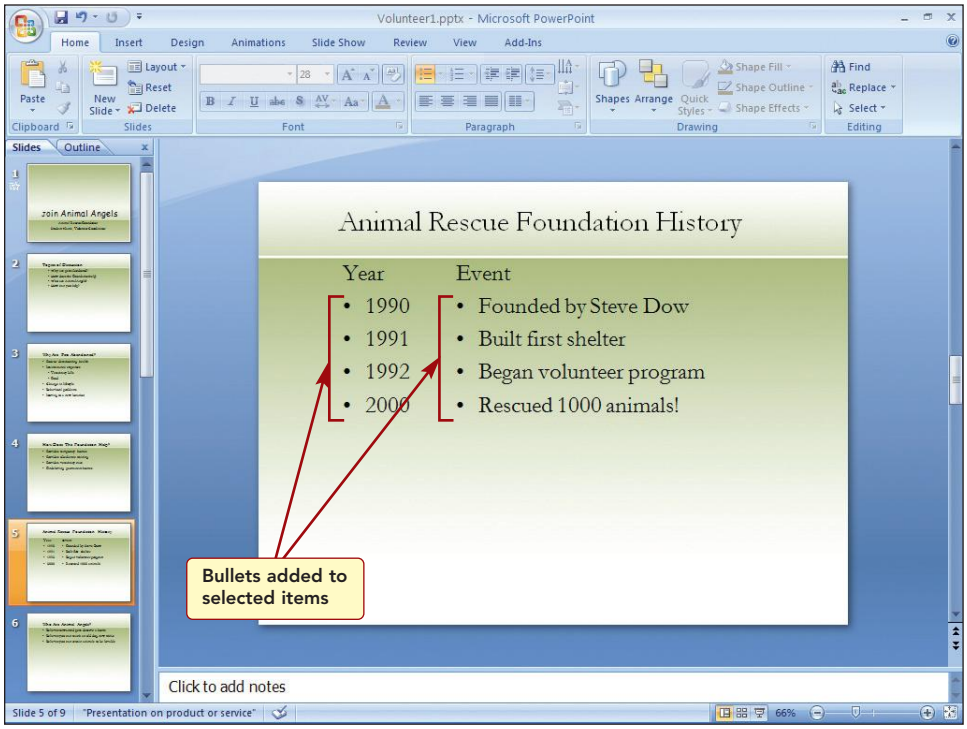


Figure 1.56

Bullets appear before the selected text items only.

Working with Graphics

Finally, you want to add a picture to the title slide. A picture is one of several different graphic objects that can be added to a slide.

Concept 7

Graphics

7 A **graphic** is a nontext element or object, such as a drawing or picture, that can be added to a slide. A graphic can be a simple **drawing object** consisting of shapes such as lines and boxes. A drawing object is part of your presentation document. A **picture** is an image such as a graphic illustration or a scanned photograph. Pictures are graphics that were created from another program and are inserted in a slide as embedded objects. An **embedded object** becomes part of the presentation file and can be opened and edited using the **source program,** the program in which it was created. Any changes made to the embedded object are not made to the original picture file because they are independent. Several examples of drawing objects and pictures are shown below.



Photograph



Graphic illustration



Drawing object

Add graphics to your presentation to help the audience understand concepts, to add interest, and to make your presentation stand out from others.

Graphic files can be obtained from a variety of sources. Many simple drawings called **clip art** are available in the Clip Organizer, a Microsoft Office tool that arranges and catalogs clip art and other media files stored on the computer's hard disk. The Clip Organizer's files, or clips, include art, sound, animation, and movies you can add to a presentation. Additionally, you can access Microsoft's Clip Art and Media Web site for even more graphics.

Digital images created using a digital camera are one of the most common types of graphic files. You also can create graphic files using a scanner to convert any printed document, including photographs, to an electronic format. Most images that are scanned and inserted into documents are stored as Windows bitmap files (.bmp). All types of graphics, including clip art, photographs, and other types of images, can

Additional Information
You also can scan a picture and insert it directly into a slide without saving it as a file first.

be found on the Internet. These files are commonly stored as .jpg or .pcx files. Keep in mind that any images you locate on the Internet may be protected by copyright and should only be used with permission. You also can purchase CDs containing graphics for your use.

Inserting a Graphic from a File

You want to add a graphic to the opening slide. You want to see how a digital photograph of a litter of puppies you recently received from one of the foster parents would look. The Insert tab includes commands that are designed to enhance a presentation by adding features such as shapes and illustrations to movies and sounds.

1. **Select slide 1.**
2. **Open the Insert tab.**
3. **Click**  **in the Illustrations group.**
4. **Change the location to your data file location.**

Your screen should be similar to Figure 1.57

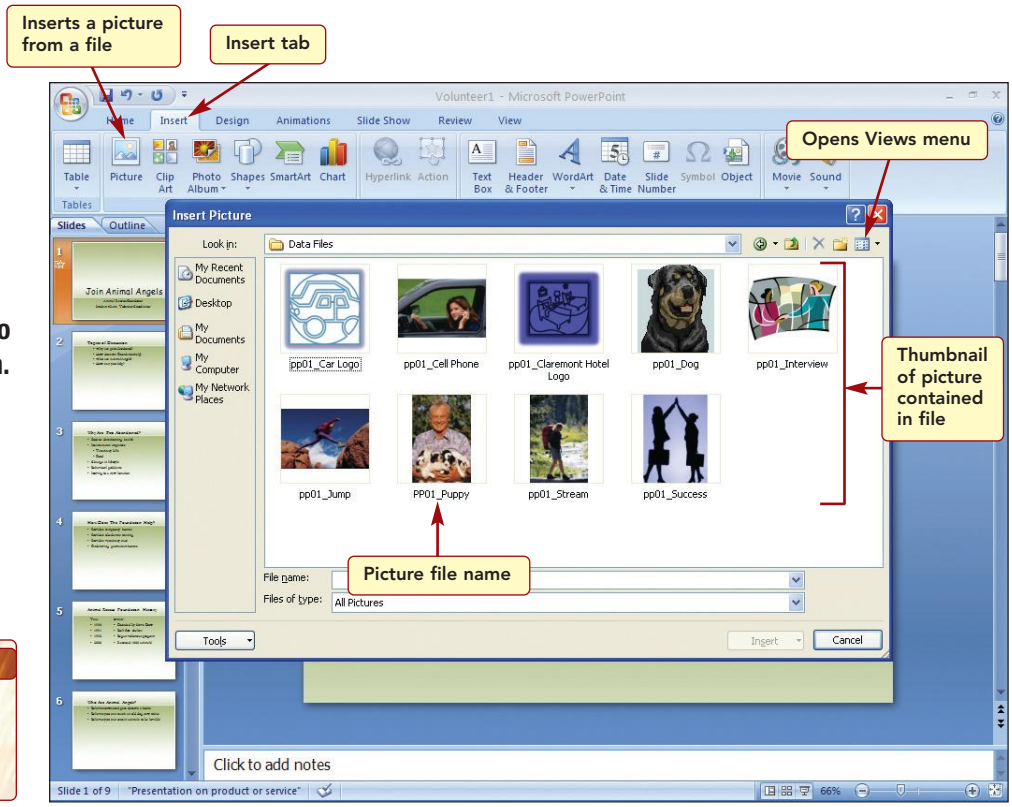


Figure 1.57

Having Trouble?
Your screen may display additional picture files or it may only display the file name.

Having Trouble?
If the thumbnail preview is not displayed, click Views and choose Thumbnails.

The Insert Picture dialog box is similar to the Open and Save dialog boxes, except that the only types of files listed are files with picture file extensions. A thumbnail preview of each picture is displayed above the file name.

2. **Select** pp01_Puppy.

Click Insert.

Your screen should be similar to Figure 1.58

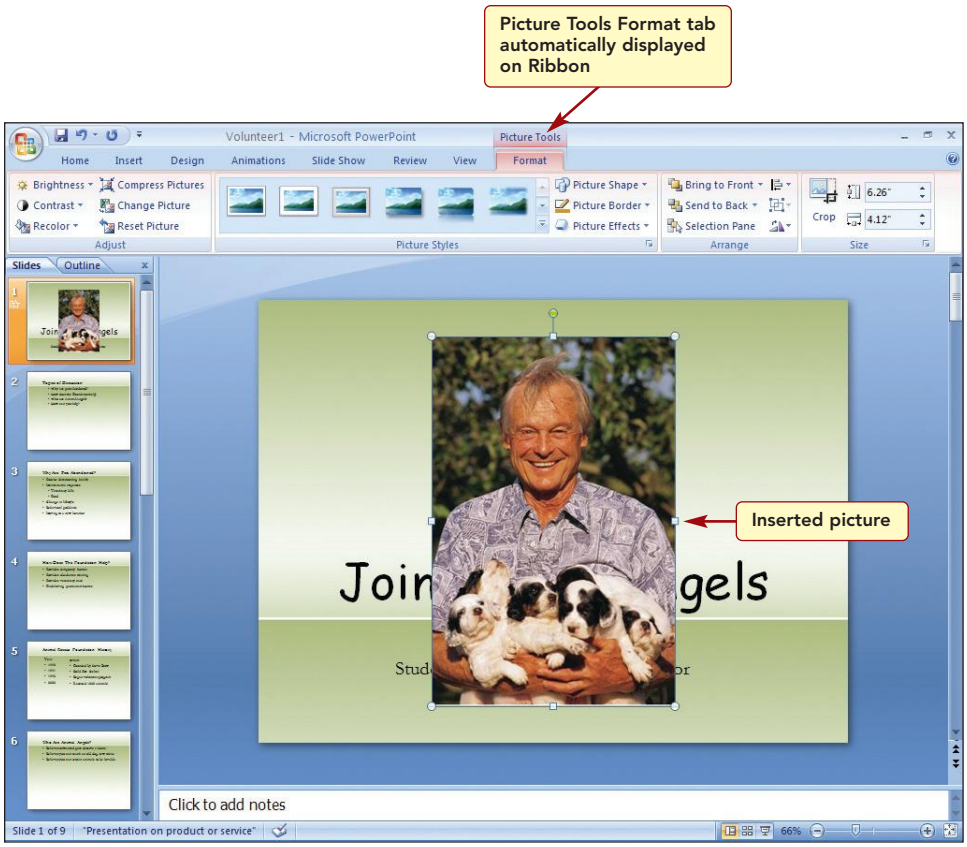


Figure 1.58

Additional Information
You will learn more about the Picture Tools tab features in later labs.

The picture is inserted in the center of the slide on top of the text. It is a selected object and can be sized and moved like any other selected object. The Picture Tools Format tab is automatically displayed in the Ribbon, in anticipation that you may want to modify the graphic.

Inserting a Graphic from the Clip Organizer

Although you like the picture of the puppies, you want to check the Clip Art Gallery to see what pictures of animals are available.

1 **Open the Insert tab.**

Click 

.

Your screen should be similar to Figure 1.59

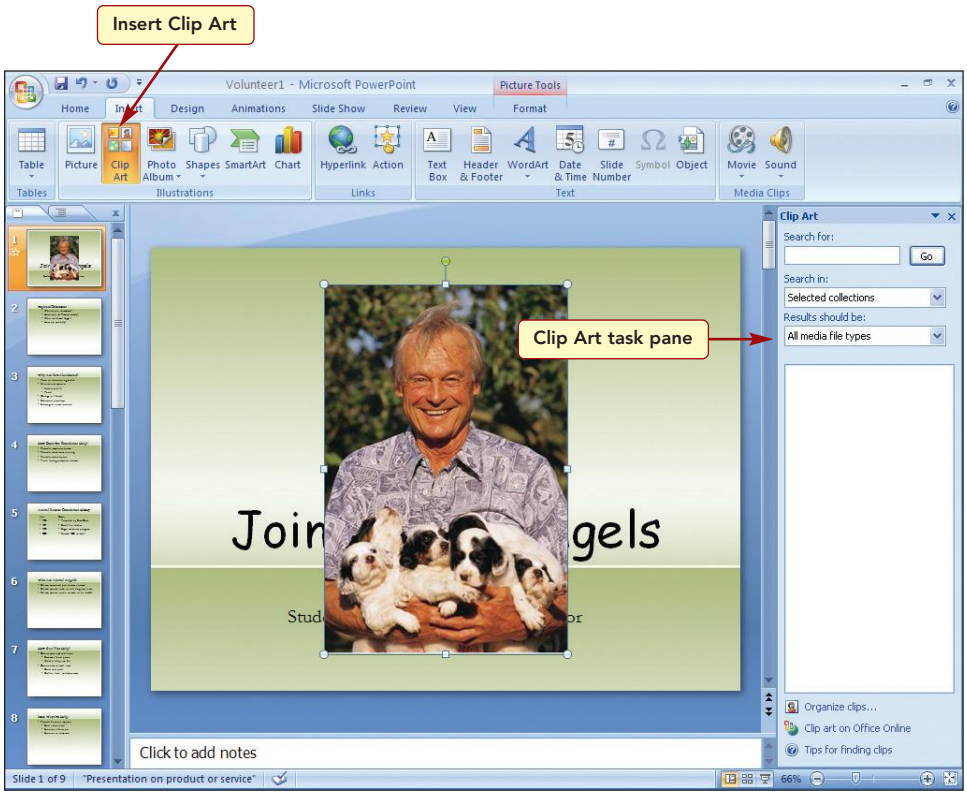


Figure 1.59

In the Clip Art task pane, you specify the locations to search and the type of media files, such as clip art, movies, photographs, or sound, to display in the search results. You want to find clip art or photographs of dogs since there are more dogs in foster care than any other type.

2. If necessary, select any existing text in the Search For text box.
- In the Search For text box, type **animals**.
- If All Collections is not displayed in the Search In text box, select Everywhere from the drop-down list.
- Open the Results Should Be drop-down list.
- Choose Clip Art and deselect the other options.

Having Trouble?
Click the box next to an option to select or deselect (clear the checkmark).

- Click outside the drop-down list to close it.
- Click Go.

Your screen should be similar to Figure 1.60

Having Trouble?
If your thumbnails appear in a single column, increase the width of your task pane by dragging the left edge of the pane until two columns are displayed.

Having Trouble?
Do not worry if the thumbnails displayed on your screen do not match these shown in Figure 1.60 since the online clip art is continuously changing.

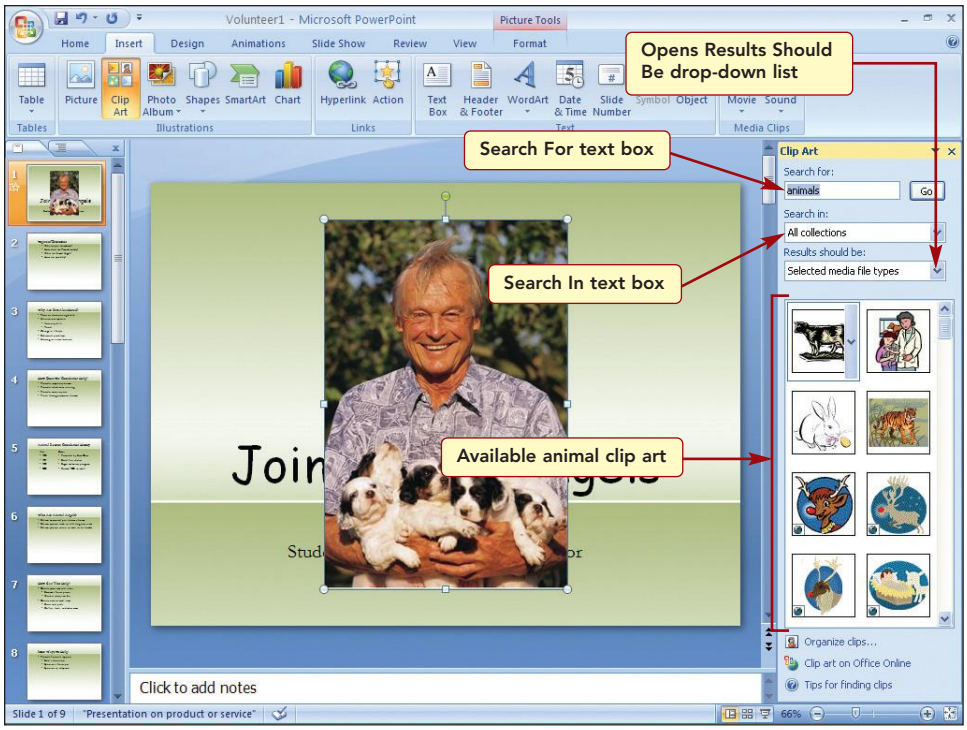


Figure 1.60

The program searches all locations on your computer and, if an Internet connection is established, searches Microsoft's Clip Art and Media Web site for clip art and graphics that match your search term. The Results area displays thumbnails of all located graphics. The pictures stored on your computer in the Microsoft Clip Art gallery appear first in the results list, followed by the Office Online clip art.

Pointing to a thumbnail displays a ScreenTip containing the **keywords** associated with the picture and information about the picture properties. It also displays a drop-down list bar that accesses the item's shortcut menu. The shortcut menu commands are used to work with and manage the items in the Clip Organizer. Because it is sometimes difficult to see the graphic in the thumbnail, you can preview it in a larger size.

3. **Scroll the list to view additional images.**

- **Point to any graphic and click to open the thumbnail menu.**
- **Choose Preview/ Properties.**

Your screen should be similar to Figure 1.61

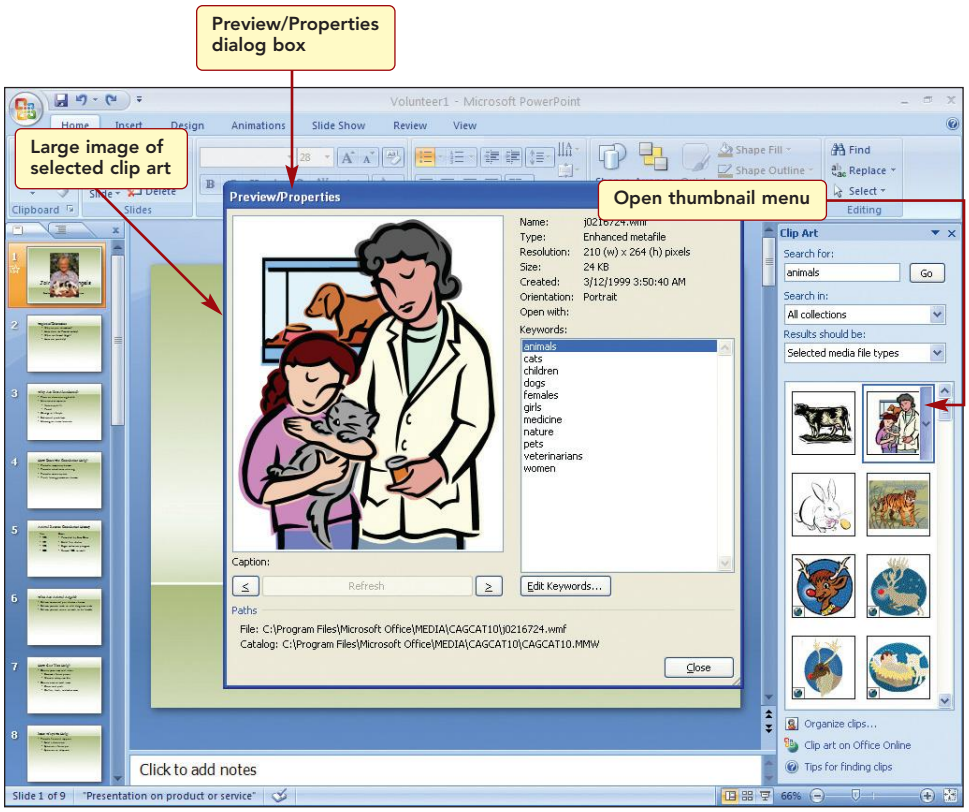


Figure 1.61

Having Trouble?

Do not worry if your preview image does not match Figure 1.61. It will only match if you selected the same graphic in the results area.

The Preview/Properties dialog box displays the selected graphic larger so it is easier to see. It also displays more information about the properties associated with the graphic. Notice the search word you entered appears as one of the keywords associated with the graphic.

After looking at the results, you decide to redefine your search. You want to find graphics of dogs only. To do this, you will use a more specific keyword, in this case "dogs", to narrow the scope of the search to locate graphics associated with that keyword.

4 Click Close to close the Preview/ Properties dialog box.

- Replace the word "animals" in the Search For text box with the word **dogs**.
- Click Go.

Your screen should be similar to Figure 1.62

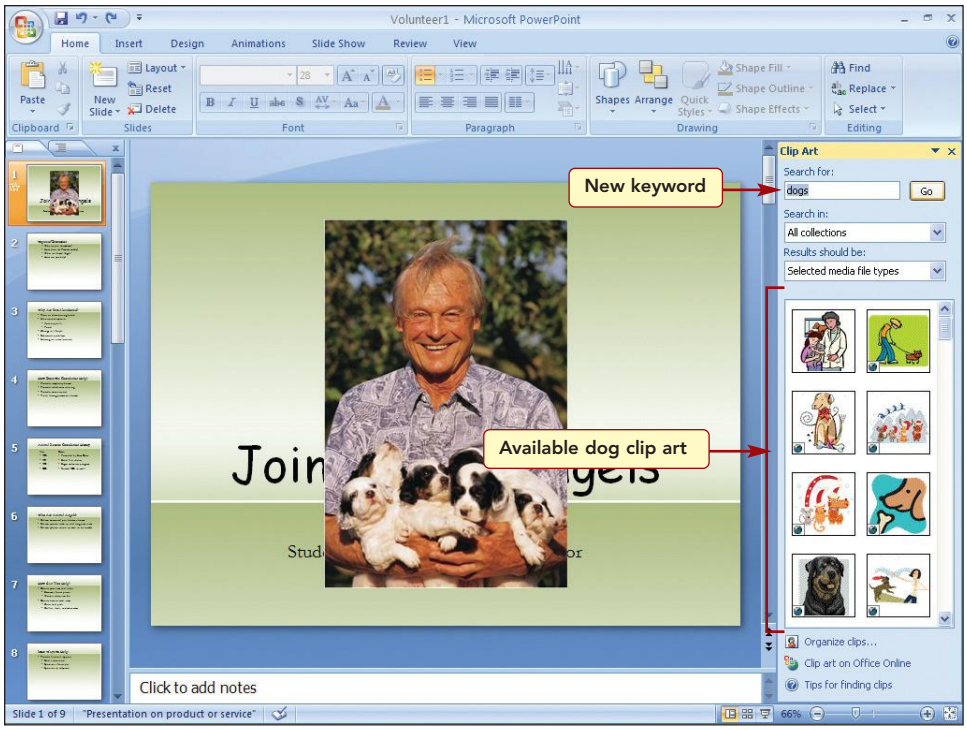


Figure 1.62

Fewer graphics were located because the term you used was more specific. Now you will scroll the list of graphics to find one you like.

5 Scroll the list to locate the graphic shown in Figure 1.63.

- Click on the graphic to insert it in the slide.

Another Method

You also could choose Insert from the thumbnail's shortcut menu to insert the graphic.

Your screen should be similar to Figure 1.63

Having Trouble?

If this graphic is not available in the Clip Organizer, close the Clip Art task pane and click Picture from the Illustrations group on the Insert tab. Then insert pp01_Dog from your data file location.

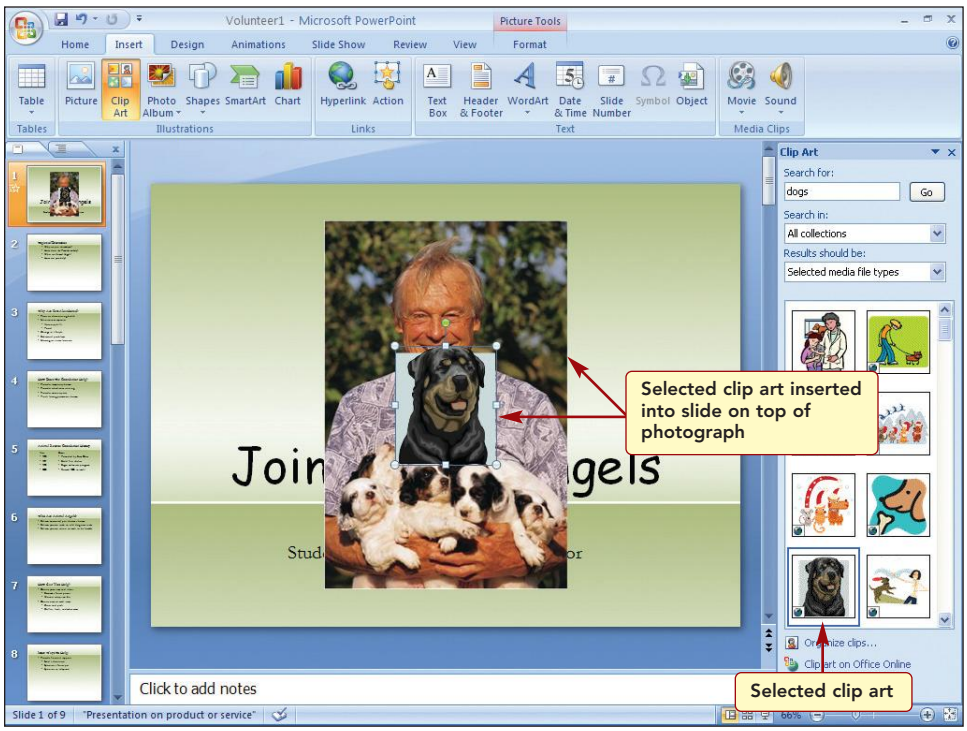


Figure 1.63

The second graphic is inserted on the slide on top of the photograph object. As objects are added to a slide, they automatically stack in individual layers.

Concept 8

Stacking Order

8 **Stacking order** is the order in which objects are inserted into different layers of the slide. As each object is added to the slide, it is added to the top layer. Adding objects to separate layers allows each object to be positioned precisely on the page, including in front of and behind other objects. As objects are stacked in layers, they may overlap. To change the stacking order, the Picture Tools tab is used. The Picture Tools tab will appear whenever a picture object is selected.

Additional Information

Sometimes it is easy to lose an object behind another. If this happens, you can press Tab to cycle forward or Shift + Tab to cycle backward through the stacked objects until the one you want is selected.

Because the photograph was the first object added to the slide, it is on the bottom layer of the stack. Although the clip art looks good, you think the photo shows the enjoyment gained from volunteering better.

6 **If necessary, select the clip art.**

Press Delete to remove the selected object.

Enhancing Graphics

When a graphic object is inserted into a slide, it can be manipulated in many ways. For example, you can move, size, or crop it; change colors; add borders; change the shape; and add effects such as shadows and reflections.

Sizing and Cropping a Graphic

First you need to size and position the picture on the slide. A graphic object is sized and moved just like a placeholder. You want to decrease the graphic size slightly and position it in the space above the title.

Additional Information

Be careful when increasing the size of a picture (bitmap) image as it can lose sharpness and appear blurry if enlarged too much.

1. **Click on the graphic to select it.**
2. **Drag the bottom right corner sizing handle inward to decrease its size to that shown in Figure 1.64.**
3. **Drag the graphic to position it as shown in Figure 1.64.**

Your screen should be similar to Figure 1.64



Figure 1.64

Although this is better, you decide it is not the right shape for the space. You will remove the upper part of the picture by cropping it to show the puppies only. This will make the picture smaller and rectangular shaped.

2. **Open the Picture Tools Format tab.**

- **Click Crop from the Size group.**

Additional Information
The mouse pointer appears as ⌖ when it is used to crop a picture

- **Point to the upper-left corner of the photo and when the mouse pointer changes to a ⌜, drag down to just above the puppies.**
- **Click Crop from the Size group to turn off this feature.**
- **Size and move the picture as in Figure 1.65.**

Your screen should be similar to Figure 1.65



Figure 1.65

Adding a Picture Style

Next, you want to enhance the graphic by applying a picture style to it. **Picture styles** are combinations of border, shadow, and shape effects that can be applied in one simple step. You also can create your own picture style effects by selecting specific style elements, such as borders and shadows, individually using the Picture Shape, Picture Border, and Picture Effects buttons.

1. **Click More in the Picture Styles group to open the Picture Styles gallery.**

2. **Point to several styles to see the Live Preview.**

Your screen should be similar to Figure 1.66

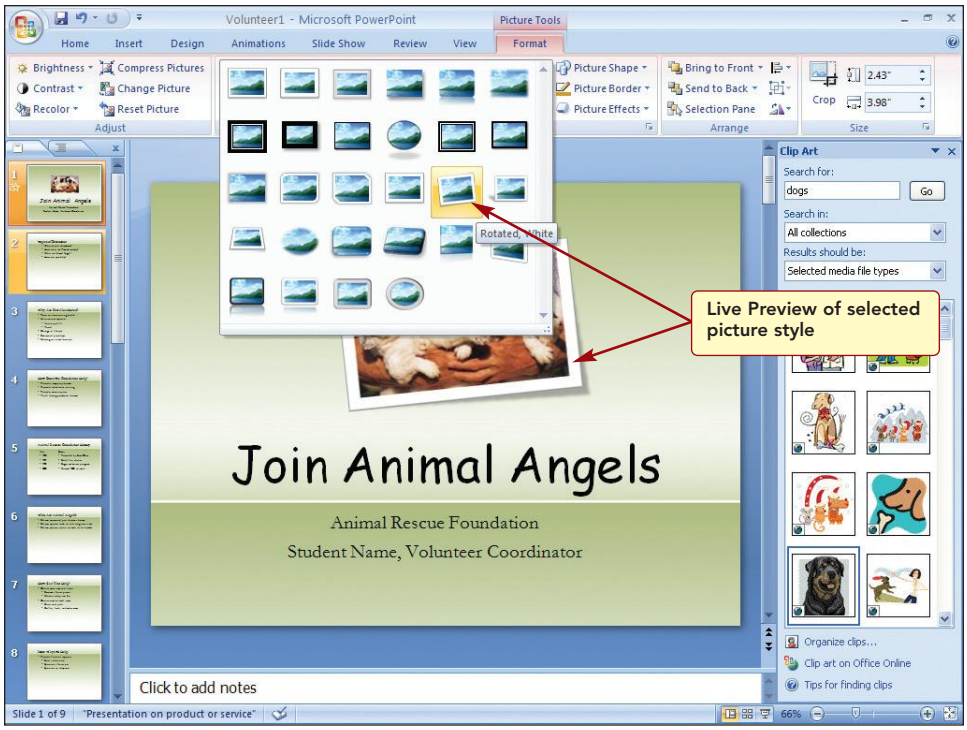


Figure 1.66

Additional Information

The Live Preview feature is also available with many other formatting features. It does not appear if you use the Mini Toolbar to apply formatting.

When you point to a style, the style name appears in a ScreenTip and the selected graphic displays how the selected picture style will look with your graphic if chosen. This is the **Live Preview** feature of PowerPoint. As you can see, many are not appropriate. However, you decide that the Metal Rounded Rectangle style will enhance the graphic and the slide.

3. **Choose the Metal Rounded Rectangle style.**

Your screen should be similar to Figure 1.67

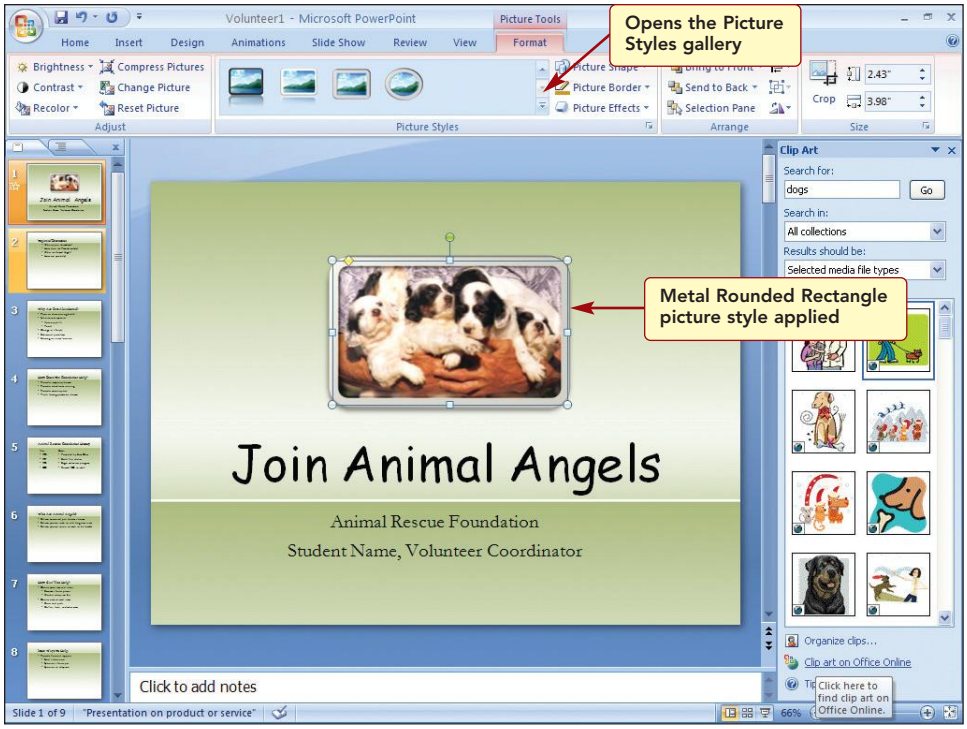


Figure 1.67

As you look at the picture, you decide to remove the rectangle and instead use an oval shape with a black border.

3 **Click Undo in the Quick Access toolbar.**

Another Method
The keyboard short cut to Undo is Ctrl + Z.

Your screen should be similar to Figure 1.68



Figure 1.68

Additional Information
If you click Undo multiple times, you remove the last actions one by one in sequence.

Using Undo reverses your last action. Notice that the Undo button includes a drop-down list button. Clicking this button displays a list of the most recent actions that can be reversed, with the most recent action at the top of the list. When you select an action from the drop-down list, you also undo all actions above it in the list.

4 **Choose the Metal Oval style.**

Click Picture Border on the Picture Styles group.

Your screen should be similar to Figure 1.69



Figure 1.69

A drop-down gallery of Picture Border colors is displayed. You will change the border color to black.

5 **Choose Black, Text 1 from the Theme Colors group.**

Click outside the graphic to deselect the object.

Close the Clip Art task pane.

Save the presentation again.

Run the slide show from the first slide.

Additional Information
You will learn about Themes in Lab 2.

With the addition of the graphic, the title slide will make a much better impression.

Previewing and Printing the Presentation

Although you still plan to make many changes to the presentation, you want to provide a copy of the slides to the foundation director to get feedback regarding the content and layout. Although your presentation looks good on your screen, it may not look good when printed. Previewing the presentation allows you to see how it will look before you waste time and paper printing it out. Many times, you will want to change the print and layout settings to improve the appearance of the output.

Previewing the Presentation

Shading, patterns, and backgrounds that look good on the screen can make printed handouts unreadable, so you want to preview how the printout will look before making a copy for the director.

1. **Click Office Button and select Print.**
2. **Choose Print Preview from the Print submenu.**

Your screen should be similar to Figure 1.70

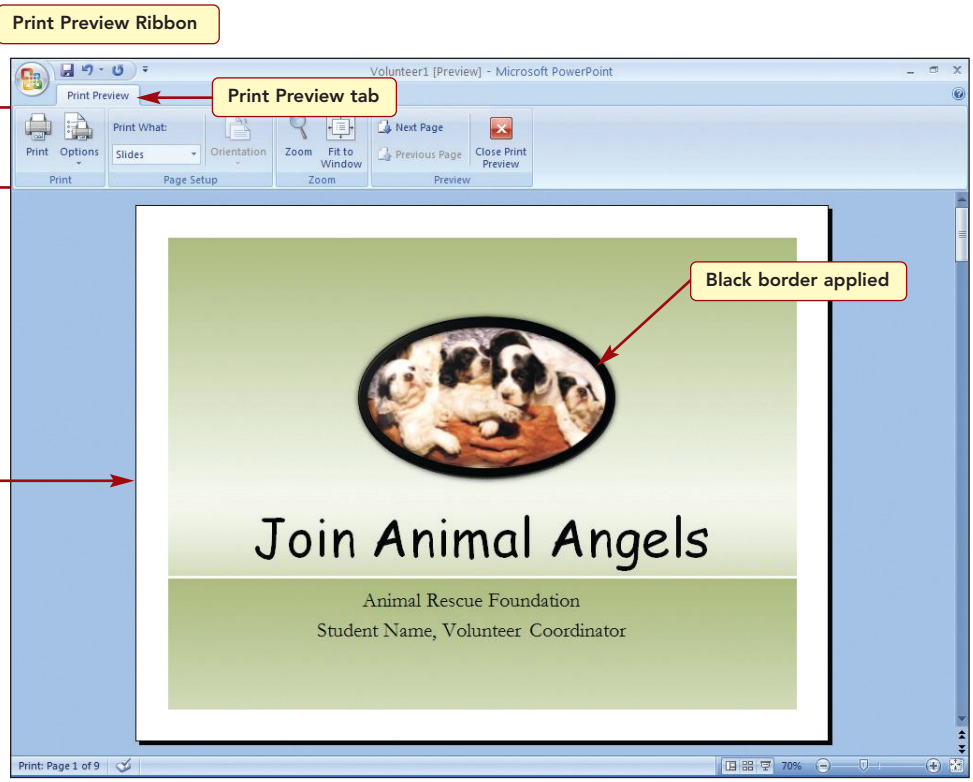


Figure 1.70

Additional Information
Use grayscale when your slides include patterns whose colors you want to appear in shades of gray.

The Print Preview window displays the first slide in the presentation as it will appear when printed using the selected printer. It is displayed in color if your selected printer is a color printer; otherwise, it appears in grayscale (shades of gray). Even if you have a color printer, you can print the slides in grayscale or pure black and white. The Print Preview tab is used to modify the default print settings. You will print the slides in black and white.

2 Click Options in the Print group.

Select Color/Grayscale and choose Pure Black and White from the submenu.

Your screen should be similar to Figure 1.71



Figure 1.71

The preview shows how the slide will look when printed in black and white.

Specifying Printed Output

The Preview window displays a single slide on the page as it will appear when printed. This is the default print setting. You can change the type of printed output using the Print What menu selection. The output types are described in the table below. Only one type of output can be printed at a time.

Output Type	Description
Slides	Prints one slide per page.
Handouts	Prints multiple slides per page.
Notes Pages	Prints the slide and the associated notes on a page.
Outline View	Prints the slide content as it appears in Outline view.

Additional Information
You will learn about notes in Lab 2.

You want to change the print setting to Handouts to print several slides on a page.

1 **Click Slides in the Print What area of the Page Setup group and choose Handouts (6 Slides Per Page).**

Your screen should be similar to Figure 1.72

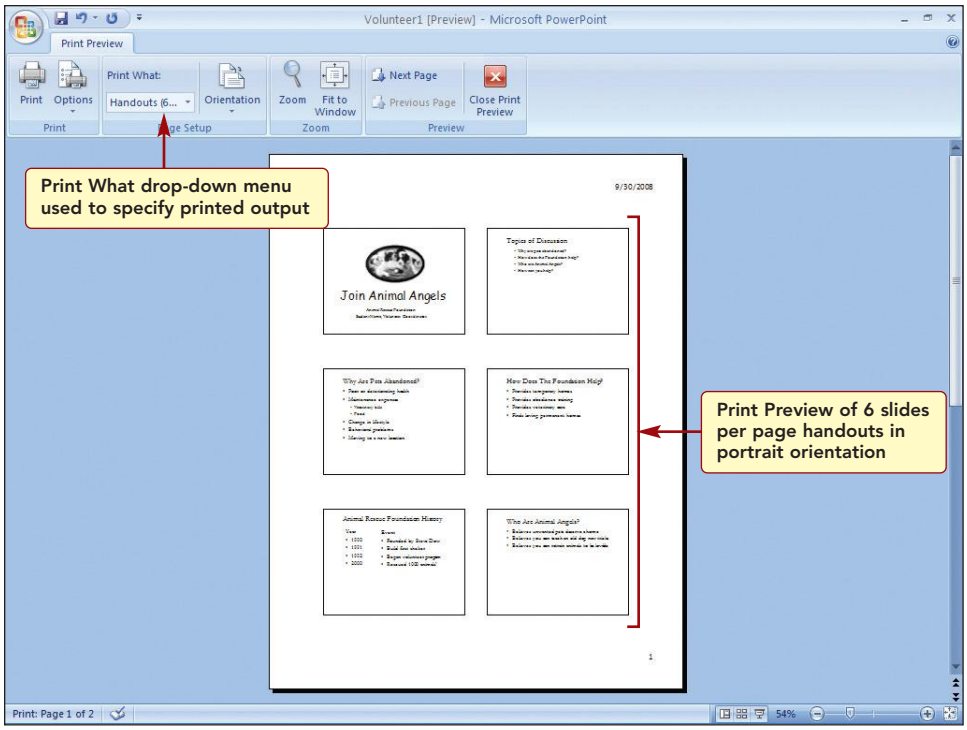


Figure 1.72

Changing Page Orientation

You also want to change the orientation or the direction the output is printed on a page. The default orientation for handouts is **portrait.** This setting prints across the width of the page. You will change the orientation to **landscape** so that the slides print across the length of the paper. Then you will preview the other pages.

1 **Click Orientation in the Page Setup group and choose Landscape.**

Click Next Page in the Preview group.

Your screen should be similar to Figure 1.73

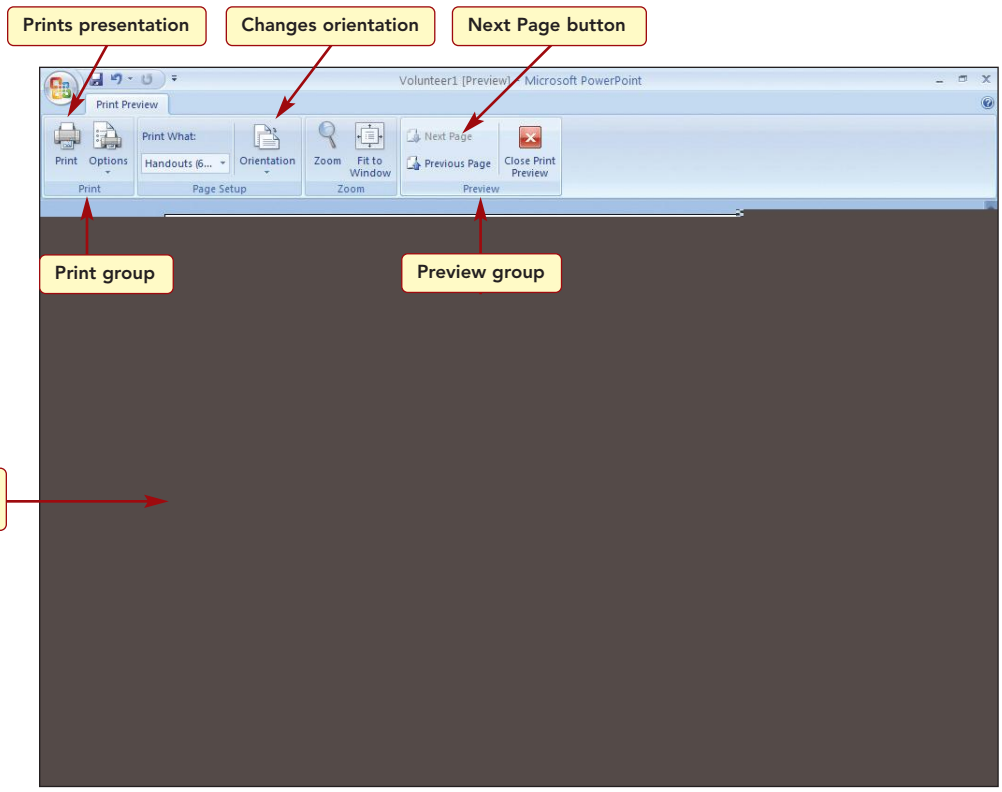


Figure 1.73

The last three slides in the presentation are displayed on the second page in landscape orientation.

Printing the Presentation

Now, you are ready to print the handouts.

1. Click Print in the Print group.

Another Method

The menu equivalent to print is Office Button/Print and the keyboard shortcut is Ctrl + P.

Your screen should be similar to Figure 1.74

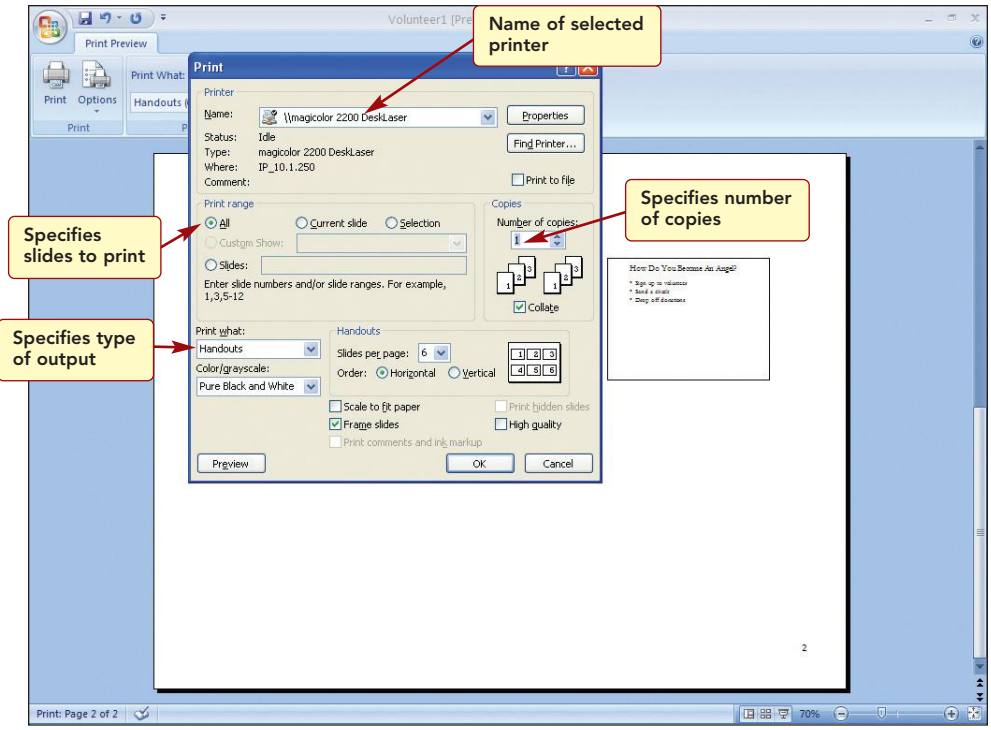


Figure 1.74

Note: Please consult your instructor for printing procedures that may differ from the following directions.

The Name text box in the Printer section displays the name of the selected printer. You may need to specify the printer you will be using. (Your instructor will provide the printer to select.) The Print Range settings specify the slides to print. The default setting, All, prints all the slides, while Current Slide prints only the slide you are viewing. The Slides option is used to specify individual slides or a range of slides to print by entering the slide numbers in the text box. The Copies section is used to specify the number of copies of the specified print range. The default is to print one copy.

At the bottom of the dialog box, PowerPoint displays many of the same options to control color output, number of slides per page, and orientation. The options you specified in the Print Preview window are already selected. The Frame Slides option is selected by default and displays a border around each slide.

2. **If you need to select a different printer, open the Name drop-down list and select the appropriate printer.**
   - **If necessary, make sure your printer is on and ready to print.**
   - **Click** OK.
   - **Click** Close Print Preview.

A printing progress bar appears in the status bar, indicating that the program is sending data to the Print Manager, and your handouts should be printing. Your printed output should be similar to that shown in the Case Study at the beginning of the lab.

Exiting PowerPoint

You have finished working on the presentation for now and will exit the PowerPoint program.

1. **Click** × **Close in the title bar.**
   - **If asked to save the file again, click** Yes.

Another Method

The menu equivalent to exit PowerPoint is Office Button/ Exit PowerPoint.



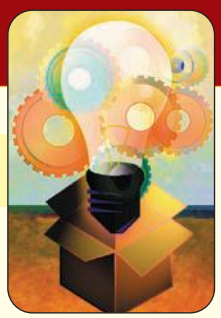
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Account Executive

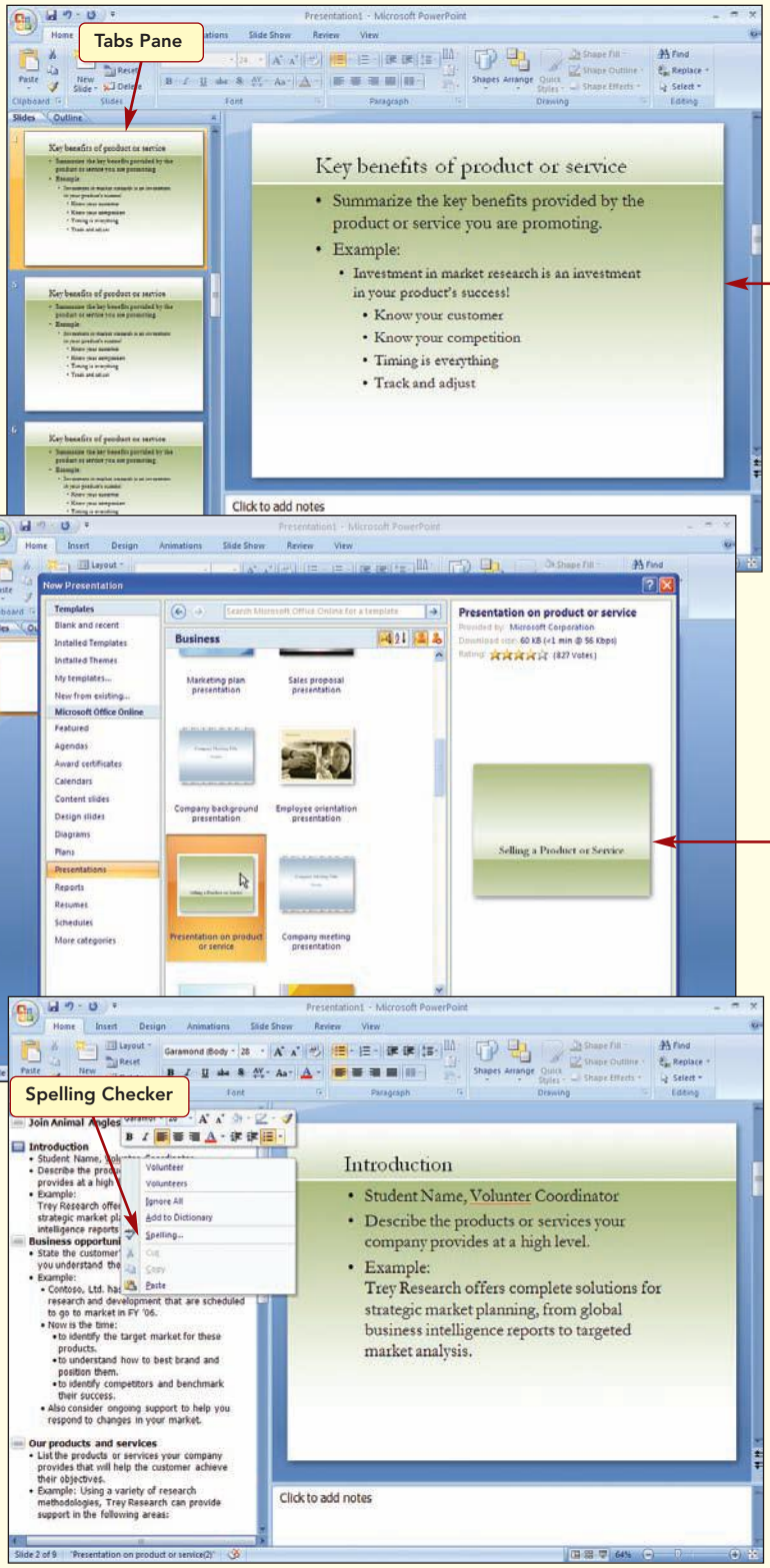
Sales is an excellent entry point for a solid career in any company. Account Executive is just one of many titles that a sales professional may have; Field Sales and Sales Representative are two other titles. Account executives take care of customers by educating them on the company's latest products, designing solutions using the company's product line, and closing the deal to make the sale and earn their commission. These tasks require the use of effective PowerPoint presentations that educate and motivate potential customers. The salary range of account executives is limited only by his/her ambition; salaries range from $30,000 to more than $120,540. To learn more about this career, visit the Web site for the Bureau of Labor Statistics of the U.S. Department of Labor.

Concept Summary



LAB 1

Creating a Presentation



Slide (PP1.5)

A slide is an individual "page" of your presentation.

Template (PP1.7)

A template is a file containing predefined settings that can be used as a pattern to create many common types of presentations.

Spelling Checker (PP1.17)

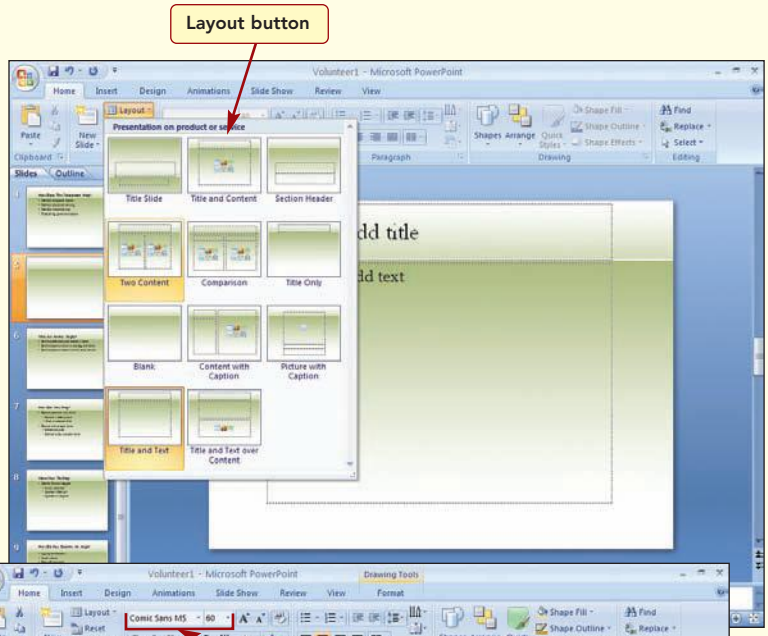
The spelling checker locates all misspelled words, duplicate words, and capitalization irregularities as you create and edit a presentation, and proposes possible corrections.

AutoCorrect (PP1.19)

The AutoCorrect feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.

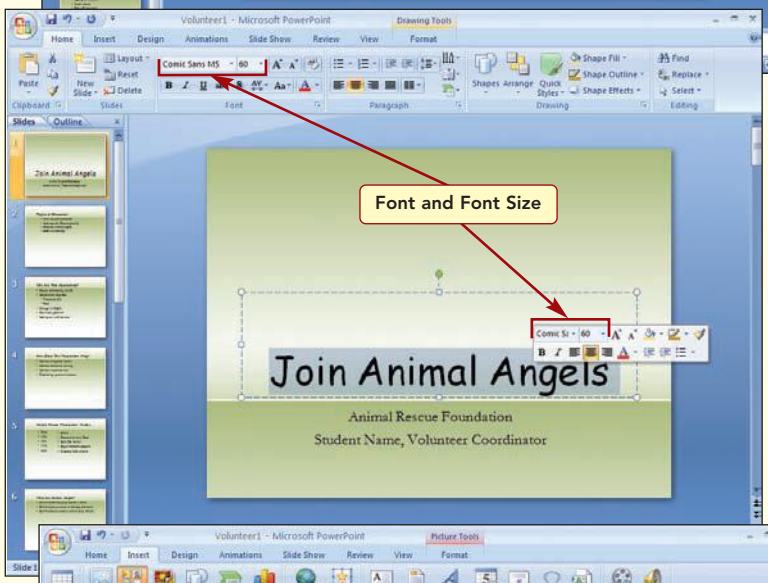
Layout (PP1.45)

Layouts define the position and format for objects and text that will be added to a slide. A layout contains placeholders for the different items such as bulleted text, titles, charts, and so on.



Font and Font Size (PP1.52)

A font, also commonly referred to as a typeface, is a set of characters with a specific design. The designs have names such as Times New Roman and Courier. Each font has one or more sizes.

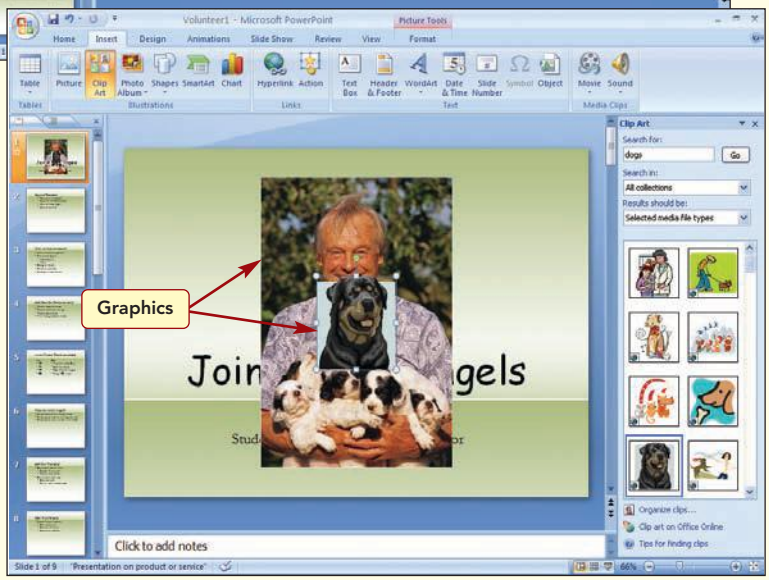


Graphics (PP1.56)

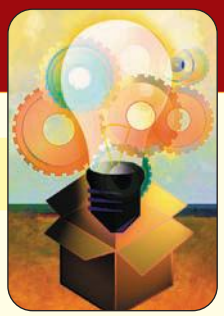
A graphic is a nontext element or object, such as a drawing or picture, that can be added to a slide

Stacking Order (PP1.63)

Stacking order is the order in which objects are inserted into different layers of the slide.



Lab Review



LAB 1

Creating a Presentation

key terms

AutoCorrect PP1.19
AutoRecover PP1.33
character formatting PP1.51
clip art PP1.56
current slide PP1.11
custom dictionary PP1.17
default settings PP1.6
demote PP1.29
drawing object PP1.56
embedded object PP1.56
font PP1.52
font size PP1.52
formatting PP1.51
graphic PP1.56
keyword PP1.60
landscape PP1.70
layout PP1.45
Live Preview PP1.66
main dictionary PP1.17
Notes pane P1.10
object PP1.15
Outline tab P1.10
paragraph formatting PP1.51
picture PP1.56
picture style P1.65
placeholder PP1.15
placeholder text P1.9
point PP1.52
portrait PP1.70
promote PP1.29
sans serif font PP1.52
selection rectangle PP1.20
serif font PP1.52
sizing handles PP1.47
slide PP1.5
Slide pane P1.10
slide show PP1.49
Slides tab P1.10
source program PP1.56
spelling checker PP1.17
stacking order PP1.63
template PP1.7
thumbnail PP1.8
typeface PP1.52
view PP1.9
workspace PP1.5

command summary

Command	Shortcut	Action
Office Button		
New		Opens New Presentation dialog box
Open	Ctrl + O	Opens existing presentation
Save	Ctrl + S	Saves presentation
Save As	F12	Saves presentation using new file name and/or location
Print/Print	Ctrl + P	Opens Print dialog box
Print/Print Preview		Displays preview of presentation
Close		Closes presentation
Exit PowerPoint		Closes PowerPoint
Quick Access Toolbar		
Save	Ctrl + S	Saves presentation
Undo	Ctrl + Z	Reverses last action
Home tab		
Clipboard group		
Paste	Ctrl + V	Pastes item from Clipboard
Cut	Ctrl + X	Cuts selection to Clipboard
Copy	Ctrl + C	Copies selection to Clipboard
Slides group		
New Slide	Ctrl + M	Inserts new slide with selected layout
Layout		Changes layout of a slide
Delete		Deletes selected slide
Font group		
Eras Medium ITC Font		Changes font type
48 Size		Changes font size
Paragraph group		
Bullets/Bullets and Numbering/Bulleted		Formats bullets and numbers

command summary

Command	Shortcut	Action
Editing group		
Select/Select All	Ctrl + A	Selects everything in the placeholder box
Insert tab		
Illustrations group		
		Inserts clip art
		Inserts a picture from file
Slide Show tab		
Start Slide Show group		
	F5	Displays presentation starting with the first slide
	Shift + F5	Displays presentation starting with the current slide
Review tab		
Proofing group		
	F7	Spell-checks presentation
View tab		
Presentation Views group		
		Switches to Normal view
		Switches to Slide Sorter view
		Runs slide show
Picture Tools Format tab		
Size group		
		Crops picture to remove unwanted parts

command summary

Command	Shortcut	Action
Picture Styles group		
More		Applies an overall visual style to picture
Picture Shape		Changes shape of drawing
Picture Border		Applies a border style to picture
Picture Effects		Applies a visual effect to picture
Print Preview tab		
Page Setup group		
Slides — Print What		Specifies what is to be printed
Orientation		Sets either Portrait or Landscape layout



screen identification

1. In the following PowerPoint screen, letters identify important elements. Enter the correct term for each screen element in the space provided.



Possible answers for the screen identification are:

Clip art	Ribbon	**A.** _____	**I.** _____
Current slide	Selection handle	**B.** _____	**J.** _____
File name	Slide pane	**C.** _____	**K.** _____
Group	Slide tab	**D.** _____	**L.** _____
Object	Status bar	**E.** _____	**M.** _____
Office Button	Subtitle	**F.** _____	**N.** _____
Outline tab	Tab	**G.** _____	**O.** _____
Notes pane	Thumbnail	**H.** _____	**P.** _____

matching

Match the item on the left with the correct description on the right.

1. AutoRecover	_____	**a.** define the position and format for objects and text that will be added to a slide
2. demote	_____	**b.** sample text that suggests the content for the slide
3. embedded object	_____	**c.** becomes part of the presentation file and can be opened and edited using the source program
4. font size	_____	**d.** program that automatically saves work to a temporary file
5. layout	_____	**e.** displays each slide as a thumbnail
6. Notes pane	_____	**f.** height and width of the character commonly measured in points
7. placeholder text	_____	**g.** small image
8. slide	_____	**h.** includes space to enter notes that apply to the current slide
9. Slides tab	_____	**i.** indent a bulleted point to the right
10. thumbnail	_____	**j.** individual page of a presentation

multiple choice

Circle the correct response to the questions below.

1. When the spelling checker is used, you can create a(n) _____ dictionary to hold words that you commonly use but are not included in the main dictionary.
- **a.** custom
- **b.** official
- **c.** personal
- **d.** common

2. If you want to provide copies of your presentation to the audience showing multiple slides on a page, you would print _____.
- **a.** slides
- **b.** handouts
- **c.** note pages
- **d.** outline area

3. The _____ feature makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.
- **a.** spell checker
- **b.** grammar checker
- **c.** template
- **d.** AutoCorrect

4. The step in the development of a presentation that focuses on determining the length of your speech, the audience, the layout of the room, and the type of audiovisual equipment available is _____.
   a. planning
   b. creating
   c. editing
   d. enhancing

5. _____ displays a miniature of each slide to make it easy to reorder slides, add special effects such as transitions, and set timing between slides.
   a. publish
   b. slide sorter
   c. template
   d. normal view

6. A _____ is a file containing predefined settings that can be used as a pattern to create many common types of presentations.
   a. graphic
   b. slide
   c. presentation
   d. template

7. If you want to work on all aspects of your presentation, switch to _____ view, which displays the Slide pane, Outline pane, and Note pane.
   a. Slide Sorter
   b. Outline
   c. Slide
   d. Normal

8. A _____ is a nontext element or object, such as a drawing or picture, that can be added to a slide.
   a. slide
   b. graphic
   c. text box
   d. template

9. A(n) _____ is an onscreen display of your presentation.
   a. outline
   b. handout
   c. slide show
   d. slide

10. A font, also commonly referred to as (a) _____, is a set of characters with a specific design.
    a. typeface
    b. font size
    c. graphic
    d. Times New Roman

true/false

Circle the correct answer to the following questions.

1. Font is commonly measured in pixels. True False
2. An embedded file cannot be edited in the source program. True False
3. A slide is a set of characters with a specific design. True False
4. All drawing objects are inserted into the same layer of the presentation. True False
5. The page orientation can be landscape or portrait. True False
6. Graphics are objects, such as charts, drawings, pictures, and scanned photographs, that provide visual interest or clarify data. True False
7. Content templates focus on the design of a presentation. True False
8. A layout contains placeholders for the different items such as bulleted text, titles, charts, and so on. True False
9. You can rely on AutoRecover to save your document for you. True False
10. Font size is the height and width of the character and is commonly measured in points. True False

fill-in

Complete the following statements by filling in the blanks with the correct terms.

1. _____ order is the order objects are inserted in the different layers of the slide.
2. _____ is a PowerPoint feature that advises you of misspelled words as you add text to a slide and proposes possible corrections.
3. A _____ is an individual "page" of your presentation.
4. A _____ is text or graphics that appears at the bottom of each slide.
5. A _____ is a miniature of a slide.
6. An embedded object is edited using the _____ program.
7. The default orientation for handouts is _____.
8. A _____ is a file containing predefined settings that can be used as a pattern to create many common types of presentations.
9. _____ define the position and format for objects and text that will be added to a slide.
10. The size of a _____ can be changed by dragging its sizing handles.

Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Triple Crown Presentation ★

1. Logan Thomas works at Adventure Travel Tours. He is working on a presentation about lightweight hiking to be presented to a group of interested clients. Logan recently found some new information to add to the presentation. He also wants to rearrange some slides and make a few other changes to improve the appearance of the presentation. The handouts of your completed presentation will be similar to those shown here.

   a. Open the file pp01_Triple Crown. Run the slide show.

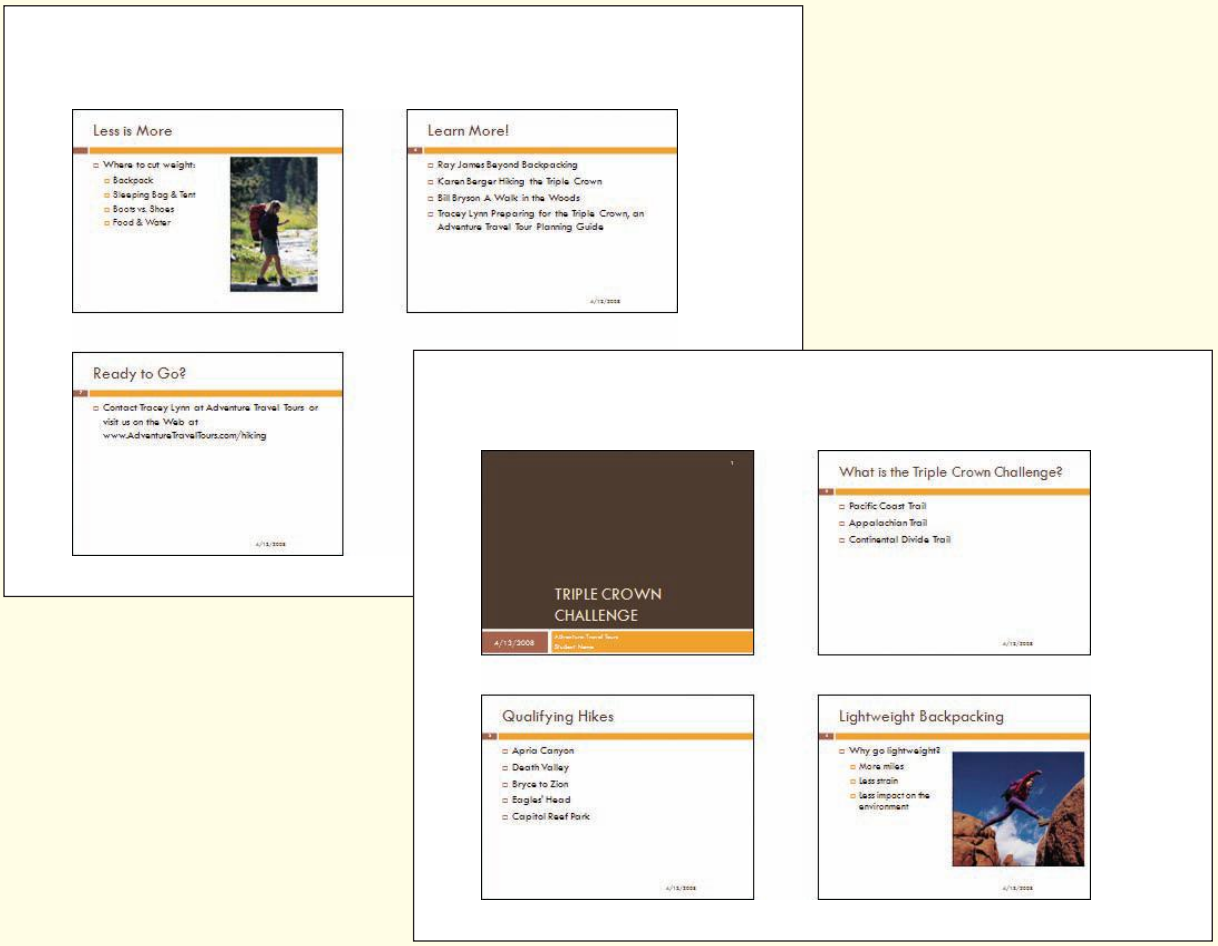
   b. Enter your name in the subtitle on slide 1.

   c. Spell-check the presentation, making the appropriate corrections.

   d. Change the layout of slide 5 to Title Only.

   e. Move slide 6 before slide 5.

   f. Insert the picture pp01_Jump on slide 4. Size and position it appropriately.



g. Insert a new slide using the Two Content layout after slide 4.

h. Enter the title **Less is More**. Insert the picture pp01_Stream in the content placeholder.

i. Change the layout of slide 7 to Title and Content layout. Add the following text in the text placeholder: **Contact Tracey Lynn at Adventure Travel Tours or visit us on the Web at www.AdventureTravelTours.com/hiking**.

j. Run the slide show.

k. Save the presentation as Triple Crown Presentation. Print the slides in landscape orientation as handouts (four per page).

Writing Effective Resumes ★★

2. Assume that you work for the career services center of a major university and are working on a presentation to help students create effective resumes and cover letters. You are close to finishing the presentation but need to clean it up and enhance it a bit before presenting it. The handouts of your completed presentation will be similar to those shown here.

a. Open the PowerPoint presentation pp01_Resume.

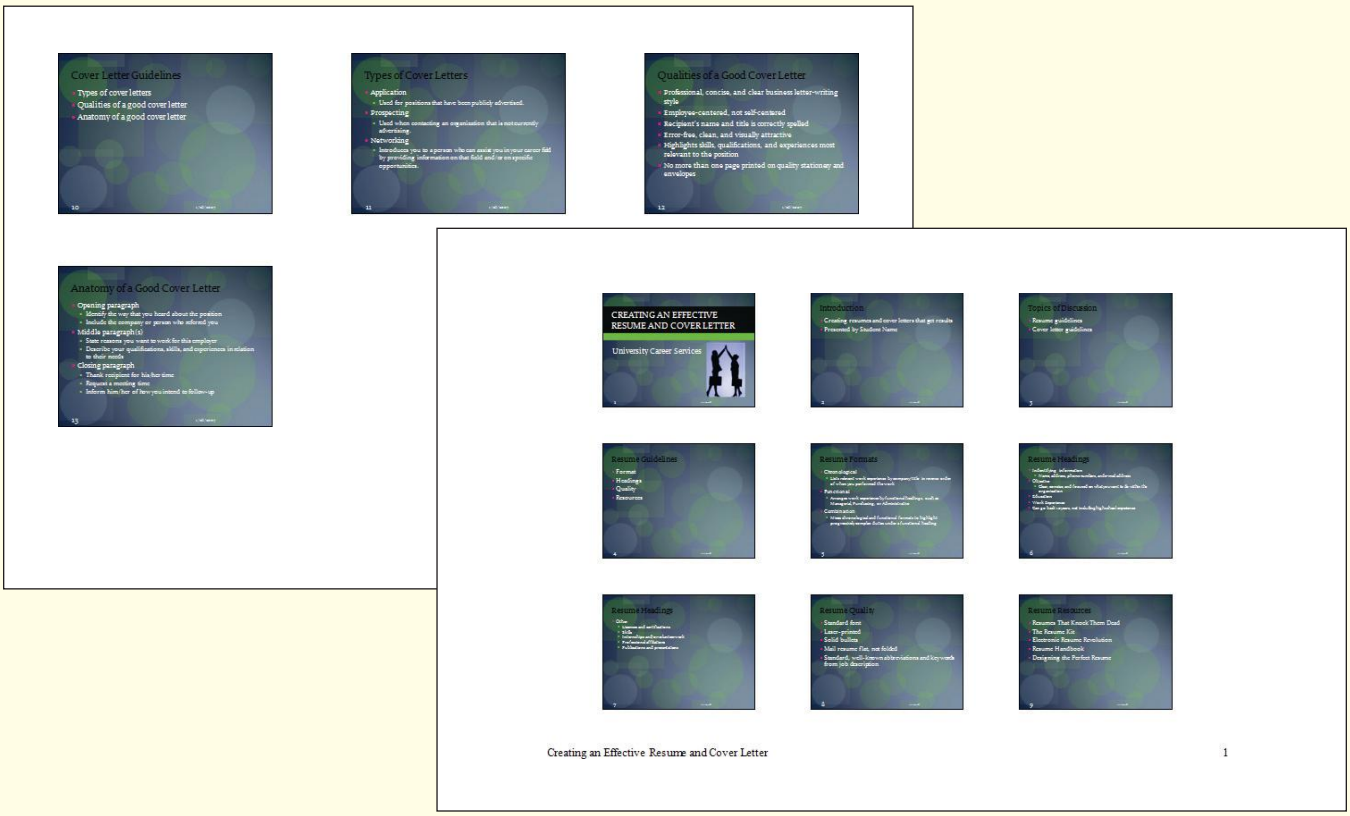
b. Run the Spelling Checker and correct any spelling errors.

c. On slide 1: Display in normal view.

Change title font size to 44 pt.

Change subtitle font size to 36 pt.

Insert, size, and position the picture from file pp01_Success.



d. On slide 2, replace "Student Name" with your name.

e. On slide 5, capitalize the first word of each bulleted item.

f. On slide 6, split the slide content into two slides. Move the first bulleted item on the new slide (7) back to slide 6 so slide 7 begins with the "Other" bulleted item.

g. On slide 10, reorganize the bulleted items so that "Types of cover letters" is the first item.

h. To match the slide order with the way the topics are now introduced, move slide 13 before slide 11.

i. On slide 13: Break each bulleted item into two or three bullets each as appropriate.

Capitalize the first word of each bulleted item.

Remove any commas and periods at the end of the bullets.

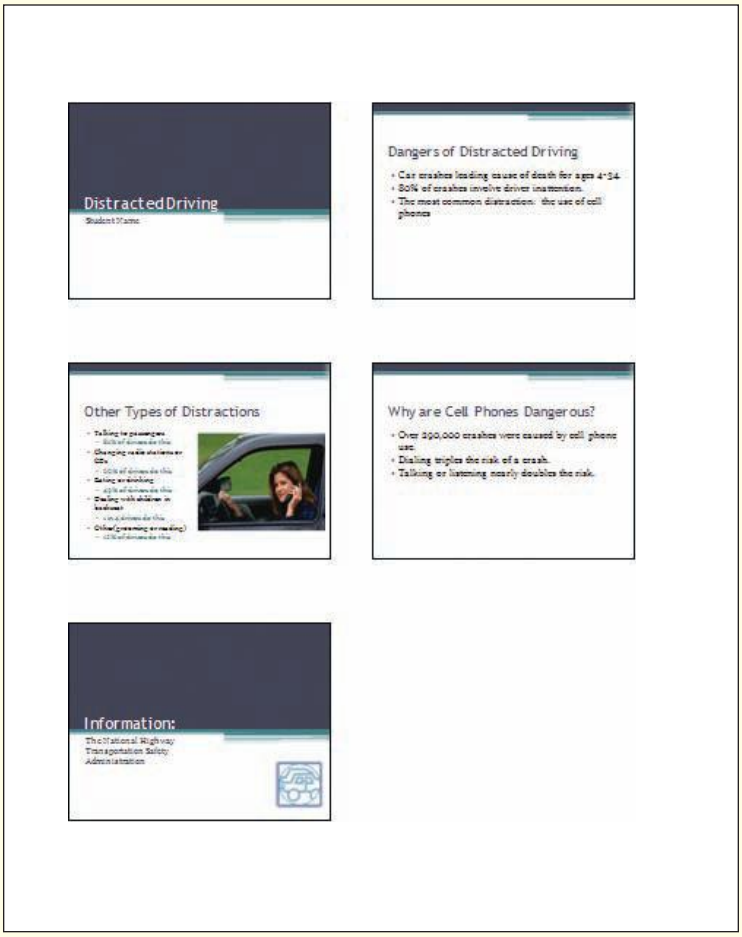
j. Save the presentation as Resume1.

k. Run the slide show.

l. Print the slides as handouts (nine per page in landscape orientation) and close the presentation.

Driving Safety ★★

3. Assume that you are a paramedic and have been asked to give a lecture to high school students about the danger of distracted driving. You have already organized statistics and data for the presentation, but now you need to add clip art, edit, and finalize the presentation. The handouts of your completed presentation will be similar to those shown here.



a. Open the PowerPoint presentation pp01_Distracted Driving.

b. Run spell check and correct any errors.

c. On slide 1, replace "Student Name" with your name.

d. On slide 4:

Change the layout to Two Content.

Promote bullet 1.

Demote the last bullet.

Insert, size, and position the picture from file pp01_Cell Phone into the right content area.

e. Move slide 4 before slide 3.

f. On slide 5, insert the picture from file pp01_Car Logo and position it in the lower-right corner of the slide.

g. Save the presentation as Distracted Driving.

h. Run the slide show.

i. Print the slides as handouts (six per page) and close the presentation.

Employee Orientation ★★★

4. As the front desk manager of the Claremont Hotel, you want to make a presentation to your new employees about all of the amenities your hotel offers its guests as well as information on activities and dining in the area. The purpose of this presentation is to enable employees to answer the many questions that are asked by the guests about both the hotel and the town. The handouts of your completed presentation will be similar to those shown here.



a. Open pp01_Claremont Hotel, which uses the Employee Orientation Presentation template from Microsoft Online.

b. On slide 1:

Enter **Claremont Hotel** as the company name, right-align this subtitle, and set the font color to red and size 24.

Insert, size, and position the picture from file pp01_Claremont Logo in place of the "your logo here" graphic.

c. On slide 2:

Enter **Amenities and Activities for Guests** as the title.

Enter the sample bulleted text **What is there to do?** as the first bullet.

Enter **At the Hotel or In the Town?** as the second bullet.

Remove the remaining bullet placeholders.

d. Insert a new slide after slide 2. In this slide:

Set the layout to Title and Content.

Enter **Hotel Amenities and Activities** as the title.

Enter **Dining** as the first bullet.

Enter **Activities** as the second bullet.

Enter **Other amenities** as the third bullet.

e. Insert a new slide after slide 3. In this slide:

Set the layout to Title and Content.

Enter **Dining** as the title.

Enter **Breakfast** as the first bullet under Dining.

Enter **Eggs Benedict or custom omelet** and demote to appear as the first bullet under Breakfast.

Enter **Daily chef's special** as the second bullet under Breakfast.

Enter **Lunch** and promote to appear as the second bullet under Dining.

Enter **Custom-pack lunch for outings** and demote to appear as the first bullet under Lunch.

Enter **Build-your-own sandwich bar** as the second bullet under Lunch.

Enter **Dinner** and promote to appear as the third bullet under Dining.

Enter **Four course meal (salad, soup, entrée, dessert)** as the first bullet under Dinner.

Enter **Three nightly chef specials** as the second bullet under Dinner.

f. Insert a new slide after slide 4. In this slide:

Set the layout to Title and Content.

Enter **Activities** as the title.

Enter **Morning** as the first bullet under Activities.

Enter **Bird watching on the veranda** and demote to appear as the first bullet under Morning.

Enter **Lecture/Tour of gardens and hotel** as the second bullet under Morning.

Enter **Afternoon** and promote to appear as the second bullet Activities.

Enter **Daily guest lecture or class** as the first bullet under Afternoon.

Enter **Historic walking tour of downtown** as the second bullet under Afternoon.

Enter **Evening** and promote to appear as the third bullet under Activities.

Enter **Champagne meet/greet** and demote to appear as the first bullet under Evening.

Enter **Live music/dancing with dinner** as the second bullet under Evening.

g. Insert a new slide after slide 5. In this slide:

Set the layout to Title and Content.

Enter **Other Amenities** as the title.

Enter **Special Dining Events** as the first bullet under Other Amenities.

Enter **Sunday champagne brunch** and demote to appear as the first bullet under Special Dining Events.

Enter **Saturday afternoon tea** as the second bullet under Special Dining Events.

Enter **Extras** and promote to appear as the second bullet for Other Amenities.

Enter **Third Tuesday cooking class** and demote to appear as the first bullet under Extras.

Enter **Tour of haunted houses on Saturdays at nine** as the second bullet under Extras.

h. Delete slides 7 through 13.

i. On slide 7:

Enter **Hotel amenities and activities** as the first bullet under Summary.

Enter **Dining** and demote to appear as the first bullet under Hotel amenities and activities.

Enter **Activities** as the second bullet under Hotel amenities and activities.

Enter **Other amenities** as the third bullet under Hotel amenities and activities.

Enter **Always remember** and promote to appear as the second bullet under Summary.

Enter **Our guests are our customers** and demote to appear as the first bullet under Always remember.

Enter **Treat our guests as friends** as the second bullet under Always remember.

Enter **Thanks for attending and put these ideas into practice** and promote to appear as the third bullet under Summary.

Delete any remaining bullet placeholders.

j. Save the presentation as Claremont Hotel Orientation.

k. Run the slide show.

l. Print the slides as handouts (four per page in landscape orientation).

Interviewing Basics ★★★

5. Jane DuBois works in a job recruitment office. She has just started preparing a presentation on interviewing skills for her new recruits. Jane has organized the topics to be presented and located a graphic that will complement the talk. She is now ready to use PowerPoint to create her presentation. The handouts of your completed presentation will be similar to those shown on the next page.

a. Open the Training Presentation-General template in file pp01_Interviewing.

b. On slide 1:

Enter **Interviewing Basics** as the title and change the font to 72.

Enter your name as the presenter.

Insert, size, and position the picture from file pp01_Interview.

c. On slide 2:

Enter **Interviewing basics and beyond** as bullet 1.

Enter **First impressions last** as bullet 2.

Enter **An interviewer's guide to interviews** as bullet 3.

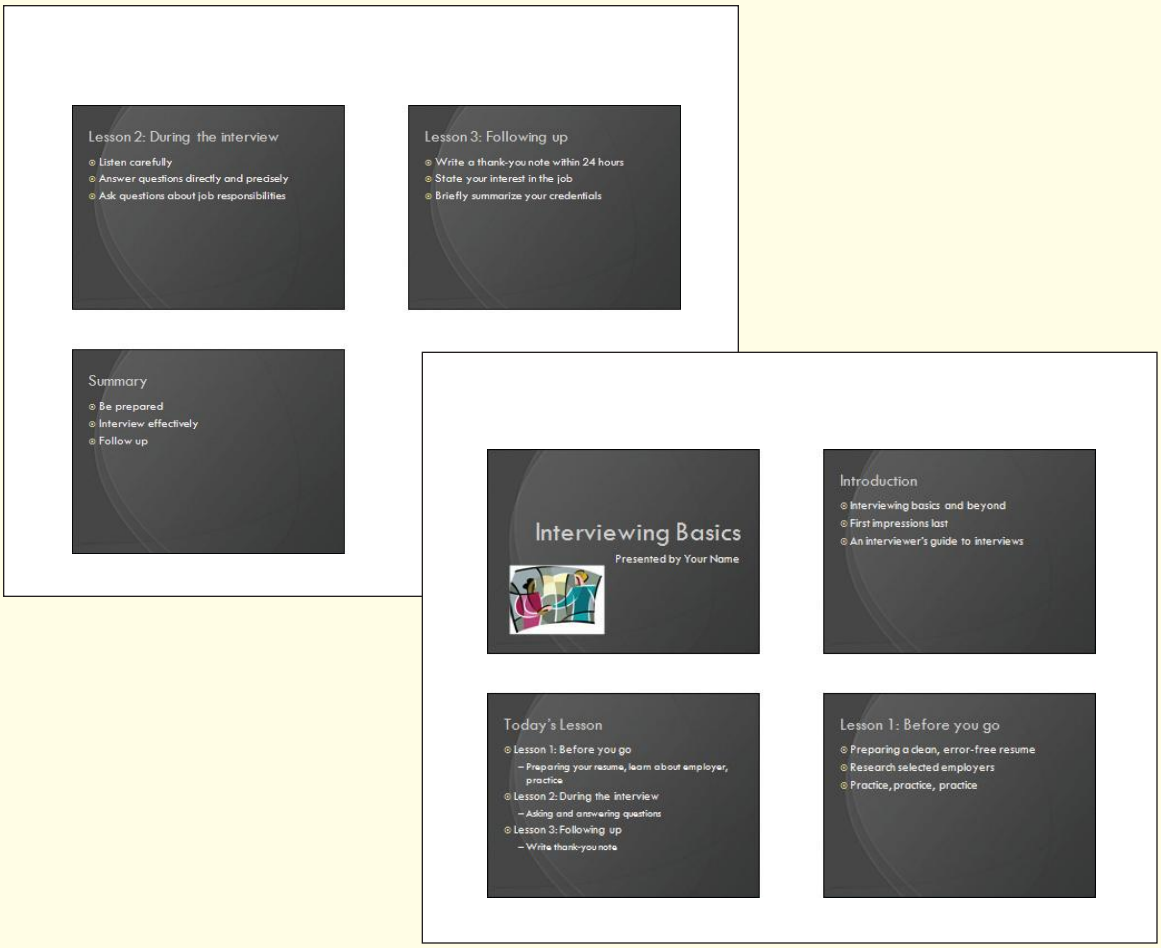
Delete the tip at the bottom of the slide.

d. On slide 3:

Enter **Today's Lesson** as the title.

Enter **Lesson 1: Before you go** as the first bullet under Today's Lesson.

Enter **Preparing your resume, learn about employer, practice** as the first bullet under Lesson 1: Before you go.



Enter **Lesson 2: During the interview** as the second bullet under Today's Lesson.

Enter **Asking and answering questions** as the first bullet under Lesson 2: During the interview.

Enter **Lesson 3: Following up** as the third bullet under Today's Lesson.

Enter **Write thank-you note** as the first bullet under Lesson 3: Following up.

e. On slide 4:

Enter **Lesson 1: Before you go** as the title.

Enter **Preparing a clean, error-free resume** as bullet 1.

Enter **Research selected employers** as bullet 2.

Enter **Practice, practice, practice** as bullet 3.

Delete the tip at the bottom of the slide.

f. Delete slides 5 and 6.

g. On slide 5:

Enter **Lesson 2: During the interview** as the title.

Enter **Listen carefully** as bullet 1.

Enter **Answer questions directly and precisely** as bullet 2.

Enter **Ask questions about job responsibilities** as bullet 3.

Delete the tip at the bottom of the slide.

h. Delete slides 6 and 7.

i. On slide 6:

Enter **Lesson 3: Following up** as the title.

Enter **Write a thank-you note within 24 hours** as bullet 1.

Enter **State your interest in the job** as bullet 2.

Enter as bullet 3 **Briefly summarize your credentials**.

Delete the tip at the bottom of the slide.

j. Delete slides 7 and 8.

k. On slide 7:

Enter **Summary** as the title.

Enter **Be prepared** as the first bullet under Summary.

Enter **Interview effectively** as the second bullet under Summary.

Enter **Follow up** as the third bullet under Summary.

Delete any unused placeholders.

l. Delete slide 8.

m. Save the presentation as Interviewing Basics.

n. Run the slide show.

o. Print the slides as handouts (four per page in landscape orientation).

on your own

Internet Policy Presentation ★

1. You are working in the information technology department at International Sales Incorporated. Your manager has asked you to give a presentation on the corporation's Internet policy to the new hire orientation class. Create your presentation with PowerPoint, using the information in the Word file pp01_Internet Policy as a resource. Use a template of your choice. When you are done, run the spelling checker, then save your presentation as Internet Policy and print it.

Telephone Training Course ★★

2. You are a trainer with Super Software, Inc. You received a memo from your manager alerting you that many of the support personnel are not using proper telephone protocol or obtaining the proper information from the customers who call in. Your manager has asked you to conduct a training class that covers these topics. Using the Word document pp01_Memo data file as a resource, prepare the slides for your class. When you are done, save the presentation as Phone Etiquette and print the handouts.

Car Maintenance Presentation ★★

3. You work as a field representative for a large auto parts manufacturer. A local organization has asked you to make a presentation on basic car maintenance. Using the Web or other resources, locate content and graphics for your presentation. Create the presentation using PowerPoint and save the presentation as Car Maintenance. Print the handouts.

Classroom Policies Presentation ★★★

4. You work in a local high school and have been asked to prepare a presentation on the rules and policies of your school. Using the Web or other resources, gather information and graphics about school policies. Using a template of your choice, create the presentation, save it as School Rules, and print the handouts.

Careers with Animals ★★★

5. You have been volunteering at the Animal Rescue Foundation. The director has asked you to prepare a presentation on careers with animals to present to local schools in hopes that some students will be inspired to volunteer at the foundation. Using the Word document pp01_Animal Careers data file as a resource, create the presentation. Add photos or clip art where appropriate. When you are done, save the presentation as Careers with Animals and print the handouts.

Modifying and Refining a Presentation

LAB 2

Objectives

After completing this lab, you will know how to:

1. Find and replace text.
2. Create and enhance a table.
3. Duplicate and hide slides.
4. Modify graphic objects and create a text box.
5. Create and enhance Shapes.
6. Create and animate SmartArt graphics.
7. Change the theme.
8. Modify slide masters.
9. Add and hide slide footers.
10. Add animation, sound, and transitions.
11. Control and annotate a slide show.
12. Add speaker notes.
13. Document a file.
14. Customize print settings.

Case Study

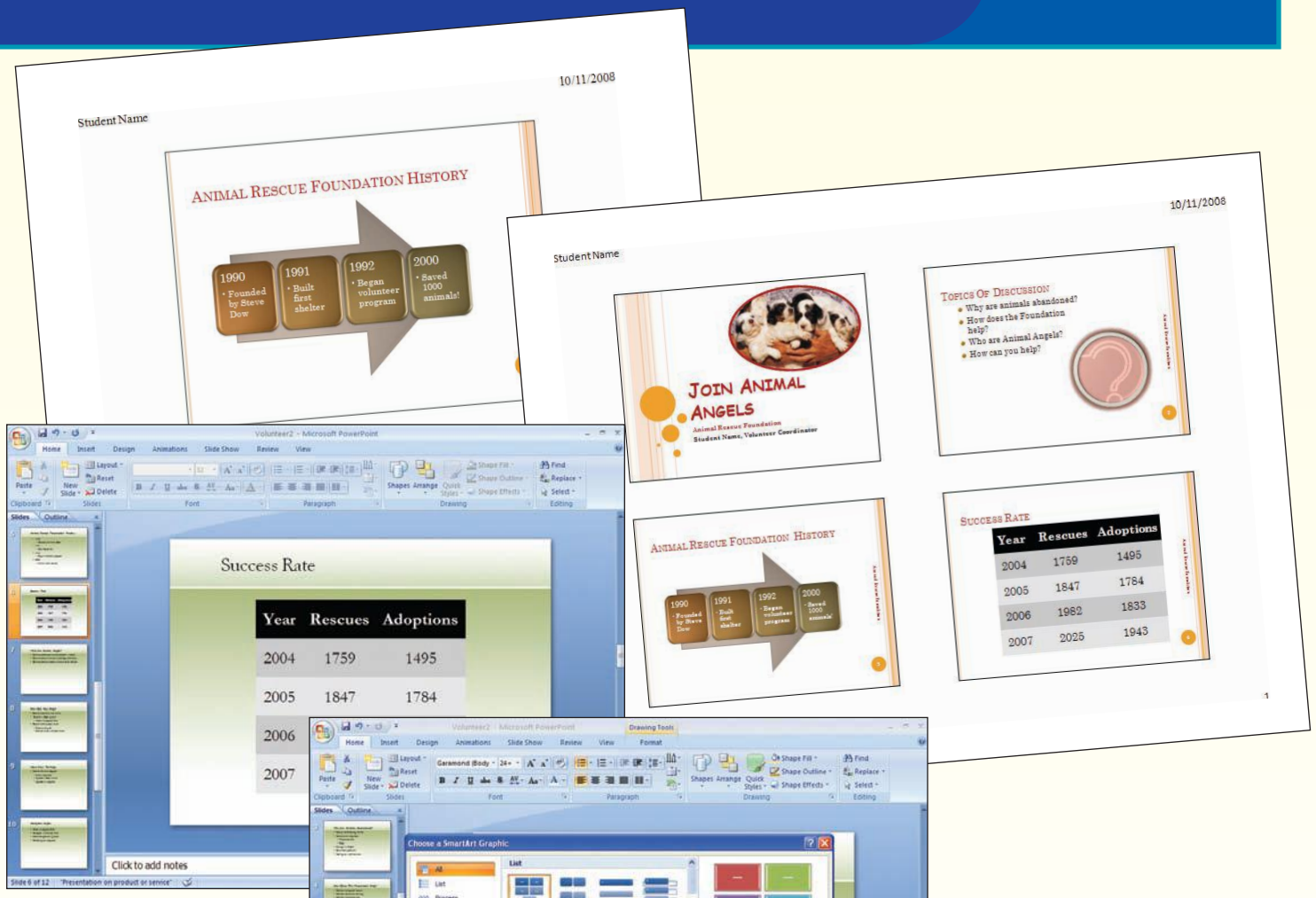
Animal Rescue Foundation

The Animal Rescue Foundation director was very impressed with your first draft of the presentation to recruit volunteers, and asked to see the presentation onscreen. While viewing it together, you explained that you plan to make many more changes to improve the appearance of the presentation. For example, you plan to use a different color theme and to include more art and other graphic features to enhance the appearance of the slides. You also explained that you will add more action to the slides using the special effects included with PowerPoint to keep the audience's attention.

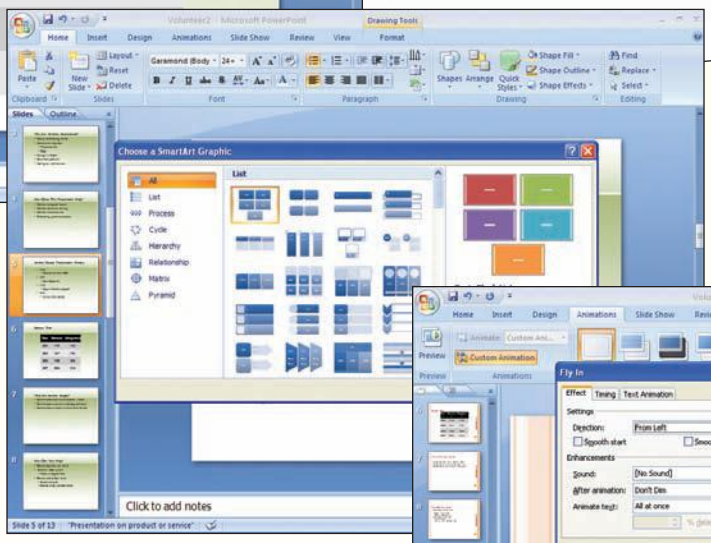


The director suggested that you include more information on ways that volunteers can help. Additionally, because the organization has such an excellent adoption rate, the director wants you to include a table to illustrate the success of the adoption program.

Office PowerPoint 2007 gives you the design and production capabilities to create a first-class onscreen presentation. These features include artist-designed layouts and color themes that give your presentation a professional appearance. In addition, you can add your own personal touches by modifying text attributes, incorporating art or graphics, and including animation to add impact, interest, and excitement to your presentation.



Displaying information in tables makes data easy to understand.



Graphics add interest and dynamically display information.



Animations and transitions add action to a slide show.

Concept Preview

The following concepts will be introduced in this lab:

1. **Find and Replace** To make editing easier, you can use the Find and Replace feature to find text in a presentation and replace it with other text.
2. **Table** A table is used to organize information into an easy-to-read format of horizontal rows and vertical columns.
3. **Alignment** Alignment controls the position of text entries within a space.
4. **Document Theme** A document theme is a predefined set of formatting choices that can be applied to an entire document in one simple step.
5. **Master** A master is a special slide or page that stores information about the formatting for all slides or pages in a presentation.
6. **Animations** Animations are special effects that add action to text and graphics so they move around on the screen during a slide show.

Replacing Text

After meeting with the Foundation director, you updated the content to include the additional information on ways that volunteers can help the Animal Rescue Foundation.

1. **Start Office PowerPoint 2007.**
- **Open the file** pp02_Volunteer2.
- **If necessary, switch to Normal view.**
- **Replace Student Name in slide 1 with your name.**
- **Scroll the Slides pane to view the content of the revised presentation.**

Your screen should be similar to Figure 2.1

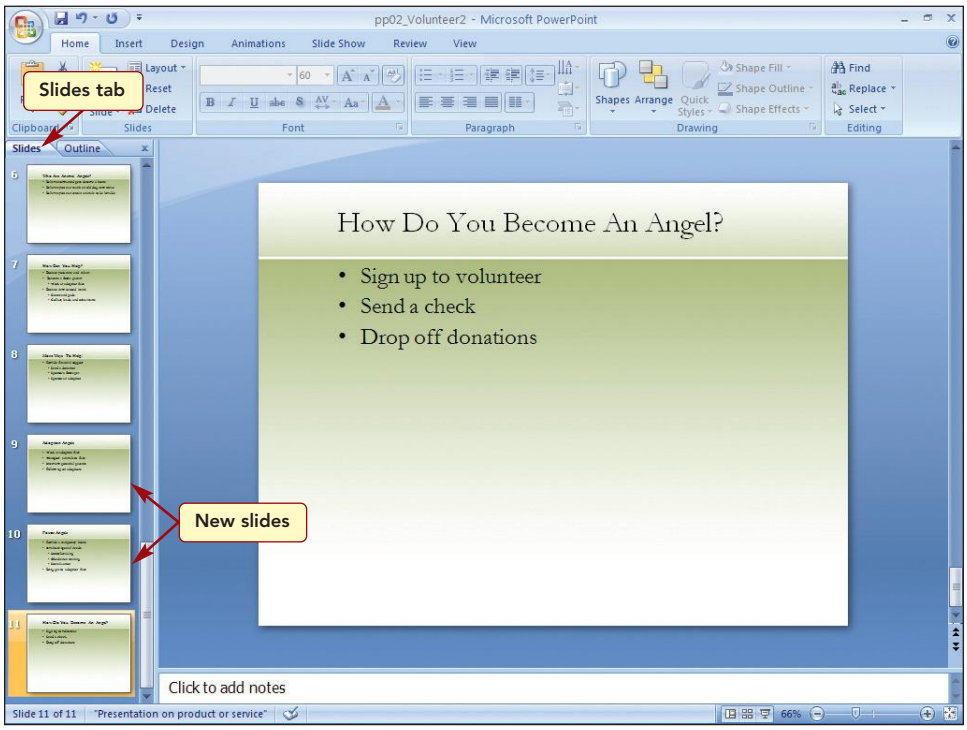


Figure 2.1

You added two new slides, 9 and 10, with more information about the Animal Angels volunteer organization, making the total number of slides

in the presentation 11. As you reread the content of the presentation, you decide to edit the text by replacing the word "pet" in many locations with the word "animal."

Concept 1

Find and Replace

1 To make editing easier, you can use the **Find and Replace** feature to find text in a presentation and replace it with other text. The Find feature will locate and identify any text string you specify in the presentation by highlighting it. When used along with the Replace feature, not only will the string be identified, but it will be replaced with the replacement text you specify if you choose. For example, suppose you created a lengthy document describing the type of clothing and equipment needed to set up a world-class home gym, and then you decided to change "sneakers" to "athletic shoes." Instead of deleting every occurrence of "sneakers" and typing "athletic shoes," you can use the Find and Replace feature to perform the task automatically.

The Replace feature also can be used to replace a specified font in a presentation with another. When using this feature, however, all text throughout the presentation that is in the specified font to find is automatically changed to the selected replacement font.

The Find and Replace feature is fast and accurate; however, use care when replacing so that you do not replace unintended matches.

Using Find and Replace

You want to replace selected occurrences of the word "pet" with "animal" throughout the presentation. Because it is easier to read the text in the Slide pane, you will make that pane active before starting. Whichever pane is active at the time you begin using Find and Replace is the pane in which the located text will be highlighted.

1 **Select slide 1 in the Slides tab and click in the Slide pane to make it active.**

If necessary, open the Home tab.

Click Replace **Replace in the Editing group.**

Another Method

The keyboard shortcut to replace text is Ctrl + H.

Your screen should be similar to Figure 2.2

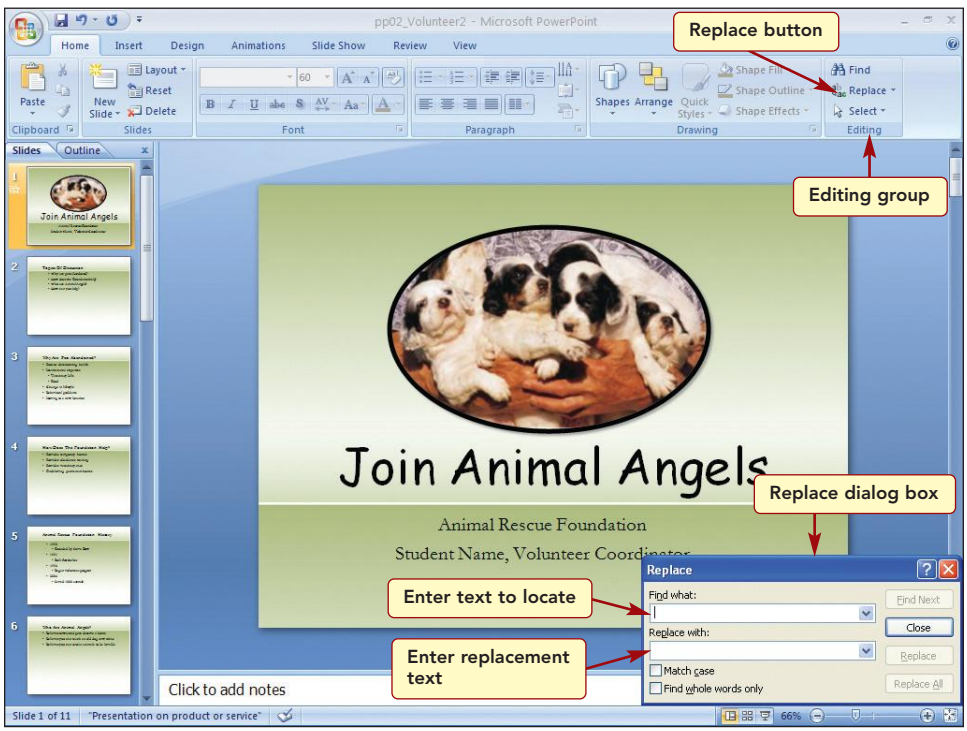


Figure 2.2

In the Replace dialog box, you first enter the text you want to locate in the Find what: text box. The two options described in the following table allow you to refine the procedure that is used to conduct the search.

Option	Effect on Text
Match Case	Distinguishes between uppercase and lowercase characters. When selected, finds only those instances in which the capitalization matches the text you typed in the Find what: box.
Find Whole Words Only	Distinguishes between whole and partial words. When selected, locates matches that are whole words and not part of a larger word. For example, finds "cat" only and not "catastrophe" too.

Then, the text you want to replace the located text is entered in the Replace with: text box. The replacement text must be entered exactly as you want it to appear in your presentation.

You want to find all occurrences of the complete word "pet" and replace them with the word "animal." You will not use either option because you want to locate all words regardless of case and because you want to find "pet" as well as "pets" in the presentation.

2 **Type pet in the Find what: text box.**

Additional Information
After entering the text to find, do not press ↵Enter or this will choose Find Next and the search will begin.

- **Press Tab ⇆ or click in the Replace with: text box.**
- **Type animal in the Replace with: text box.**
- **Click Find Next.**
- **If necessary, move the dialog box so you can see the located text.**

Your screen should be similar to Figure 2.3

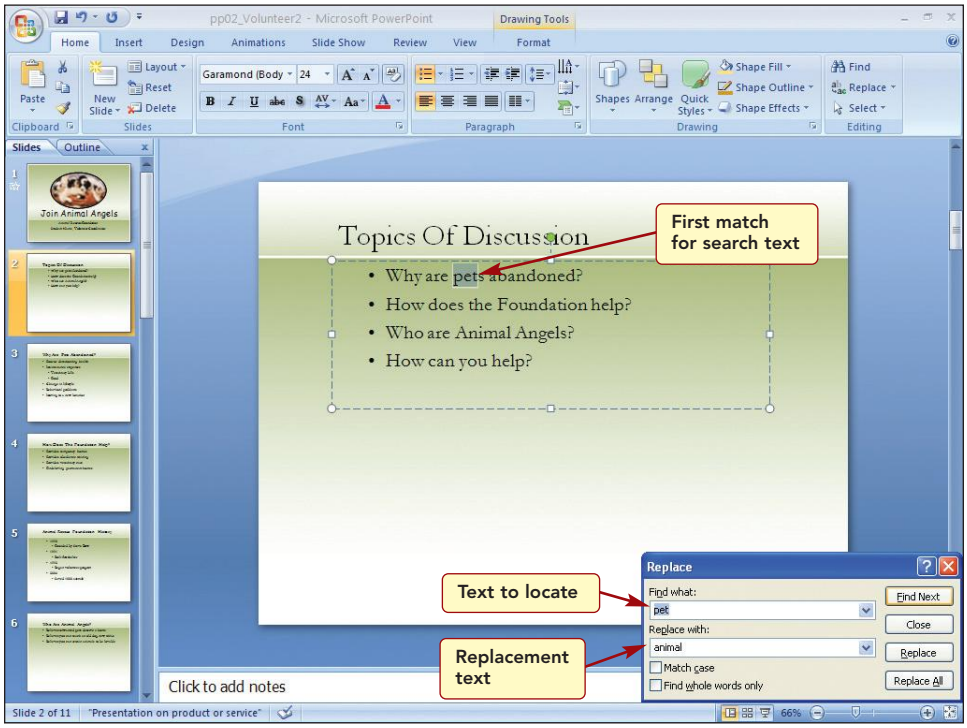


Figure 2.3

Immediately, the first occurrence of text in the presentation that matches the entry in the Find what: text box is located and highlighted in the Slide pane. You will replace the located word in slide 2 with the replacement text.

3 Click Replace.

Your screen should be similar to Figure 2.4

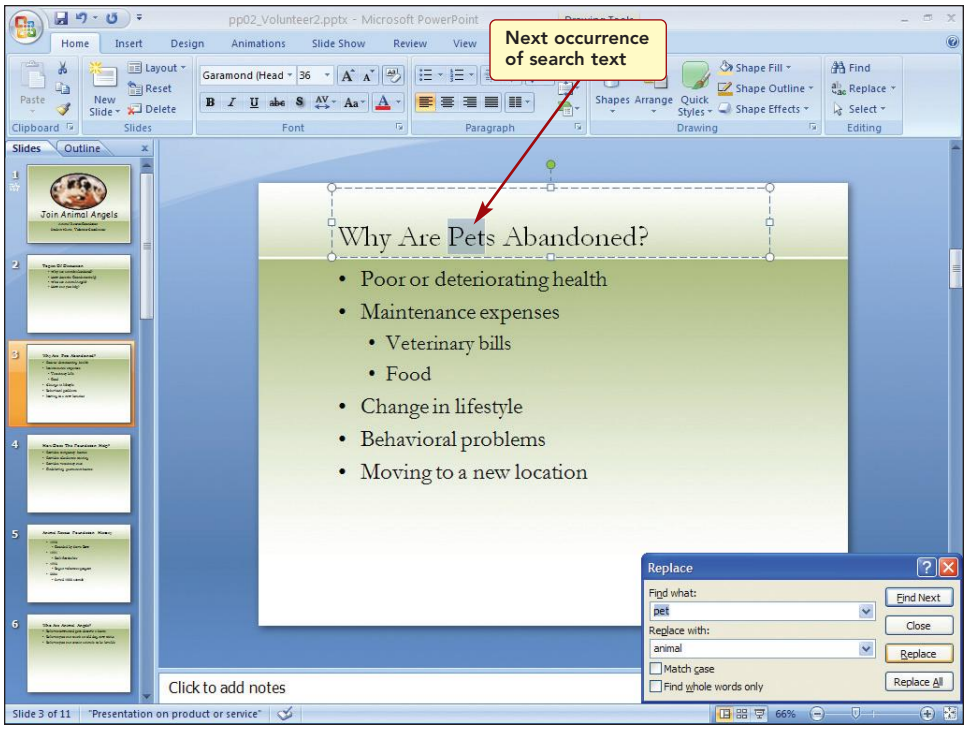


Figure 2.4

The located text is replaced with the replacement text and the next occurrence of text in the Find what: box is located. You could continue finding and replacing each occurrence. You will, however, replace all the remaining occurrences at one time. As you do, the replacement is entered in lowercase even when it replaces a word that begins with an uppercase character. You will correct this when you finish using replacing.

4 Click Replace All to continue.

- Click OK in response to the finished searching dialog box.
- Click Close to close the Replace dialog box.
- Edit the word "animals" to "Animals" in slide 3.
- Save the presentation as Volunteer2.

Your screen should be similar to Figure 2.5

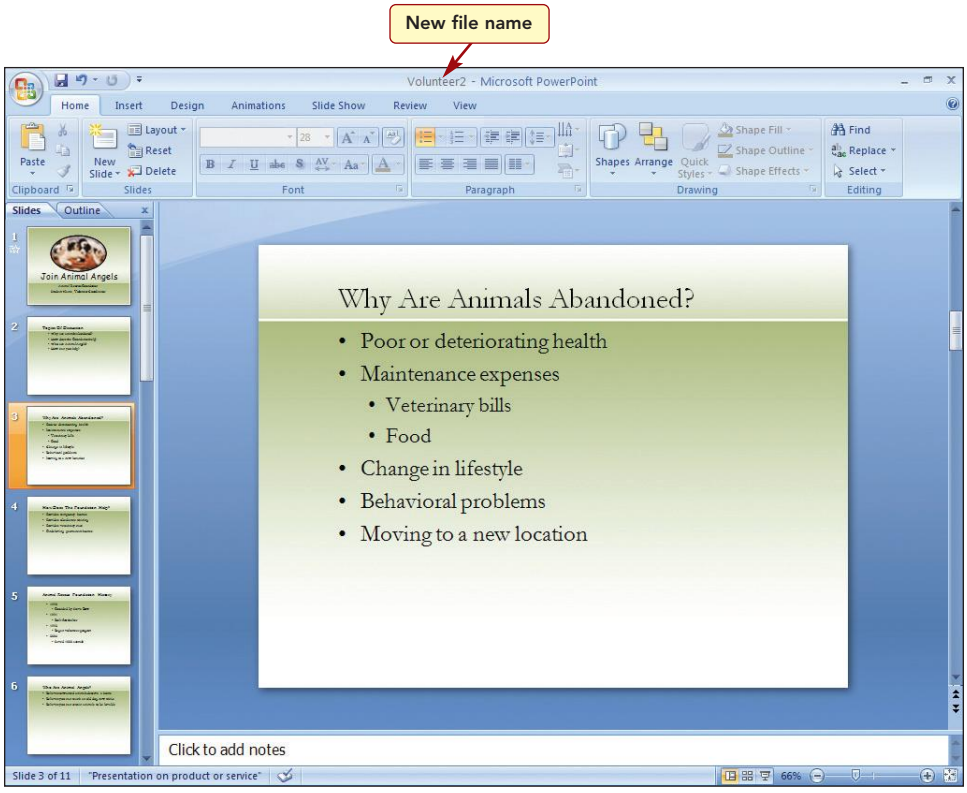


Figure 2.5

If you plan to change all occurrences, it is much faster to use the Replace All. Exercise care when using Replace All, however, because the search text you specify might be part of another word and you may accidentally replace text you want to keep.

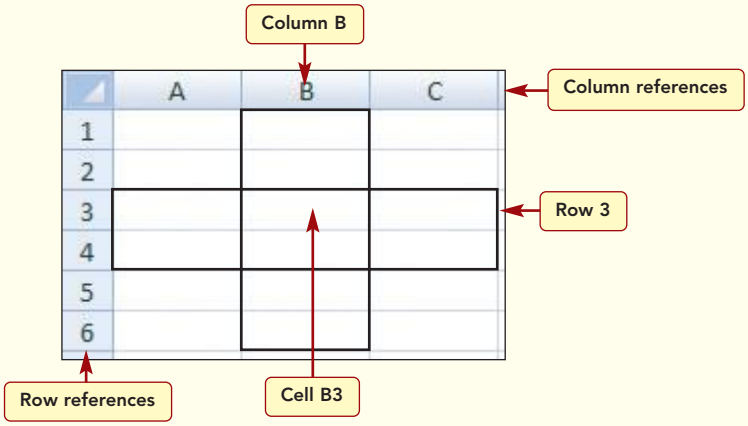
Creating a Simple Table

During your discussion with the director, he suggested that you add a slide containing data showing the success of the adoption program. The information in this slide will be presented using a table layout.

Concept 2

Table

2 A **table** is used to organize information into an easy-to-read format of horizontal rows and vertical columns. The intersection of a row and column creates a **cell** in which you can enter data or other information. Cells in a table are identified by a letter and number, called a **table reference**. Columns are identified from left to right beginning with the letter A, and rows are numbered from top to bottom beginning with the number 1. The table reference of the top-leftmost cell is A1 because it is in the first column (A) and first row (1) of the table. The third cell in column 2 is cell B3. The fourth cell in column 3 is C4.



Tables are a very effective method for presenting information. The table layout organizes the information for readers and greatly reduces the number of words they have to read to interpret the data. Use tables whenever you can to make the information in your presentation easier to read.

The table you will create will display columns for the year, and for the number of rescues and adoptions. The rows will display the data for the past four years. Your completed table will be similar to the one shown here.

Year	Rescues	Adoptions
2004	1759	1495
2005	1847	1784
2006	1982	1833
2007	2025	1943

Creating a Table Slide

To include this information in the presentation, you will insert a new slide after slide 5. Because this slide will contain a table showing the adoption data, you want to use the Title and Content layout.

1. **Display slide 5.**
2. **Open the New Slide drop-down menu from the Slides group on the Home tab.**
3. **Choose the Title and Content layout.**

Additional Information

PowerPoint remembers the last slide layout used while working in this presentation or during the current session and inserts it when you click New Slide.

Your screen should be similar to Figure 2.6

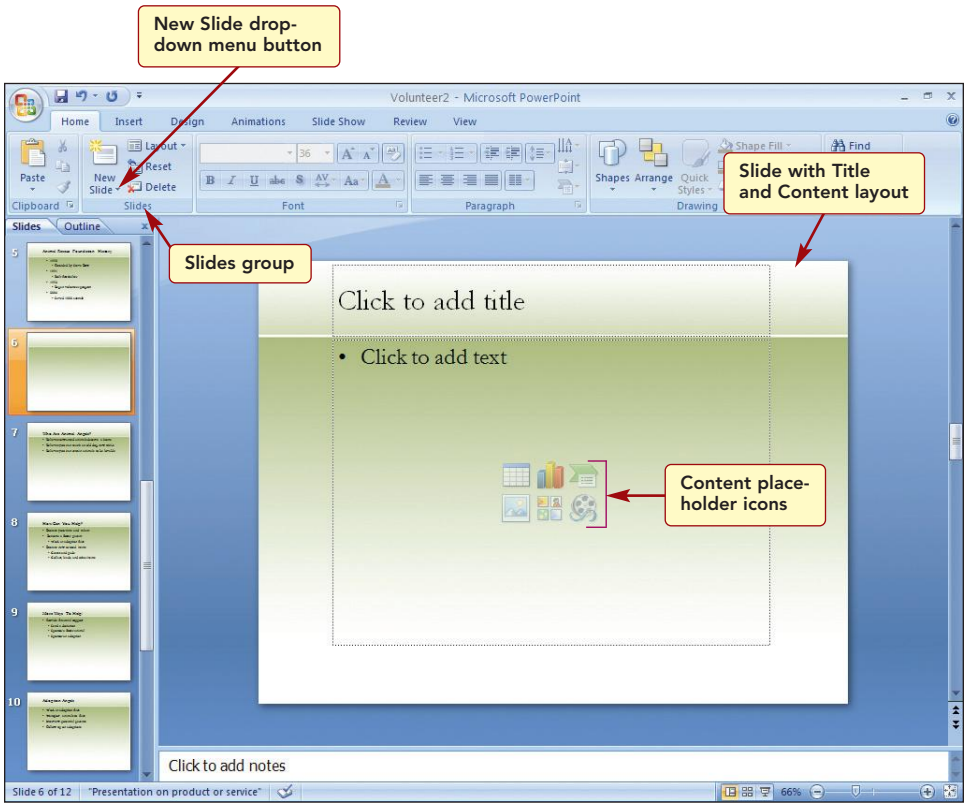
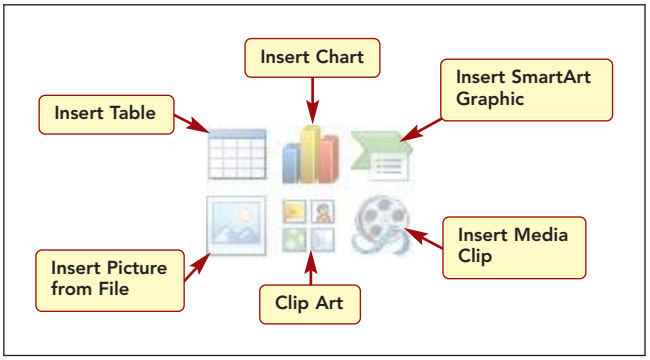


Figure 2.6

Inside the content placeholder are six icons shown below each representing the different types of content that can be inserted. Clicking an icon opens the appropriate feature to add the specified type of content.



Inserting the Table

First, you will add a slide title and then you will create the table to display the number of adoptions and rescues.

1. **Enter the title Success Rate in the title placeholder.**
2. **Click the Insert Table icon in the center of the slide.**

Your screen should be similar to Figure 2.7

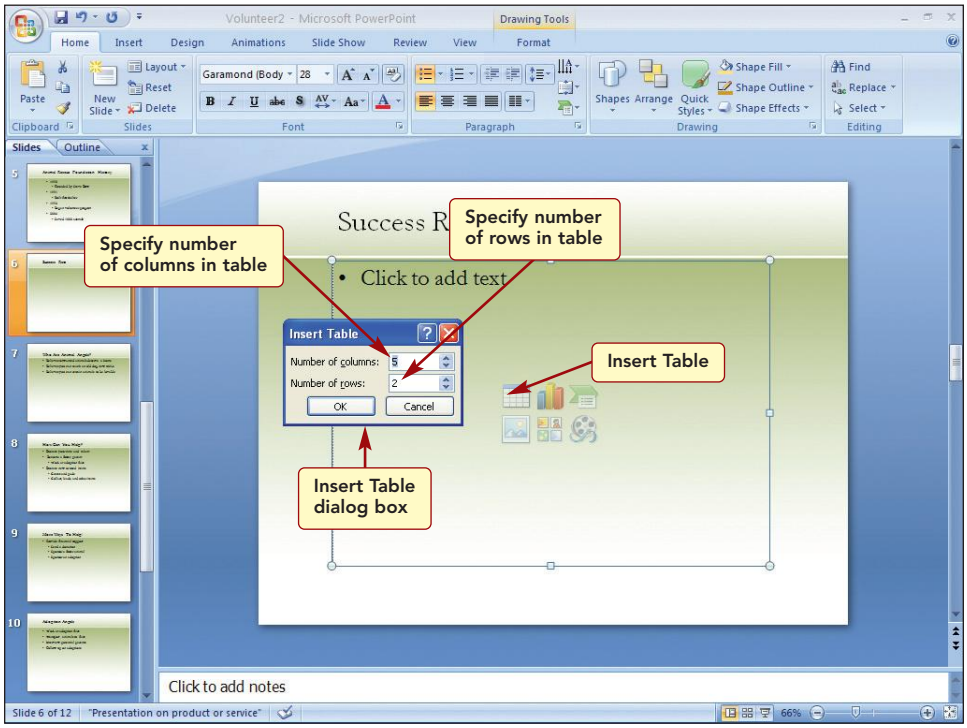


Figure 2.7

In the Insert Table dialog box, you specify the number of rows and columns for the table.

2. **Specify 3 columns and 5 rows.**

Having Trouble?
You can type in the number or use the scroll buttons to increase or decrease the number.

3. **Click OK.**

Your screen should be similar to Figure 2.8

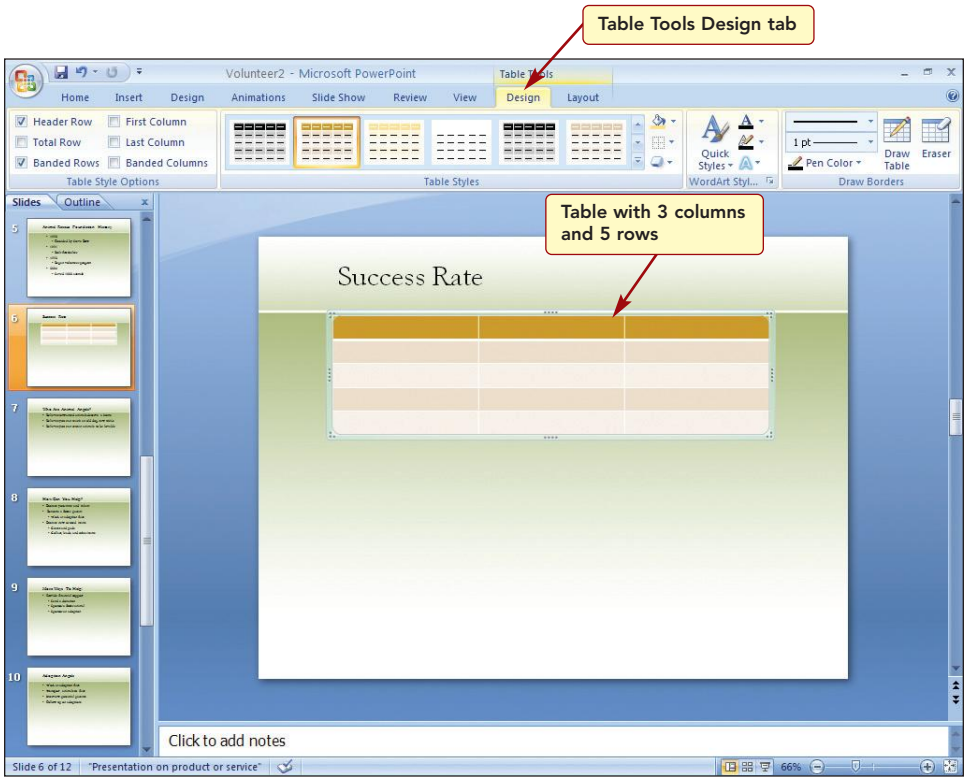


Figure 2.8

A basic table consisting of three columns and five rows is displayed as a selected object. In addition, the Table Tools Design tab opens in anticipation that you will want to modify the design of the table.

Entering Data in a Table

Now, you can enter the information into the table. The insertion point appears in the top-left corner cell, cell A1, ready for you to enter text. To move in a table, click on the cell or use Tab to move to the next cell to the right and Shift + Tab to move to the cell to the left. If you are in the last cell of a row, pressing Tab takes you to the first cell of the next row. You also can use the ↑ and ↓ directional keys to move up or down a row. When you enter a large amount of text in a table, using Tab to move rather than the mouse is easier because your hands are already on the keyboard.

1. **Type Year.**
2. **Press Tab or click on the next cell to the right.**

Having Trouble?

Do not press Enter to move to the next cell as this adds a new line to the current cell. If this happens, press Backspace to remove it.

Your screen should be similar to Figure 2.9

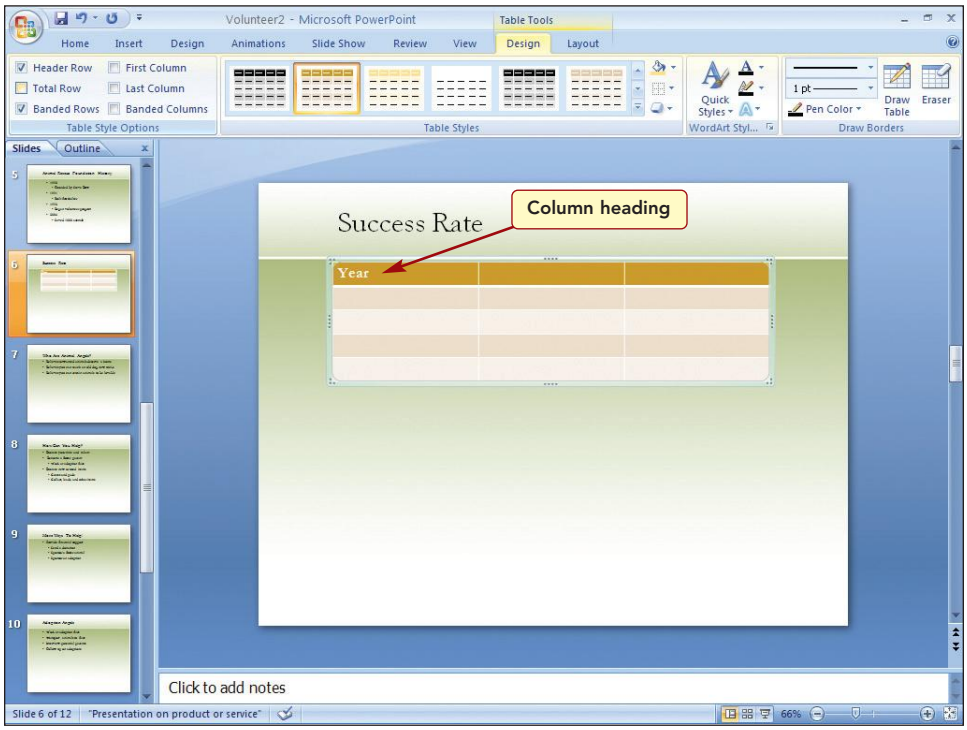


Figure 2.9

Next, you will complete the information for the table by entering the data shown below.

	Col. A	Col. B	Col. C
Row 1	Year	Rescues	Adoptions
Row 2	2004	1759	1495
Row 3	2005	1847	1784
Row 4	2006	1982	1833
Row 5	2007	2025	1943

2 Add the remaining information shown above to the table.

Your screen should be similar to Figure 2.10

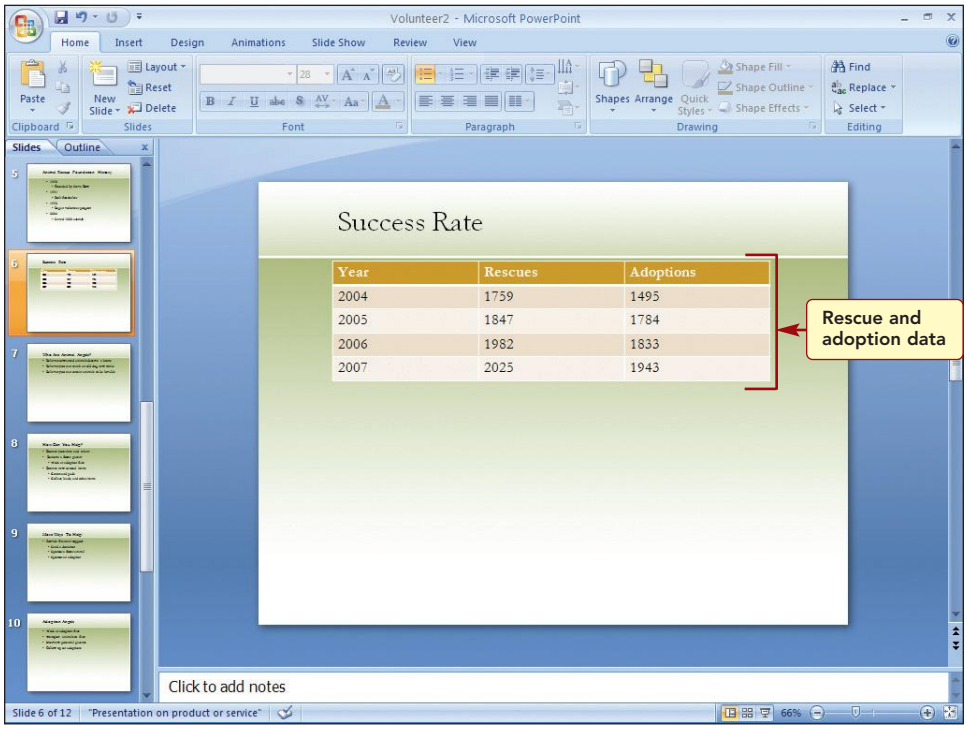


Figure 2.10

You are happy with the table but would like to increase the font size of the text to make it more readable on screen. The size of the font in a table can be changed like any other text on a slide. However, selecting text in a table is slightly different. The following table describes how to select different areas of a table.

Area to Select	Procedure
Cell	Drag across the contents of the cell.
Row	Drag across the row or click in front of the row when the mouse pointer is a ➡.
Column	Drag down the column or click in front of the row when the mouse pointer is a ⬇.
Multiple cells, rows, or columns	Drag through the cells, rows, or columns when the mouse pointer is a ➡ or I.
	Or select the first cell, row, or column, and hold down Shift while clicking on another cell, row, or column.
Contents of next cell	Press Tab.
Contents of previous cell	Press Shift + Tab.
Entire table	Drag through all the cells or click anywhere inside the table and press Ctrl + A.

3 **Select all the text in the table.**

Open the Home tab.

Click A Increase Font Size in the Font group four times.

Additional Information

Clicking A increases the font size by units.

Your screen should be similar to Figure 2.11

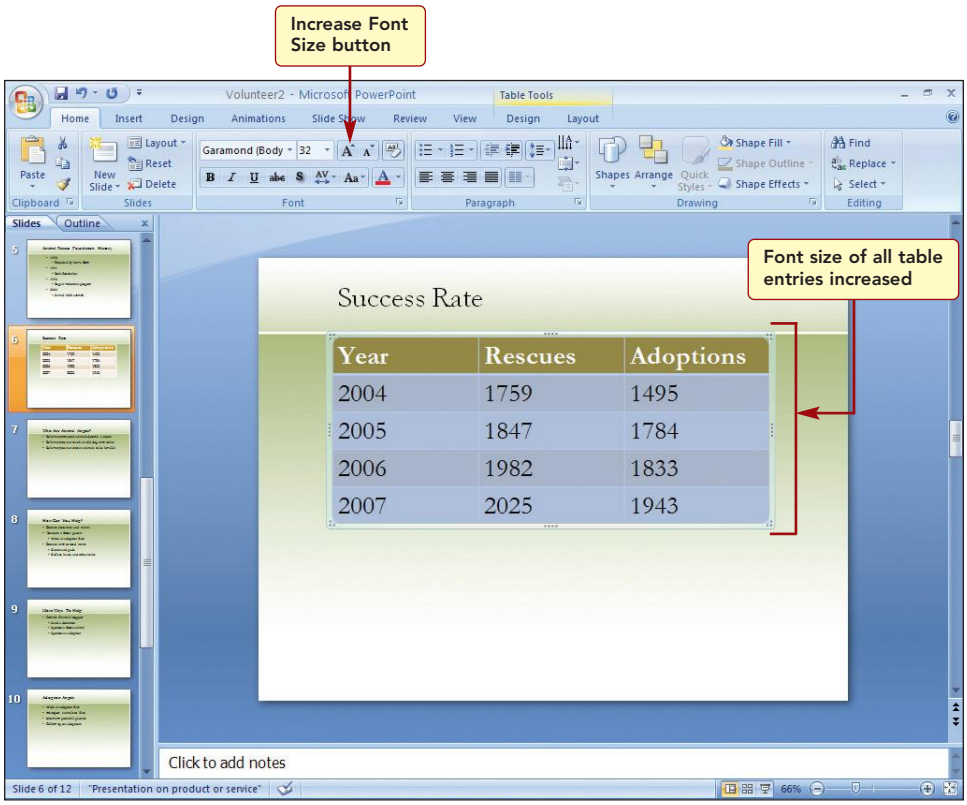


Figure 2.11

The font size has quickly been increased by four units, and at 32 points the text is much easier to read.

Sizing the Table and Columns

You now need to increase the overall size of the table and then adjust the size of the columns to fit their contents.

1 **Drag the lower-right-corner sizing handle down and outward to increase the table size as in Figure 2.12.**

Additional Information
The mouse pointer will appear in ↘ when you can drag the corner sizing handle.

Your screen should be similar to Figure 2.12

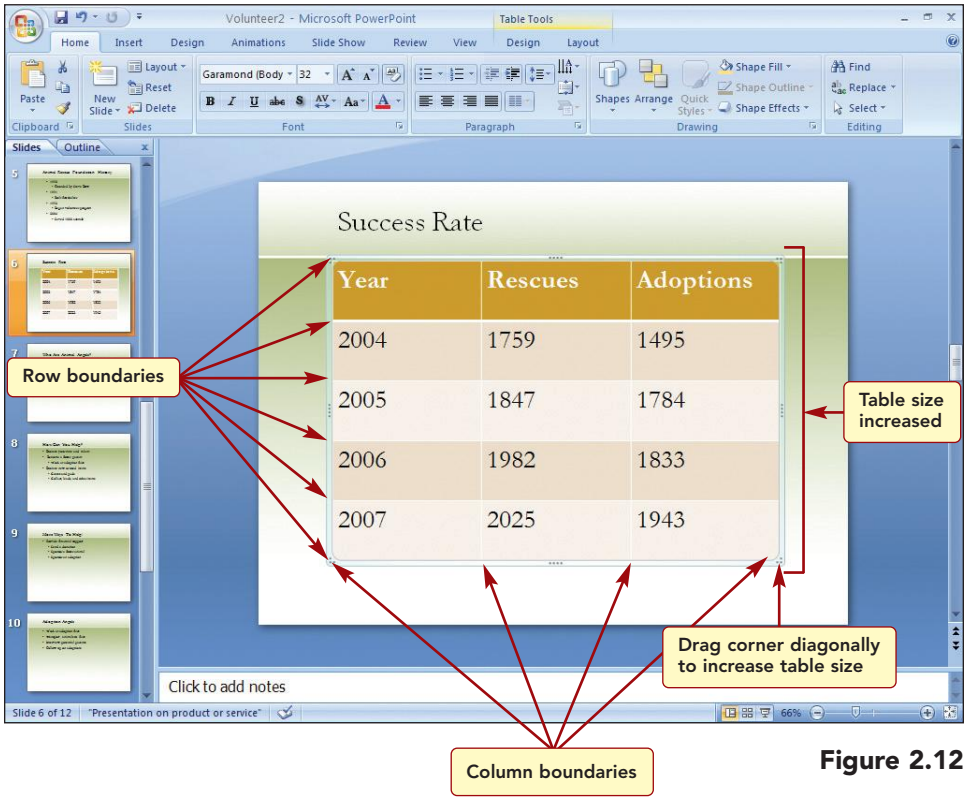


Figure 2.12

Additional Information
You also can double-click on the boundary line to automatically size the width to the largest cell entry.

To adjust the individual column width or row height, you drag the row and column boundaries. The mouse pointer appears as a ↔ when you can size the column and ↕ when you can size the row. The mouse pointer appears a ✥ when you can move the entire table.

2. **Drag the right column boundary line of the year column to the left to reduce the column width as in Figure 2.13.**

- **Drag the boundary lines of the other two columns to the left to reduce the column widths as in Figure 2.13.**
- **Drag the entire table to center it in the slide as in Figure 2.13.**

Your screen should be similar to Figure 2.13

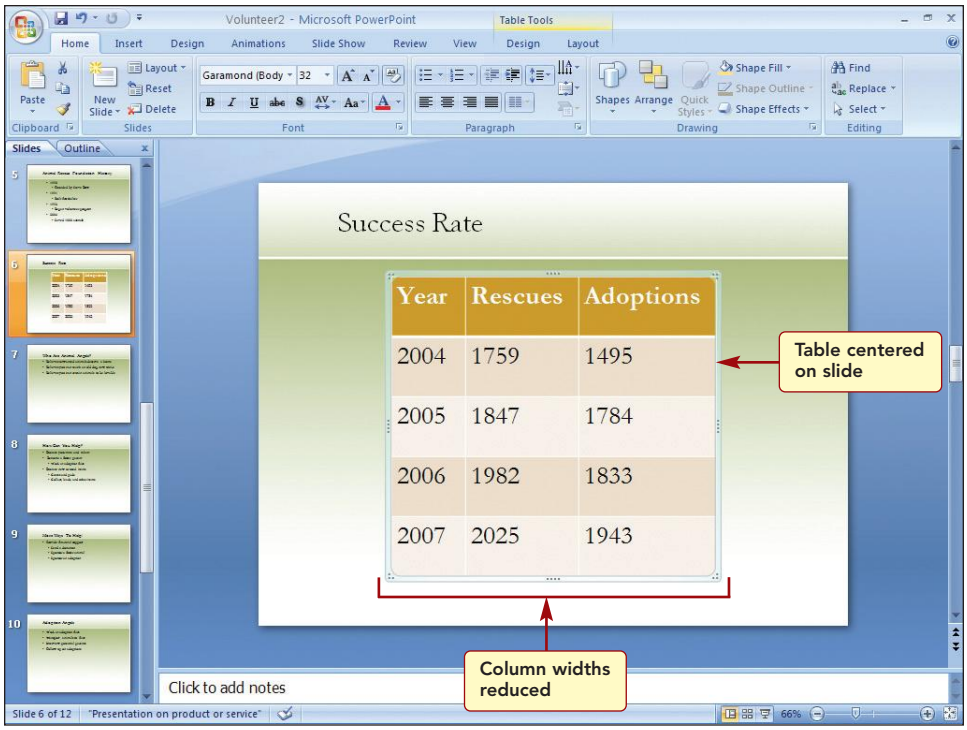


Figure 2.13

Now the columns are more appropriately sized to the data they display.

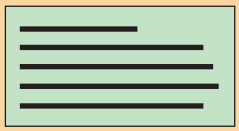
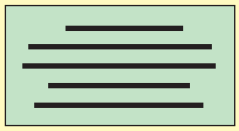
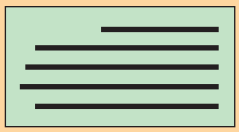
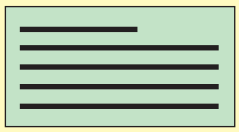
Aligning Text in Cells

The next change you want to make is to center the text and data in the cells. To do this, you can change the alignment of the text entries.

Concept 3

Alignment

3 **Alignment** controls the position of text entries within a space. You can change the horizontal placement of an entry in a placeholder or a table cell by using one of the four horizontal alignment settings: left, center, right, and justified. You also can align text vertically in a table cell with the top, middle, or bottom of the cell space.

Horizontal Alignment	Effect on Text	Vertical Alignment	Effect on Text
Left 	Aligns text against the left edge of the placeholder or cell, leaving the right edge of text, which wraps to another line, ragged.	Top 	Aligns text at the top of the cell space.
Center 	Centers each line of text between the left and right edges of the placeholder or cell.	Middle 	Aligns text in the middle of the cell space.
Right 	Aligns text against the right edge of the placeholder or cell, leaving the left edge of multiple lines ragged.	Bottom 	Aligns text at the bottom of the cell space.
Justified 	Aligns text evenly with both the right and left edges of the placeholder or cell.		

The commands to change horizontal alignment are on the Home tab in the Paragraph group. However, using the shortcuts shown below or the Mini Toolbar is often much quicker.

Alignment	Keyboard Shortcut
Left	Ctrl + L
Center	Ctrl + E
Right	Ctrl + R
Justified	Ctrl + J

The data in the table is not centered within the cells. You want to center the cell entries both horizontally and vertically in their cell spaces.

1. **Select the entire contents of the table.**
2. **Right-click on the selection and click Center in the Mini Toolbar.**

Another Method

You also could click Center in the Paragraph group of the Home tab.

3. **Open the Align Text drop-down menu in the Paragraph group and choose Middle.**

Your screen should be similar to Figure 2.14

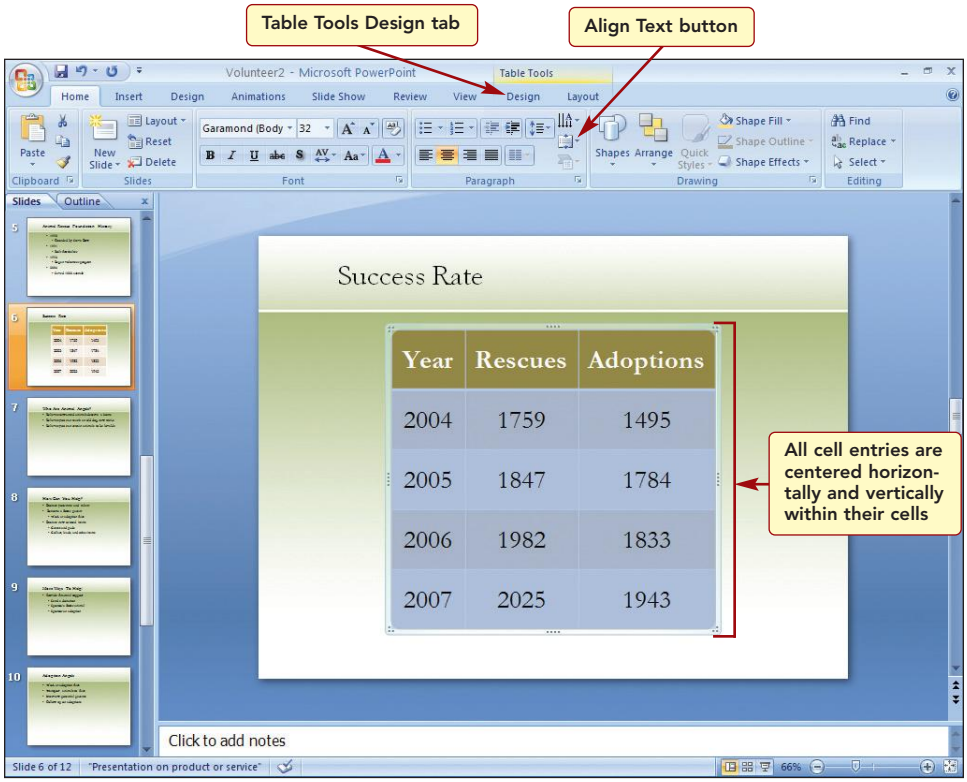


Figure 2.14

Changing the Table Style

Next, you will add a color and other formatting changes to the table. To quickly make these enhancements, you will apply a table style. Like picture styles, **table styles** are combinations of shading colors, borders, and visual effects such as shadows and reflections that can be applied in one simple step. You also can create your own table style effects by selecting specific style elements such as borders and shadows individually using the Shading, Borders, and Effects commands from the Table Styles group on the Table Tool Design tab.

1. **Open the Table Tools Design tab.**
2. **Click More in the table styles group to display the Table Styles gallery.**
3. **Select several table styles to see how they look in Live Preview.**
4. **Choose Dark Style 2 from the gallery.**

Having Trouble?
Scroll the gallery to see the Dark Styles at the bottom of the gallery.

5. **Click outside the table to see the new format.**
6. **Save the file.**

Your screen should be similar to Figure 2.15

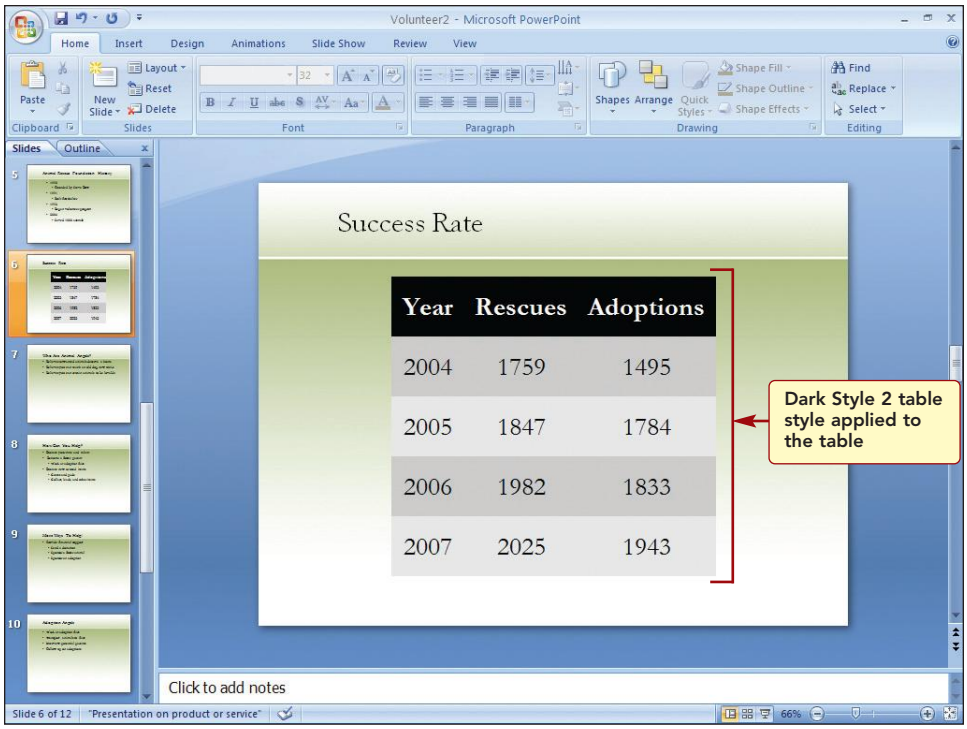


Figure 2.15

The style has been changed. New formatting has been applied to the table. The enhancements added to the table greatly improve its appearance. The table displays the information in an attractive and easy-to-read manner.

Modifying and Creating Graphic Objects

Now you are ready to enhance the presentation by adding several graphics. As you have seen, you can easily add clip art and photographs to slides. Many of the clip art graphics can be customized to your needs by changing colors and adding and deleting elements.

Changing the Slide Layout

First, you want to add a graphic to slide 2. Before adding the graphic, you will change the slide layout from the bulleted list style to a style that is designed to accommodate text as well as other types of content such as graphics.

1. **Display slide 2.**
2. **Click Layout in the Slides group of the Home tab.**
3. **Choose the Two Content layout.**

Your screen should be similar to Figure 2.16

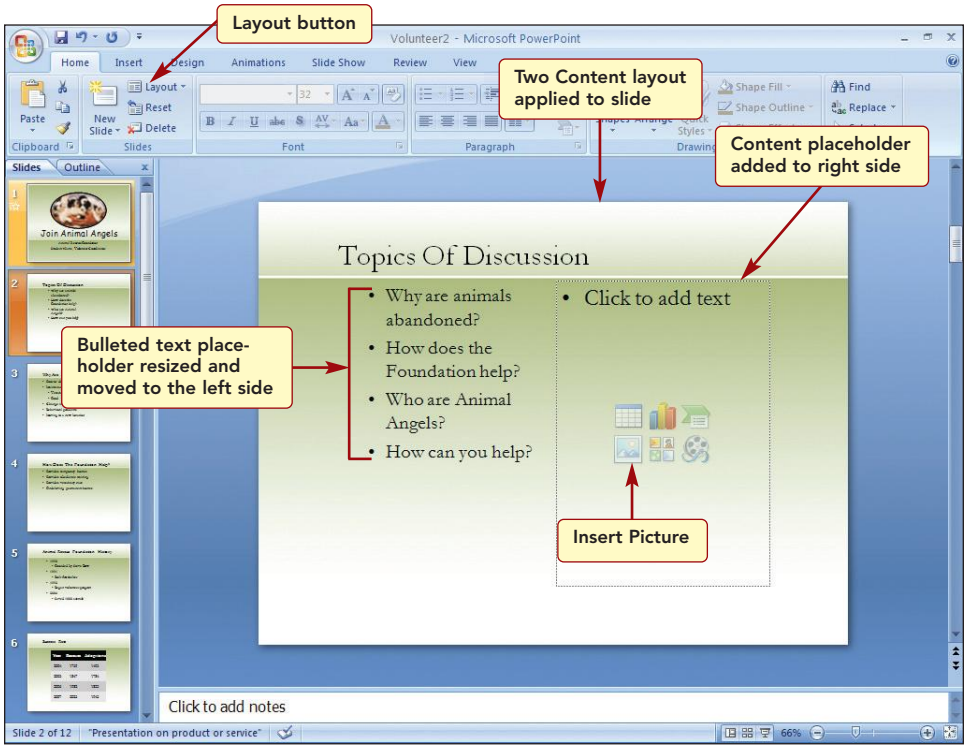


Figure 2.16

A content placeholder was added on the right side of the slide, and the bulleted text placeholder was resized and moved to the left side of the slide. You will add a clip art graphic of a question mark and then size the placeholder.

2. **Click Insert Picture in the content placeholder.**

Additional Information
A ScreenTip identifies the content placeholder as you point to it.

3. **If necessary, change the Look In location to the location containing your data files.**
4. **Locate and select the pp02_Question Mark clip art.**
5. **Click Insert.**
6. **Increase the size of the graphic and position it as in Figure 2.17.**

Your screen should be similar to Figure 2.17

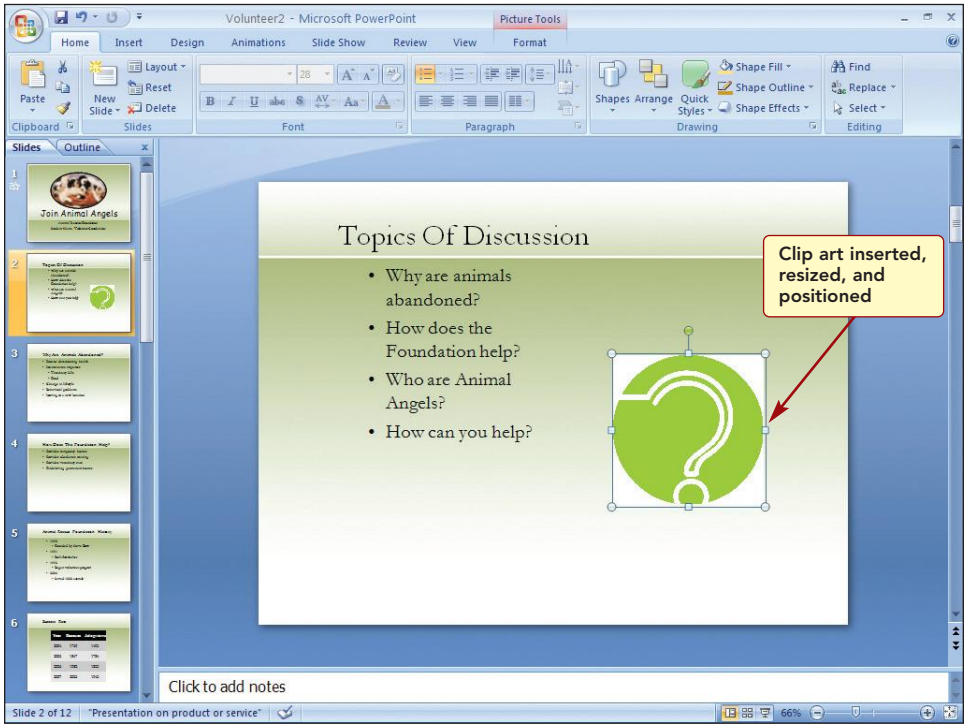


Figure 2.17

Enhancing a Picture

There are many effects you can use to improve the appearance of clip art. The first enhancement you would like to make is to change the color of the question mark so it coordinates with the slide design.

1. **With the clip art selected, click Recolor in the Adjust group of the Picture Tools Format tab.**
   - **Float your mouse pointer over the choices in the Recolor gallery to see the Live Previews.**
   - **Choose Accent color 2 Dark from the Dark Variations section.**

Your screen should be similar to Figure 2.18

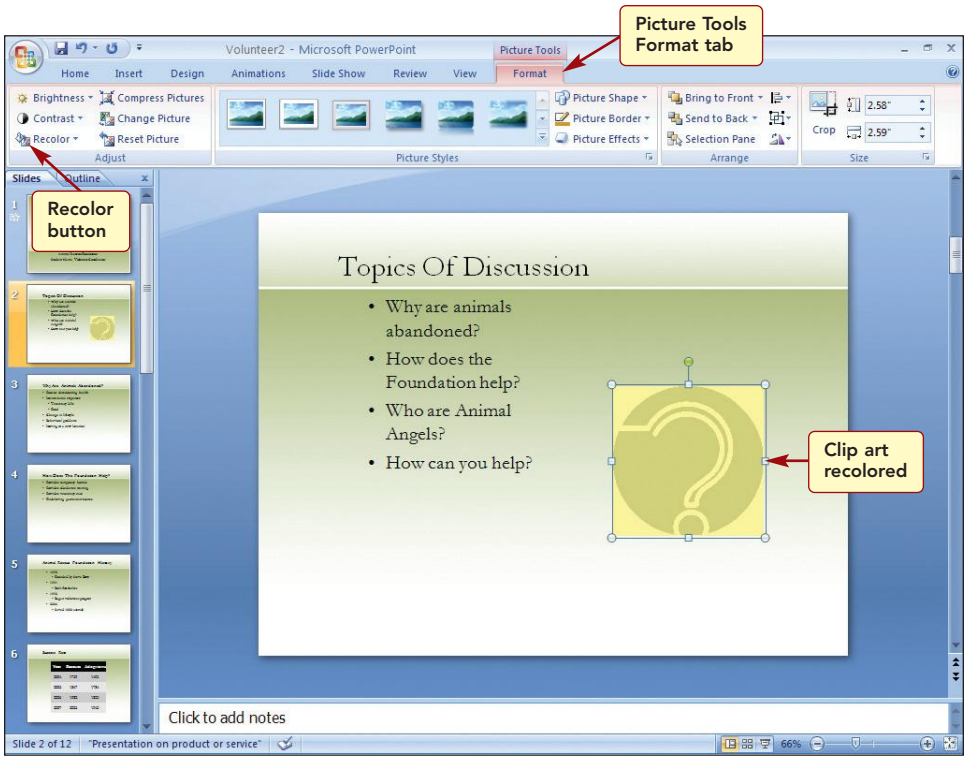


Figure 2.18

Next you will select a picture style.

2. **Click More in the Picture Styles group to display all the options in the Picture Styles gallery.**
   - **Choose the Metal Oval picture style.**

Your screen should be similar to Figure 2.19

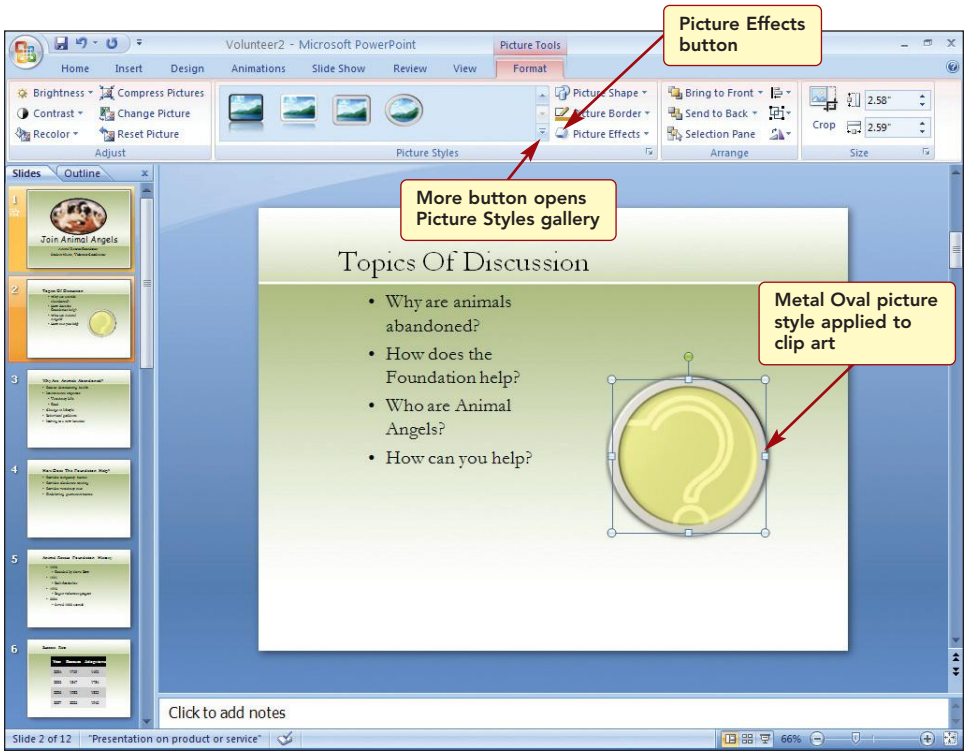


Figure 2.19

Although, you like how the picture style looks, you still feel the image needs some additional enhancements. You decide to look at adding a picture effect.

3. **Click** Picture Effects.

- **Select Glow.**
- **Float the mouse pointer over the choices to see the Live Previews.**
- **Choose Accent color 2, 18 pt glow.**
- **Increase the width of the bulleted item placeholder until the text appears on a single line.**
- **Move the placeholder to the left until the bullets align with the title as shown in Figure 2.20.**

Your screen should be similar to Figure 2.20

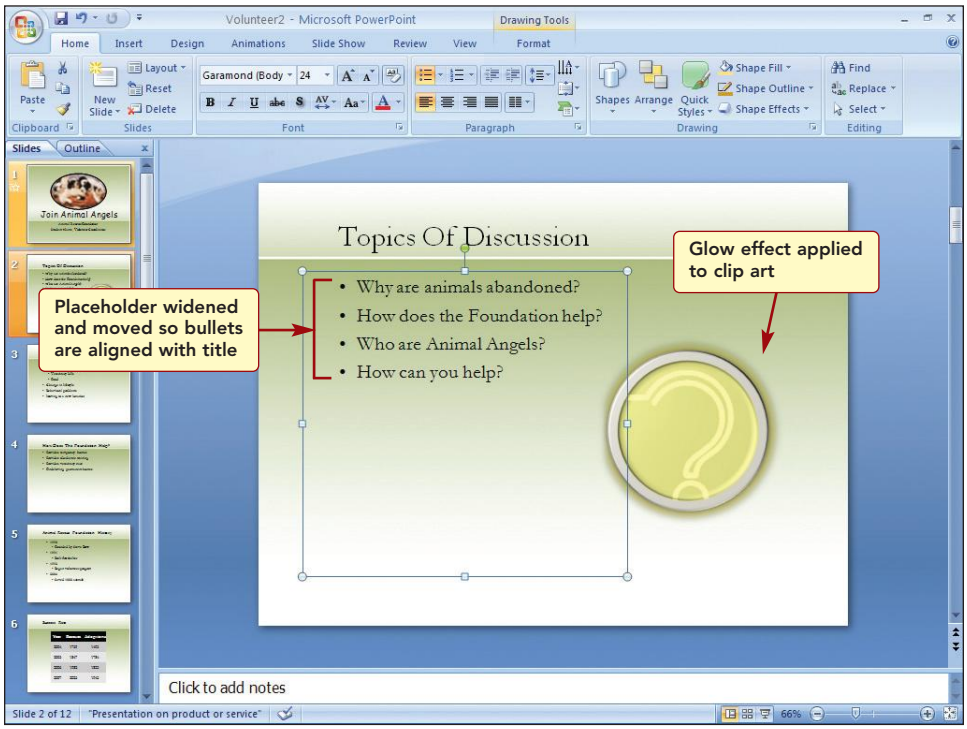


Figure 2.20

The glow adds just the right effect to the graphic and the bulleted list of items is now correctly aligned.

Duplicating a Slide

At the end of the presentation, you want to add a concluding slide. This slide needs to be powerful, because it is your last chance to convince your audience to join Animal Angels. To create the concluding slide, you will duplicate slide 1 and then create a graphic to complement the slide.

Duplicating a slide creates a copy of the selected slide and places it directly after the selected slide. You can duplicate a slide in any view, but in this case you will use the Slide Sorter view to duplicate slide 1 and move it to the end of the presentation.

1. **Switch to Slide Sorter view.**
2. **Select slide 1.**
3. **Open the**  **drop-down menu from the Slides group of the Home tab.**
4. **Choose Duplicate Selected Slides.**
5. **Move slide 2 to the end of the presentation.**

Your screen should be similar to Figure 2.21

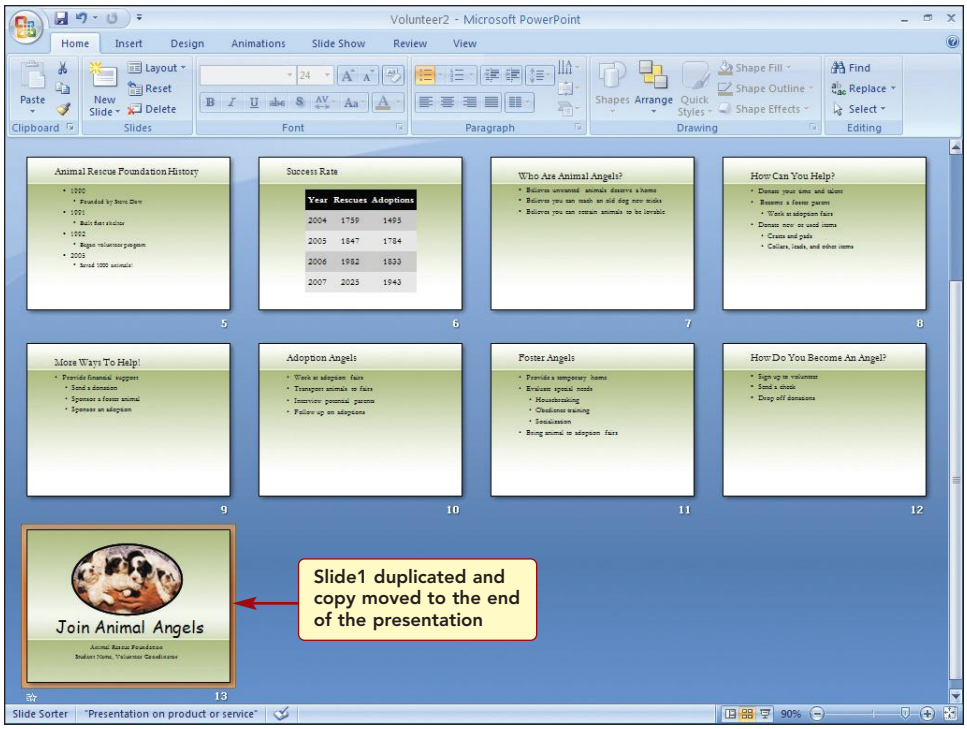


Figure 2.21

There are now 13 slides in the presentation.

Adding a Shape

Now you want to replace the graphic in the concluding slide with another of a heart. To quickly add a shape, you will use one of the ready-made shapes supplied with PowerPoint. These include such basic shapes as rectangles and circles, a variety of lines, block arrows, flowchart symbols, stars and banners, and callouts.

Additional Information
Most shapes also can be inserted from the Clip Organizer as well.

1. **Double-click on slide 13 to display it in Normal view.**
2. **Select the graphic and press Delete.**
3. **Click Shapes in the Drawing group of the Home tab.**

Your screen should be similar to Figure 2.22

Another Method

You also can access the Shapes gallery by selecting Shapes on the Insert tab.

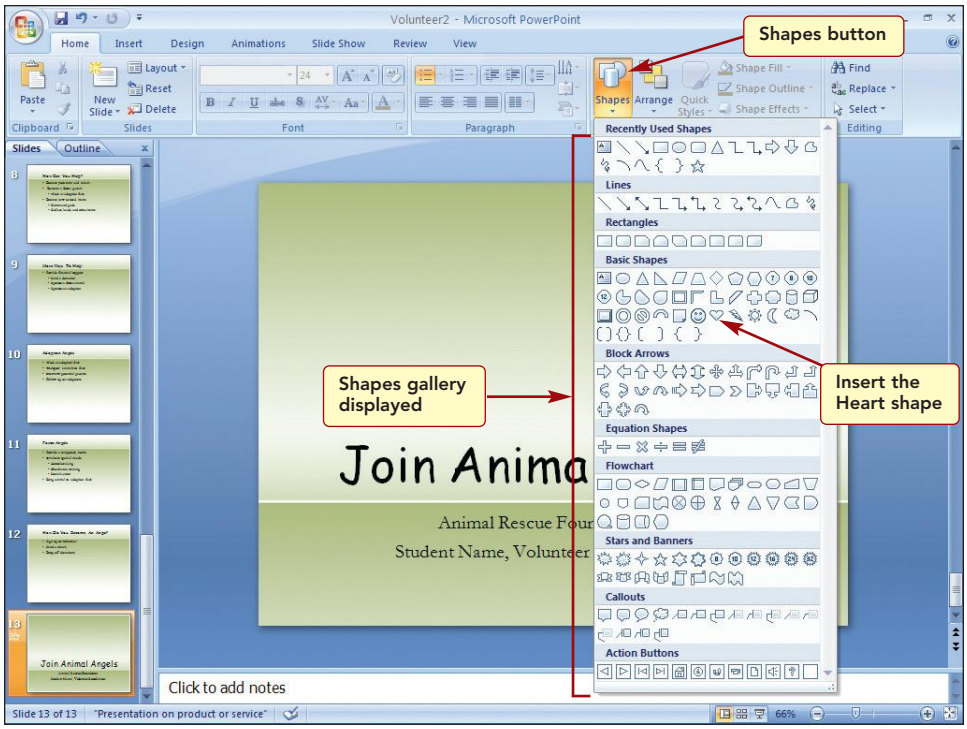


Figure 2.22

Additional Information

The selected shape will be added to the Recently Used Shapes section of the Shapes gallery.

Next, you need to select the shape you want from the Shapes gallery and then indicate where you want the shape inserted on the slide. When inserting a shape, the mouse pointer appears as + when pointing to the slide. Then, to insert the shape, click on the slide and drag to increase the size.

2. **Click Heart in the Basic Shapes section.**
3. **Click above the title on the slide and drag to insert and enlarge the heart.**
4. **Size and position the heart as in Figure 2.23.**

Additional Information

A shape can be sized and moved just like any other object.

Another Method

To maintain the height and width proportions of the shape, hold down Shift while you drag.

Your screen should be similar to Figure 2.23



Figure 2.23

The heart shape is inserted and the Drawing Tools Format tab is available.

Enhancing a Shape

Next, you will enhance its appearance by selecting a shape style and adding a reflection. Just like the other styles in PowerPoint 2007, shape styles consist of combinations of colors, outlines, and effects.

1. **Open the Drawing Tools Format tab.**
- **Click More in the Shape Styles group to open the Shapes Styles gallery.**
- **Choose Moderate Effect – Accent 2 from the Shape Styles gallery.**
- **Click Shape Effects.**
- **From the Reflection gallery, choose Half reflection, 4 pt offset.**

Additional Information
The offset controls the amount of space between the object and the reflection.

Your screen should be similar to Figure 2.24

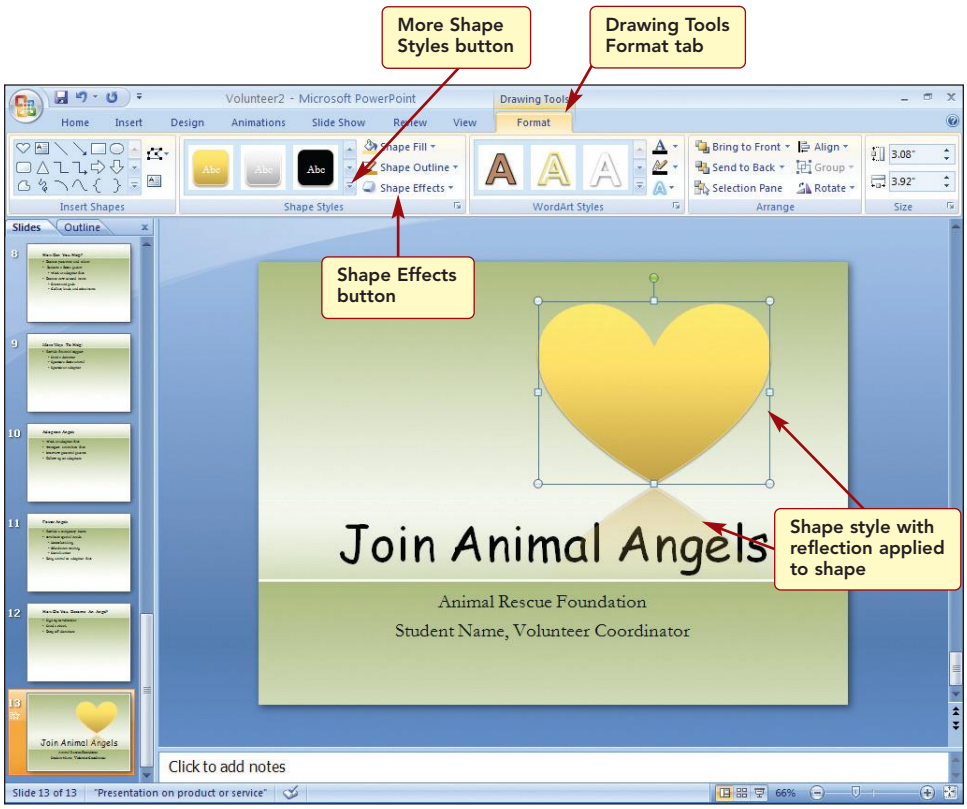


Figure 2.24

The addition of style and reflection effects greatly improves the appearance of the heart.

Adding Text to a Shape

Next, you will add text to the heart object. Text can be added to all shapes and becomes part of the shape; when the shape is moved, the text moves with it.

1. **Right-click on the heart to open the shortcut menu, and choose Edit Text.**

2. **Type Open Your Heart.**

Having Trouble?

If the inserted text does not fit into the heart shape, increase the size of the heart.

Your screen should be similar to Figure 2.25

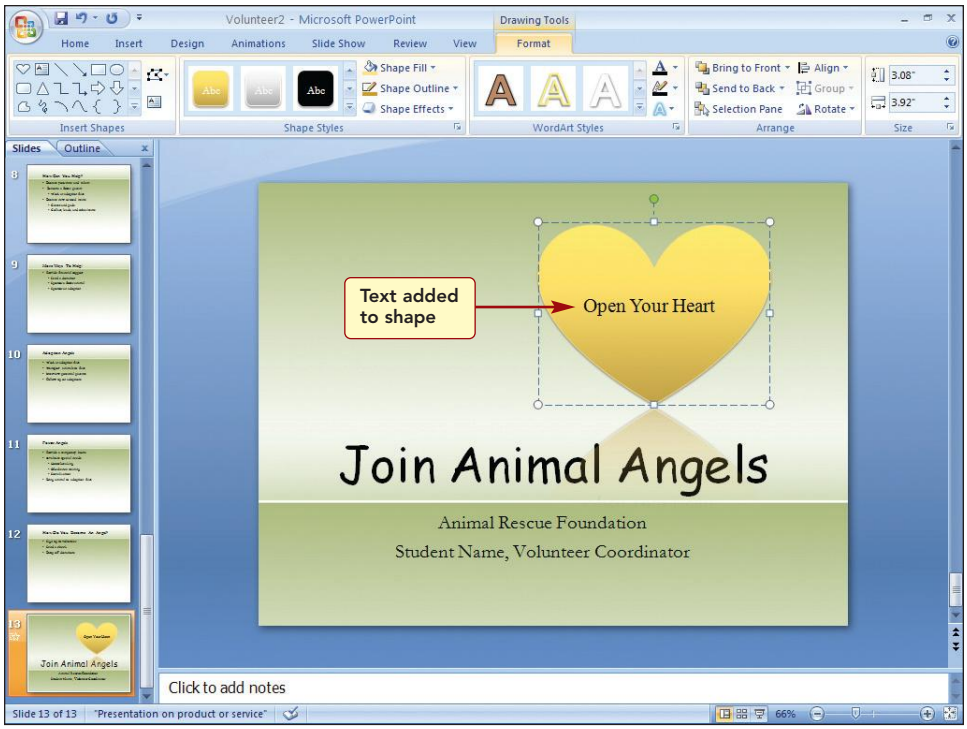


Figure 2.25

Next, you want to improve the appearance of the text by changing the format. Fonts and font size are two basic text attributes that you have used already. The table below describes some additional text formats and their uses. The Home tab and the Mini Toolbar contain buttons for many of the formatting effects.

Format	Example	Use
Bold, italic	***Bold Italic***	Adds emphasis
Underline	Underline	Adds emphasis
Superscript	"To be or not to be."[1]	Used in footnotes and formulas
Subscript	H_2O	Used in formulas
Shadow	Shadow	Adds distinction to titles and headings
Color	Color Color Color	Adds interest

You will use the Mini Toolbar to make all the formatting changes to the text.

2. **Select the text in the Heart**

- **Click Bold on the Mini Toolbar.**
- **Increase the font size to 28 points.**
- **Open the Font Color gallery and . choose White, Background 1 in the Theme Colors section.**
- **Click Center.**

Your screen should be similar to Figure 2.26

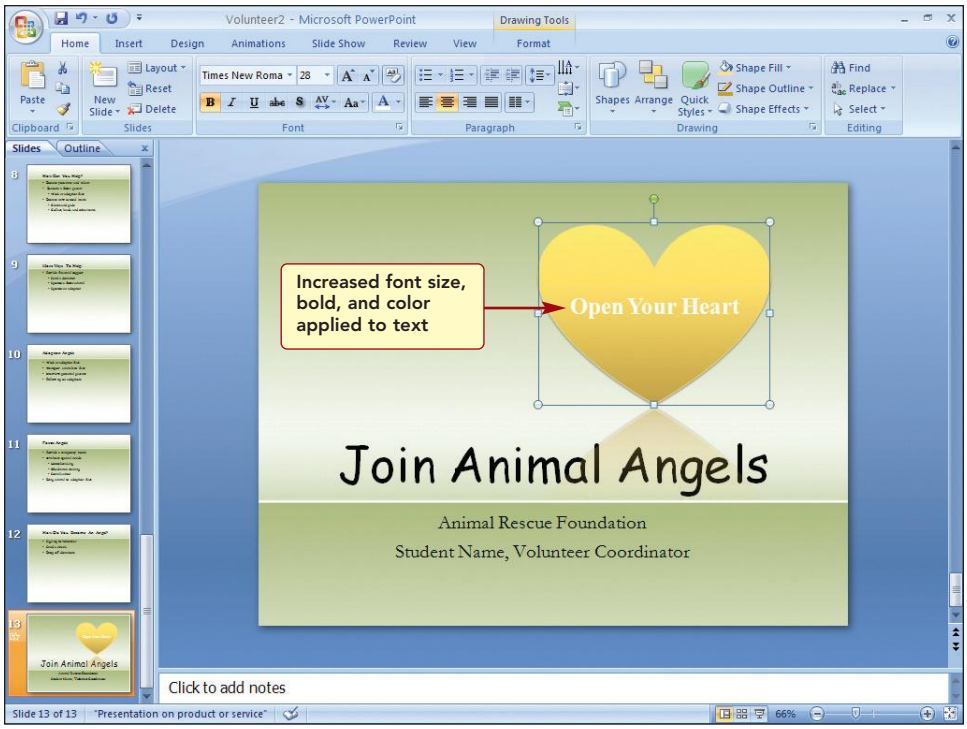


Figure 2.26

Rotating the Object

Finally, you want to change the angle of the heart. You can rotate an object 90 degrees left or right, flip it vertically or horizontally, or specify an exact degree of rotation. You will change the angle of the heart to the right using the  **rotate handle** for the selected object, which allows you to rotate the object to any degree in any direction.

Additional Information

Holding down Shift while using the rotate handle rotates the object in 15-degree increments.

Another Method

You also can use Rotate in the Arrange group of the Drawing Tools Format tab to rotate an object.

1. **If necessary, select the graphic.**
2. **Drag the rotate handle to the right slightly.**

Additional Information

The mouse pointer appears as ↻ when positioned on the rotate handle and a Live Preview shows how the object will look as you rotate it.

Your screen should be similar to Figure 2.27

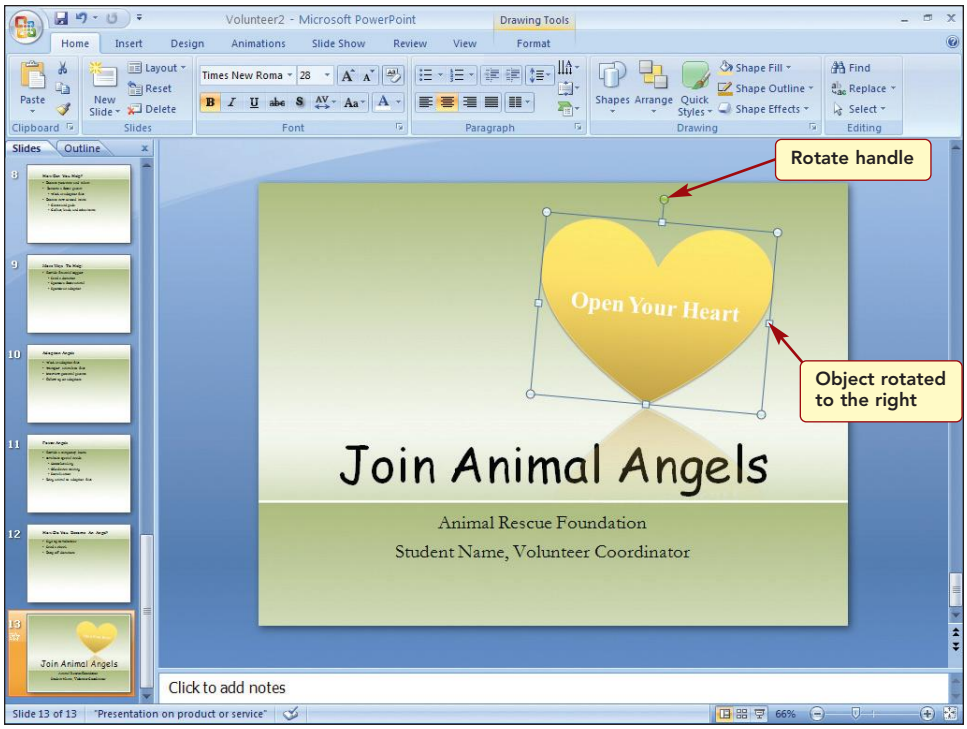


Figure 2.27

Additional Information

You can set an exact degree of rotation using Rotate in the Arrange group of the Drawing Tools Format tab.

The graphic is a nice addition to the final slide of the presentation.

Converting Text to a SmartArt Graphic

The director liked the inclusion of the history of the foundation in the presentation but would like you to make that slide look more interesting. You decide to convert the bulleted list to a diagram using one of the Microsoft Office SmartArt graphics. **SmartArt** graphics help you quickly create a visual representation of textual information. Most SmartArt graphics are most effective when the number of shapes and amount of text are limited to key points. Larger amounts of text can distract from the visual appeal of the graphic and make it harder to convey the message.

1. **Select slide 5.**
- **Select all of the bulleted text.**
- **Right-click on the selection and select Convert to SmartArt from the shortcut menu.**

Additional Information
The shortcut menu gallery of graphic shapes displays only those shapes that PowerPoint determined work best with bulleted lists.

- **Choose More SmartArt graphics.**

Your screen should be similar to Figure 2.28

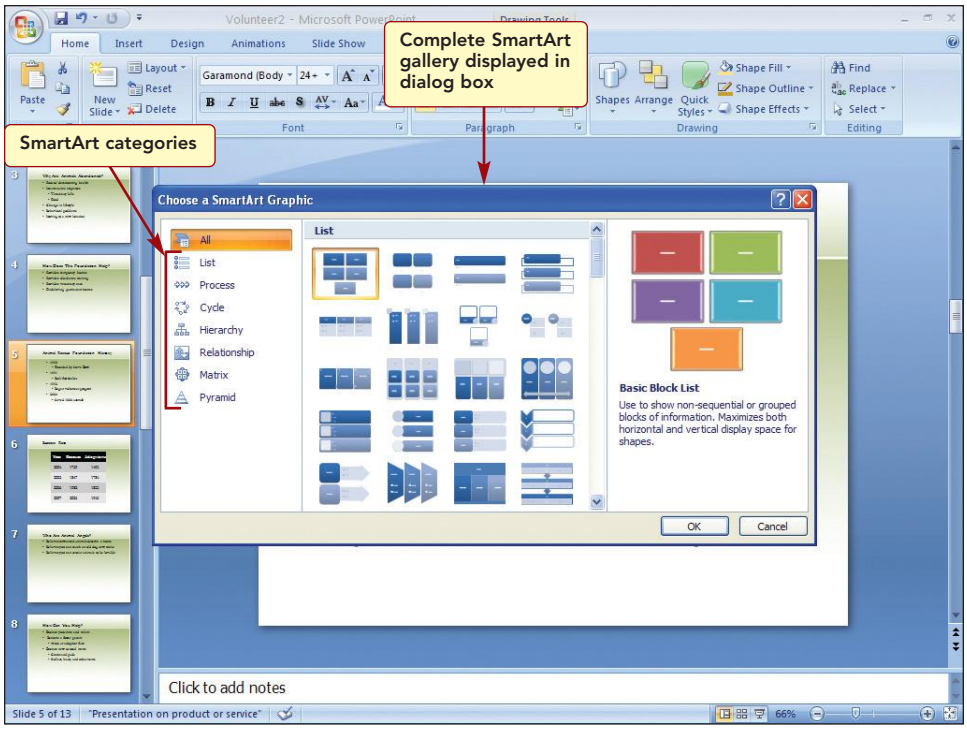


Figure 2.28

The complete gallery of SmartArt graphic designs is displayed. They are divided into categories by the type of graphic, such as Process, Cycle, or Hierarchy. Within each category are different layouts. The following table contains suggestions to help you decide what type of graphic to use to best illustrate the content. In addition, as you select each type, the dialog box displays an enlarged version of the graphic and a brief description of its use.

Purpose	Graphic Type
Show nonsequential information	List
Show steps in a process or timeline	Process
Show a continual process	Cycle
Show a decision tree	Hierarchy
Show proportional relationships	Pyramid
Illustrate connections	Relationship

Because the history slide content shows nonsequential events in time, you will use a layout in the Process category.

2. **Choose Process from the category list.**

- **Click on several different Process graphics and read the description.**
- **Choose Accent Process and click** OK.

Your screen should be similar to Figure 2.29

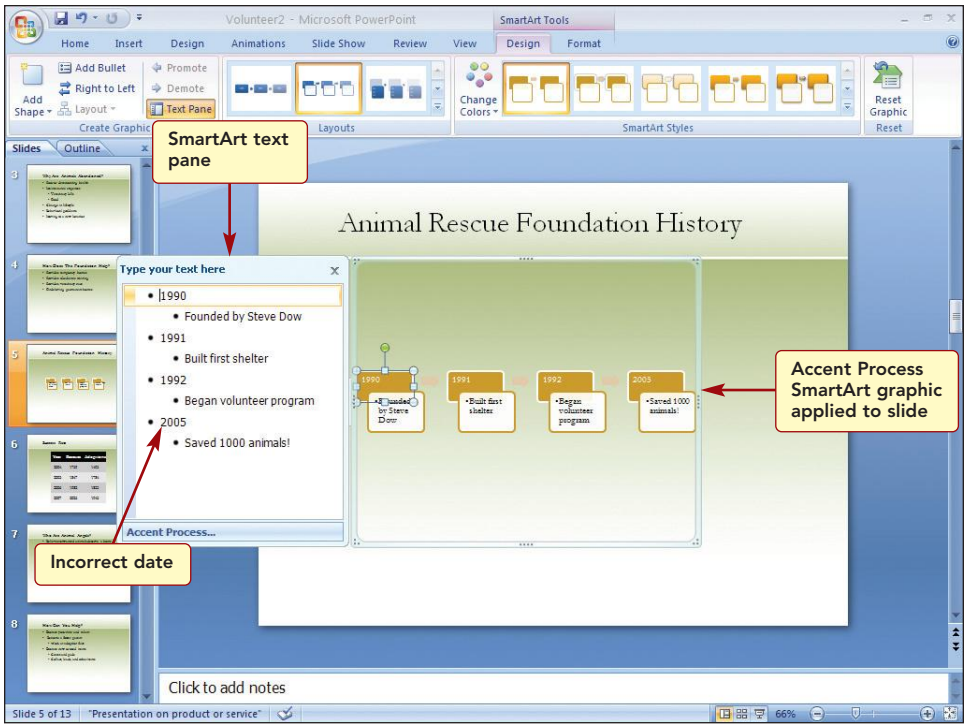


Figure 2.29

Additional Information
You also can copy text from another slide or program and paste it into the Text pane.

The selected text in the slide is automatically placed in the shapes and arranged in the SmartArt layout you choose. A Text pane opens next to the content placeholder. It is used to add or edit the text content of the SmartArt graphic. You notice the last date, 2005, is incorrect and should be 2000. You will change it in the text pane.

3. **Click on the 2005 bullet in the Text pane.**

- **Edit the date to 2000.**
- **Click** × **Close to close the Text pane.**

Your screen should be similar to Figure 2.30

Additional Information
Clicking Text Pane along the left edge of the SmartArt graphic object opens the Text pane.

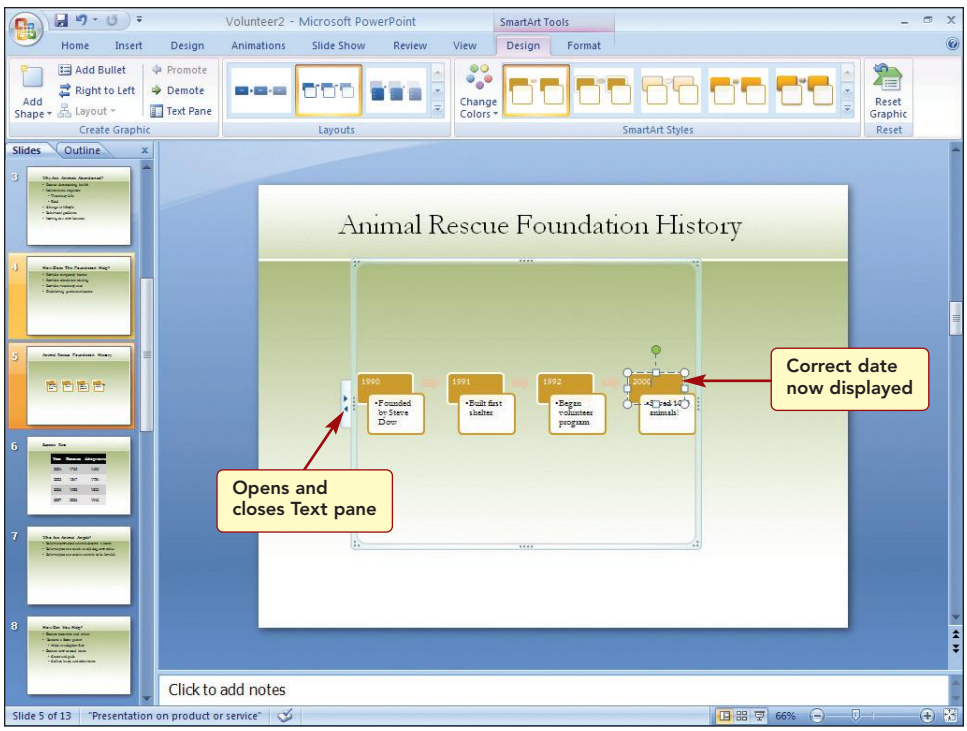


Figure 2.30

The text in the SmartArt graphic was automatically updated. Although you like the change to a diagram from the bulleted list, you decide to try another layout that may better visually represent the information.

4 **Click More in the Layouts group.**

Point to several layouts to see the Live Preview.

Choose Continuous Block Process.

Your screen should be similar to Figure 2.31

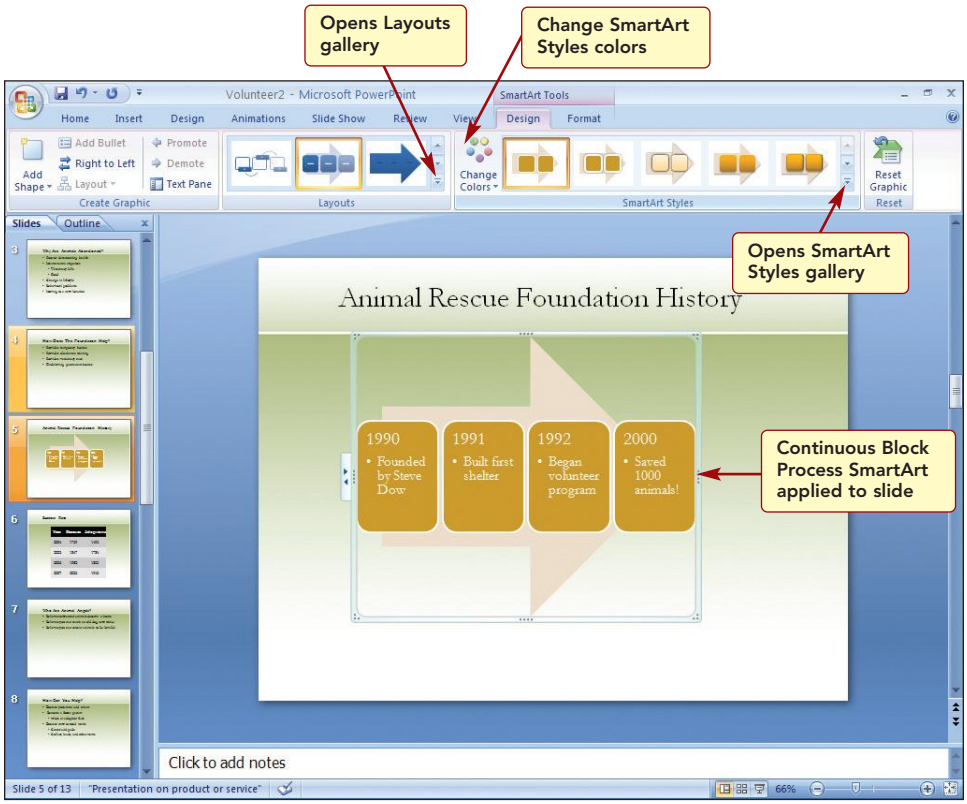


Figure 2.31

The new graphic design with the arrow in the background better suits the text. Next, you will change the colors and style of the SmartArt graphic. You want to use colors that are like those in the table in slide 6. Then you will use a SmartArt style, combinations of different formatting options such as edges, gradients, line styles, shadows, and three-dimensional effects, to enhance the SmartArt graphic. You can try different combinations of colors and styles until you find the one that suits your presentation.

5. Click Change Colors.
   - Choose Colorful Range – Accent Colors 4 to 5.
   - Click More from the SmartArt Styles group.
   - Point to several SmartArt designs to see the Live Preview.
   - Choose Inset from the 3-D category.
   - Click outside the graphic to deselect it.

Your screen should be similar to Figure 2.32

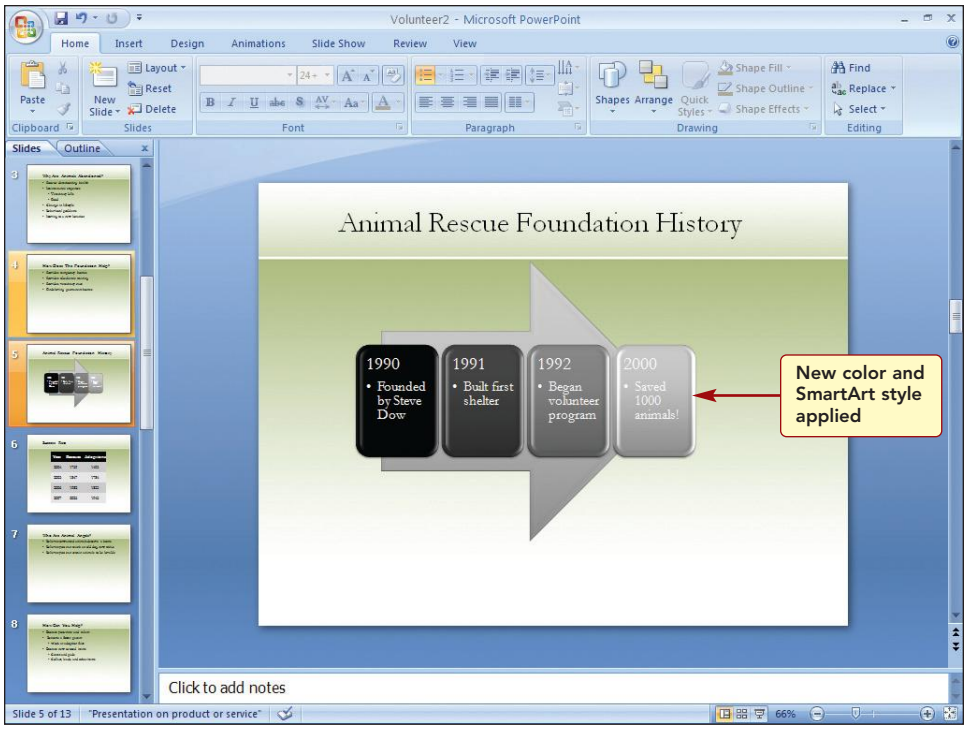


Figure 2.32

Additional Information
If, after making many formatting changes to a SmartArt graphic, you want to return to the original graphic design, use Reset Graphic.

The selected SmartArt style applies a combination of line, edge, and 3-D effects to all the shapes in the SmartArt graphic. You think the changes to the history slide greatly improve its appearance and readability.

Working with Text Boxes

On slide 12, you want to add the foundation's contact information. To make it stand out on the slide, you will put it into a text box. A **text box** is a container for text or graphics. The text box can be moved, resized, and enhanced in other ways to make it stand out from the other text on the slide.

Creating a Text Box

First you create the text box, and then you add the content.

1. **Display slide 12**
2. **Open the Insert tab.**
3. **Click**  **in the text group.**
4. **Click below the bullets and drag to the right.**

Your screen should be similar to Figure 2.33

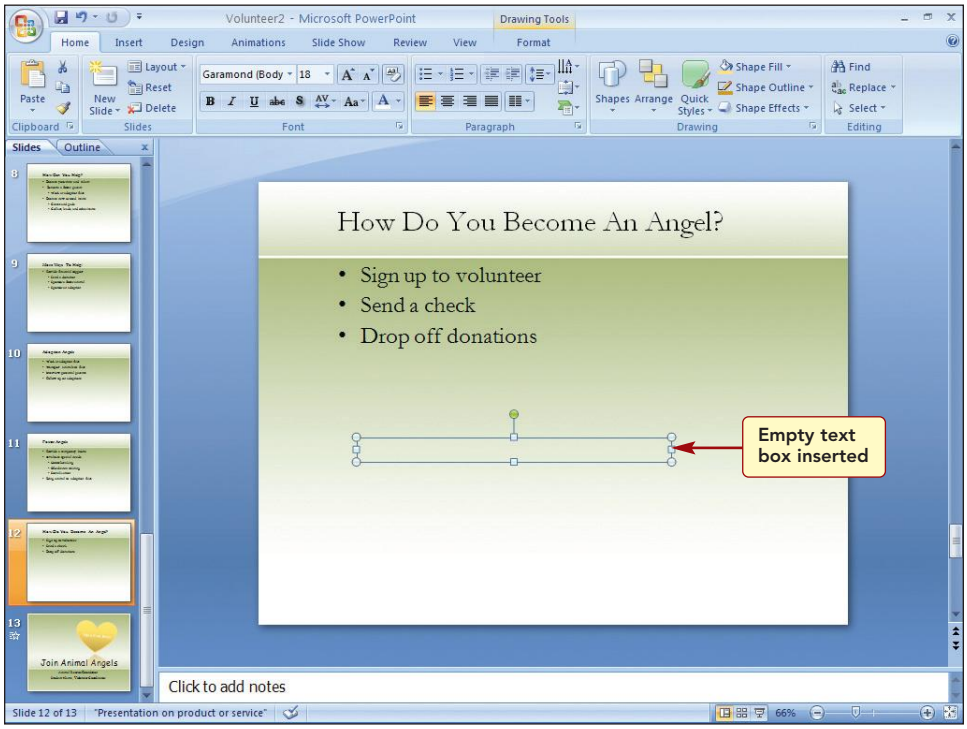


Figure 2.33

Additional Information
You also could copy text from another location and paste it into the text box.

The text box is created and is a selected object. It is surrounded with a dashed border indicating you can enter, delete, select, and format the text inside the box.

Adding Text to a Text Box

The text box displays an insertion point, indicating that it is waiting for you to enter the text. As you type the text in the text box, it will resize automatically as needed to display the entire entry.

1. **Type the organization's name and address shown below in the text box.**

Animal Rescue Foundation
1166 Oak Street
Lakeside, NH 03112
(603) 555-1313

2. **Select all the text and increase the font size to 24 points and bold.**

Your screen should be similar to Figure 2.34

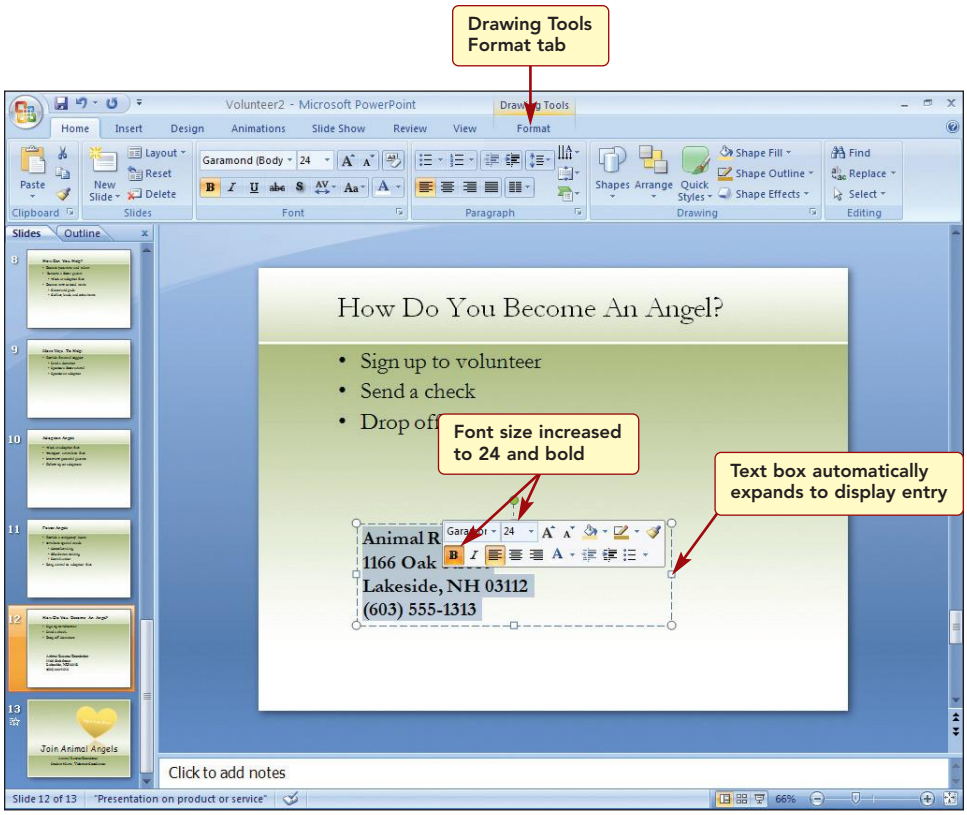


Figure 2.34

The text box resizes as you type and increase the font size.

Enhancing the Text Box

Like any other object, the text box can be sized and moved anywhere on the slide. It also can be enhanced by adding styles and effects. You want to change the color and add a border around the box to define the space. Then you will position it on the slide.

1. Deselect the text.
- Open the Drawing Tools Format tab.
- Open the Shape Styles gallery and choose Subtle Effect – Accent 4.
- Click Shape Effects.
- Choose Angle from the Bevel group.
- Move the text box to the position shown in Figure 2.35.
- Deselect the text box.
- Save the presentation.

Your screen should be similar to Figure 2.35

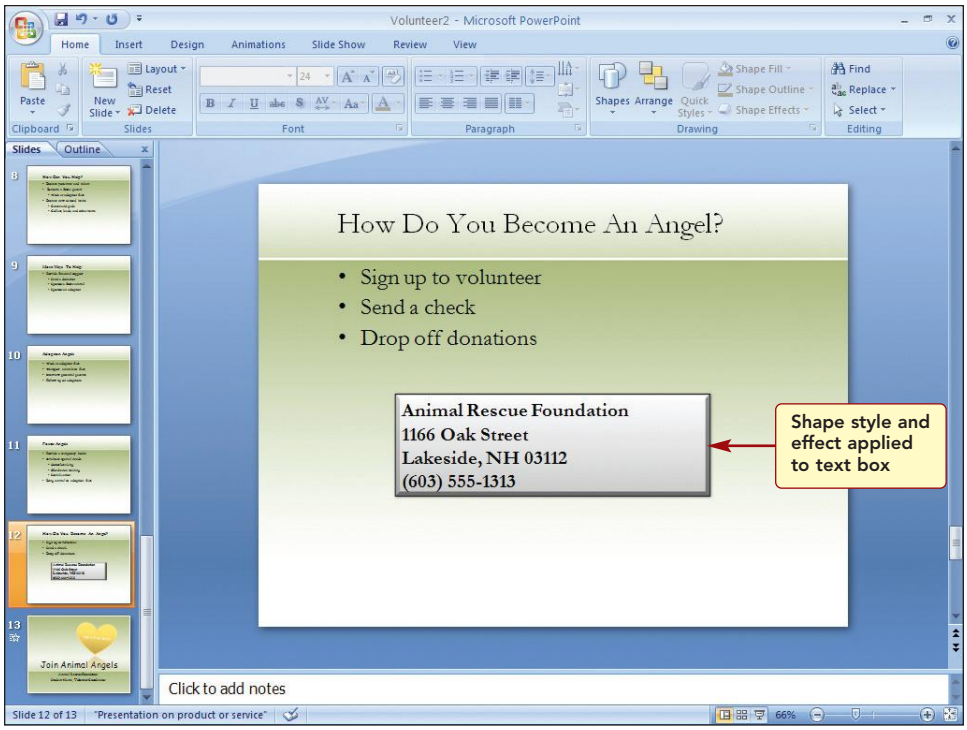


Figure 2.35

The information in the text box now stands out from the other information on the slide.

Changing the Presentation Design

When you first started this presentation, you used a PowerPoint template that included sample text as well as color and design elements. Now you are satisfied with the presentation's basic content and organization, but you would like to change its design style and appearance by applying a different document theme.

Concept 4

Document Theme

4 A **document theme** is a predefined set of formatting choices that can be applied to an entire document in one simple step. PowerPoint includes 20 named built-in themes. Each theme includes three subsets of components: colors, fonts, and effects. Each theme consists of 12 colors that are applied to specific elements in a document. Each font component includes different body and heading fonts. Each effects component includes different line and fill effects. You also can create your own custom themes by modifying an existing document theme and saving it as a custom theme. The default presentation uses the Office theme.

Using themes gives your documents a professional and modern look. Because themes are shared across 2007 Office applications, all your office documents can have the same uniform look.

Applying a Document Theme

A document theme can be applied to the entire presentation or to selected slides. You want to change the design for the entire presentation.

1. **Display slide 1.**
2. **Open the Design tab.**
3. **Click More in the Themes group to open the Themes gallery.**
4. **Point to the Office Theme.**

Your screen should be similar to Figure 2.36

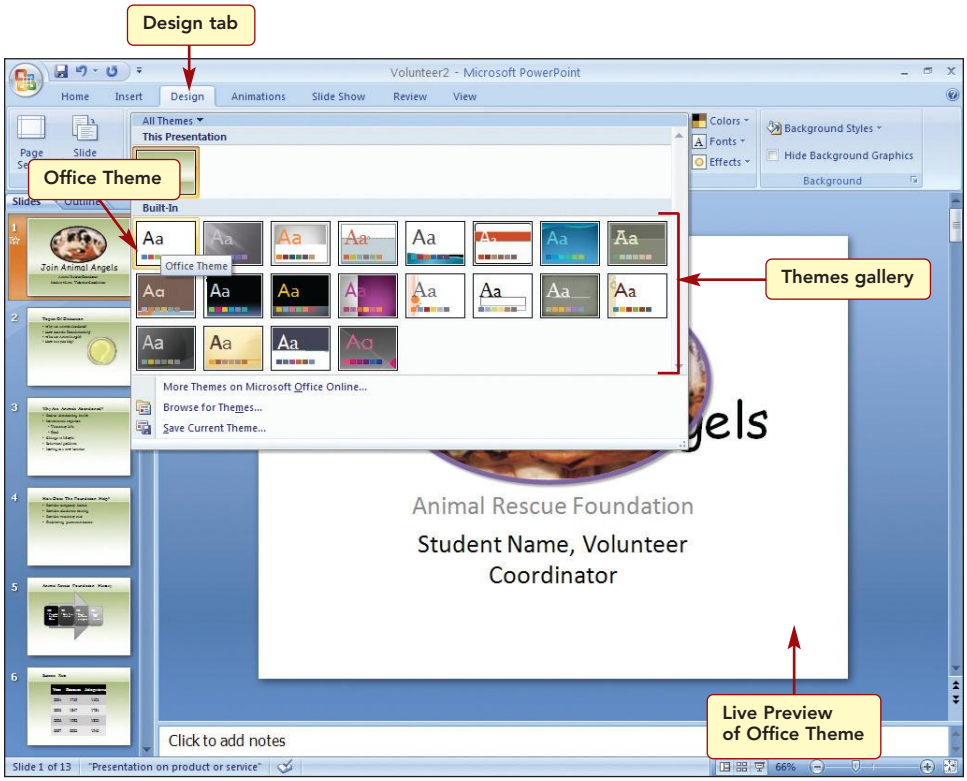


Figure 2.36

The Themes gallery displays samples of the document themes. The This Presentation area displays a preview of the theme that is currently used in the presentation. This is the theme associated with the presentation template you used to start the presentation. The Built-In area displays examples of the themes that are available in PowerPoint. The Live Preview shows how the presentation would look if the Office Theme were used. As you can see, the slide colors, background designs, font styles, and overall layout of the slide are affected by the theme.

You will preview several other themes, and then use the Oriel theme for the presentation.

2 **Preview several other themes.**

Choose the Oriel theme.

Your screen should be similar to Figure 2.37

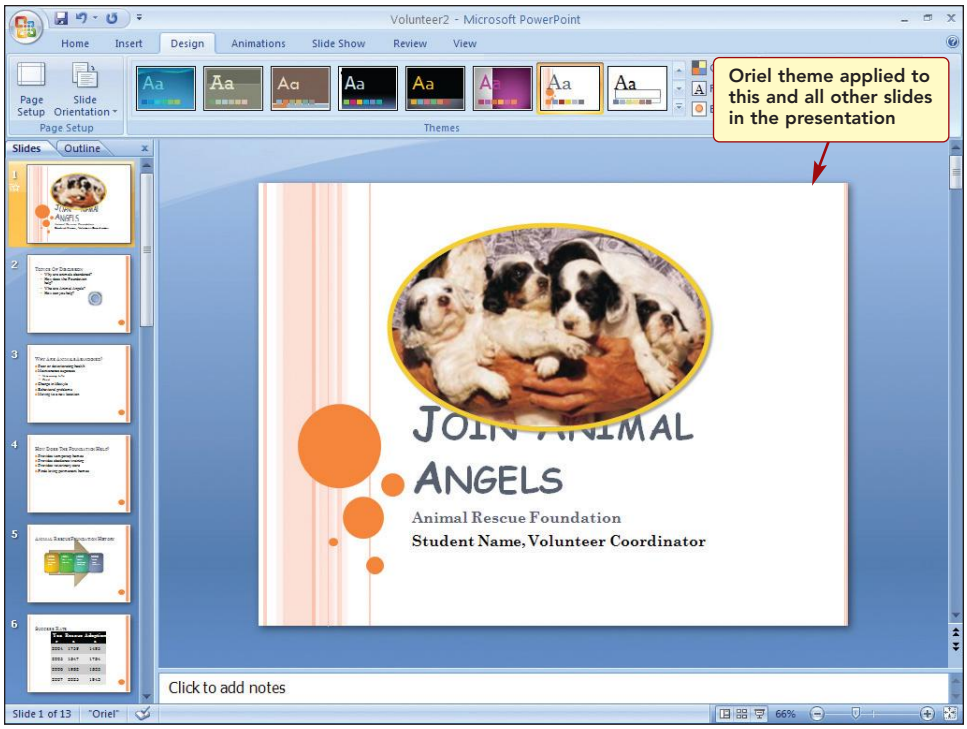


Figure 2.37

Additional Information

To apply a theme to selected slides, preselect the slides to apply the themes to in the Slide pane, and use the Apply to Selected Slides option from the theme's shortcut menu.

The Oriel theme has been applied to all slides in the presentation. When a new theme is applied, the text styles, graphics, and colors that are included in the design replace the previous design settings. Consequently, the layout may need to be adjusted. For example, the photo on slide 1 will need to be repositioned and sized.

However, if you had made individual changes to a slide, such as changing the font of the title, these changes are not updated to the new theme design. In this case, the title font is still the Comic Sans MS that you selected; however, it has a smaller point size.

3 **Use the Slides tab to select each slide and check the layout.**

Make the adjustments shown in the table below to the indicated slides.

After making the adjustments to slide 13, your screen should be similar to Figure 2.38

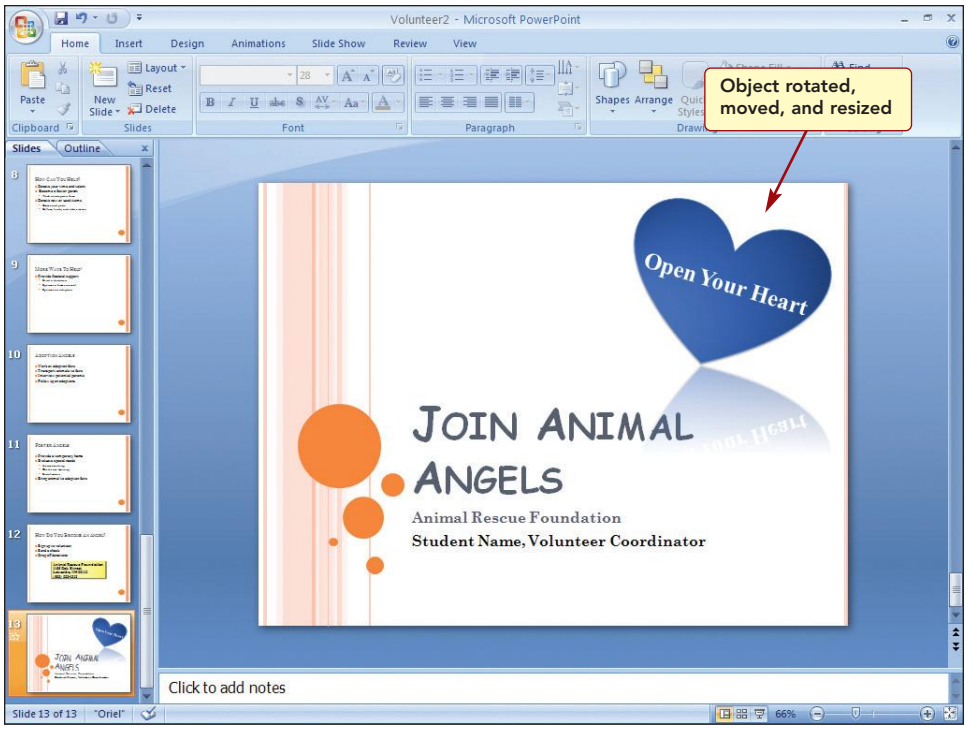


Figure 2.38

Slide	Adjustment
1	Reduce the size of the graphic slightly. Move the graphic to the upper right of the slide. Change the border color to the Blue-Gray, Text 2 theme color (top row, fourth column).
2	If needed, adjust the size and position of the text content placeholder. Adjust the size of the graphic. Recolor the graphic to Text color 2 Dark (first item) in the Dark Variations category.
5	Move the SmartArt graphic down and increase its size.
6	Adjust the size of the table columns.
7	Click Reset in the Slides group on the Home tab to reapply the theme bullet style to the text.
12	Click Reset to reapply the theme bullet style to the text.
13	If necessary, rotate, move, and resize the heart to fit the upper-right area of the slide.

Changing the Theme Colors

To make the presentation livelier, you decide to try changing the colors associated with the selected theme. Although each theme has an associated set of colors, you can change the colors by applying the colors from another theme to the selected theme.

1. **Display slide 1 in Normal view.**
2. **Open the Design tab.**
3. **Click Colors in the Themes group.**

Your screen should be similar to Figure 2.39



Figure 2.39

The colors used in each of the themes are displayed in the Built-In drop-down list. Each theme's colors consist of eight coordinated colors that are applied to different slide elements. The Oriel theme colors are selected because they are the set of colors associated with the Oriel theme. You want to see how the colors used in the Trek theme would look.

2. **Preview several other color themes.**
3. **Select the Trek theme colors.**

Your screen should be similar to Figure 2.40

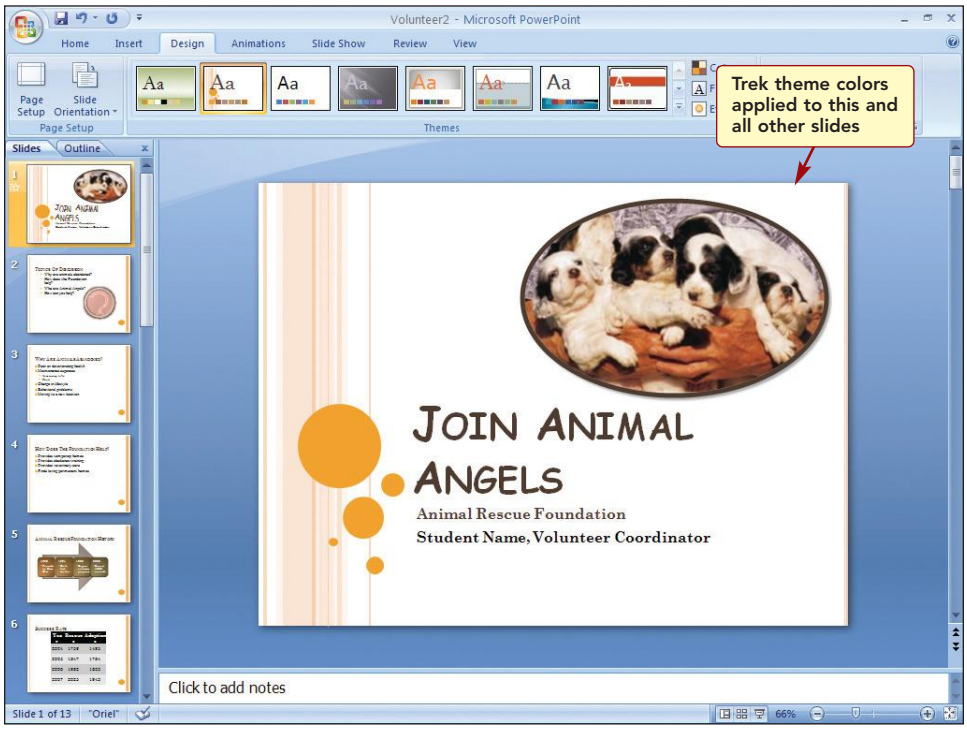


Figure 2.40

The slides are all converted to the colors used in the Trek theme. You like the slightly softer colors associated with the Trek theme. Using predefined theme colors gives your presentation a professional and consistent look.

Customizing Theme Colors

You like the Trek theme colors but think it could be improved by changing the title text color. You can customize theme colors by changing colors associated with the different elements. The new theme colors can then be saved as custom theme colors.

1. **Click** Colors.
2. **Choose Create New Theme Colors.**

Your screen should be similar to Figure 2.41

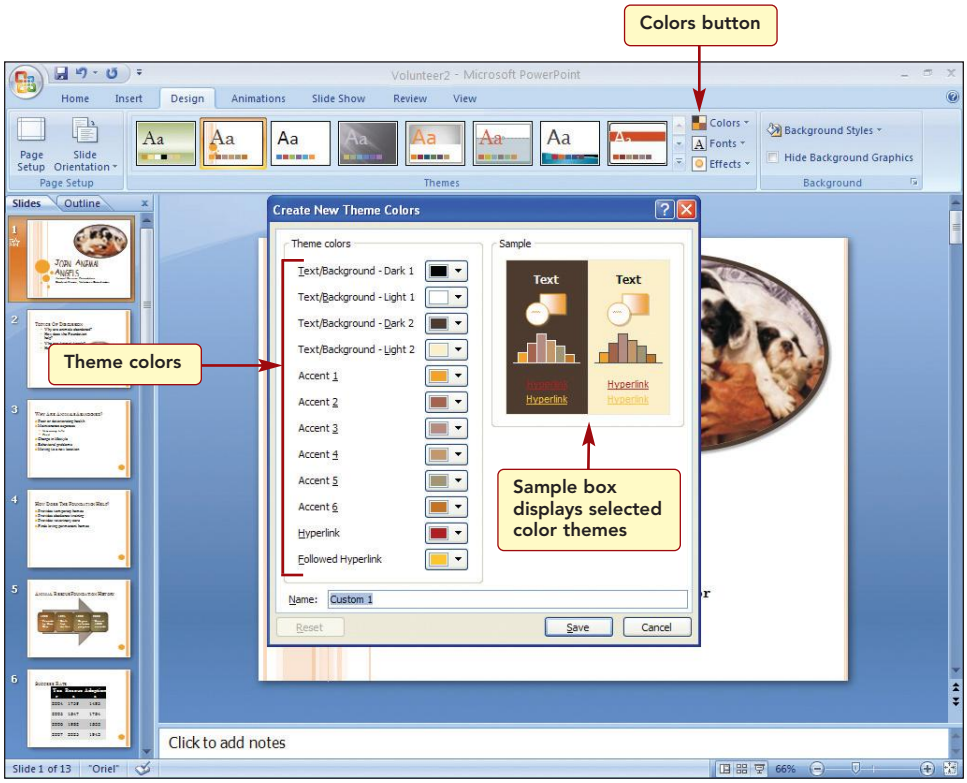


Figure 2.41

The dialog box identifies how the 12 Trek theme colors are applied to different elements of the slide. The sample box shows as example of how the selected colors are used in a slide. You will change the color of the background and title.

2. **Click Text/Background – Dark 2** .

- **Choose Red, Hyperlink from the Theme Colors category.**
- **Type Volunteer in the Name text box.**
- **Click Save.**
- **Save the presentation as Volunteer3.**

Your screen should be similar to Figure 2.42



Figure 2.42

Additional Information
You can edit, delete, or specify how to apply a theme color by choosing the appropriate option from the theme color shortcut menu.

The new title color gives the presentation much more impact. In addition, the Volunteer custom theme colors will appear at the top of the available theme colors list. This makes it easy to reapply your custom color settings in the future. You saved the presentation with a new file name so you can show the director two different versions of the presentation.

Working with Master Slides

While viewing the slides, you think the slide appearance could be further improved by changing the bullet design on all slides. Although you can change each slide individually as you did in Lab 1, you can make the change much faster to all the slides by changing the slide master.

Concept 5

Master

5 A **master** is part of a template that stores information about the formatting for the three key components of a presentation—slides, speaker notes, and handouts. Each component has a master associated with it. The masters are described below.

Slide Master	Defines the format and layout of text and objects on a slide, text and object placeholder sizes, text styles, backgrounds, color themes, effects, and animation.
Handout Master	Defines the format and placement of the slide image, text, headers, footers, and other elements that will appear on every handout.
Notes Master	Defines the format and placement of the slide image, note text, headers, footers, and other elements that will appear on all speaker notes.

Any changes you make to a master affect all slides, handouts, or notes associated with that master. Each theme comes with its own slide master. When you apply a new theme to a presentation, all slides and masters are updated to those of the new theme. Using the master to modify or add elements to a presentation ensures consistency and saves time.

You can create slides that differ from the master by changing the format and placement of elements in the individual slide rather than on the master. For example, when you changed the font settings of the title on the title slide, the slide master was not affected. Only the individual slide changed, making it unique. If you have created a unique slide, the elements you changed on that slide retain their uniqueness even if you later make changes to the slide master. That is the reason that the title font did not change when you changed the theme.

Modifying the Slide Master

You will change the bullet style in the slide master so that all slides in the presentation will be changed.

1. **Open the View Tab.**
2. **Click Slide Master in the presentation views group.**

Another Method

You also can hold down Shift and click Normal View to display Slide Master view.

Your screen should be similar to Figure 2.43

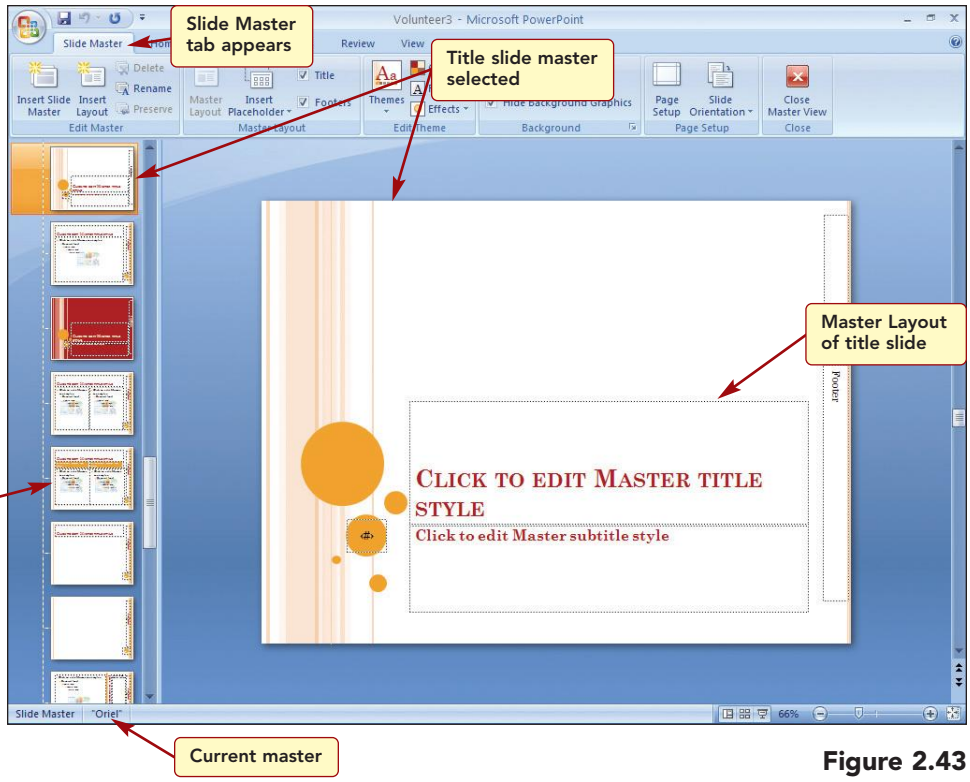


Figure 2.43

Additional Information

A presentation can contain one or more slide masters. Each slide master contains one or more standard or custom layouts, which make up a template.

The view has changed to Slide Master view, and a new tab, Slide Master, is displayed. Slide Master view consists of two panes: the left pane, or Slide pane, displays thumbnails for each of the layouts associated with the Oriel slide master and the right pane displays the selected master slide. The status bar identifies the master you are viewing. The thumbnail for the title layout master is selected, and the slide pane displays the master slide.

You want to make changes to the slide master first.

2. **Scroll the Slide pane up and point to the thumbnail with the number 2 near its left edge to see the screentip for the Oriel Slide Master.**

Additional Information

Pointing to a master thumbnail displays a ScreenTip that identifies the selected master and the slides where it is used in the presentation.

3. **Click on the Oriel Slide Master thumbnail to select it.**

Your screen should be similar to Figure 2.44

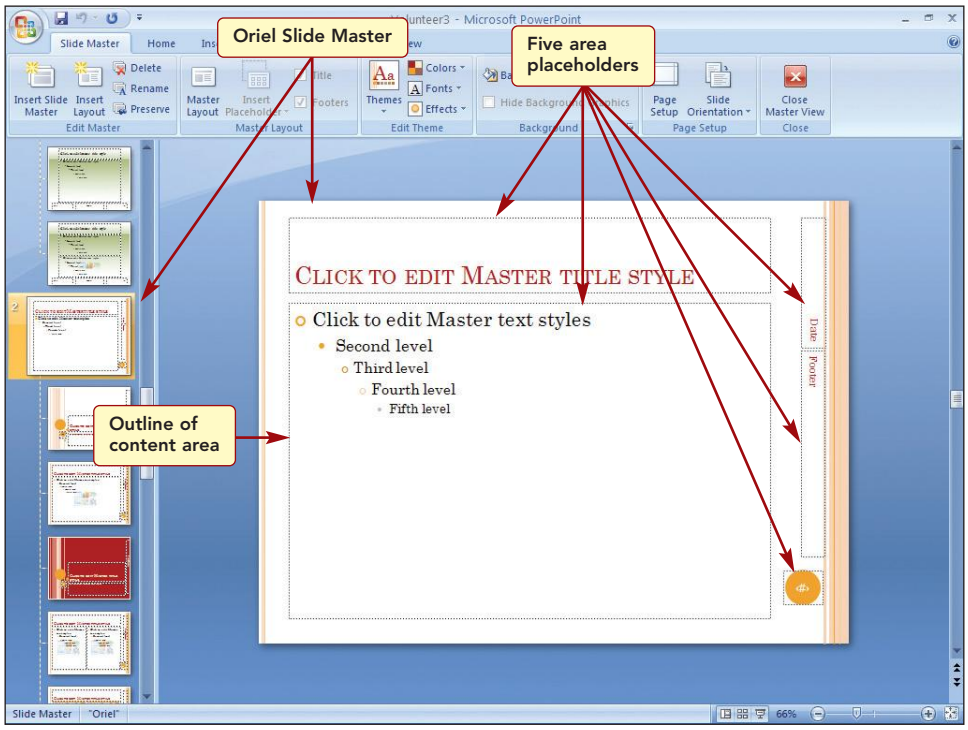


Figure 2.44

Additional Information

Notice the masters associated with the original template, Presentation on product or service, appear above the second master you applied when selecting the Oriel theme.

The slide master consists of five area placeholders that control the appearance of all slides: title, content, date, footer, and a shape. The title and content areas display sample text to show you how changes you make in these areas will appear. You make changes to the master slide in the same way that you change any other slide. You will modify the content area placeholder and change the current round bullet style to a picture bullet style.

3. **Click the outline of the content area on the slide to select it.**

Having Trouble?

Do not select an individual item within the content area or the changes will be applied to the item only.

- **Open the Home tab.**
- **Open the Bullets drop-down menu.**
- **Choose Bullets and Numbering.**
- **Click Picture....**

Your screen should be similar to Figure 2.45

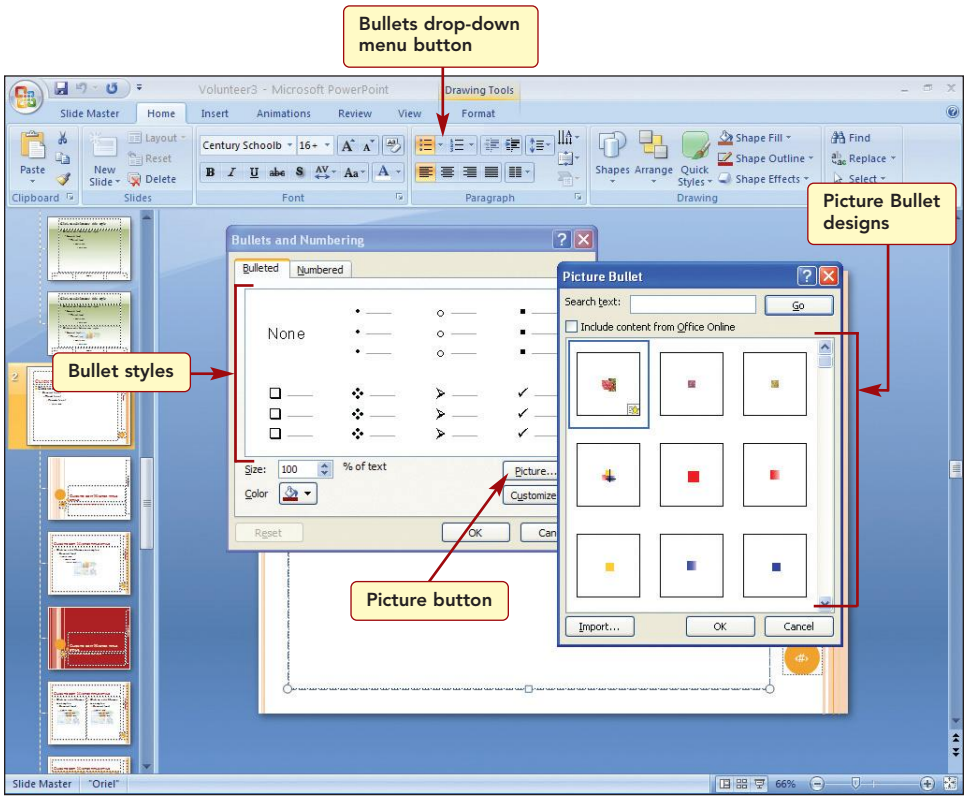


Figure 2.45

From the Picture Bullet dialog box, you select the bullet design you want to use from the bullet styles listed. You will use a round bullet design in a color that coordinates with the theme colors.

4 Scroll the gallery and choose bullets, network blitz 15 . . . (second column of the fourth row).

Having Trouble?
If this bullet style is not available, select another of your choice.

Click OK.

Your screen should be similar to Figure 2.46

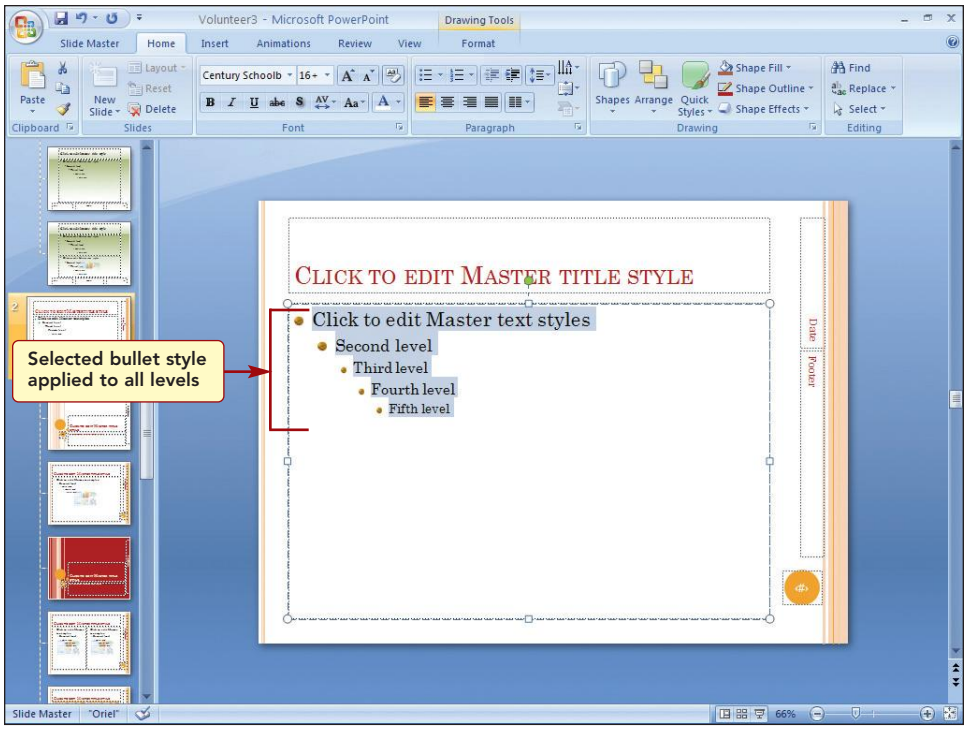


Figure 2.46

Additional Information
You can apply different bullet styles to each level by selecting each level individually.

The selected bullet style has been applied to all levels of items in the content area and to all slides under the main master slide that have bulleted items.

Now, you want to see how the changes you have made to the slide master have affected the actual slides in the presentation.

5 Click Slide Sorter view.

Increase the magnification to 100%.

Your screen should be similar to Figure 2.47

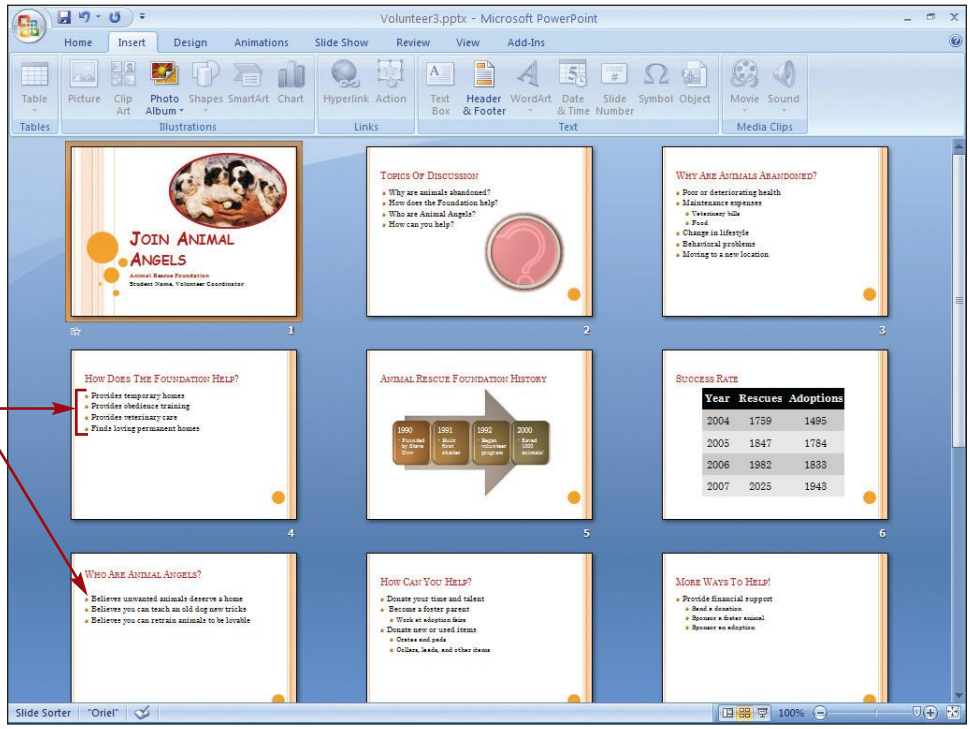


Figure 2.47

You can now see that the change you made to the bullet style in the slide master is reflected in all slides in the presentation. Using the slide master allows you to quickly make global changes to your presentation.

Adding Slide Footer Text

You also would like to include the name of the foundation and slide number in a footer on the slides. The slide master controls the placement and display of the footer information but does not control the information that appears in those areas.

1. **Open the Insert tab.**
2. **Click** 

in the Text group.
3. **If necessary, open the Slide tab.**

Your screen should be similar to Figure 2.48

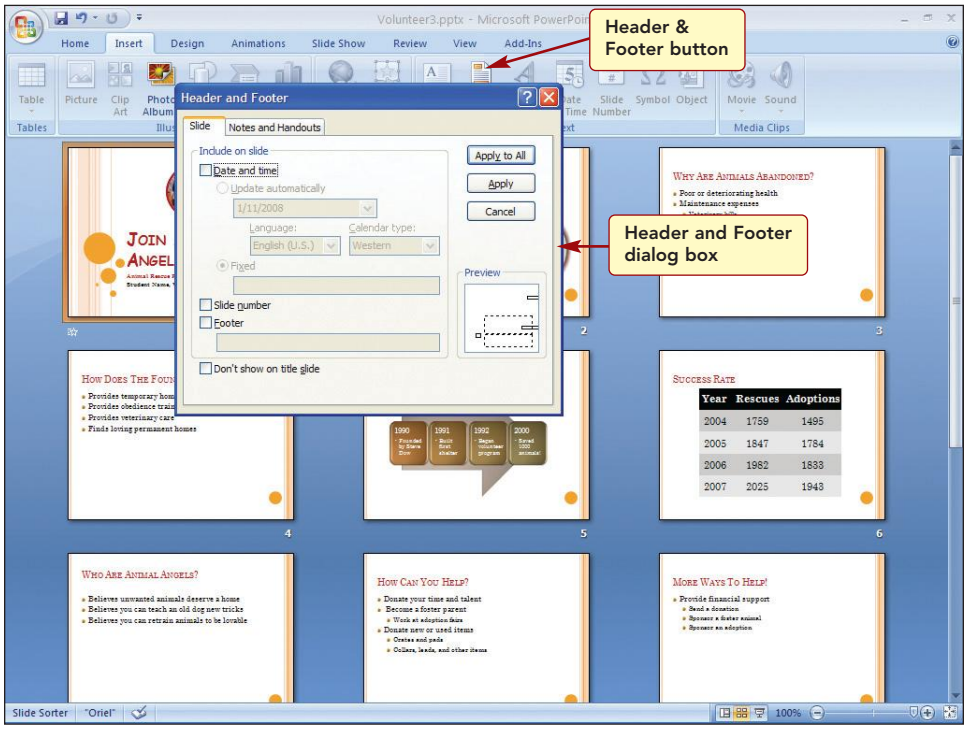


Figure 2.48

None of the options in the Include on Slide list are checked because there are currently no footers defined. The footer can appear on all slides or selected slides. You also can turn off the display of the footer information in title slides only. You would like to add the foundation name and the slide number to the footer of all slides, except the title slides.

2. **Choose the Slide number option.**
   - **Choose the Footer option.**
   - **Type Animal Rescue Foundation in the Footer text box.**
   - **Choose the Don't show on title slide option.**
   - **Click** Apply to All **.**

Your screen should be similar to Figure 2.49

Additional Information

The Apply command button applies the settings to the current slide or selected slides only.

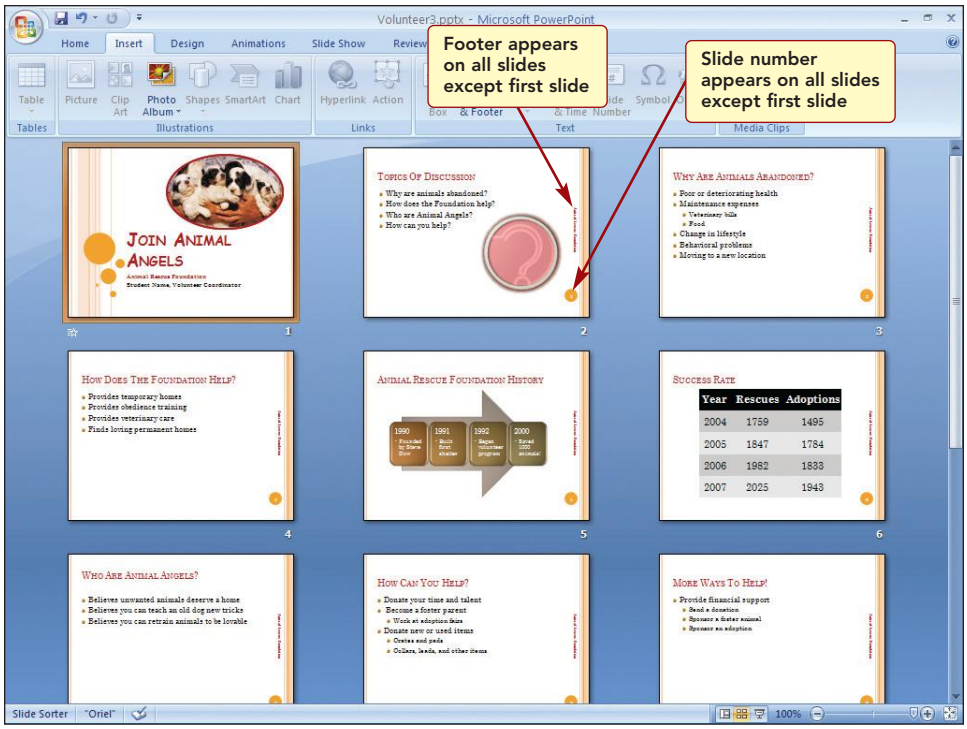


Figure 2.49

The text you entered is displayed in the Footer area placeholder and the slide number appears in the graphic circle. No footer information is displayed on the first or last slides in the presentation because they use the Title Slide layout.

As you run the slide show next, you will see that the footer does not display on the first or last slides. Also notice the use of the custom bullet throughout.

3. **Run the slide show beginning with slide 1.**
   - **Click on each slide to advance through the presentation.**
   - **Save the presentation.**

As you ran the slide show, you probably noticed that slides 1 and 13, the title slides, displayed the text using a special animation effect. This effect was included in the template as part of the template design.

Note: If you are ending your session now, save the presentation and exit PowerPoint 2007. When you begin again, open this file.

Adding Animation Effects

You liked the animation effect that was included on the title slides and have several additional places in mind where using animation will make the presentation more interesting.

Concept 6

Animations

6 **Animations** are special effects that add action to text and graphics so they move around on the screen during a slide show. Animations provide additional emphasis for items or show the information on a slide in phases. There are two basic types of animations: object animations and transitions.

Object animations are used to display each bullet point, text, paragraph, or graphic independently of the other text or objects on the slide. You set up the way you want each element to appear (to fly in from the left, for instance) and whether you want the other elements already on the slide to dim or shimmer when a new element is added. For example, because your audience is used to reading from left to right, you could select animations that fly text in from the left. Then, when you want to emphasize a point, bring a bullet point in from the right. That change grabs the audience's attention.

Transitions control the way that the display changes as you move from one slide to the next during a presentation. You can select from many different transition choices. You may choose Dissolve for your title slide to give it an added flair. After that you could use Wipe Right for all the slides until the next to the last, and then use Dissolve again to end the show. As with any special effect, use slide transitions carefully.

When you present a slide show, the content of your presentation should take center stage. You want the animation effects to help emphasize the main points in your presentation—not draw the audience's attention to the special effects.

Animating an Object and Adding Sound Effects

You will begin by adding animation and sound to the shape object on the final slide.

1. **Display slide 13 in Normal view.**
2. **Select the heart shape.**
3. **Open the Animations tab.**
4. **Click** Custom Animation **in the Animations group.**

Your screen should be similar to Figure 2.50

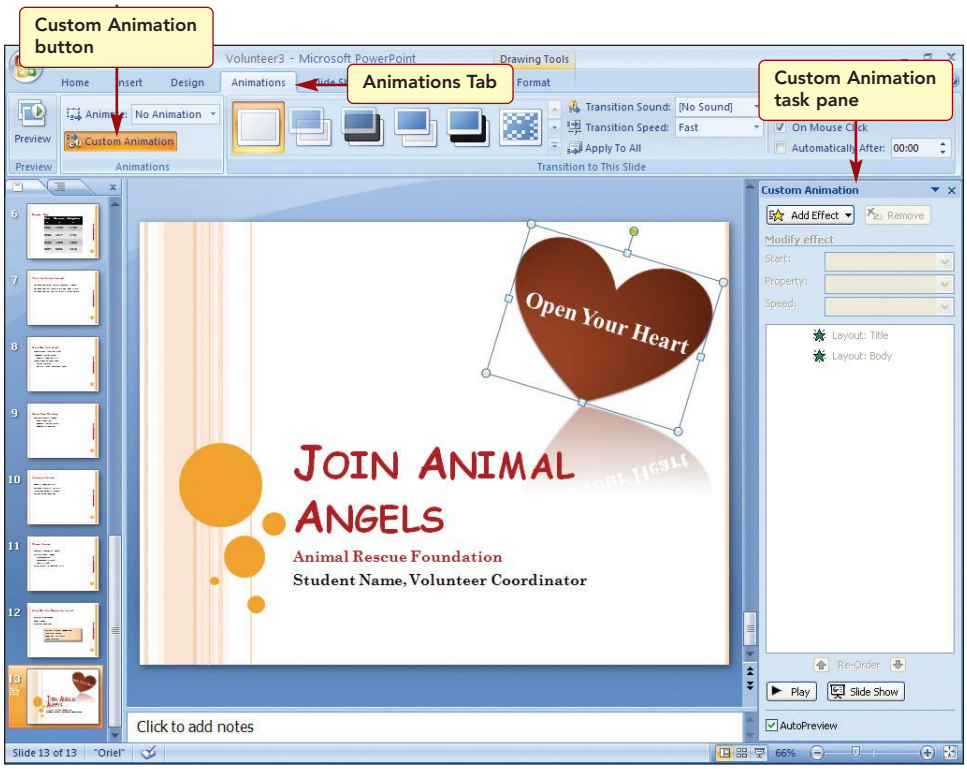


Figure 2.50

The Custom Animation task pane is used to assign animations and sound to objects on the slide. As you add animated items to a slide, each item is numbered. The number determines the order in which they display. A nonprinting numbered tag appears on the slide near each animated item that correlates to the effects in the list.

You will animate the shape object only. As you make selections, the Custom Animation list box will display the selected settings for the object and the effect will be demonstrated in the slide.

2. **If necessary, choose the AutoPreview option.**
- **Click** Add Effect.
- **Select Entrance from the drop-down list.**
- **Choose 5. Fly In.**
- **From the Direction drop-down list, select From Left.**
- **From the Speed drop-down list, select Medium.**
- **Display the** 1 Heart 4: Open You... **drop-down list and choose Effect Options.**

Your screen should be similar to Figure 2.51

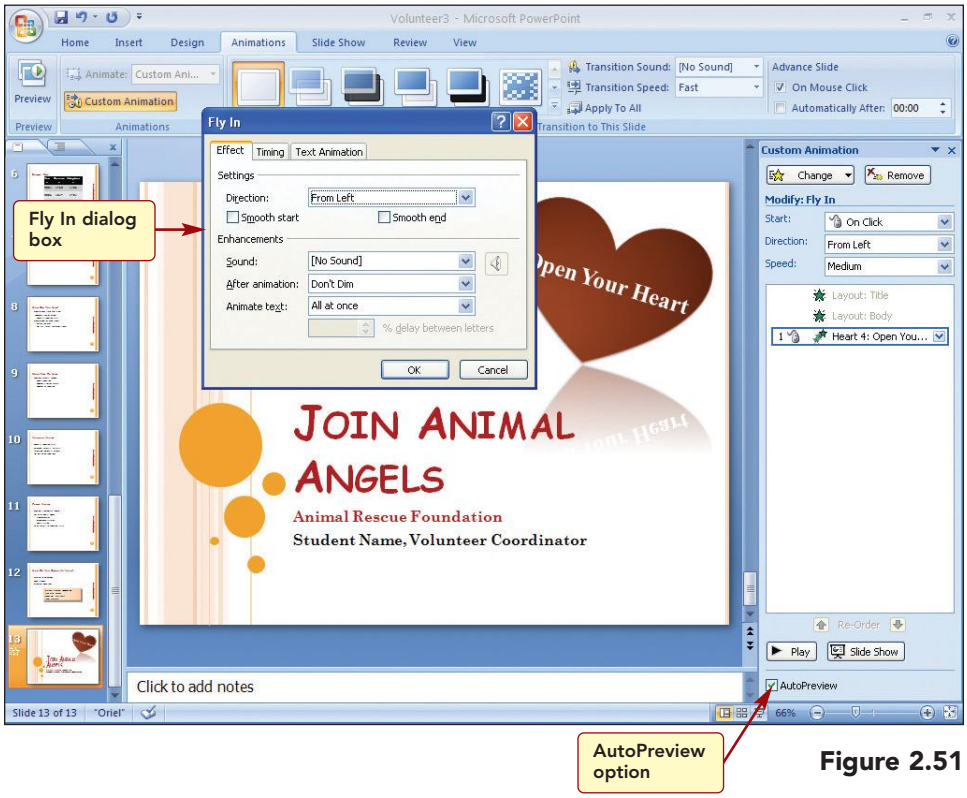


Figure 2.51

The Fly In dialog box includes the setting you already specified for the direction of the effect. You will use it to add a sound to the fly-in effect.

3. **From the Sound drop-down menu, choose Chime.**
- **Click** OK.
- **Click** ✕ **to close the Custom Animation task pane.**
- **Click** Preview **in the Preview group to run the animations associated with this slide.**

Additional Information
You must have a speaker and a sound card to hear the sound.

The heart appeared using the fly-in effect, and the chime sound played as it will when the slide show is run.

Animating a SmartArt Graphic

Next, you will animate the SmartArt graphic. The entire graphic can be animated or the individual parts can be animated to show the information in phases.

1. **Display slide 5.**
2. **Select the SmartArt shape.**
3. **Open the** Animate: No Animation **drop-down list.**

Your screen should be similar to Figure 2.52

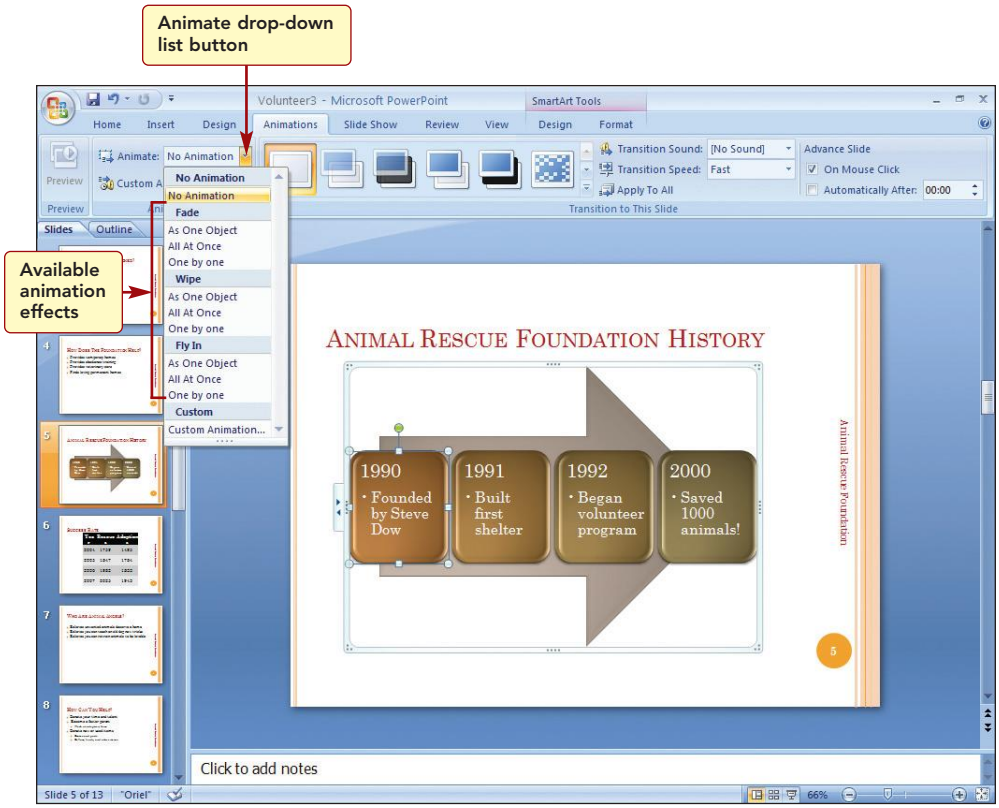


Figure 2.52

Additional Information
Any connecting lines that are associated with the SmartArt shape are not animated individually.

The animations that are displayed in the list are animations that are available for the layout of your SmartArt graphic. Animations for a SmartArt graphic are different than those for other graphic objects. This is because the animation plays in the order that the shapes appear. This order begins with the first item listed in the text pane and moves down. As you point to the different animations, a Live Preview demonstrates the effect.

2 **Point to several animations to see the Live Preview.**

Choose One by One in the Fade group.

Your screen should be similar to Figure 2.53

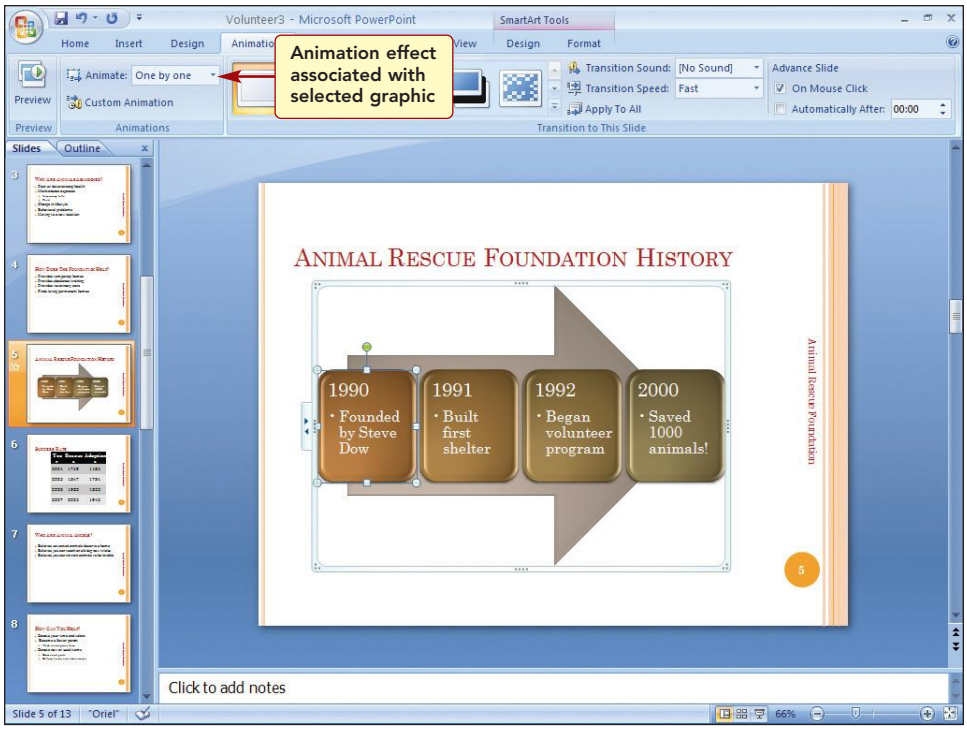


Figure 2.53

The underlying graphic, in this case the arrow, appeared first using a Fade effect. Then each box appeared in sequence also using the same effect.

Animating a Slide Master

The next effect you want to add to the slides is an animation effect that will display each bullet progressively on a slide. When the animation is applied to a slide, the slide initially shows only the title. The bulleted text appears as the presentation proceeds. You want to add this effect to all the slides that have bulleted items (slides 3, 4, 7–12). To do this, you could add the effect to each slide individually. However, when there are many slides, it is faster to add the effect to the slide master so all slides based on the selected master slide layout display the effect.

1. **Display slide 3.**
2. **Change to Slide Master view.**
3. **Select the Oriel Title and Text Layout slide master (last layout in slide pane).**

Having Trouble?
Point to the slide master thumbnail to see the master slide layout name.

4. **Select the content placeholder.**
5. **Open the Animations tab.**
6. **Click** Custom Animation.
7. **Click Add Effect and choose the Fly-in Entrance effect.**
8. **Change the direction to Bottom-Left and speed to Medium.**
9. **Close the task pane and return to Normal view.**

Your screen should be similar to Figure 2.54

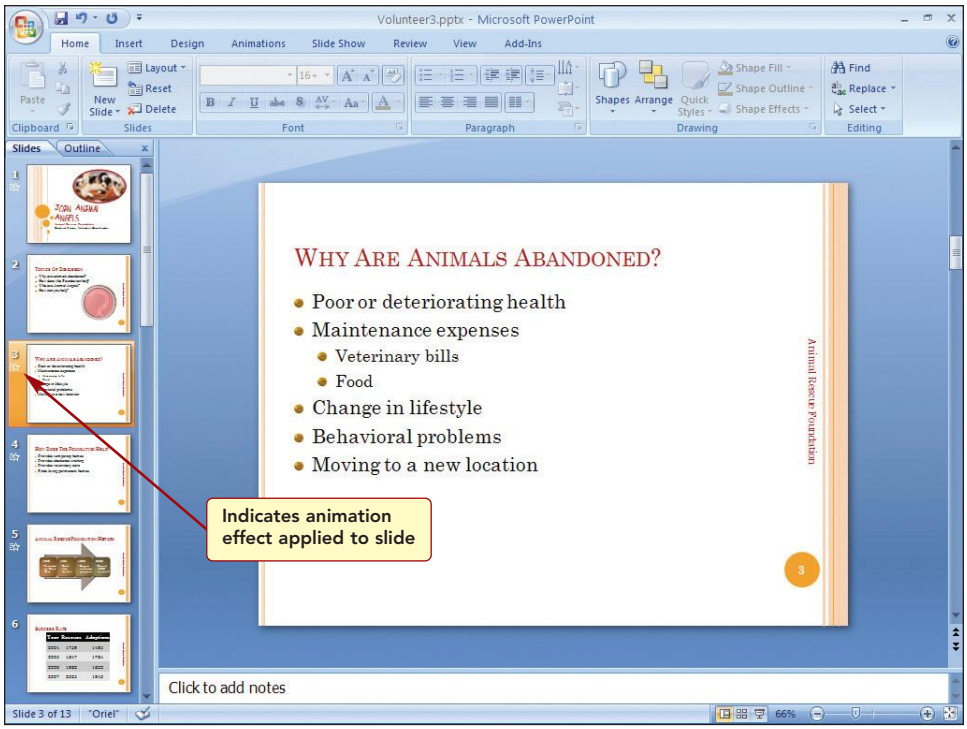


Figure 2.54

Notice the action icon displayed next to the slides in the Slides tab. This indicates that an animation effect has been applied to the slide. To preview the animation, you can click the icon or Preview in the Animations tab.

2. **Preview the animation on slide 3.**

The preview demonstrates how each first-level bullet will appear one by one on the slide. The same effect has been applied to all slides using the Title and Text Layout (slides 3, 4, 7–12). If a new slide were inserted using this layout, it would have the same animation effect.

Adding Transition Effects

Next, you want to add a transition effect to all the slides. Although you can add transitions in Normal view, you will use Slide Sorter view so you can preview the action on all the slides.

1. **Switch to Slide Sorter view.**
2. **Click More in the Transition to This Slide group to open the Transitions gallery.**

Your screen should be similar to Figure 2.55

Additional Information
In Slide Sorter view, the animation icon appears below each slide.

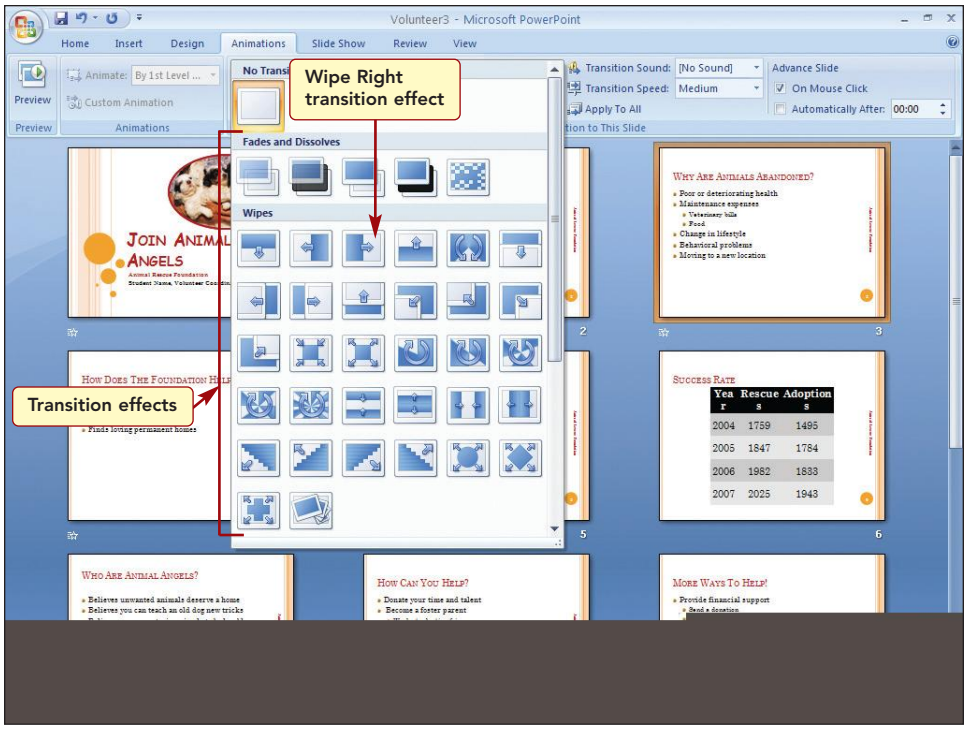


Figure 2.55

Additional Information
Use the No Transition option to remove transition effects.

There are five transition categories with each containing variations on the category effect. You want to use a simple transition effect that will display as each slide appears.

2. **Click Wipe Right in the Wipes category.**

Having Trouble?
If you want to see the transition effect again, click in the transition gallery in the Ribbon.

The selected slide displays the Wipe Right transition effect. This effect displays the next slide's content by wiping over the previous slide from the right with the new slide content. You want to try a similar effect in the Push and Cover category.

3. **Open the Transitions gallery again.**
4. **Select Push Right from the Push and Cover category.**

You like this effect too but think a little variety may be more effective. To do this, you decide to use the Random Transition effect, which will randomly run different transition effects, and apply the effect to all slides.

4 **Open the Transitions gallery again.**

Choose Random Transition from the Random category.

Having Trouble?
Scroll down to see the Random Transition option.

Click Apply to All **in the Transition to This Slide group.**

Additional Information
You also could select all the slides or multiple slides and apply the transition to those slides only.

Select all the slides and click Preview **to see all animation effects.**

Your screen should be similar to Figure 2.56

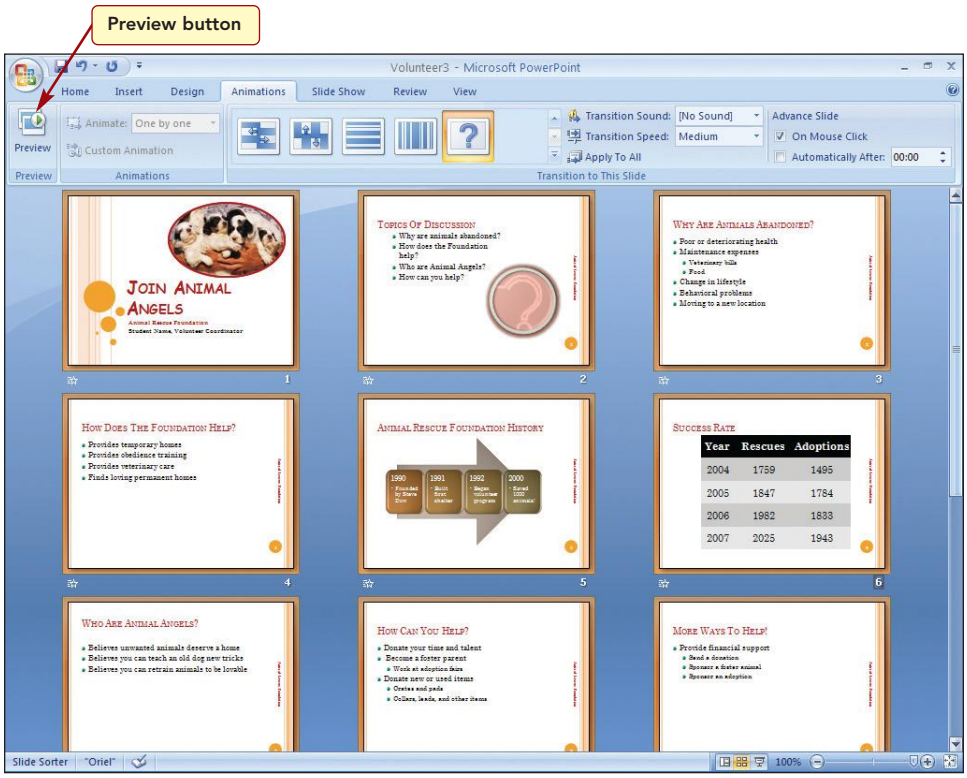


Figure 2.56

A variety of transitions were used as each slide was previewed.

5 **Switch to Normal view.**

Save the presentation.

You have made many changes to the presentation and want to run the show full screen to see the total effect.

Controlling the Slide Show

As much as you would like to control a presentation completely, the presence of an audience usually causes the presentation to change course. PowerPoint has several ways to control a slide show during the presentation. Before presenting a slide show, you should rehearse the presentation. To help with this aspect of the presentation, you can use the Rehearse Timings feature that records the time you spend on each slide as you practice your narration. If your computer is set up with a microphone, you could even record your narration with the Record Narration feature.

Navigating in a Slide Show

Running the slide show and practicing how to control the slide show help you to have a smooth presentation. For example, if someone has a question about a previous slide, you can go backward and redisplay it. You will try out some of the features you can use while running the slide show.

1. **Start the slide show from the beginning.**
2. **Click two times to display slides 2 and 3.**

Your screen should be similar to Figure 2.57

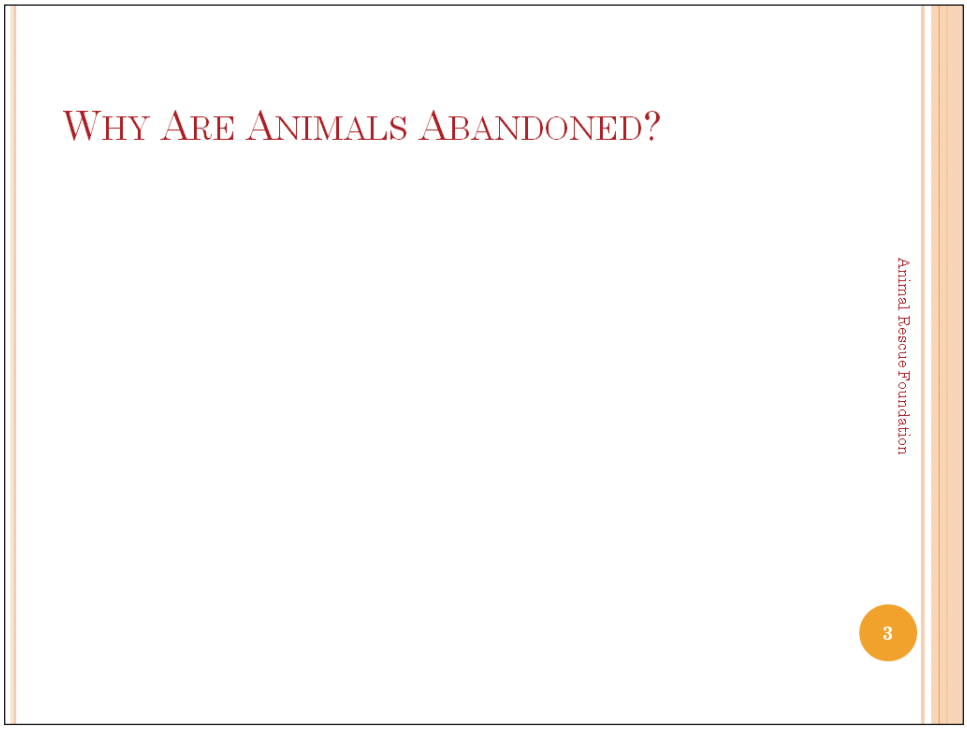


Figure 2.57

The first slide displayed the animation effect associated with the slide title. The second slide appeared using one of the transition effects. The third slide also appears with a transition effect and displays the title only.

When an animation is applied to the content area of a slide, the content items are displayed only when you click or use any of the procedures to advance to the next slide. This allows the presenter to focus the audience's attention and to control the pace of the presentation.

2 **Continue to click or press Spacebar until slide 8, How Can You Help? appears.**

Press ←Backspace (5 times).

Additional Information
You can return to the first slide in the presentation by holding down both mouse buttons for two seconds.

Your screen should be similar to Figure 2.58

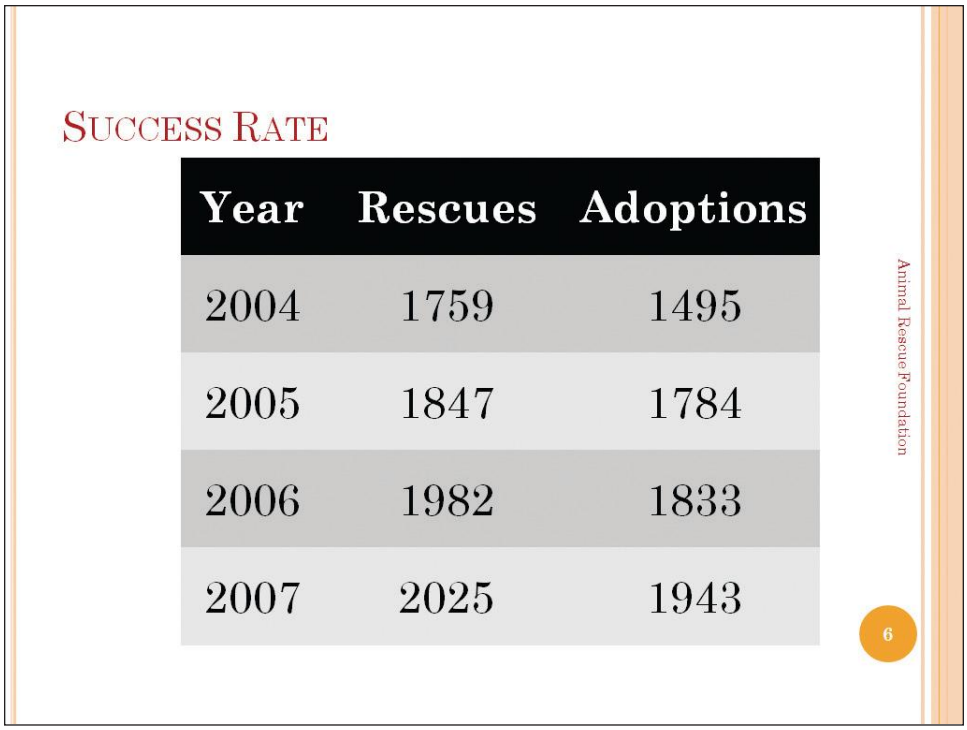


Figure 2.58

You returned the onscreen presentation to slide 6, but now, because the audience has already viewed slide 7, you want to advance to slide 8. To go to a specific slide number, you type the slide number and press ↵Enter.

3 **Type 8 and press ↵Enter.**

Another Method
You also can choose Go to Slide from the shortcut menu and select a slide to display.

Click three times to display the bulleted items.

Click again to display slide 9.

Your screen should be similar to Figure 2.59



Figure 2.59

Slide 9, More Ways To Help, is displayed.

Additional Information
You also can white out the screen by pressing W or using Screen/White Screen on the shortcut menu.

Sometimes a question from an audience member can interrupt the flow of the presentation. If this happens to you, you can black out the screen to focus attention onto your response.

4 **Press b or B.**

Another Method
The menu equivalent is Screen/Black Screen on the shortcut menu.

The screen goes to black while you address the topic. When you are ready to resume the presentation, you can bring the slide back.

5 **Click, or press b.**

Click to display the bulleted items on slide 9.

Adding Freehand Annotations

During your presentation, you may want to point to an important word, underline an important point, or draw checkmarks next to items that you have covered. To do this, you can use the mouse pointer during the presentation. When you move the mouse, the mouse pointer appears and the Slide Show toolbar is displayed in the lower-left corner of the screen. The mouse pointer in its current shape can be used to point to items on the slide. You also can use it to draw on the screen by changing the mouse pointer to a ballpoint pen, felt tip pen, or highlighter, which activates the associated freehand annotation feature.

1 **Move the mouse on your desktop.**

Click to display the Pointer options menu.

Another Method
You also can select Pointer Options from the shortcut menu.

Your screen should be similar to Figure 2.60

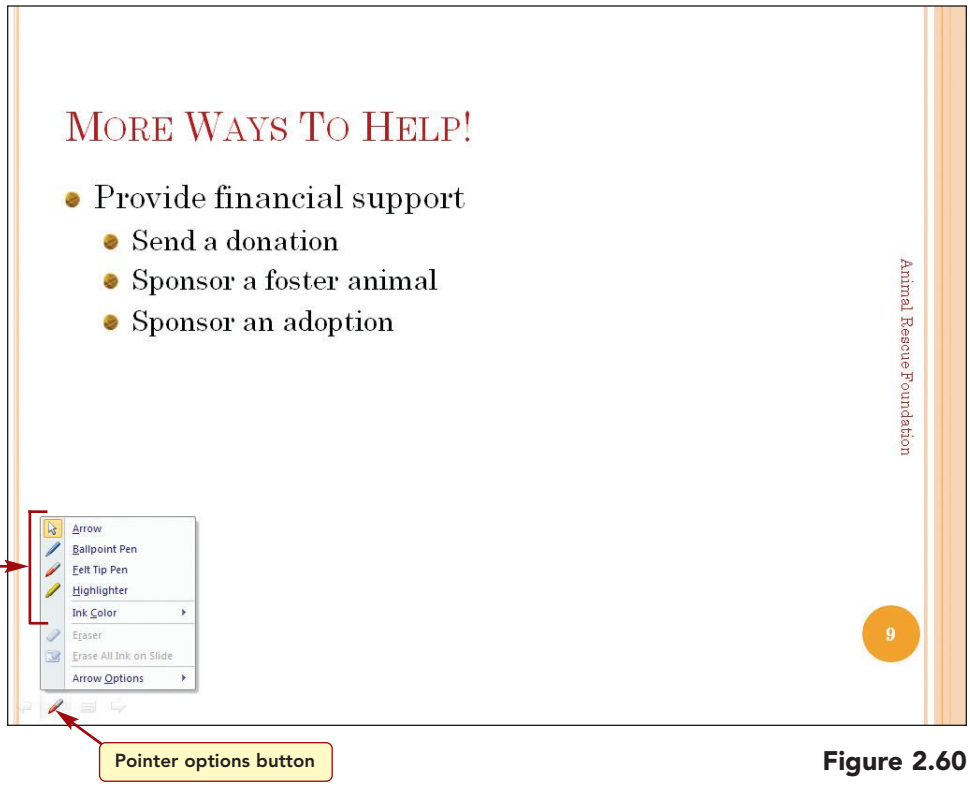


Figure 2.60

The mouse pointer and arrow options are described in the following table.

Pointer Options	Effect
Arrow	Displays the mouse pointer as an arrow.
Ballpoint Pen	Changes the mouse pointer to a diamond shape and turns on ballpoint pen annotation.
Felt Tip Pen	Changes the mouse pointer to a circle shape and turns on felt tip pen annotation.
Highlighter	Changes the mouse pointer to a bar shape and turns on highlighter.
Ink Color	Displays a color palette to select a color for the annotation tool.
Eraser	Erases selected annotations.
Erase All Ink on Slide	Removes all annotations from the slide.
Arrow Options	**(These options apply only if Arrow is selected.)**
Automatic	Hides the mouse pointer if it is not moved for 15 seconds. It reappears when you move the mouse. This is the default setting.
Visible	Displays the mouse pointer as an arrow and does not hide it.
Hidden	Hides the mouse pointer until another pointer option is selected.

You will try out several of the freehand annotation features to see how they work. To draw, you select the pen style and then drag the pen pointer in the direction you want to draw.

2 **Choose Felt Tip Pen.**

Additional Information
The mouse pointer changes shape depending upon the selected annotation tool.

- **Move the dot pointer to near the word "Send" and then drag the dot pointer until a circle is drawn around the word "Send."**
- **Choose Highlighter from the Pointer options menu and highlight the word "Donation."**
- **Choose Ballpoint Pen from the Pointer options menu.**

Another Method
You also can use Ctrl + P to display the Ballpoint Pen.

- **Choose Ink Color from the Pointer options menu and select Light Blue from the Standard Colors bar.**

Additional Information
The Automatic ink color setting determines the default color to use for annotations based upon the slide theme colors.

- **Draw three lines under the word "Help".**

Your screen should be similar to Figure 2.61

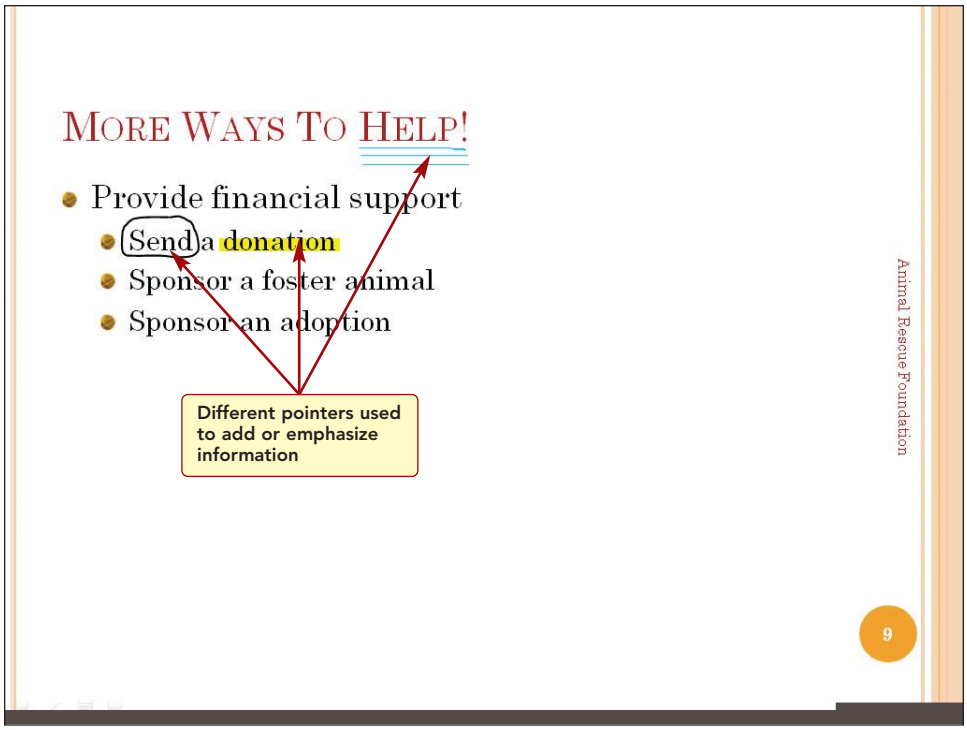


Figure 2.61

The freehand annotation feature allows you to point out and emphasize important information on a slide during the presentation.

3. **Practice using the freehand annotator to draw any shapes you want on the slide.**

- **To erase the annotations, select Erase All Ink on Slide from the Pointer options menu.**

Another Method
The keyboard shortcut to erase annotations is E.

- **To turn off freehand annotation, select Arrow from the Pointer options menu.**

Another Method
You also can use Ctrl + A to display the arrow.

- **Press Esc to end the slide show.**

If you do not erase annotations before ending the presentation, you are prompted to keep or discard the annotations when you end the slide show. If you keep the annotations, they are saved to the slides and will appear as part of the slide during a presentation.

Hiding Slides

As you reconsider the presentation, you decide to show the Success Rate slide only if someone asks about this information. To do this, you will hide the slide.

1. **Select slide 6.**
2. **Open the Slide Show tab.**
3. **Click** Hide Slide.

Your screen should be similar to Figure 2.62

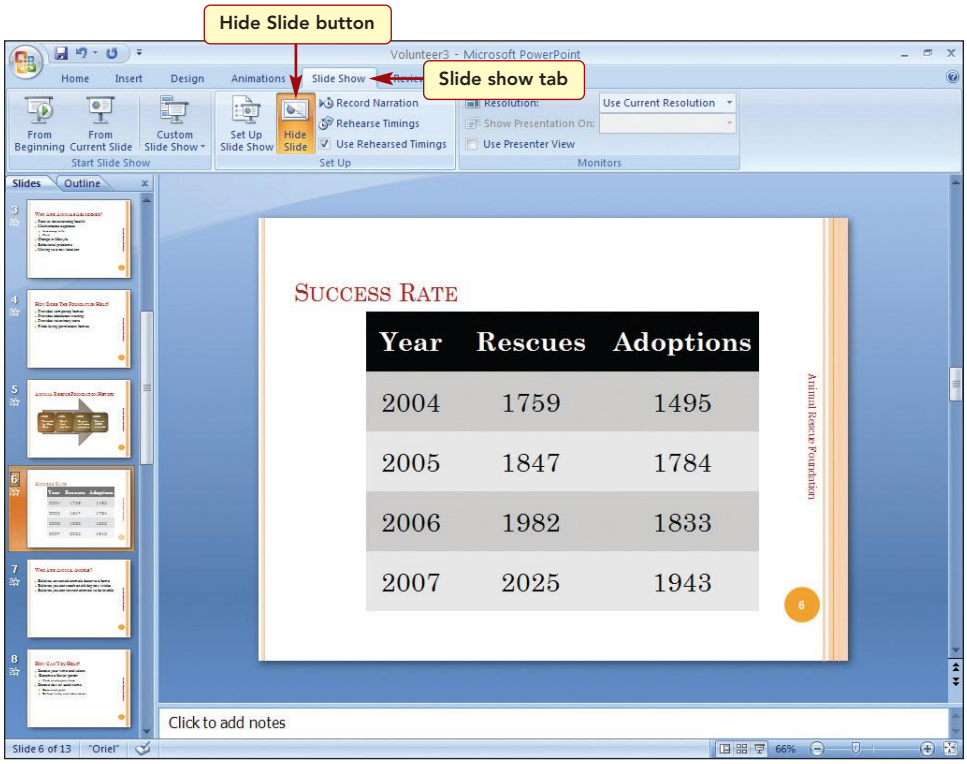


Figure 2.62

Notice that the slide number for slide 6 is surrounded by a box with a slash drawn through it, which indicates that the slide is hidden. Next, you will run the slide show to see how hidden slides work. You will begin the show at the slide before the hidden slide.

2. **Select slide 5.**
   - **Run the slide show from the current slide.**
   - **Click six times to display the slide animation and move to the next slide, which should be Who Are Animal Angels?**

Your screen should be similar to Figure 2.63

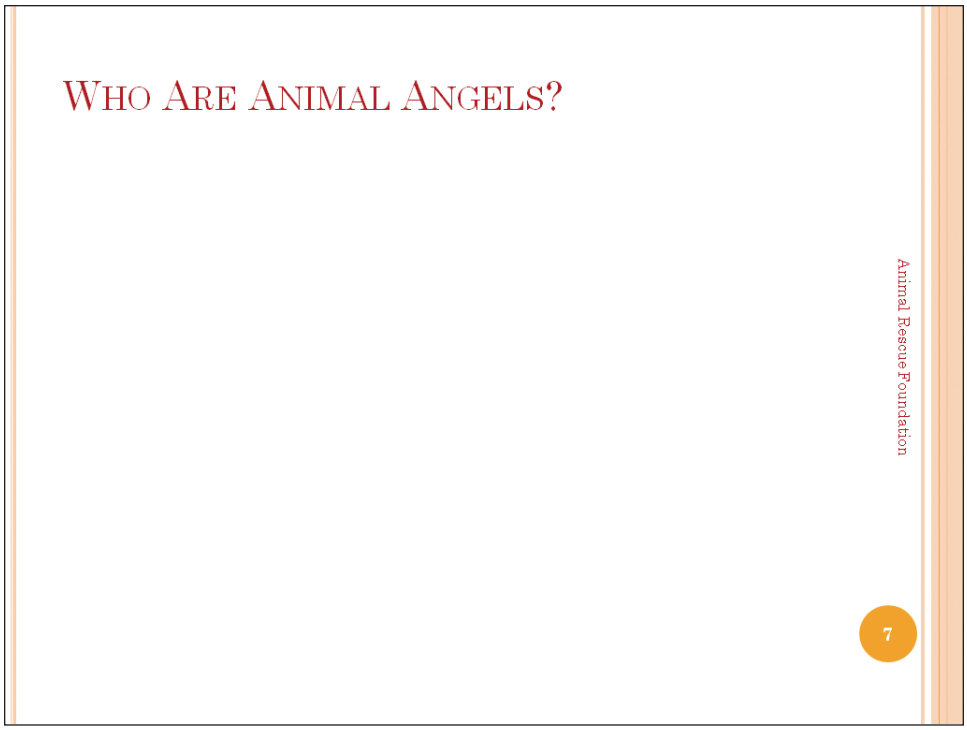


Figure 2.63

Slide 6 was not displayed because it is hidden. To show how to display a hidden slide, you will return to slide 5 and then display slide 6.

3. **Press Page Up to display slide 5 again.**
   - **Press H to see slide 6.**

Your screen should be similar to Figure 2.64

Another Method
You also can use Go to Slide on the shortcut menu to display a hidden slide.

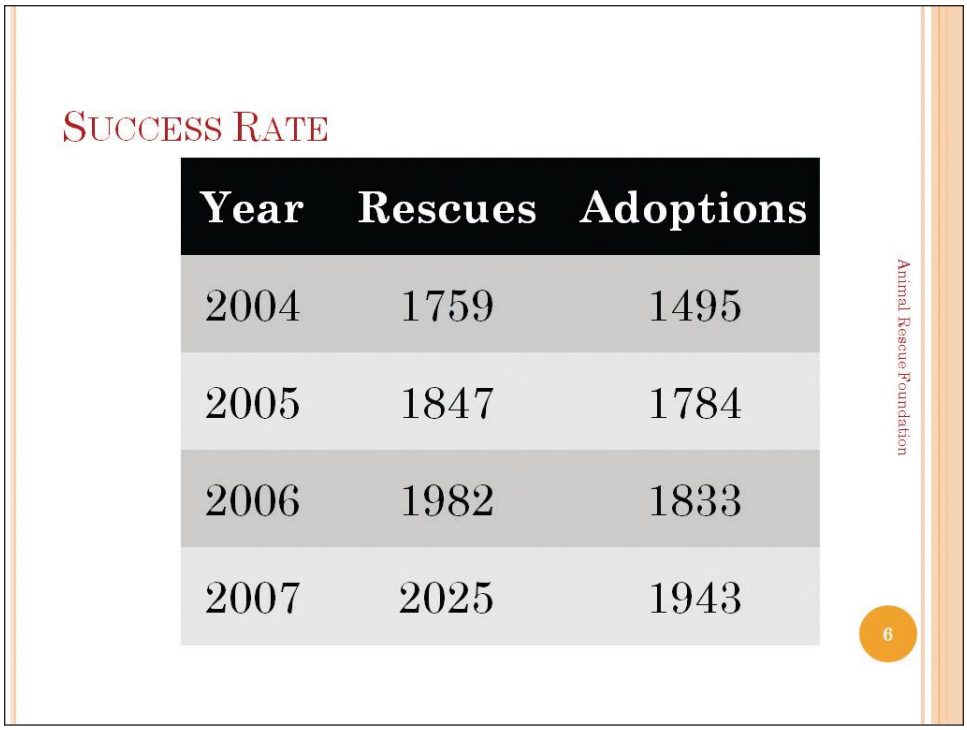


Figure 2.64

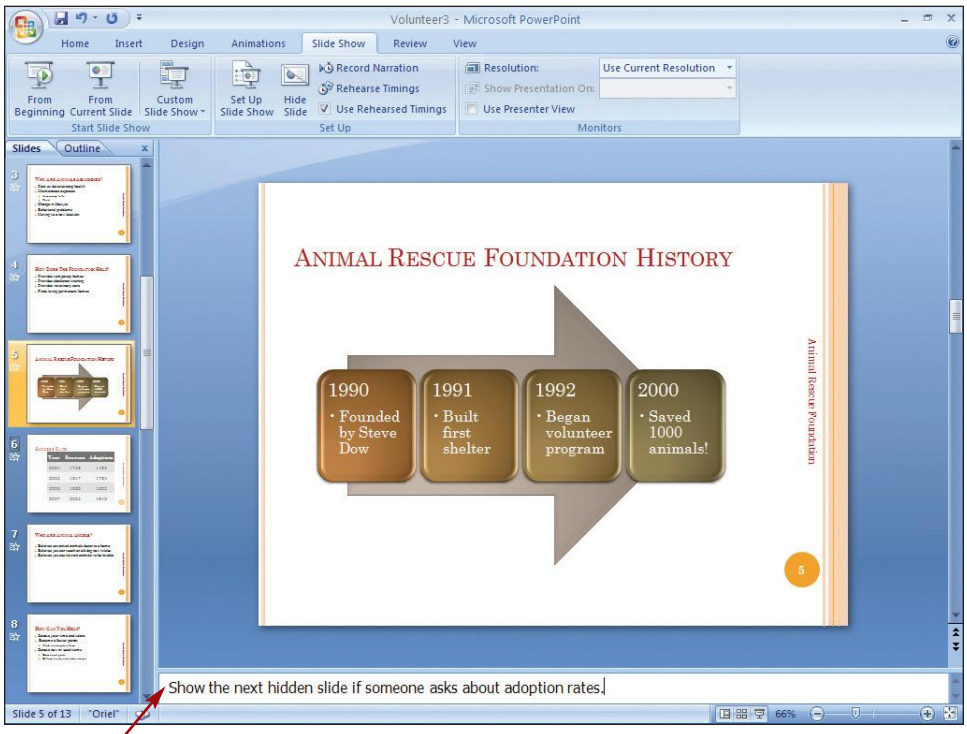
Adding Speaker Notes

When making your presentation, there are some critical points you want to be sure to discuss. To help you remember the important points, you can add notes to a slide and then print the **notes pages.** These pages display the notes below a small version of the slide they accompany. You can create notes pages for some or all of the slides in a presentation. You decide to add speaker notes on slide 5 to remind you about the hidden slide.

1. **Press Esc to end the slide show.**
2. **Display slide 5 in Normal view.**
3. **Click in the notes pane.**
4. **Type Show the next hidden slide if someone asks about adoption rates.**

Your screen should be similar to Figure 2.65

Additional Information
You can enlarge the notes area by dragging the pane divider line.



Speaker notes added

Figure 2.65

You will preview the notes page to check its appearance before it is printed.

2. **Open the View tab.**

- **Click Notes Page in the Presentation Views group.**

Your screen should be similar to Figure 2.66

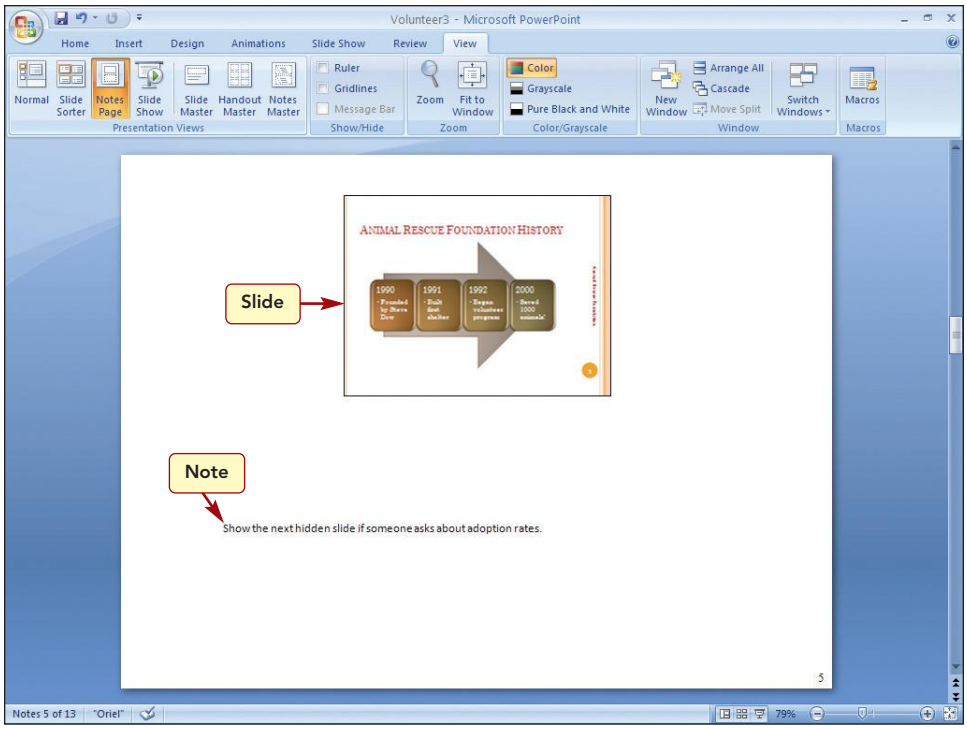


Figure 2.66

The notes pages display the note you added below the slide that the note accompanies.

To make the speaker notes easy to read in a dimly lit room while you are making the presentation, you will increase the font size of the note text.

3. **Click on the note text to select the placeholder.**

- **Select the note text.**
- **Use the Mini Toolbar to increase the font size to 20.**
- **Click outside the note text border.**

Your screen should be similar to Figure 2.67

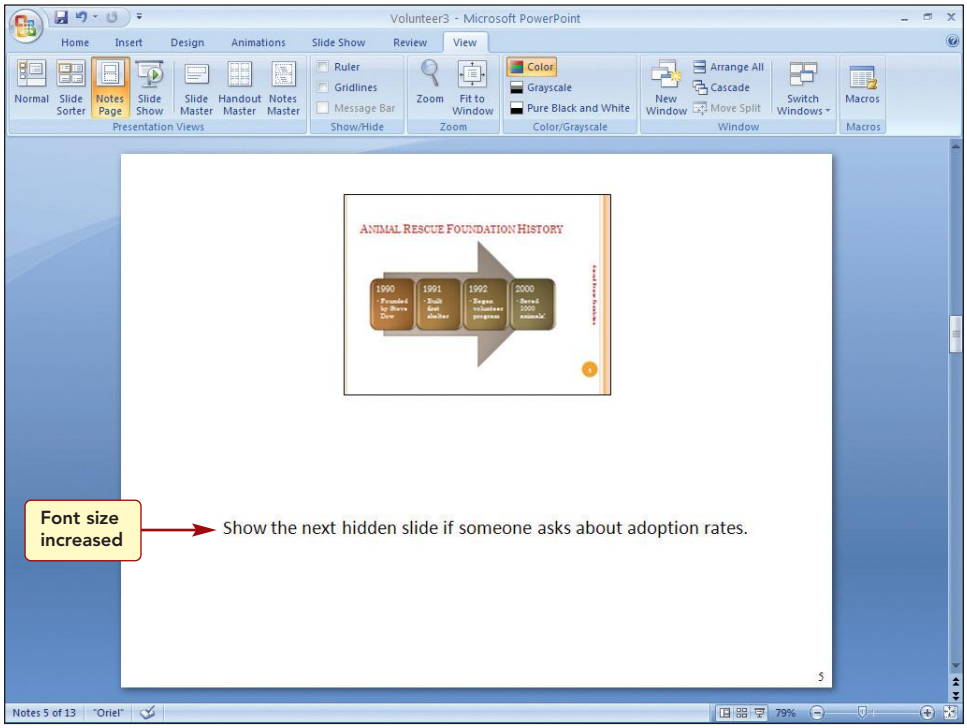


Figure 2.67

Adding Headers and Footers to Notes and Handouts

Currently, the only information that appears in the footer of the notes page is the page number. You want to include the date and your name in the header of the notes and handouts.

1. **Open the Insert tab.**
2. **Click** 

in the Text group.
3. **If necessary, open the Notes and Handouts tab.**

Your screen should be similar to Figure 2.68

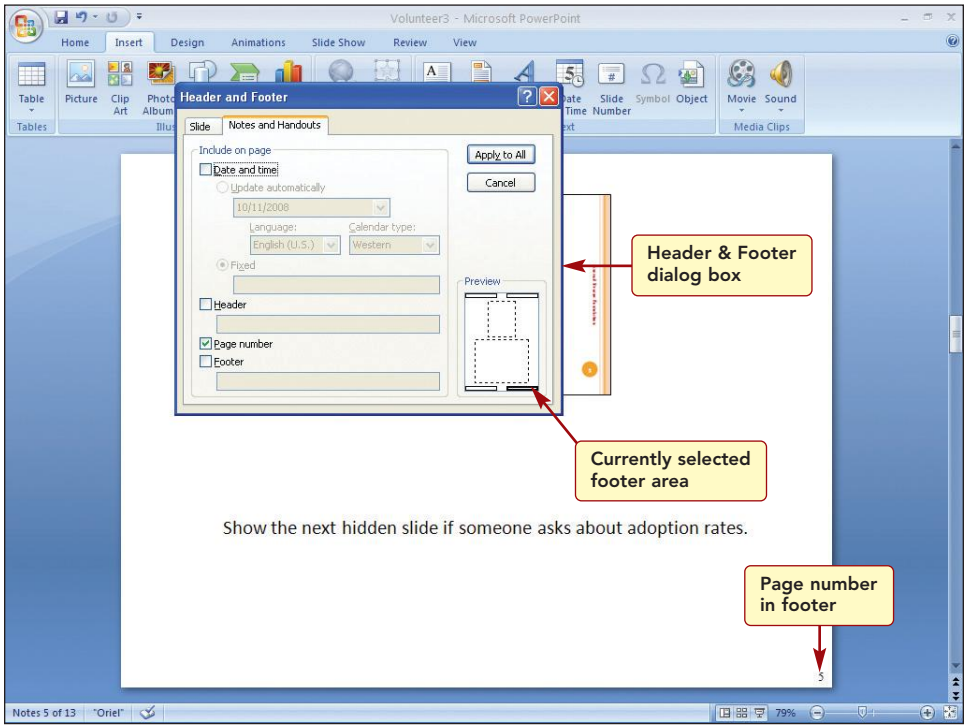


Figure 2.68

As in slides, you can display date and time information and footer text. In addition, on notes and handouts, you can include header text and a page number. The preview area identifies the four areas where this information will appear and identifies the currently selected areas, in this case page number, in bold.

2. **Click Date and time to turn on this option and, if necessary, select Update automatically.**

- **Select Header and enter your name in the Header text box.**
- **Click** Apply to All **.**

Your screen should be similar to Figure 2.69

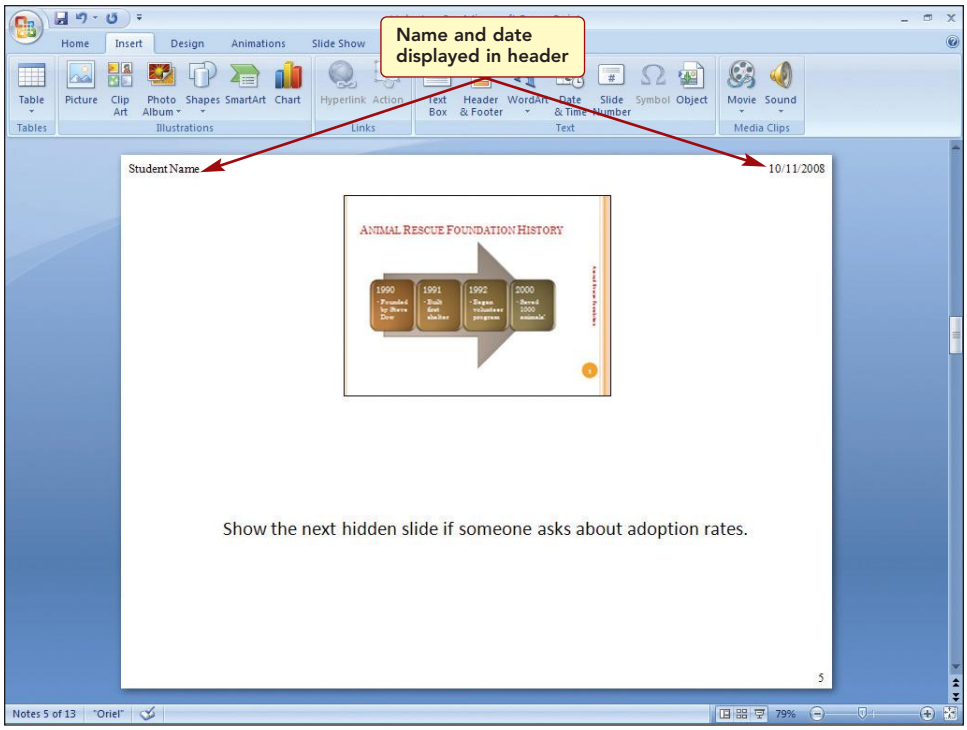


Figure 2.69

The information is displayed in the header as specified.

Documenting a File

Along with the content of the presentation, each file can include additional document properties or settings that are associated with the file. Some of these properties are automatically generated. These include statistics such as the number of words in the file and general information such as the date the document was created and last modified. Others such as the author of the file are properties that you can add to the file.

You will look at the file properties and add documentation as needed.

1. **Return to Normal view.**
2. **Display slide 1.**
3. **Click Office Button and select Prepare.**
4. **Choose Properties.**

Your screen should be similar to Figure 2.70

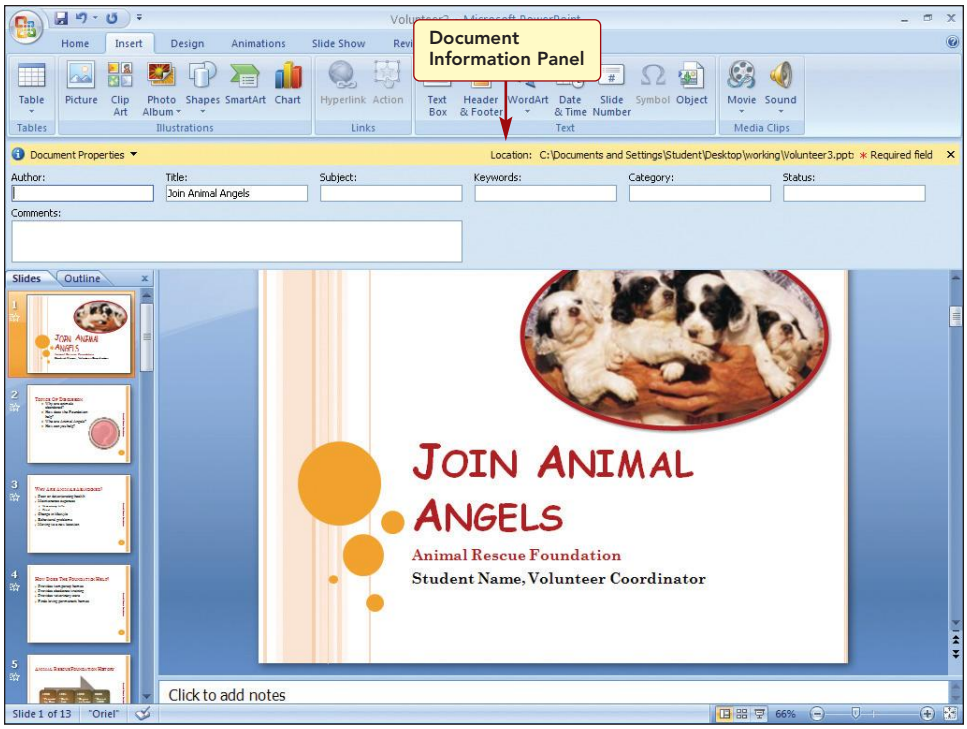


Figure 2.70

The Document Information Panel opens and displays the standard information about the file. The first few words in the first line of a document are used as the default title.

The Standard property fields are used for the following:

Option	Action
Author	Enter the name of the presentation's author. By default this is the name entered when PowerPoint was installed.
Title	Enter the presentation title. This title can be longer and more descriptive than the presentation file name.
Subject	Enter a description of the presentation's content.
Keywords	Enter words that you associate with the presentation so the Find File command can be used.
Category	Enter the name of a higher-level category under which you can group similar types of presentations.
Status	Enter the degree of completion; for example, first draft or final presentation.
Comments	Enter any comments you feel are appropriate for the presentation.

You will modify the information to include your name and a subject description. The default title does not need to be changed. You also will quickly look at the additional information that is stored with the file properties.

2. **In the Author text box, enter your name.**

   In the Subject text box, enter Volunteer recruitment.

   Click Document Properties **and choose Advanced Properties.**

   Your screen should be similar to Figure 2.71

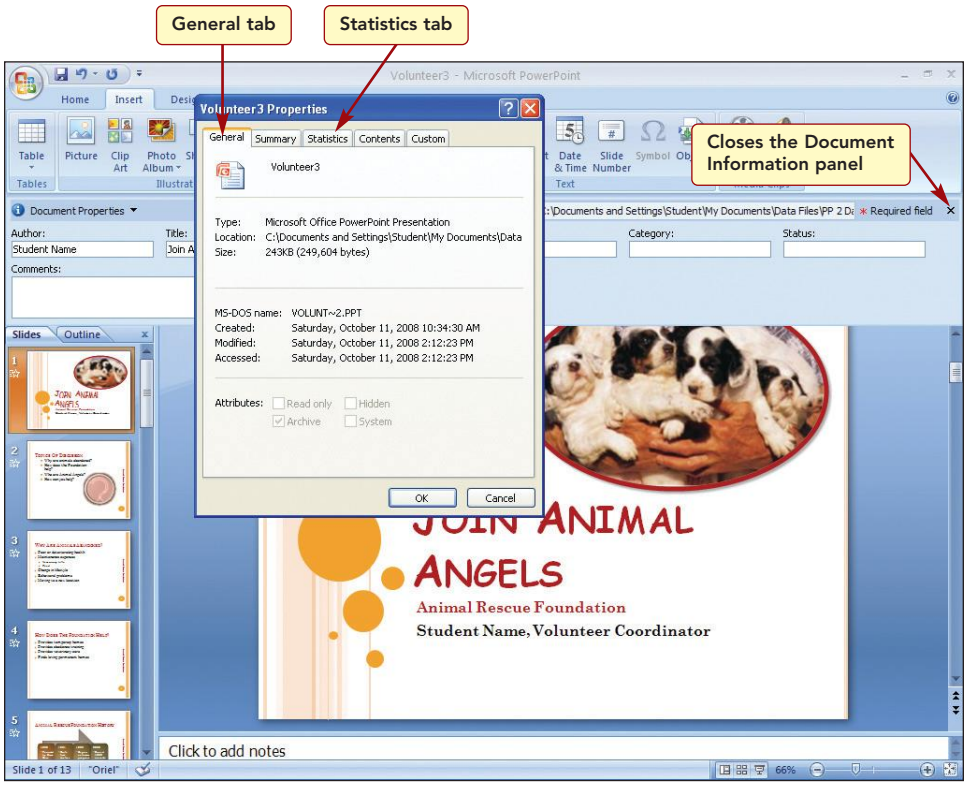


Figure 2.71

The General tab displays information about the type, location, and size of the document as well as about when the document was created and modified. Next, you will look at the document statistics. This tab identifies who last saved the document, the revision number, and the total editing time in minutes. The table identifies the number of slides, words, paragraphs, and so forth that are included in the presentation. Then you will close the Document Information panel.

3. **Open the Statistics tab.**

   Click OK **to close the Properties dialog box.**

   Click × **to close the Document Information panel.**

Customizing Print Settings

You have created both slides and a notes page for the presentation. Now you want to print the notes page and some of the slides. Customizing the print settings by selecting specific slides to print and scaling the size of the slides to fill the page are a few of the ways to make your printed output look more professional.

Printing Notes Pages

First you will print the notes page for the slide on which you entered note text.

1. Select slide 5.
2. Click Office Button and choose Print.
3. If necessary, select the printer.
4. From the Print Range section, select Current Slide.
5. From the Print What drop-down list box, select Notes Pages.
6. If necessary, select Grayscale from the Color/Grayscale drop-down list box.
7. Click Preview.

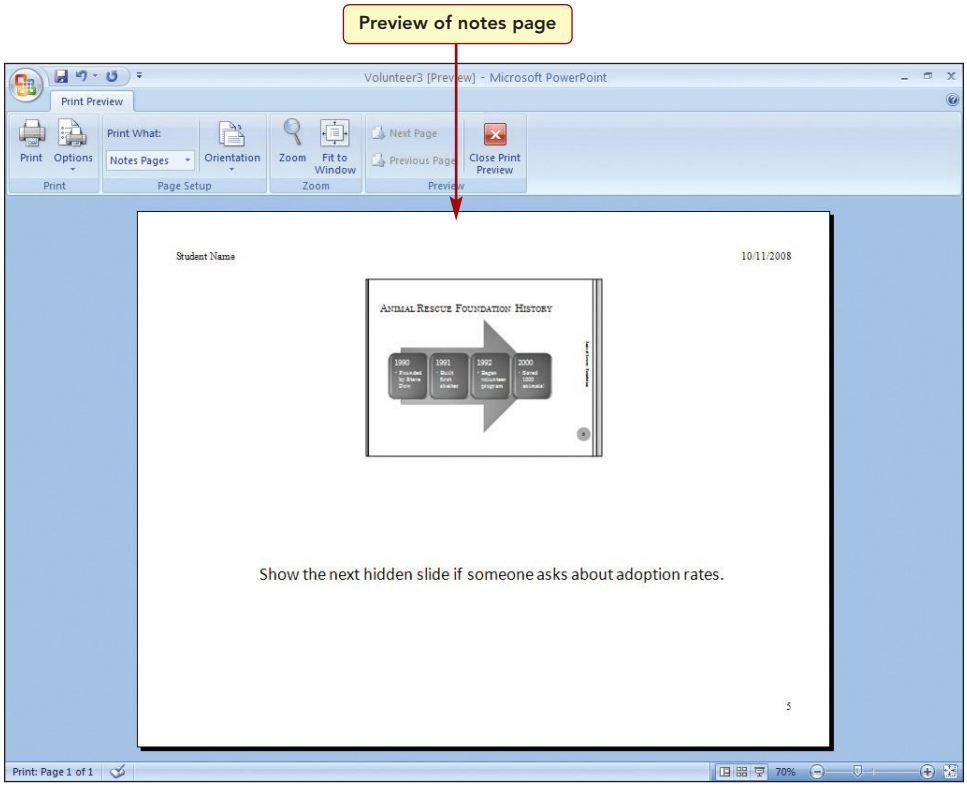


Figure 2.72

Having Trouble?
If your notes page is in Portrait orientation, click Orientation and choose Landscape.

The notes page is displayed in landscape orientation as it will appear when printed.

Your screen should be similar to Figure 2.72

8. Click Print.
9. Click OK.

Additional Information
To print multiple Notes pages, enter the slide number of each slide (separated by commas) whose page you want to print in the Slide text box.

Printing Selected Slides

Next you will print a few selected slides to be used as handouts. You will change the orientation to landscape and scale the slides to fit the paper size.

1. Click Print.
   - Click Slides in the Print Range section.
   - In the Slides text box, type 1, 2, 6, 13.
   - Specify Handouts as the component to print and 4 slides per page.
   - Click Preview.
   - Click Orientation and change to Portrait orientation.
   - Click Options and select Scale to Fit Paper.

Your screen should be similar to Figure 2.73

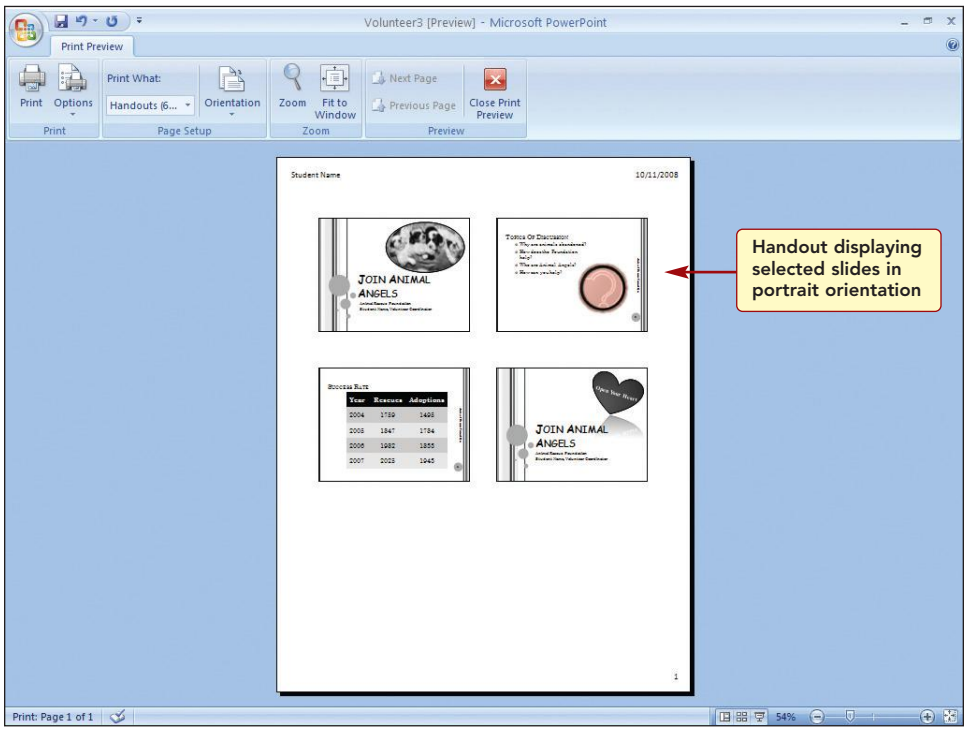


Figure 2.73

The four selected slides are displayed in portrait orientation and the slide images were sized as large as possible to fill the page.

2. Print the handout.
   - Close the Print Preview window.
   - Save the completed presentation.
   - Exit PowerPoint.

The view you are in when you save the file is the view that will be displayed when the file is opened. The document properties and print settings are also saved with the file.



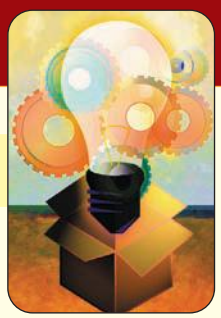
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Communications Specialist

Are you interested in technology? Could you explain it in words and pictures? Communications Specialists, also known as public relations specialists, assist sales and marketing management with communications media and advertising materials that represent the company's products and services to customers. In high-tech industries, you will take information from scientists and engineers and use PowerPoint to transform the data into eye-catching presentations that communicate effectively. You also may create brochures, develop Web sites, create videos, and write speeches. If you thrive in a fast-paced and high-energy environment and work well under the pressure of deadlines, then this job may be for you. Typically a bachelor's degree in journalism, advertising, or communications is desirable. Typical salaries range from $26,000 to $85,000, depending on the industry. To learn more about this career, visit the Web site for the Bureau of Labor Statistics of the U.S. Department of Labor.

Concept Summary



LAB 2

Modifying and Refining a Presentation

Find and Replace (PP2.5)

To make editing easier, you can use the Find and Replace feature to find text in a presentation and replace it with other text as directed.

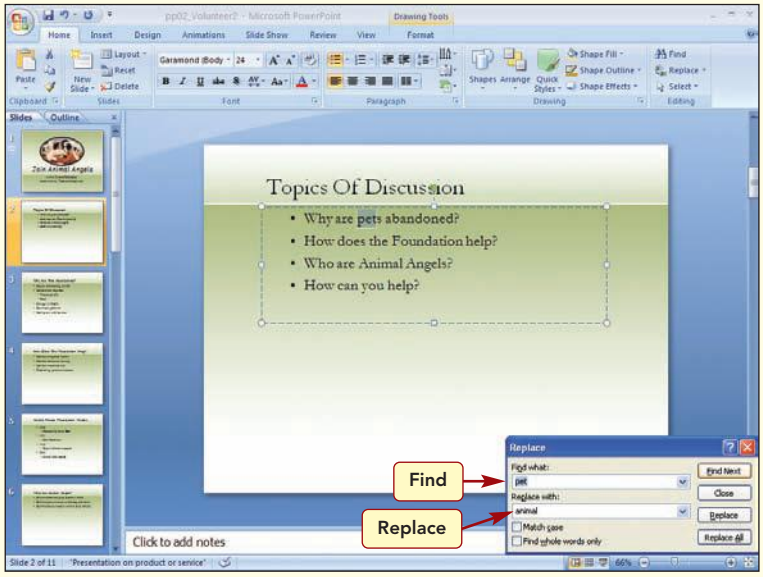
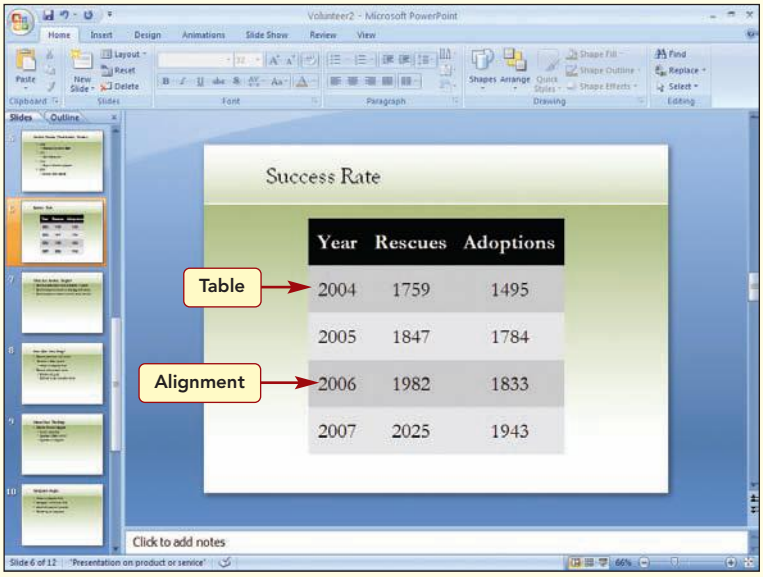


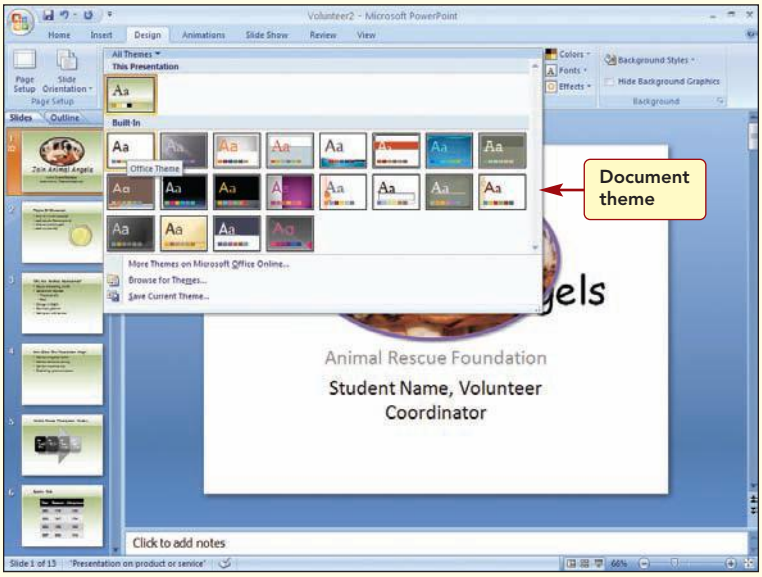
Table (PP2.8)

A table is used to organize information into an easy-to-read format of horizontal rows and vertical columns.

Alignment (PP2.16)

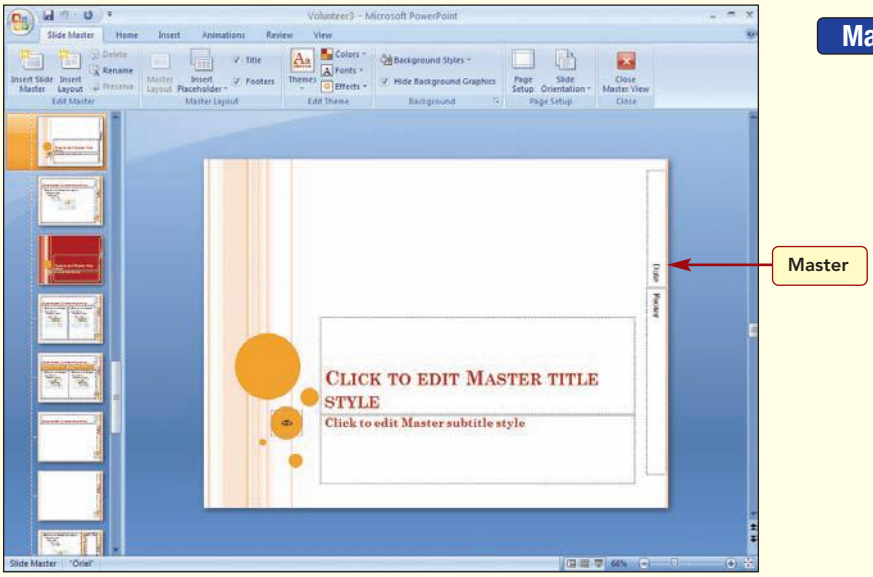
Alignment controls how text entries are positioned within a space.





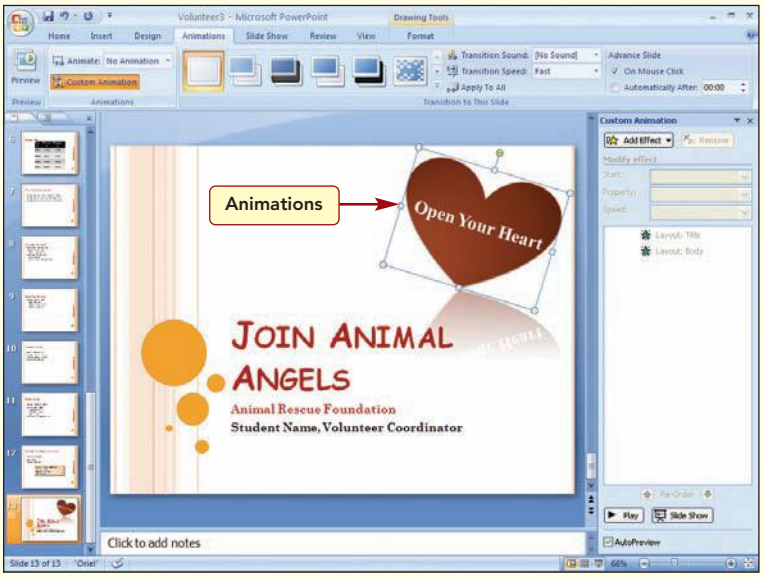
Document Theme (PP2.34)

A document theme is a professionally created slide design that is stored as a file and can be applied to a presentation.



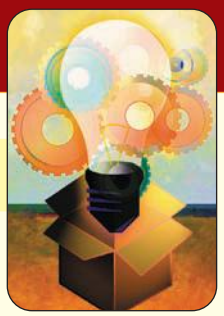
Master (PP2.41)

A master is a special slide or page that stores information about the formatting for all slides in a presentation.



Animations (PP2.47)

Special effects such as animation, sound, and slide transitions are used to enhance the onscreen presentation.



LAB 2

Modifying and Refining a Presentation

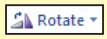
key terms

alignment PP2.16
animation PP2.47
cell PP2.8
document theme PP2.34
Find and Replace PP2.5
master PP2.41
notes page PP2.61
object animation PP2.47
rotate handle PP2.26
SmartArt PP2.27
table PP2.8
table reference PP2.8
table style PP2.17
text box PP2.31
transition PP2.47

command summary

Command	Shortcut	Action
Office Button		
Prepare/Properties		View and edit presentation properties such as Title, Author, and keywords
Home tab		
Font group		
Increase Font Size	Ctrl + Shift + >	Increases font size of selected text
Paragraph group		
Align Left	Ctrl + F	Aligns text to the left
Align Center	Ctrl + E	Centers text
Align Right	Ctrl + R	Aligns text to the right
Justify	Ctrl + F	Aligns text to both the left and right margins
Align Text		Sets vertical alignment of text
Editing group		
Find	Ctrl + F	Finds specified text
Replace	Ctrl + H	Replaces located text with replacement text
Insert tab		
Illustrations group		
Shapes		Inserts a shape
SmartArt		Inserts SmartArt shape
Text group		
Text Box		Inserts text box or adds text to selected shape
Header & Footer		Inserts a header and footer
Design tab		
Themes group		
More		Opens gallery of document themes
Colors		Changes the color for the current theme

command summary

Command	Shortcut	Action
Animations tab		
Animations group		
		Creates custom animation for individual objects
Transition to This Slide group		
		Applies transitions in current slide to all slides
Slide Show tab		
Set Up group		
		Hides current slide so that it does not appear during the presentation
View tab		
Presentation Views group		
		Displays current slide in Notes view to edit the speaker notes
		Opens Slide Master view to change the design and layout of the master slides
Drawing Tools Format tab		
Shapes Styles group		
 More		Opens the Shape Styles gallery to select a visual style to apply to a shape
		Applies a visual effect to a shape
Arrange group		
		Rotates or flips the selected object
Picture Tools Format tab		
Adjust group		
		Recolors picture
Picture Styles		
 More		Opens Picture Styles gallery to select an overall visual style for picture
		Applies a visual effect to picture

command summary

Command	Shortcut	Action
SmartArt Tools Design tab		
Layouts group		
More		Opens the Layouts gallery to change the layout for the selected SmartArt shape
SmartArt Styles group		
		Change the color variation of a SmartArt graphic
More		Opens the SmartArt Styles gallery to choose an overall visual style for the SmartArt graphic
Table Tools Design tab		
Table Styles group		
More		Opens the table styles gallery to choose a visual style for a table
Shading		Colors background behind selected text or paragraph
Border		Applies a border style
Effects		Applies a visual effect to the table such as shadows and reflections



matching

Match the item on the left with the correct description on the right.

1. animation	_____	**a.** predefined set of formatting choices that can be applied to an entire document
2. cell	_____	**b.** slide that stores information about the formatting for all slides or pages in a presentation
3. color theme	_____	**c.** organizes information into an easy-to-read format of horizontal rows and vertical columns
4. document theme	_____	**d.** special effects that add action to text and graphics
5. master	_____	**e.** quickly creates a visual representation of textual information
6. object animation	_____	**f.** controls the way the display changes as you move from one slide to the next
7. rotate handle	_____	**g.** consists of 12 colors that are applied to specific elements in a document
8. SmartArt	_____	**h.** the intersection of a row and column
9. table	_____	**i.** allows you to spin an object to any degree in any direction
10. transition	_____	**j.** motion such as clip art that flies in from the left

multiple choice

Circle the letter of the correct response to the questions below.

1. If you wanted to add a company logo on each slide in your presentation, you would place it on the _____.
- **a.** handout
- **b.** notes page
- **c.** outline slide
- **d.** master

2. To substitute one word for another in a presentation, you would use the _____ feature.
- **a.** Find and Replace
- **b.** Locate and Move
- **c.** Copy
- **d.** Duplicate

3. The _____ defines the format and placement of the slide image, note text, headers, footers, and other elements that will appear on all speaker notes.
   a. Slide master
   b. Notes master
   c. Handouts master
   d. Title master

4. A _____ theme is a predefined set of formatting choices that can be applied to an entire document in one simple step.
   a. slide layout
   b. document
   c. animation
   d. master

5. _____ add action to text and graphics so they move around on the screen.
   a. Transitions
   b. Masters
   c. Animations
   d. Slides

6. Each _____ theme consists of eight coordinated colors that are applied to different slide elements.
   a. document
   b. slide layout
   c. color
   d. master

7. _____ control the way that the display changes as you move from one slide to the next during a presentation.
   a. Animations
   b. Slide masters
   c. Graphics
   d. Transitions

8. If you want to display information in columns and rows, you would create a _____.
   a. table
   b. text box
   c. slide layout
   d. shape

9. You can change the horizontal placement of an entry in a placeholder or a table cell by using one of the four horizontal alignment settings: left, center, right, and _____.
   a. highlighted
   b. located
   c. marginalized
   d. justified

10. To help you remember the important points during a presentation, you can add comments to slides and print _____.
    a. notes pages
    b. slide handouts
    c. preview handouts
    d. handouts

true/false

Circle the correct answer to the following questions.

1.	A master is a special slide or page on which the formatting for all slides or pages in your presentation is defined.	True	False
2.	A document theme can be applied to selected slides in a presentation	True	False
3.	Tables contain rows and columns.	True	False
4.	Alignment controls the position of text entries in a placeholder.	True	False
5.	SmartArt Style provides ready-made shapes such as rectangles and circles, a variety of lines, block arrows, flowchart symbols, stars and banners, and callouts.	True	False
6.	You can print 12 slides per page using notes page.	True	False
7.	Masters are professionally created slide designs that can be applied to your presentation.	True	False
8.	Find and Replace makes it difficult to locate specific words or phrases.	True	False
9.	Style checking looks for consistency in punctuation and capitalization.	True	False
10.	Columns in a table are identified by letters.	True	False

fill-in

Complete the following statements by filling in the blanks with the correct terms.

1. _____ add action to text and graphics so they move on the screen.
2. Cells in a table are identified by a letter and number, called a _____.
3. _____ provides access to a combination of different formatting options such as edges, gradients, line styles, shadows, and three-dimensional effects.
4. You also can align text _____ in a table cell with the top, middle, or bottom of the cell space.
5. A _____ is a container for text or graphics.
6. A _____ is part of a template that stores information about the formatting for the three key components of a presentation—slides, speaker notes, and handouts.
7. _____ controls the position of text entries within a space.
8. _____ are used to display each bullet point, text, paragraph, or graphic independently of the other text or objects on the slide.
9. The _____ slide is a special slide that stores information about the formatting for all slides or pages in a presentation.
10. Object _____ are used to display each bullet point, text, paragraph, or graphic independently of the other text or objects on the slide.

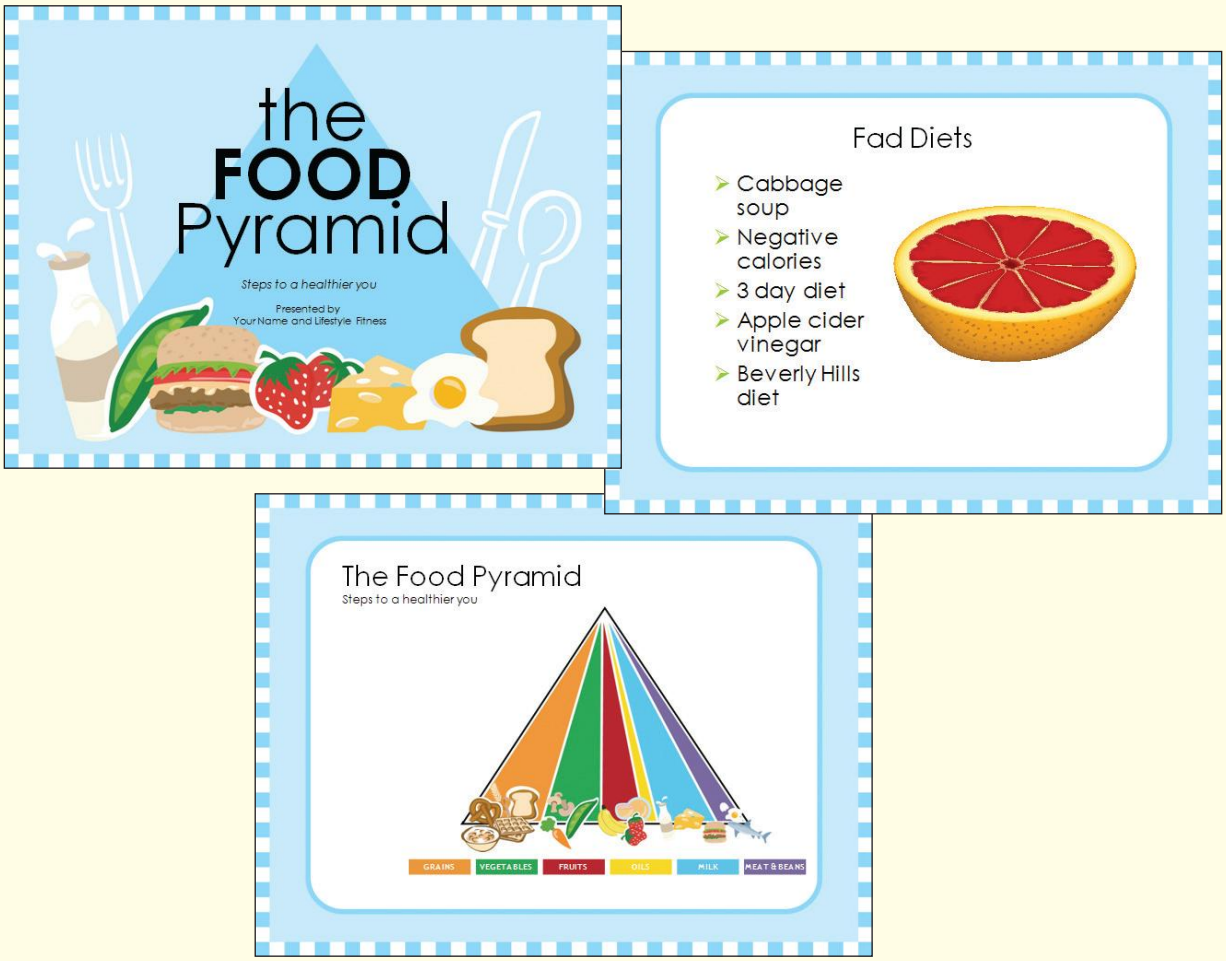
Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Explaining Fad Diets ★

1. You have been asked to give a lunchbox presentation at the Lifestyle Fitness Club on fad diets. You plan to first describe all fad diets and then end with a summary of the benefits of eating according to the USDA's Food Pyramid and proper exercise. The summary of the food pyramid research is complete; now you will need to add information about common fad diets. You want to make the new slides look and feel like a part of the existing presentation, so you will add appropriate graphics and formatting. Three slides from your completed presentation will be similar to those shown here.



a. Open the file pp02_Fad Diets.

b. Run the slide show to see the progress so far.

c. Spell check the presentation, making the appropriate corrections.

d. Find and replace the occurrences of "children" with the word **everyone**.

e. In slide 1:

Insert a new text box.

Type **Presented by**.

Press ↵Enter and type **Your Name and Lifestyle Fitness**.

Replace "Your Name" with your name.

Set font size 12 and center the text for each line in the text box.

Position the text box just below the existing subtitle.

f. Insert a new slide with Two Content layout after slide 2. In this slide:

Add the title **Fad Diets**.

Insert the picture from the file pp02_Grapefruit into the right content placeholder.

Add the following bullets to the left content holder:

Cabbage soup

Negative calories

3 day diet

Apple cider vinegar

Beverly Hills diet

AutoFit Text to Placeholder.

Size and position the graphic appropriately.

g. In slide 13:

Change the layout of slide 13 to Title and Content.

Locate and insert a clip art graphic related to this topic.

Animate the graphic's entrance to fly in from the bottom left at slow speed.

h. Add a transition effect of your choice to all slides. Run the slide show to view the entire presentation.

i. Save the file as Fad Diets. Print slides 1, 3 and 13 as handouts (four per page).

Enhancing a Staff Training Presentation ★

2. You are working on the staff training presentation for the Sleepy Time Inn. You have already created the introductory portion of the presentation and need to reorganize the topics and make the presentation more visually appealing. Three slides from your modified presentation will be similar to those shown here.



a. Open the file pp02_Sleepy Time Staff Training.

b. Run the slide show to see the progress so far.

c. Spell check the presentation, making the appropriate corrections.

d. Find and replace any occurrence of "city" with the word **town**.

e. In slide 1:

Insert a textbox below the subtitle.

Type **Presented by Your Name**.

Replace "Your Name" with your name.

Set the font size to 24 and position the text box appropriately on the slide.

Add the following speaker note: **Be sure to introduce yourself and play the name game**.

f. In slide 4:

Add a shape of your choice.

Enter and format the text **Terms to Know**.

Position and size the shape appropriately. Add an animation effect of your choice to the shape.

g. In slide 5:

Set the Picture Style to Metal Rounded Rectangle.

Set the Picture Effect to glow Accent color 6, 5 pt glow.

h. Hide slide 13. Move slide 4 after slide 12.

i. Change the design of the slides to one of your choice from the Themes gallery. Check all slides and make any needed adjustments.

j. Duplicate slide 1 and move it to the end of the presentation. Delete the speaker note from slide 15.

k. Add a transition effect of your choice to all slides. Add an animation effect and sound to the first slide. Add your name to the File properties.

l. Save the file as Sleepy Time Training.

m. Print slides 1, 4, 12 and 15 as handouts (four per page).

Enhancing the Interviewing Tips Presentation ★★

3. To complete this problem, you must have completed Step-by-Step Exercise 5 in Lab 1. Jane has completed the first draft of the presentation for her talk, but she still has some information she wants to add to the presentation. Additionally, she wants to make the presentation look better using many of the PowerPoint design and slide show presentation features. Three slides from your modified presentation will be similar to those shown here.



a. Open the presentation Interviewing Basics. If necessary, switch to Normal view.

b. Change the document theme to one of your choice. Change the color theme to a color of your choice. If necessary, reposition graphics and change font sizes.

c. On the master slides:

Set the bullet style to artsy, bullets, square.

Set the title and subtitle style to a different font color and size of your choice.

d. Review the slides in Slide Sorter view and fix the placement and size of the placeholders and pictures as needed.

e. Set the footer **Interview Basics** to display on all slides.

f. Apply a custom animation to the clip art in slide 1 so that the image entrance is fly in from the bottom at a slow speed.

g. Duplicate the title slide and move it to the end of the presentation. Add a shape to this slide that includes the text **Good Luck!**. Format the object and text appropriately.

h. Select an animation scheme of your choice to add transition effects to all the slides. Run the slide show.

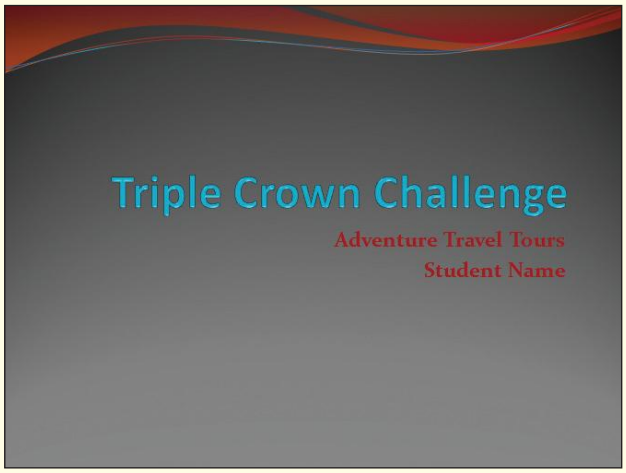
i. Add the following note to slide 4 in a point size of 18: **You must be able to give a short biography when asked "Tell me about yourself." Practice until you can tell the story smoothly**.

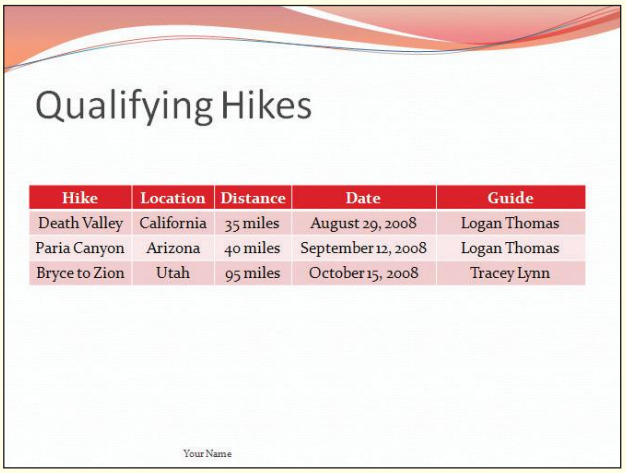
j. Add file documentation and save the completed presentation as **Interviewing Basics2**.

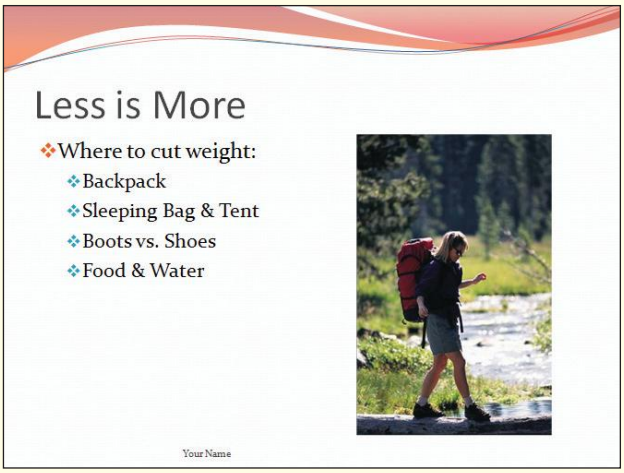
k. Print the notes page for slide 4. Print slides 1, 2, 6, and 8 as handouts with four slides per page.

Enhancing the Triple Crown Presentation ★★★

4. To complete this problem, you must have completed Step-by-Step Exercise 1 in Lab 1. Logan's work on the Triple Crown Presentation was well received by his supervisor. She would like to see some additional information included in the presentation, including a table of upcoming qualifying hikes. Four slides from your updated presentation will be similar to those shown here.









a. Open the file Triple Crown Presentation.

b. Change the document theme to one of your choice. Change the color theme to a color of your choice. If necessary, reposition graphics and change font sizes.

c. Using the master slides, change the text color of the titles and subtitles. Change the bullet styles.

d. Use the Find and Replace command to replace any occurrence of "Apria Canyon" with **Emerald Pools**.

e. Replace slide 3 with a new Title and content slide. In this slide:

Enter the title **Qualifying Hikes**.

Create a table with five columns and four rows.

Enter the following information in the table:

Hike	Location	Distance	Date	Guide
Death Valley	California	35 miles	August 29, 2008	Logan Thomas
Paria Canyon	Page, AZ	40 miles	September 12, 2008	Logan Thomas
Bryce to Zion	Utah	95 miles	October 15, 2008	Tracey Lynn

Adjust the column and row size as needed.

Center the cell entries both horizontally and vertically in their cell spaces.

Change the table style to one of your choice.

Position the table appropriately.

f. Duplicate slide 1 and place the copy at the end of the presentation. In this slide:

Change the title to **Adventure is Waiting!**.

g. Add the Fade animation to the graphics on slides 4 and 5. Add an animation effect of your choice to all slides that include bullets. Add a transition effect of your choice to all slides.

h. Add a footer that does not display the date and time but does display your name and the slide number on all slides except the title slide.

Add a shape of your choice to the final slide with the text: **Call us Today!**.

i. Add the following information to the file properties:

Author: **Your Name**

Title: **Triple Crown Presentation**

j. Save the file as Triple Crown Presentation2.

k. Print slides 1, 3, 5, and 8 as a handout with all four slides on one page.

Enhancing the Coffee Presentation ★★★

5. Evan, the owner of the Downtown Internet Café, commissioned a presentation on coffee basics. You have created the presentation and added some formatting enhancements. Evan previewed your work and was so impressed with your presentation on coffee that he has decided to run it periodically throughout the day on a large screen in the cafe so customers can see it as well. To "spiff it up," he wants you to convert it to an onscreen presentation with more graphics as well as other design and animation effects. Four slides from your modified presentation will be similar to those shown here.









a. Open the file pp02_Coffee Talk.

b. Change the document theme to a design of your choice. Select a new color theme of your choice. Check the presentation to see how the new design has affected all slides, and move and size items as needed.

c. Use the slide master to change the font color of all first-level bullet text to a different color. Replace "Student Name" with your name in the footer text of all slides.

d. Use the Find and Replace feature to change all occurrences of "Regular Roasts" to **Coffee Categories**. Do the same to replace "Other Offerings" with **Coffee Types**.

e. Apply a custom animation and sound of your choice to the coffee cup clip art on slide 2.

f. On slide 3:

Change the title to **What's Brewing**.

Delete the clip art.

Copy the clip art from slide 2 to slide 3 and size and position it appropriately.

Add a third bullet with the text: **Coffee Terms**.

g. Delete slide 2.

h. On slide 3, insert, resize, and position the graphic from the file pp02_Coffee Pot.

i. On slide 4, change the title to **Coffees from Around the World**.

j. Insert a new slide with a Title and Content layout after slide 7. In this slide:

Enter the title **Coffee Terms**.

Create a table with two columns and five rows.

Enter **What You Say** as the first column heading and **What It Means** as the second column heading.

Copy the terms and definitions from slide 9 into the table.

Change the font size of the text as needed.

Center-align the What You Say column.

Size the columns and table appropriately.

Select a table style of your choice.

Delete slide 9.

k. Duplicate slide 1 and place the copy at the end of the presentation. In this slide:

Change the title to **Come have coffee with us . . .** . Size and position the title appropriately.

Delete the subtitle text.

Delete the subtitle placeholder.

Insert a shape of your choice with the text **Open Late!**.

l. Select a slide transition of your choice and apply to all slides the slide transition to automatically advance after 10 seconds. Run the slide show.

m. Add file documentation information.

n. Save the completed presentation as Coffee Talk.

o. Print slides 1, 2, 8, and 9 as handouts, four per page in landscape orientation.

on your own

Clutter Control ★

1. You work for a business that designs and builds custom closet solutions. You have been asked to prepare a presentation for new clients that will help them prepare for the construction phase. Clients need to organize and categorize their items before the crews arrive on site; your presentation will serve as a "declutter" guide. When construction ceases, the business puts everything into the closet as a service. Research ideas on reducing clutter on the Web. Add transitions, animations, and a document theme that will catch the viewer's attention. When you are done, save the presentation as Custom Closets, and print the presentation as handouts, nine per page.

Enhancing the Car Maintenance Presentation ★

2. To finalize your Car Maintenance presentation that you began in Lab 1 On Your Own Exercise 3, use a document theme and color theme of your choice. Add clip art, sound, and transitions to help hold your audience's interest. Create speaker notes and rehearse the presentation. When you are done, save the presentation as Car Maintenance2; print the presentation as handouts, six per page; and print the notes pages for slides containing notes only.

Enhancing the Careers with Animals ★★★

3. To add interest to your Careers with Animals presentation that you created in Lab 1 On Your Own Exercise 5, select a document theme and color theme of your choice. Add clip art, sound, and transitions that will hold your audience's interest. Add speaker notes and rehearse the presentation. When you are done, save the presentation as Careers with Animals2, print the presentation as handouts, and print the notes pages for slides containing notes only.

Enhancing the Internet Policy Presentation ★★★

4. After completing the Internet Policy presentation you created in Lab 1 On Your Own Exercise 1, you decide it could use a bit more sprucing up. You want to add some information about personal computing security. Do some research on the Web to find some helpful tips on protecting personal privacy and safeguarding your computer. Enter this information in one or two slides. Add some animated clip art pictures and transitions to help liven up the presentation. Make these and any other changes that you think would enhance the presentation. Add a table and check the style consistency of the presentation. Add appropriate documentation to the file. When you are done, save it as Internet Policy2; print the presentation as handouts, nine per page; and print the notes pages for slides containing notes only.

Sharing Favorite Vacation Spots ★★★

5. You and your fellow Getaway Travel Club members have decided that each of you should do a presentation on your favorite vacation spot (one you have already been to or one you would like to go to). Pick a location and do some research on the Web and/or visit a local travel agency to get information about your chosen destination. Create a presentation using a document theme and color theme of your choice. Include clip art, animation, sounds, and transitions to make the presentation more interesting. Include your name as a footer or subtitle on at least one slide. Create and enhance a table and speaker notes to remind yourself of additional information you want to relay that is not included in the slides. Add appropriate documentation to the file. Run the slide show and practice your presentation, then save as Travel Favorites and print your presentation and notes pages.

Using Advanced Presentation Features

LAB 3

Objectives

After completing this lab, you will know how to:

1. Create a new presentation from existing slides.
2. Insert slides from another presentation.
3. Create and modify a chart.
4. Create and modify an organization chart.
5. Create a numbered list.
6. Add animated graphics.
7. Create and modify a WordArt object.
8. Rehearse timings.
9. Create custom shows.
10. Create hyperlinks.
11. Publish a presentation on the Web.

Case Study

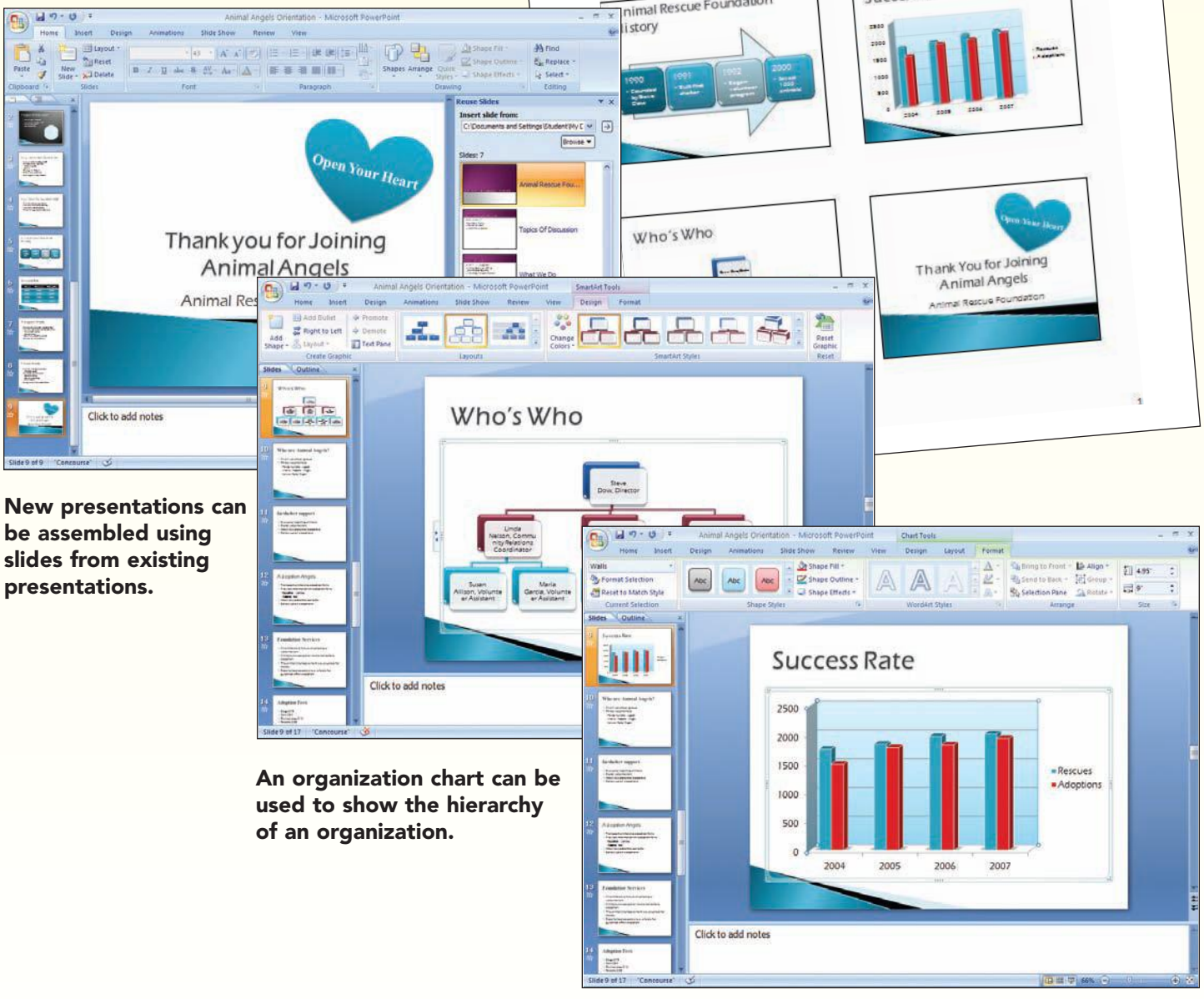
Animal Rescue Foundation

The volunteer recruitment presentation you created for the Animal Rescue Foundation was a huge success. Now the agency director has asked you to create a new presentation to use during new volunteer orientation programs. To create the orientation presentation, you will modify and expand the recruitment presentation. The director also thinks it would be a good idea to include the completed presentation on the foundation's Web site for volunteers to refer to whenever they want.



As you create the orientation presentation, you will use several specialized PowerPoint 2007 tools to chart numeric data and create an organization chart of the foundation's management structure. You will further enhance the presentation using special text effects and animated graphics. Finally, you will use several features that will make it easier to deliver the presentation.

When the orientation presentation is complete, you will then modify it for use on the Web site and save it as a Web page document file.



New presentations can be assembled using slides from existing presentations.

An organization chart can be used to show the hierarchy of an organization.

A graphic representation of table data as a chart makes data easier to understand.

Concept Preview

The following concepts will be introduced in this lab:

1. **Chart** A chart is a visual representation of numeric data that is used to help an audience grasp the impact of your data more quickly.
2. **Collect and Paste** The collect and paste feature is used to store multiple copied items in the Office Clipboard and then paste one or more of the items into another location or document.
3. **Organization Chart** An organization chart graphically represents the structure of an organization, which usually includes people but can include any items that have a hierarchical relationship.
4. **Animated GIF** An animated GIF file is a type of graphic file that has motion.
5. **WordArt** The WordArt feature is used to enhance slides by changing the shape of text, adding 3-D effects, and changing the alignment of text on a line.
6. **Group** A group is two or more objects that are treated as a single object.
7. **Custom Show** A custom show is a presentation that runs within a presentation.
8. **Hyperlinks** Hyperlinks provide a quick way to jump to other slides, custom shows, presentations, objects, e-mail addresses, or Web pages.
9. **Hypertext Markup Language** The majority of Web pages are written using a language called Hypertext Markup Language (HTML). HTML commands control how the information on a page, such as font colors and size, is displayed.

Creating a Presentation from Multiple Sources

Often, as you are developing a presentation, you will have information from a variety of sources such as slides from other presentations or text from a Word document. You can easily incorporate this information into a presentation without having to recreate it again.

Creating a New Presentation from Existing Slides

To make the task of creating the new presentation easier, you will use an existing presentation, modify it to fit your needs, and save it as a new presentation. Much of the information included in the volunteer recruitment presentation you created will be used again in the volunteer orientation presentation.

You have already started to work on revising the recruitment presentation to fit the needs of the orientation presentation by adding new graphics, removing many slides whose content does not pertain to the orientation program, and changing the theme to Concourse. You will use this file as the basis for the volunteer orientation presentation you will create next.

1. **Start Office PowerPoint 2007.**
2. **Click Office Button and choose New.**
3. **Choose New from existing.**

Your screen should be similar to Figure 3.1

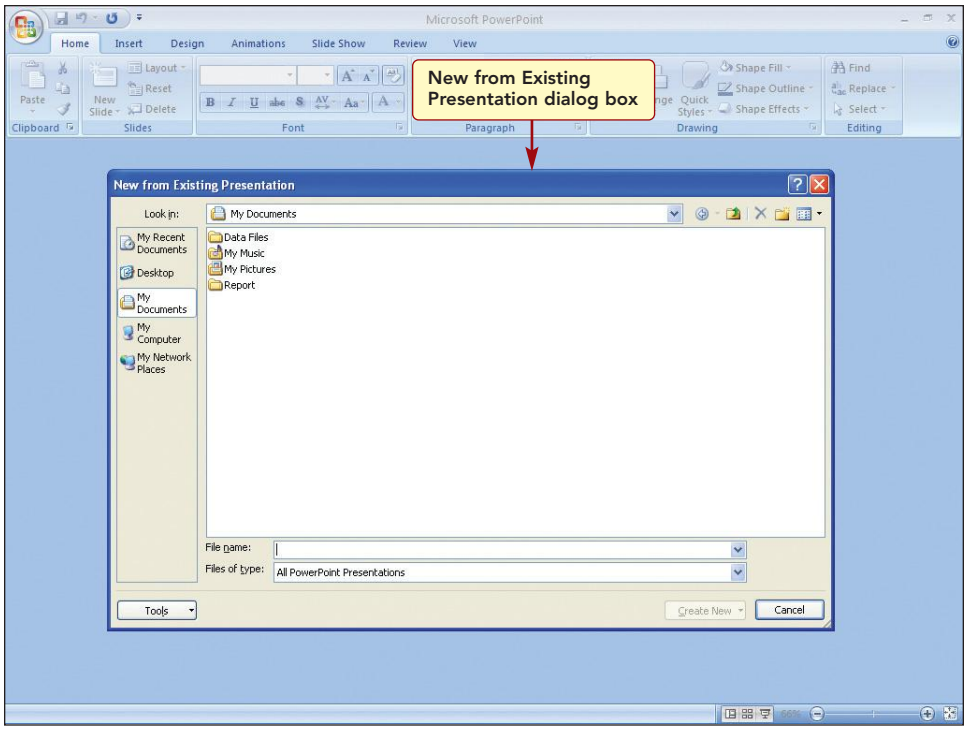


Figure 3.1

From the New from Existing Presentation dialog box, you select the file to be used to create the new presentation.

2. **Select the location that contains your data files.**
3. **Double-click on** pp03_Volunteer3**.**

Your screen should be similar to Figure 3.2

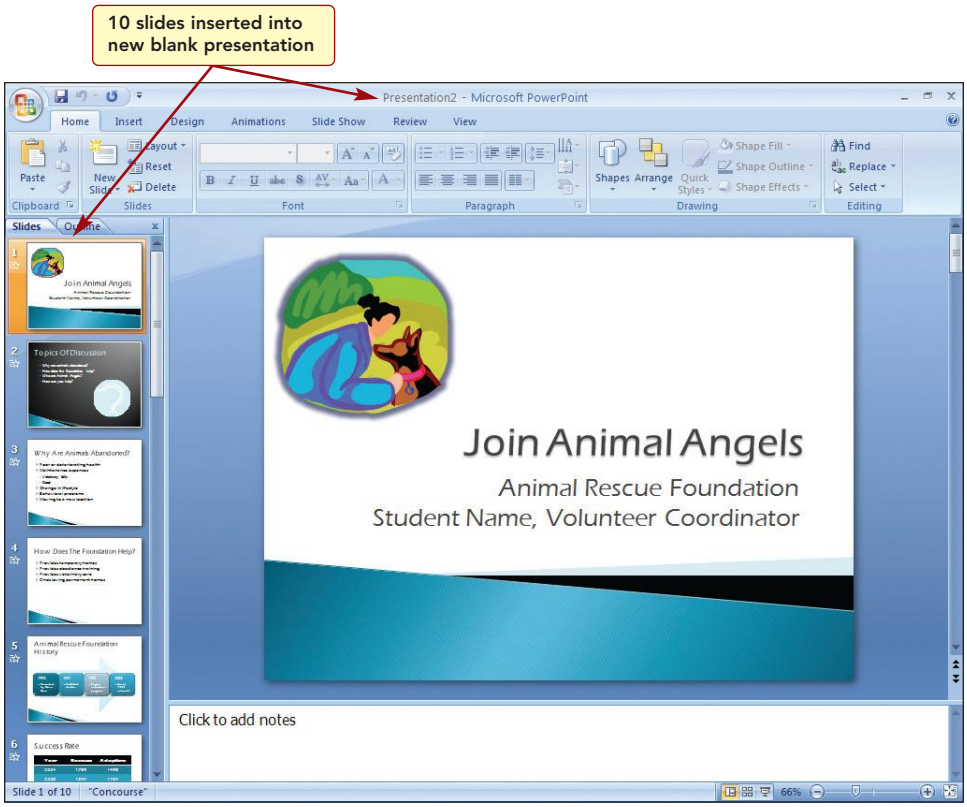


Figure 3.2

Another Method

You also could copy and rename a presentation to create a new presentation from an existing presentation.

The 10 slides from the volunteer presentation are inserted into a new unnamed presentation. In addition to deleting unnecessary slides, you changed the graphic on the opening slide and applied the Concourse theme to the presentation.

The first change you want to make is to change the title of the opening and ending slides. You also will delete a slide that does not contain information relevant to the orientation. Then, before you make any additional changes, you will save the file as a new presentation.

3. **Modify the title of slide 1 to Welcome Animal Angels.**
   - **Insert Your Name in the subtitle.**
   - **Modify the title of slide 10 to have Thank You for Joining on the first line and Animal Angels on the second line.**
   - **Delete slide 9.**
   - **Save the revised presentation as Animal Angels Orientation.**

Your screen should be similar to Figure 3.3

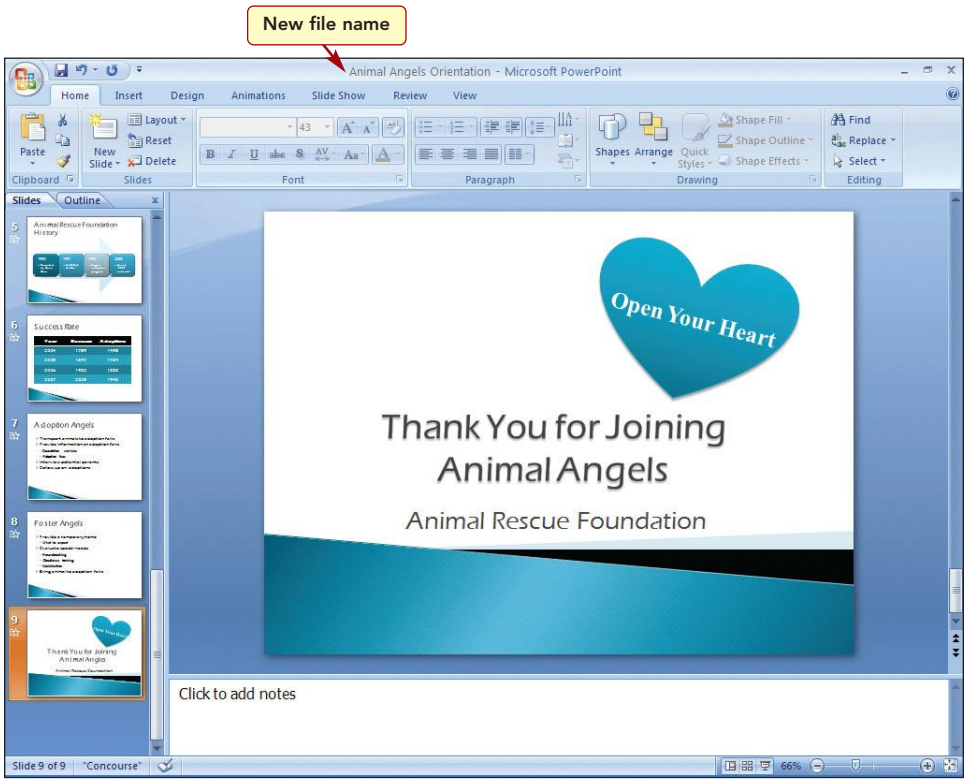


Figure 3.3

The new presentation now consists of nine slides. By modifying an existing presentation and saving it as a new presentation, you have saved a lot of time in the creation of your new presentation.

Inserting Slides from Another Presentation

Next, you want to add a slide to the presentation containing information about the philosophy of the foundation. To save time, you will copy and insert a slide containing this material from another presentation into the new presentation.

1. **Open the New Slide drop-down list in the Slides group on the Home tab.**
2. **Choose Reuse slides.**

Your screen should be similar to Figure 3.4

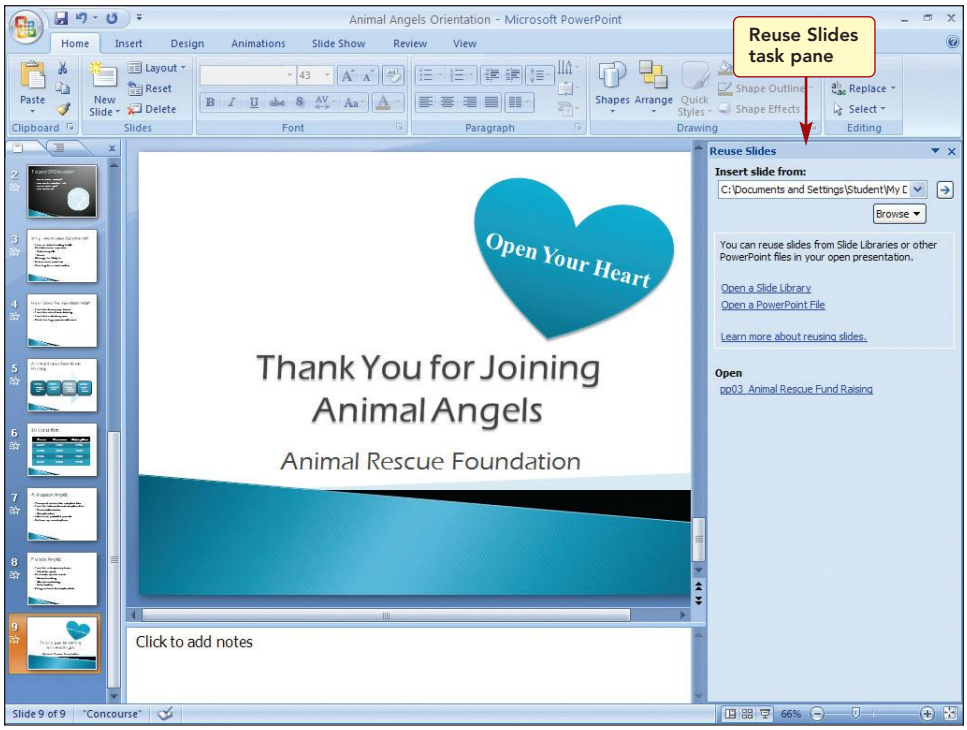


Figure 3.4

The Reuse Slides task pane provides access to presentations stored in the Slide Library or to presentations stored on your computer. The Slide Library is a location on an Office SharePoint Server 2007 that stores and maintains updates to presentation files centrally for use by others in an organization. You will insert a slide from the foundation's fund-raising presentation that is on your computer.

2. **Click Browse and choose Browse File.**
3. **Change the Look In location to the location of your data files.**
4. **Select pp03_Animal Rescue Fund Raising.**
5. **Click Open.**

Your screen should be similar to Figure 3.5

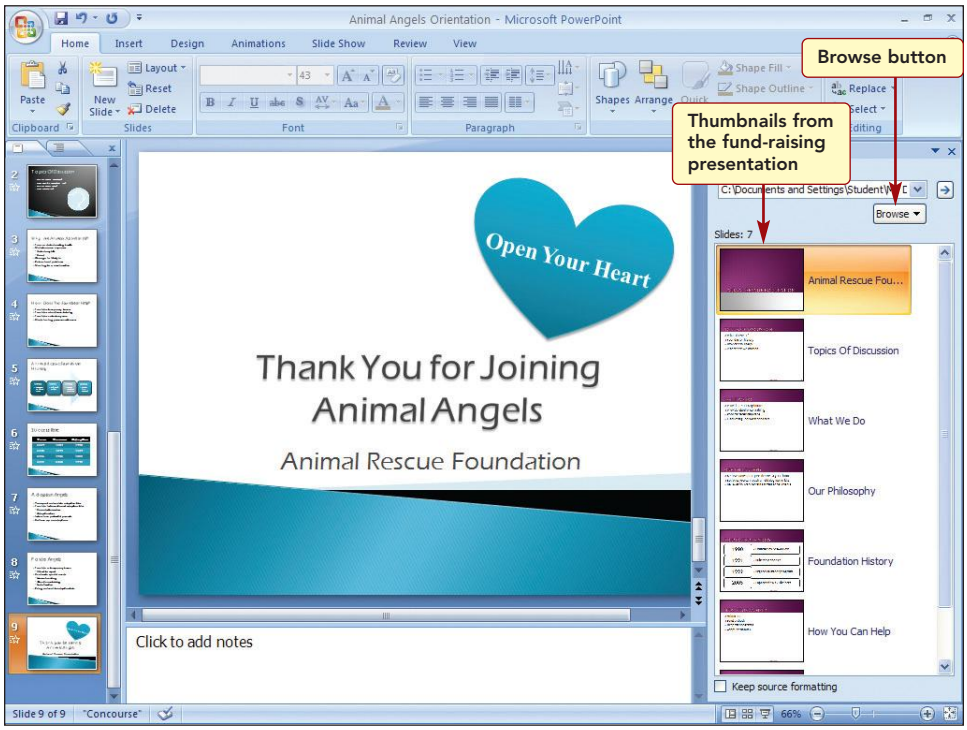


Figure 3.5

Additional Information
The Reuse Slides will only display slides from PowerPoint 2007 presentations. If you want to use slides from another version of PowerPoint, you will need to open the presentation with PowerPoint 2007, save it, and close the file. The file will be converted to a PowerPoint 2007 presentation and then can be reused.

Thumbnails of the slides from the Animal Rescue Fund-Raising presentation are displayed in the Reuse Slides task pane. You will insert the "Our Philosophy" slide into the orientation presentation after slide 3.

3 **Select slide 3 in the Orientation presentation.**

Click the "Our Philosophy" thumbnail in the task pane.

Additional Information
An enlarged version of the thumbnail is displayed when you point to it.

Close the Reuse Slides task pane.

Your screen should be similar to Figure 3.6

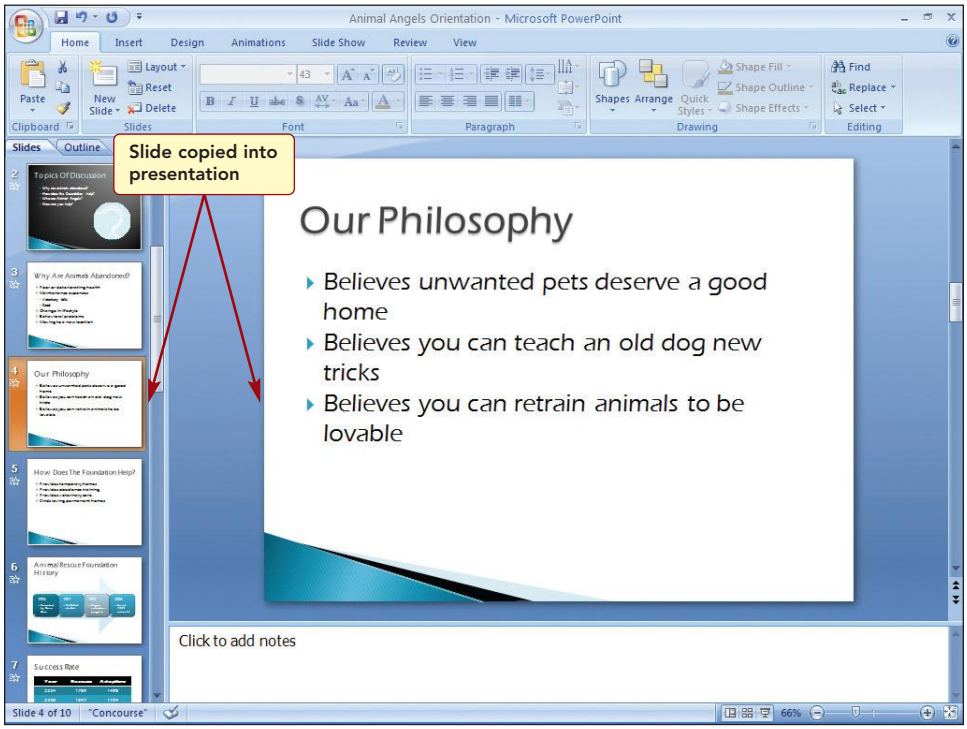


Figure 3.6

The selected slide from the Animal Rescue Fund-Raising presentation file was inserted into the Animal Angels Orientation presentation and the template design used in the presentation is applied to the inserted slide.

Now you would like to add more information about the foundation and about the Animal Angels volunteer group.

Inserting Text from a Word Document

Additional Information
Text created in other word processing programs also can be used to create a new presentation. The text files that PowerPoint can import are Word (.doc), Rich Text Format (.rtf), Plain Text Format (.txt), or HTML (.htm) files.

You have already started developing the content for the new orientation presentation by creating an outline in Word. Instead of retyping this information, you will insert slides containing the Word text for the presentation by importing the outline. For best results, the document you want to import should be formatted using heading styles so PowerPoint can easily convert the file content to slides. PowerPoint uses the heading levels to determine the slide title and levels for the slide body text. If heading levels are not available, PowerPoint determines these features from the paragraph indentations.

Additional Information

In Word, if you apply Outline Numbering styles to the outline text, save the file as a Rich Text Format (rtf) file before importing it to PowerPoint. This removes the Numbering style so that outline numbers do not appear on the slide, but maintains the heading style.

As you used Outline view in Word to create the materials for the presentation, heading styles were automatically applied. Now all you have to do is import the outline into PowerPoint. You will insert the new content at the end of the presentation and then move the slides to the appropriate location in the presentation.

1 **Switch to Slide Sorter view to better see the sequence of topics.**

- **Select slide 10.**
- **Open the**  **drop-down list and choose Slides from Outline. . . .**
- **Change to your data file location.**
- **Select the Word document** pp03_Orientation Outline**.**
- **Click** Insert**.**
- **Reduce the zoom to 70%.**

Your screen should be similar to Figure 3.7

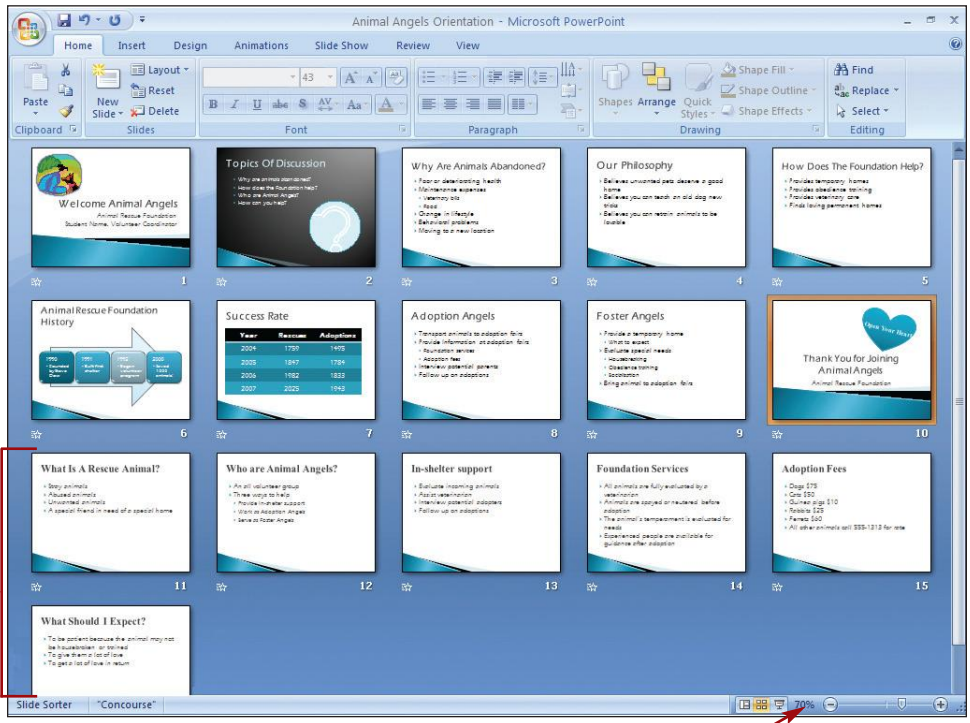


Figure 3.7

The outline text is imported into the presentation and inserted as six separate slides at the end of the presentation. Each level 1 heading in the outline is used as the slide title. Text formatted as a level 2 heading is a main body text point, a level 3 heading is a second-level body text point, and so on. The first slide from the outline is automatically formatted using the Title slide layout.

Now you want change the layout of slide 11 to Title and Content and then you will rearrange the slide order.

2. **Change the layout of slide 11 to Title and Content.**
- **Move slide 11 to follow slide 2.**
- **Move slides 12 and 13 to follow slide 8.**
- **Move slides 14 and 15 to follow slide 11.**
- **Move slide 16 to follow slide 14.**
- **Save the changes you have made to the presentation.**
- **Run the slide show from the beginning.**

Your screen should be similar to Figure 3.8

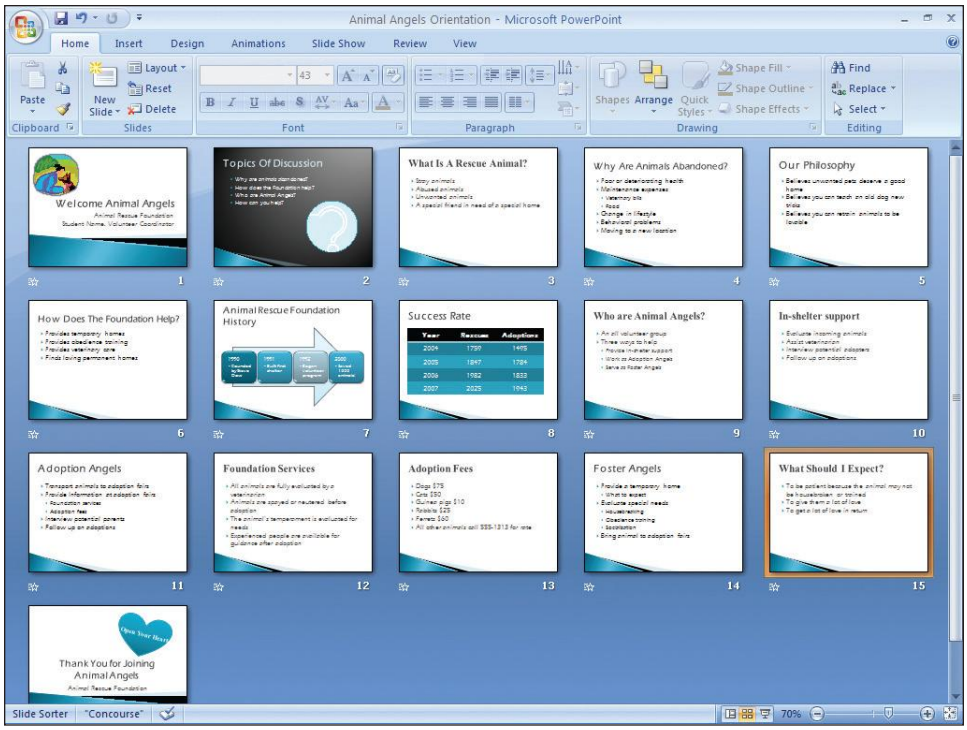


Figure 3.8

Now that the new slides are in the correct order and the majority of the content for the presentation is complete, you are ready to add some more enhancements to the presentation.

Creating a Chart Slide

The first change you want to make is to show the adoption success rate data in slide 8 as a chart rather than a table.

Concept 1

Chart

1 A **chart**, also called a **graph**, is a visual representation of numeric data. When you are presenting data to an audience, they will grasp the impact of your data more quickly if you present it as a chart. PowerPoint 2007 includes a separate program, Microsoft Graph, designed to help you create 14 types of charts with many different formats for each type.

Each type of chart represents the data differently and has a different purpose. It is important to select the type of chart that will provide the right emphasis to support your presentations. The basic chart types are described below.

Type of Chart	Description
Area 	Shows the relative importance of a value over time by emphasizing the area under the curve created by each data series.
Bar 	Displays categories vertically and values horizontally, placing more emphasis on comparisons and less on time. Stacked-bar charts show the relationship of individual items to a whole by stacking bars on top of one another.
Column 	Similar to a bar chart, except categories are organized horizontally and values vertically. Shows data changes over time or comparison among items.
Line 	Shows changes in data over time, emphasizing time and rate of change rather than the amount of change.
Pie 	Shows the relationship of each value in a data series to the series as a whole. Each slice of the pie represents a single value in a data series.



Most charts are made up of several basic parts as identified on the previous page and described below.

Part	Description
X axis	The bottom boundary of the chart, also called the category axis, is used to label the data being charted; the label may be, for example, a point in time or a category.
Y axis	The left boundary of the chart, also called the value axis, is a numbered scale whose numbers are determined by the data used in the chart. Each line or bar in a chart represents a data value. In pie charts, there are no axes. Instead, the data that are charted are displayed as slices in a circle or pie.
Data Series	Each group of related data that are plotted in a chart.
Legend	A box containing a brief description identifying the patterns or colors assigned to the data series in a chart.
Titles	Descriptive text used to explain the contents of the chart.

You will create the chart in a new slide following the slide containing the table of data on success rates.

1. **Insert a new slide using the Title and Content slide layout after slide 8.**
2. **Double-click on slide 9.**
3. **Click Insert Chart in the center icons.**

Another Method

You also can click Chart on the Insert tab to add a chart object to a slide.

Your screen should be similar to Figure 3.9

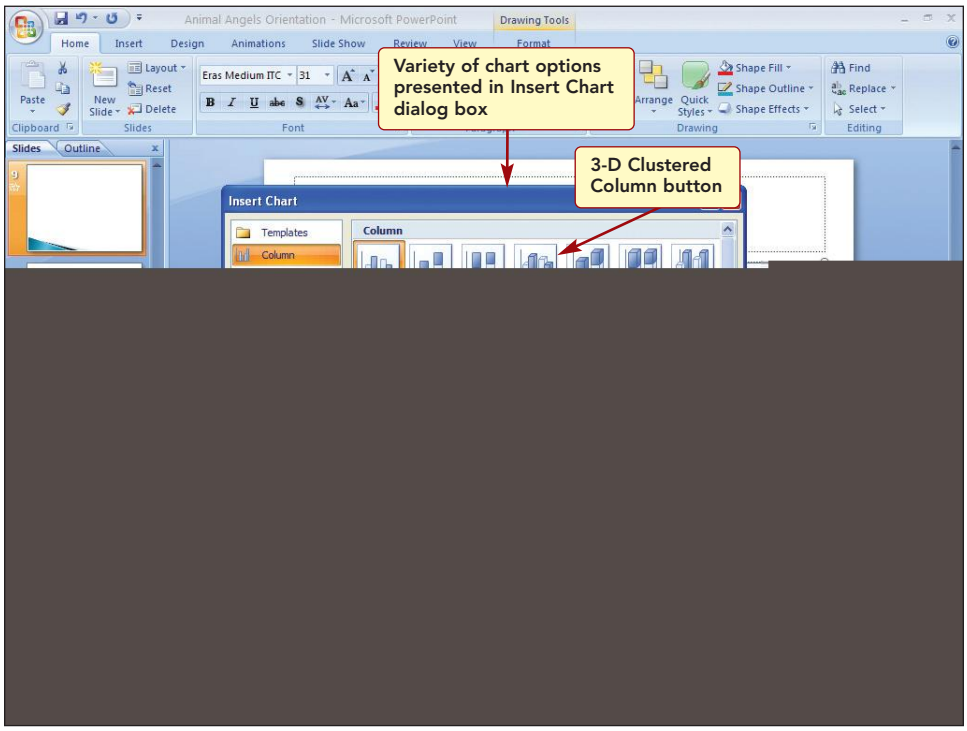


Figure 3.9

From the Insert Chart dialog box, you select the type of chart you want to create.

2 **Choose 3-D Clustered Column.**

Additional Information
When you point to the chart icon, a ScreenTip displays the chart type.

- **Click OK.**
- **Delete the text in cell B8 by moving to the cell and pressing Delete.**

Your screen should be similar to Figure 3.10

Having Trouble?
Do not be concerned if your chart and data do not match Figure 3.10.

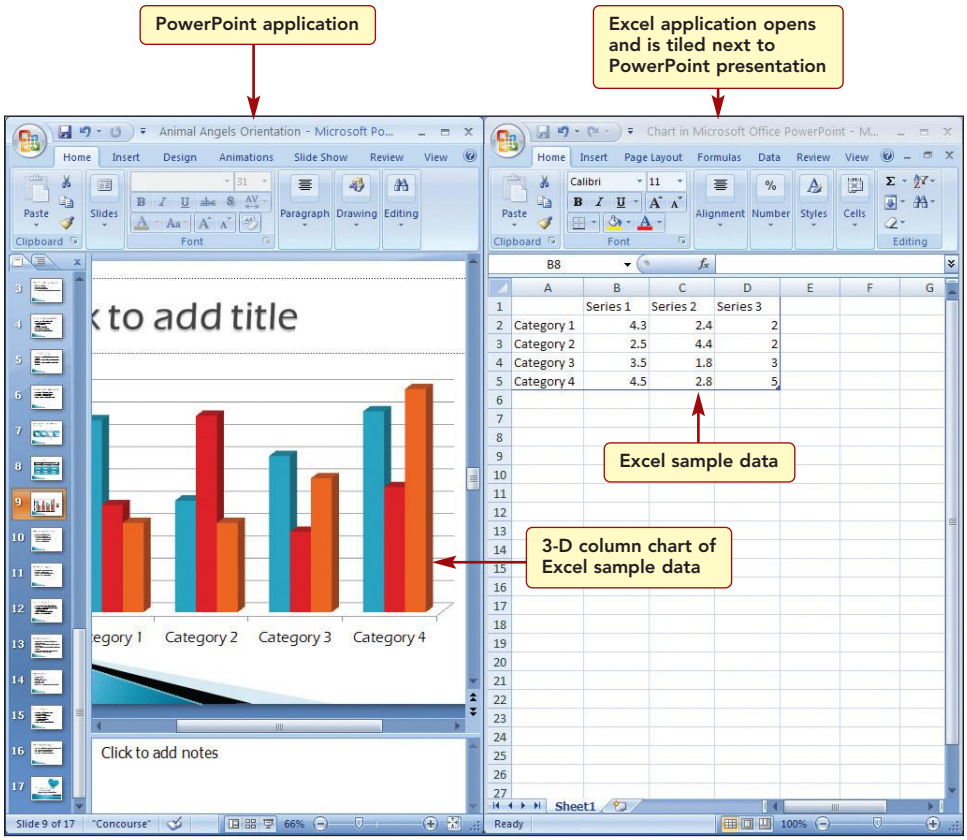


Figure 3.10

The Microsoft Office Excel 2007 application opens and is tiled on the screen next to the PowerPoint window so you can see both the Excel and PowerPoint applications at the same time. The Excel worksheet contains sample data and the PowerPoint slide displays a 3-D column chart of the sample data. You need to replace the sample data in the worksheet with the success rate data.

Copying Data to the Office Clipboard

Because the data are already contained in the table in slide 8, you will copy the data from the table into the chart. You also will copy the title text from slide 8 into the chart slide. You could copy and paste the selections one after the other, or you can use the Office Clipboard to collect multiple items and paste them as needed.

Concept 2

Collect and Paste

2 The **collect and paste** feature is used to store multiple copied items in the Office Clipboard and then paste one or more of the items into another location or document. For example, you could copy a chart from Excel and a paragraph from Word, then switch to PowerPoint and copy the two stored items into a slide in one easy step. This saves you from having to switch back and forth between documents and applications multiple times.

The Office Clipboard and the system Clipboard are similar, but separate, features. The major difference is that the Office Clipboard can hold up to 24 items, whereas the system Clipboard holds only a single item. The last item you copy to the Office Clipboard is always copied to the system Clipboard. When you use the Office Clipboard, you can select from the stored items to paste in any order.

The Office Clipboard is available in all Office 2007 applications and is accessed through the Clipboard task pane. Once the Clipboard task pane is opened, it is available for use in any program, including non-Office programs. In some programs where the Cut, Copy, and Paste commands are not available, or in non-Office programs, the Clipboard task pane is not visible, but it is still operational. You can copy from any program that provides copy and cut capabilities, but you can only paste into Word, Excel, Access, PowerPoint, and Outlook.

First you will copy the slide title text from slide 8 to the Office Clipboard.

1. **Open the PowerPoint Home tab.**
2. **Click** the Clipboard group launcher **to open the Clipboard group.**
3. **If necessary, click** Clear All **to empty the Office Clipboard contents.**
4. **Select slide 8 and triple-click on the title text to select it.**
5. **Click** Copy.

Your screen should be similar to Figure 3.11

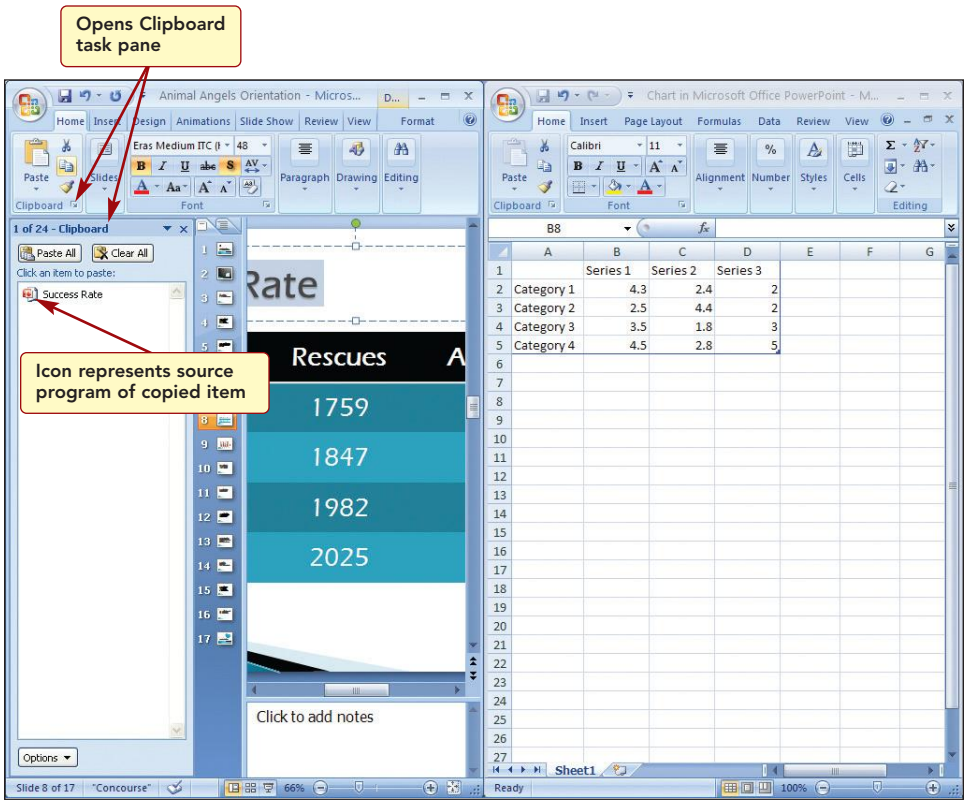


Figure 3.11

The Clipboard task pane displays a PowerPoint icon identifying PowerPoint as the application source of the copied item and a preview of the copied selection. Next, you will copy the contents of the table into the Office Clipboard. As items are copied, they are added sequentially to the Office Clipboard with the last-copied item at the top of the list.

2. **Click on the table in slide 8 to select the object.**
   - **Press Ctrl + A to select the entire contents of the table.**
   - **Click Copy.**

Your screen should be similar to Figure 3.12

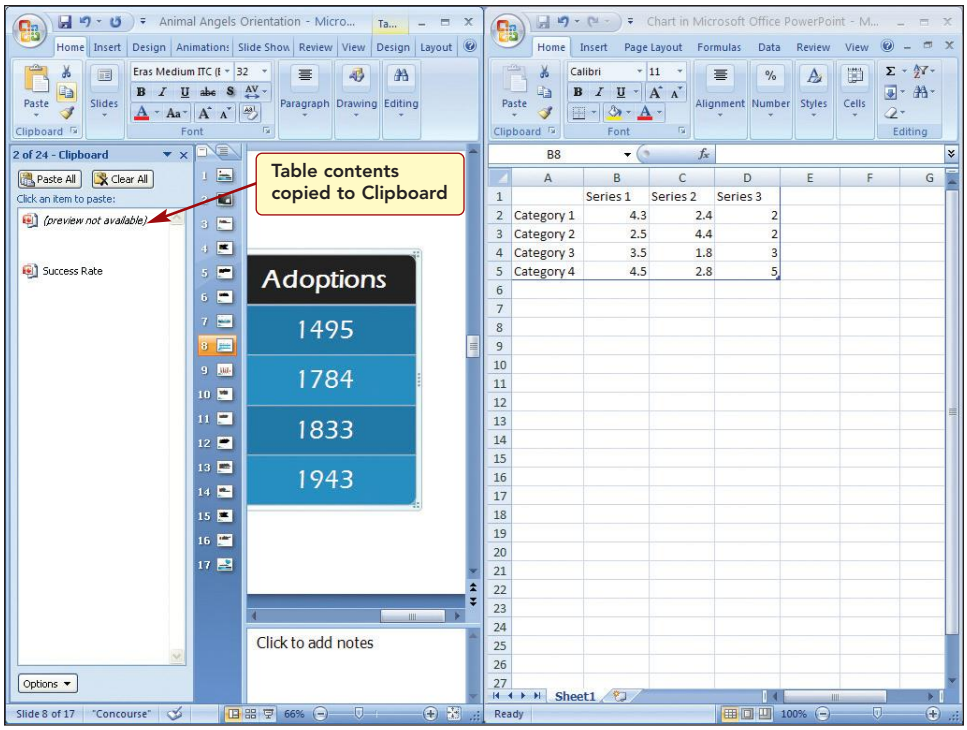


Figure 3.12

Additional Information

The Office Clipboard is automatically activated if you copy or cut two different items consecutively in the same program; if you copy one item, paste the item, and then copy another item in the same program; or if you copy one item twice in succession.

The Office Clipboard now contains two PowerPoint document icons, one for each copied item. A preview for the copied table is not available. Next, you will paste the title into slide 9.

3. **Display slide 9.**
   - **Click in the slide title placeholder.**
   - **Click on the "Success Rate" item in the Clipboard task pane.**
   - **Move the horizontal slider to the left to make the title more visible.**

Your screen should be similar to Figure 3.13

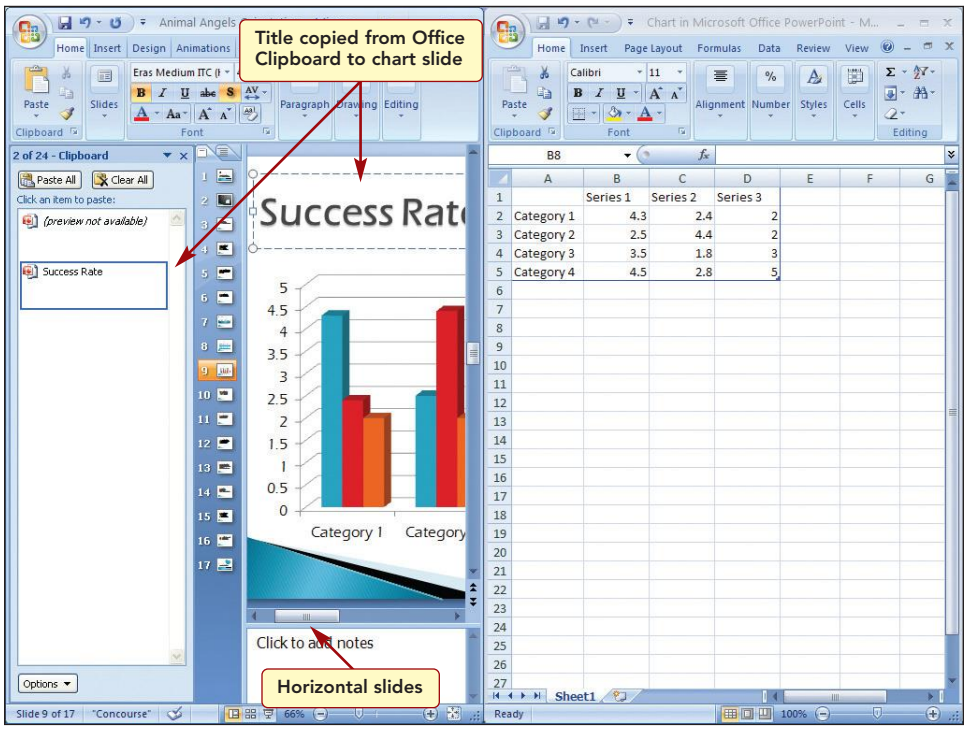


Figure 3.13

The contents of the first-copied item are pasted from the Office Clipboard into the title of the slide.

Specifying the Chart Data

Now you are ready to replace the sample data in Excel with the data from the table.

1. **Select all the worksheet data (A1:D5) and press** Delete.
2. **Move to cell A1.**
3. **In Excel, open the Clipboard.**
4. **Click on the table data item in the Clipboard.**
5. **Best fit the Excel columns to fully display the data.**

Having Trouble?
Double-click on the column header border line to best fit a column.

Your screen should be similar to Figure 3.14

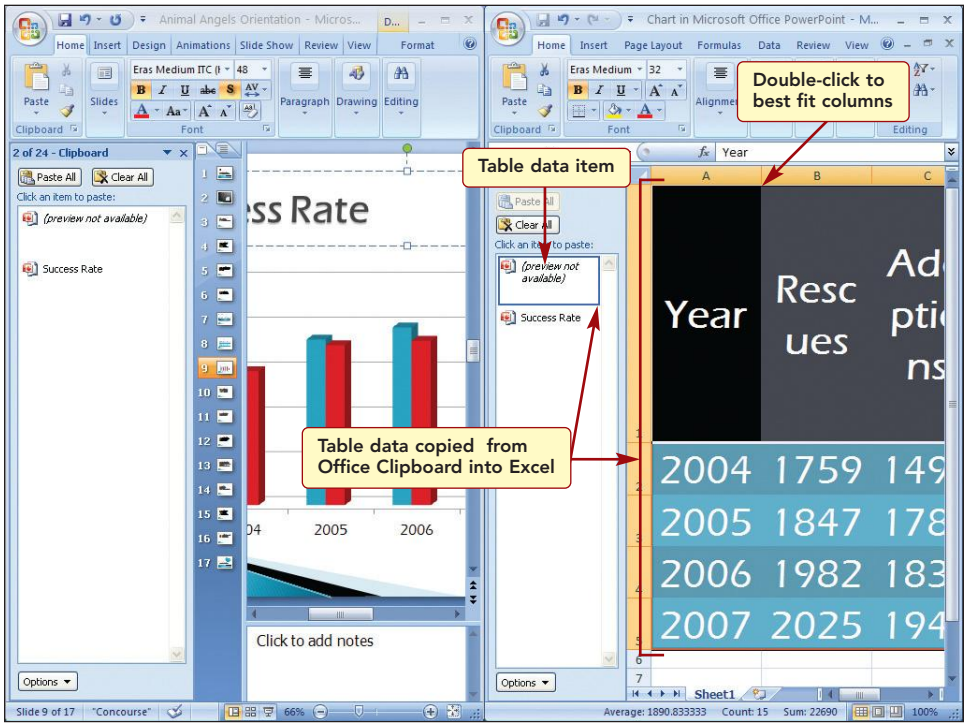


Figure 3.14

The worksheet displays the data and the chart in the slide represents the new worksheet data.

2. **Click** Clear All **to clear the contents of the Office Clipboard.**
3. **Close the Excel Clipboard task pane and exit Excel.**
4. **Close the PowerPoint Clipboard task pane.**
5. **If necessary, maximize the PowerPoint window.**

Your screen should be similar to Figure 3.15

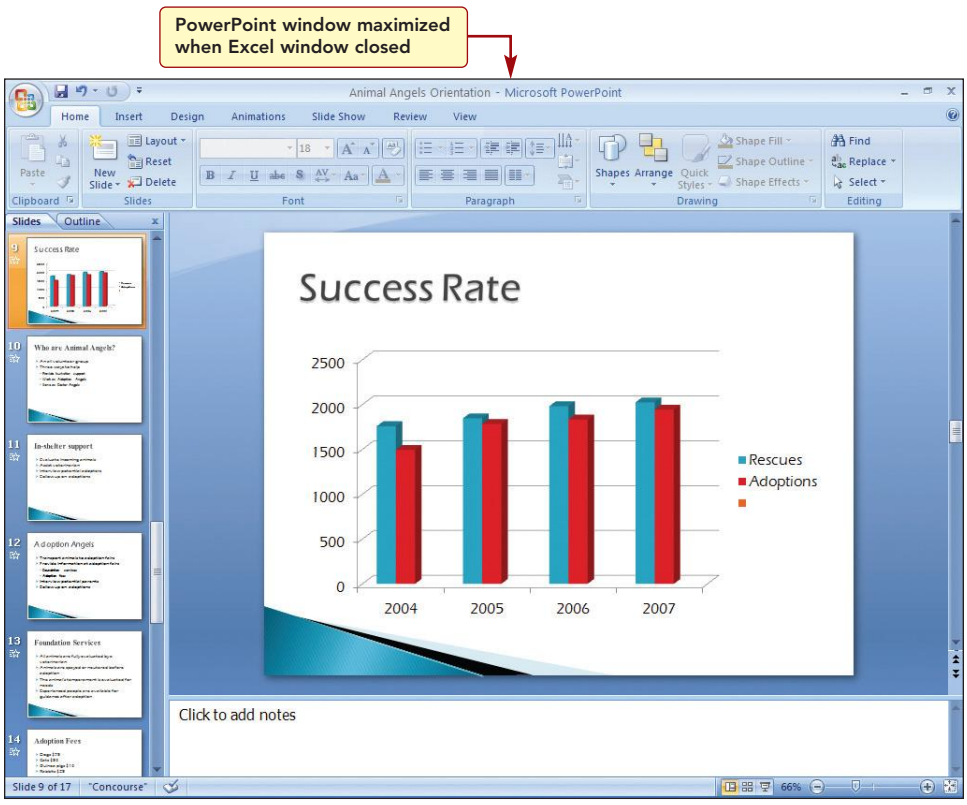


Figure 3.15

Excel is closed and the PowerPoint application is active and maximized in the window. The column chart is a visual representation of the data in slide 8. Each data series has a unique color or pattern assigned to it to identify the different series. The legend identifies the color or pattern associated with each data series.

Changing Chart Style

Next, you want to change the color and appearance of the data series to make it easier to differentiate the two data series. To do this, you will change the chart style.

1. **If necessary, select the chart object.**
2. **Open the Chart Tools Design tab.**
3. **Click More in the Chart Styles group.**
4. **Choose Style 10.**

Your screen should be similar to Figure 3.16

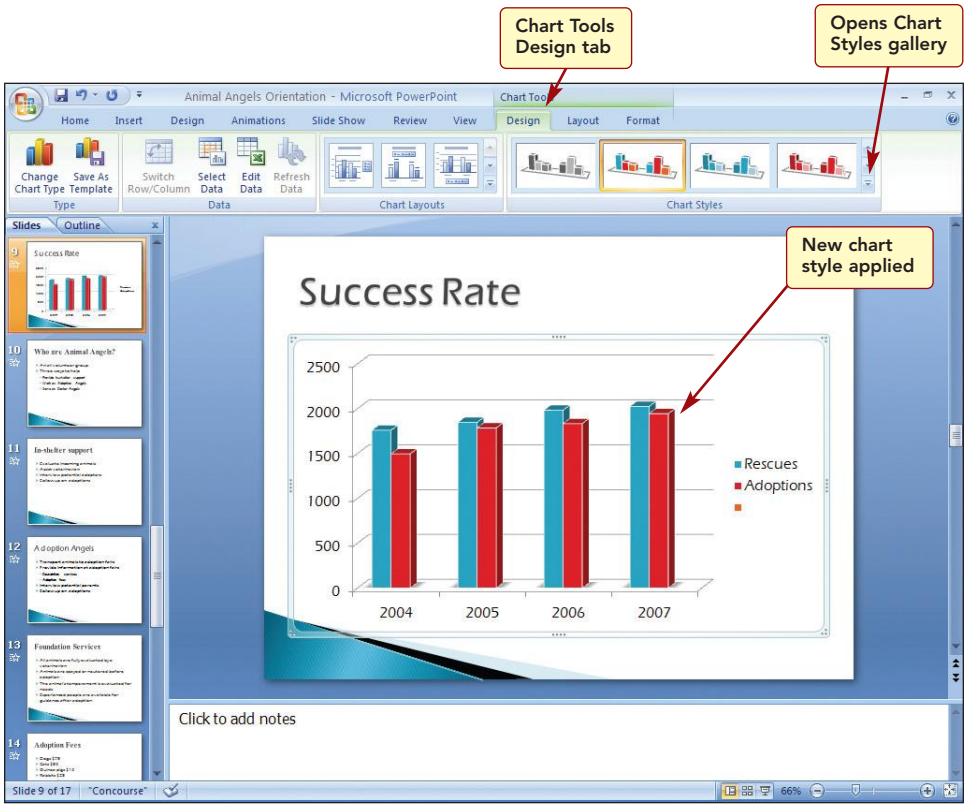


Figure 3.16

You like the change to the column style and the three-dimensional effect. You also would like to add color to the chart background by applying a shape style to the back wall of the chart only. Finally, you want to remove the extra bullet from the legend.

2 Open the Chart Tools Format tab.

- Click on the back wall of the chart to select both the back and side walls.

Another Method
You can also choose Walls from the Chart Elements drop-down menu.

- Choose Subtle Effect – Accent 1 (second column of the fourth row) from the Shape Styles gallery.
- Click on the legend and then click on the bottom bullet to select it.
- Press Delete to remove it.

Your screen should be similar to Figure 3.17

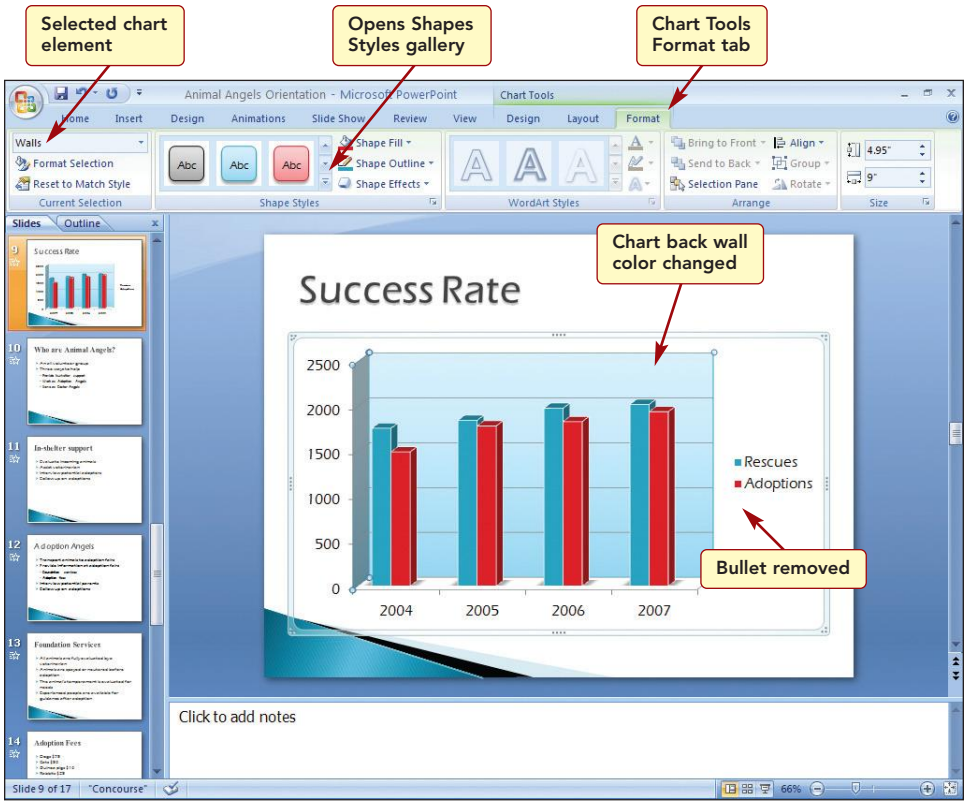


Figure 3.17

The chart is now more attractive and more meaningful. Now that the success rate data are represented in a chart, you will delete slide 8 containing the same information in a table.

3 Switch to Slide Sorter view.

- Delete slide 8.
- Save the presentation.

Your screen should be similar to Figure 3.18

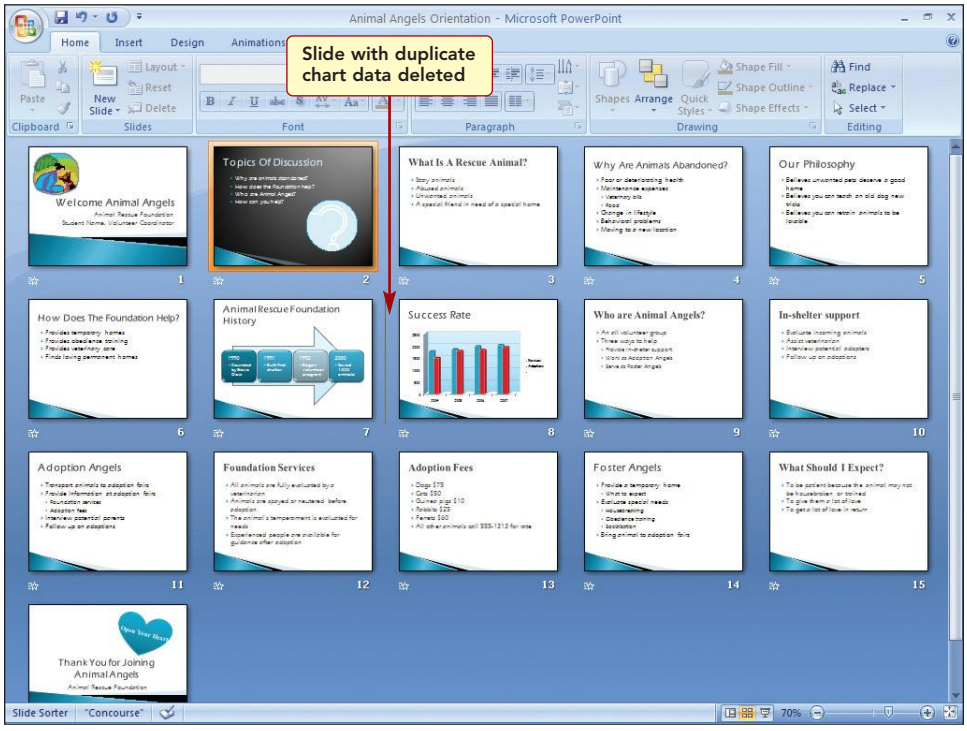


Figure 3.18

Creating an Organization Chart

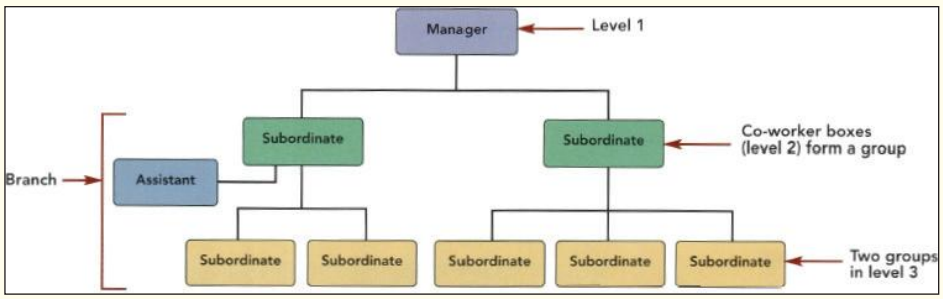
To provide the volunteers with an overview of the structure of the Animal Rescue Foundation organization, you want to include an organization chart in the presentation.

Concept 3

Organization Chart

3 An **organization chart** graphically represents the structure of an organization. Traditionally, it includes names and job titles, but also can include any items that have a **hierarchical relationship**. A **hierarchy** shows ranking, such as reporting structures within a department in a business.

There are several different styles of organization charts from which you can choose, depending on how you would like to display the hierarchy and how much room you have on your slide. A basic organization chart is shown below. All organization charts consist of different levels that represent the hierarchy. A level is all the boxes at the same hierarchical position regardless of the boxes each reports to. The topmost box in the organization chart is at level 1. All boxes that report directly to it are at level 2. Those boxes reporting to a level 2 box are at level 3, and so forth. An organization chart can have up to 50 levels.



The **manager box** is the top-level box of a group. Subordinate boxes report to the manager box. **Co-worker boxes** are boxes that have the same manager. Co-workers form a group. A group consists of all the boxes reporting to the same manager, excluding assistant boxes. **Assistant boxes** represent administrative or managerial assistants to a manager. A **branch** is a box and all the boxes that report to it. A level is all the boxes at the same level regardless of the boxes each reports to.

You will add a new slide following slide 8 to display the organization chart. To create the chart, you will use a SmartArt graphic.

1. **Insert a new Title and Content slide after slide 8.**
- **Display slide 9 in Normal view.**
- **Click Insert SmartArt Graphic from the slide placeholder icon.**
- **Choose Hierarchy as the category.**
- **Select Organization Chart.**
- **Click OK.**

Your screen should be similar to Figure 3.19

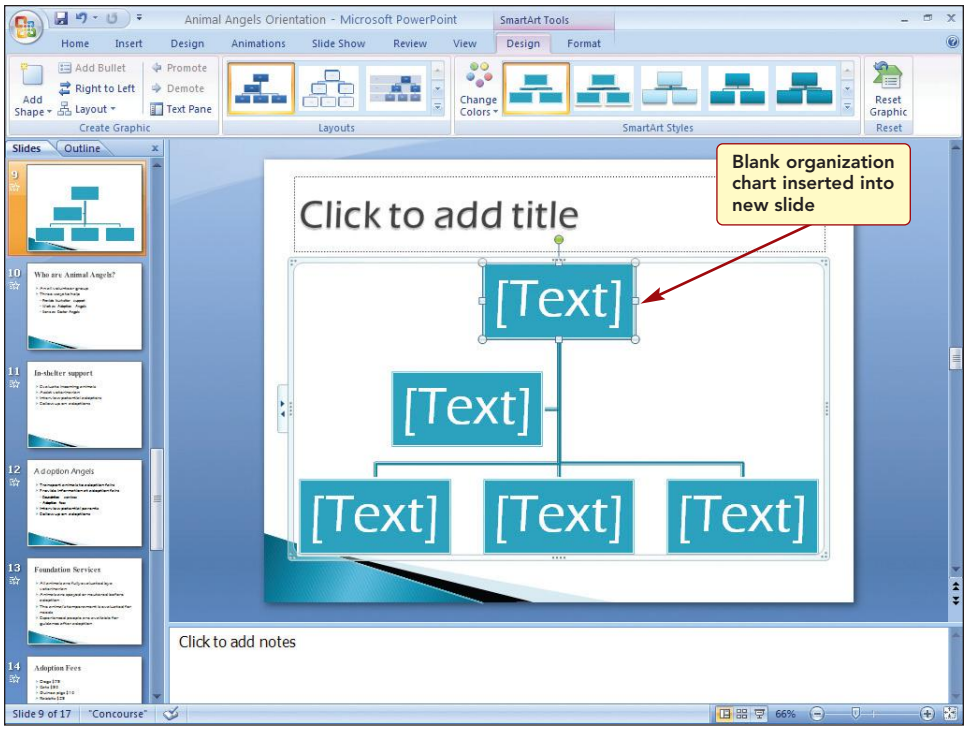


Figure 3.19

A blank organization chart, consisting of five shapes, is displayed.

Adding Text to the Organization Chart

To enter information into the organization chart, you can type or copy the information directly in the shapes. Alternatively, you can use the text pane. Using the Text pane, you will enter the name of the director of the Animal Rescue Foundation in the top-level shape. Each bullet in the Text pane represents one of the shapes in the graphic.

1. Click Text Pane from the Create Graphic group.

Another Method:

You also can click the left edge of the SmartArt graphic object to open and close the Text Pane.

- Click in the top text box and type **Steve Dow, Director**.
- Click on the next bullet in the Text pane.
- Type **Linda Nelson, Community Relations Coordinator**.

Having Trouble?

Do not be concerned if your screen displays "Community" split between two lines. As you proceed, the end will be rejoined on a single line.

Your screen should be similar to Figure 3.20

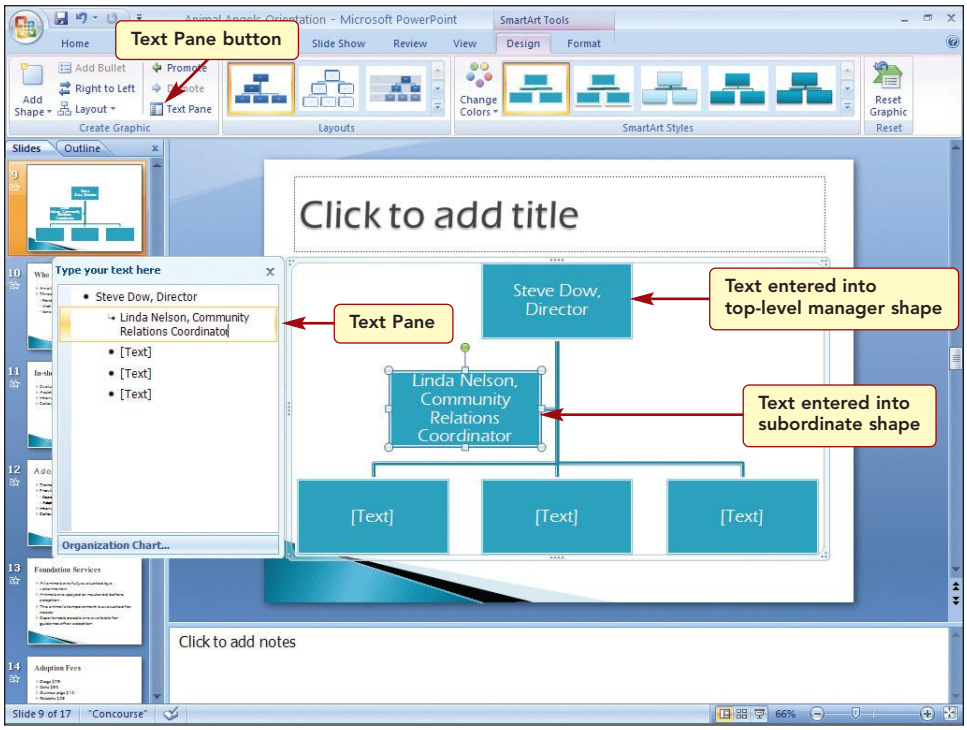


Figure 3.20

The text appears in the existing graphic shapes as you type in the Text pane. The text for the director appears in the top-level manager shape and the text for the community relations coordinator appears in the subordinate shape below it. Occasionally, a word gets split between two lines. As you proceed to another text placeholder, these split words are typically recombined automatically.

The next position you want to add is also at the subordinate level in the organization. Since there are no other shapes at this level, you will need to add a shape at the same level. In the Text pane, this is accomplished simply by pressing ↵Enter to complete the current entry and to create a new shape at the same level.

2 **Press** ↵Enter.

Type Ronnie Carey, Fund Raising Coordinator.

Your screen should be similar to Figure 3.21

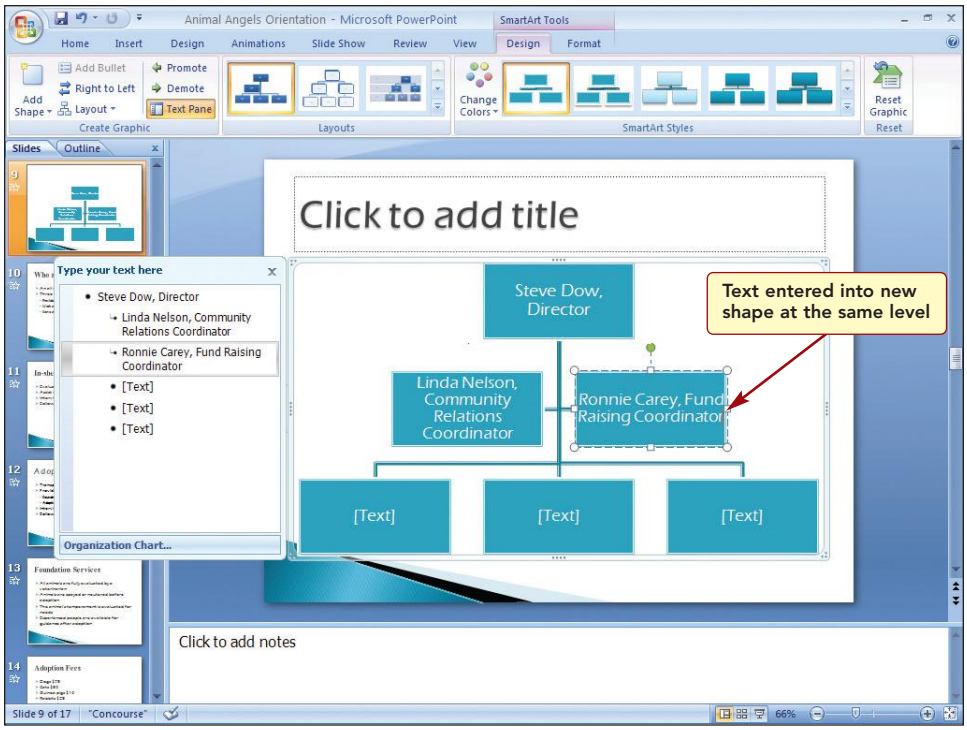


Figure 3.21

Each time you press ↵Enter, a new shape is added at the same level. Notice, the font size of the text decreases in all the shapes to the size needed to display the largest entry in the shapes. You have two more names and positions to add. You will enter the text for the last positions directly in the shape, remove the last empty shape, and enter a title for the slide.

3. **Close the Text pane.**

- **Click on the placeholder in the next empty shape to activate it.**
- **Type Your Name, Volunteer Coordinator.**
- **Click on the placeholder of the next empty shape to activate it.**
- **Type Carlos Rodriguez, Foster Angel Recruiter.**
- **Select the next empty shape and press Delete to eliminate the shape.**
- **Type Who's Who as the slide title.**

Your screen should be similar to Figure 3.22

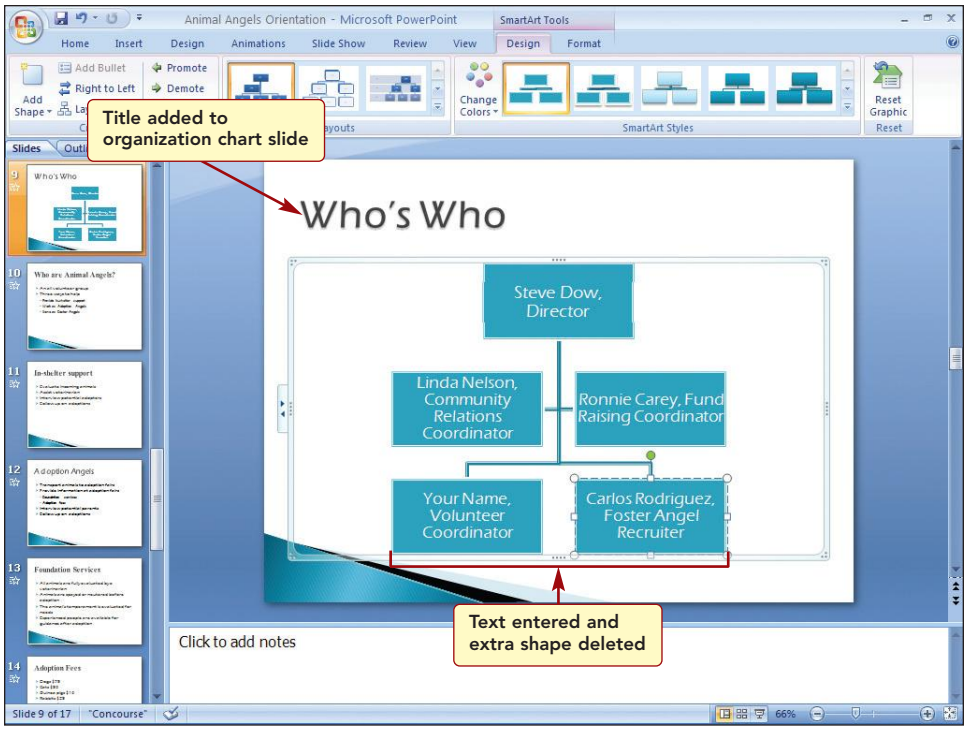


Figure 3.22

The new positions have been added and the extra shape deleted. Although the layout of the organization chart is close, it still does not reflect the hierarchy within the organization.

Changing the Organization Chart Layout

You will change the layout to better illustrate the foundation's staffing.

1. **Select the Organization Chart object.**
2. **Open the SmartArt Tools Design tab.**
3. **Click Hierarchy in the Layouts gallery.**

Your screen should be similar to Figure 3.23

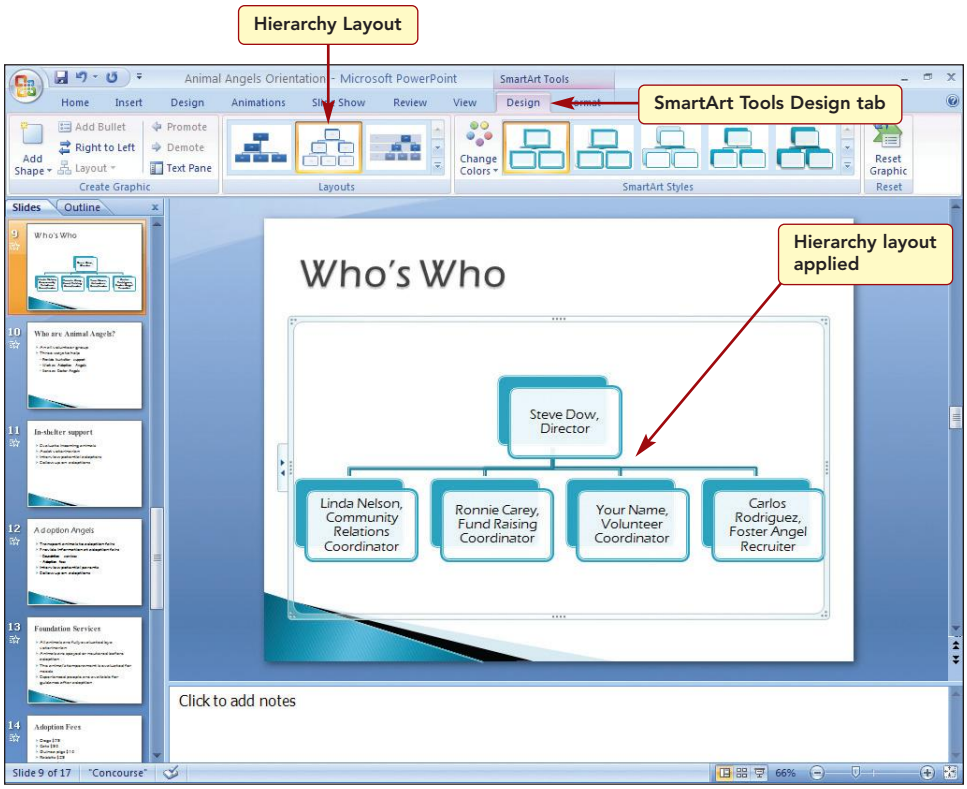


Figure 3.23

This new layout better reflects the organization structure. You, Ronnie, and Linda report directly to the director. However, Carlos Rodriguez works in your department and reports directly to you. You will change the layout to reflect this.

2. **Select the shape for Carlos Rodriguez.**
3. **Click Demote in the Create Graphic group.**

Your screen should be similar to Figure 3.24

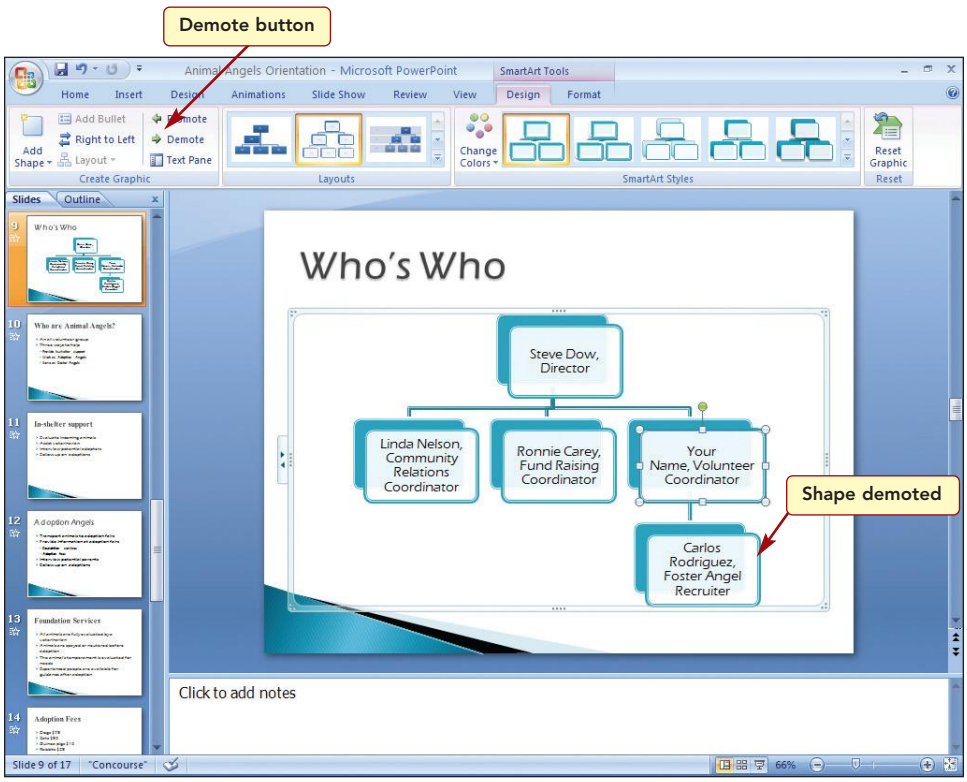


Figure 3.24

The organization chart now correctly identifies the relationships of the people in the organization. Now, you realize you have forgotten to include the name of the Animal Angel recruiter in the organization. This person also reports to the Volunteer Coordinator.

Adding Shapes to the Organization Chart

You will need to add an additional shape to accommodate the missing position. To add a shape, you first select an existing shape that is located closest to where you want to add the new shape. Then you add the new shape relative to the location of the selected shape. In this case, you want to add a shape at the same level as the Carlos Rodriguez shape.

1. **Open the Add Shape drop-down list in the Create Graphic group of the SmartArt Tools Design tab.**
2. **Choose Add Shape After.**
3. **Type Serina Johnson, Animal Angel Recruiter.**

Your screen should be similar to Figure 3.25

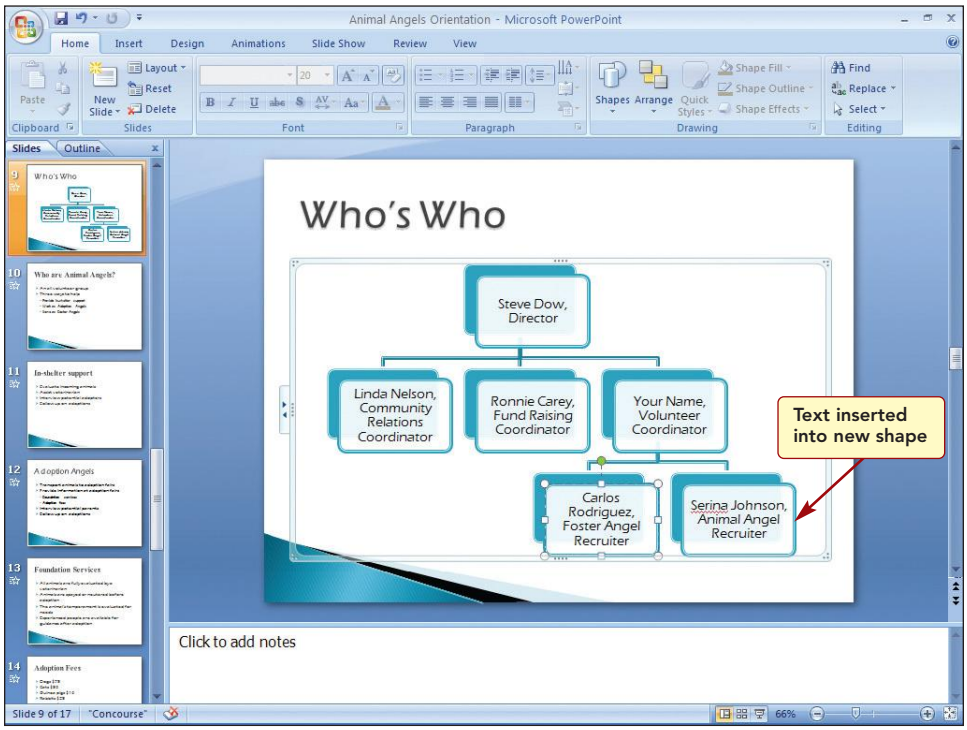


Figure 3.25

The new shape takes the same position as the selected shape, but after it. You also decide to add to the chart the names of the volunteer assistants who work for the coordinators.

2. **Select the shape with Linda Nelson's name.**

- **From the Add Shape drop-down list, choose Add Shape Below.**
- **Click Add Shape and choose Add Shape After to add a second shape at the same level.**
- **Enter Susan Allison, Volunteer Assistant and Maria Garcia, Volunteer Assistant into the shapes.**
- **In a similar manner, under Ronnie Carey's shape, add a subordinate shape and enter George Matthews, Volunteer Assistant.**

Your screen should be similar to Figure 3.26

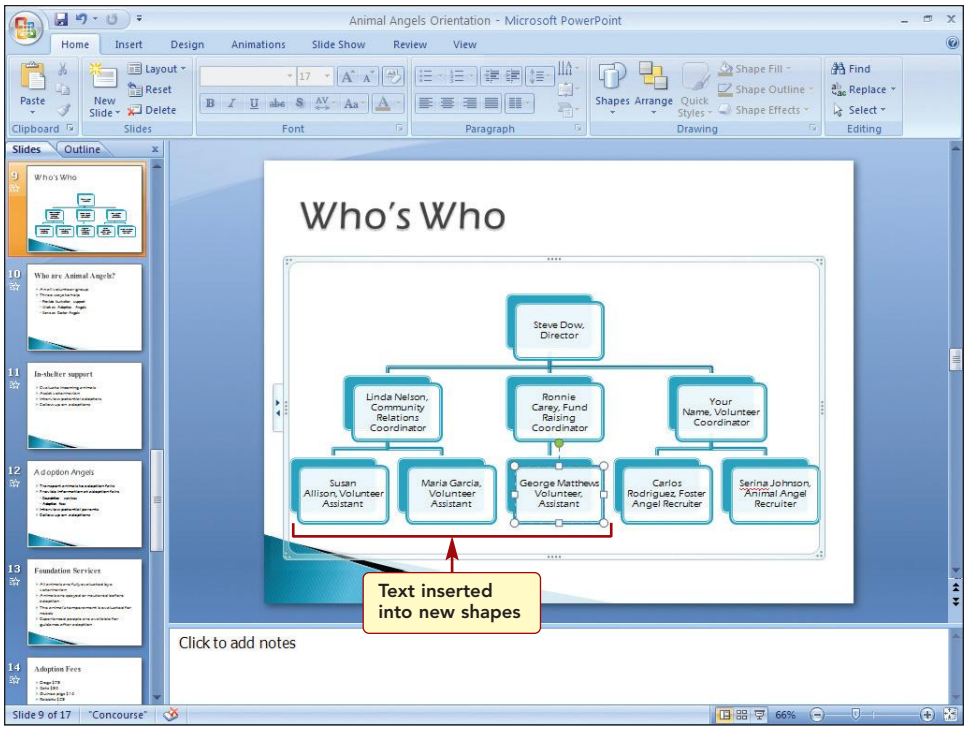


Figure 3.26

Enhancing the Organization Chart

To make the organization chart more interesting, you want to enhance its appearance. You could select each element individually and make changes, but PowerPoint includes a variety of prepackaged styles in the SmartArt Styles group. You will change both the colors and the design characteristics.

1. Click Change Colors in the SmartArt Styles group.
   - Choose Colorful Range Accent Colors 5 to 6.
   - Click More in the SmartArt Styles group.
   - Choose 3-D Polished.

Your screen should be similar to Figure 3.27

Additional Information
If you do not like the changes you have made to a shape, you can quickly restore the default settings using Reset Graphic.

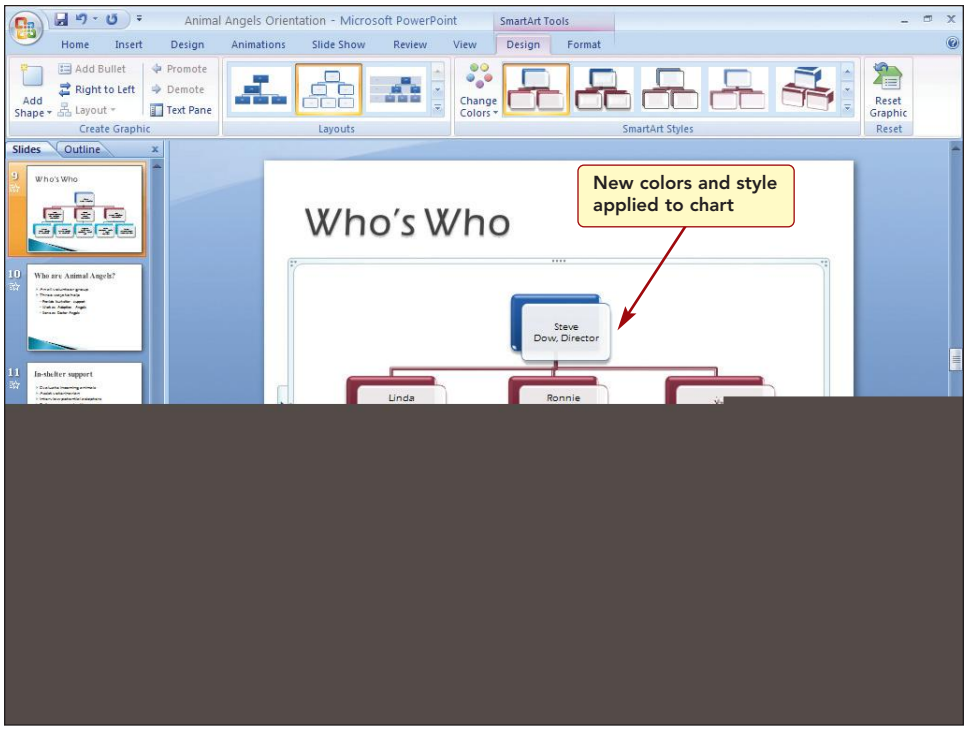


Figure 3.27

The changes to the organization chart are complete. You can click on the chart to further modify the chart at any time.

2. Save the presentation.
   - To see how all the changes you have made to the presentation look, run the presentation beginning with slide 1.

Additional Information
Press F5 to quickly start the presentation from the beginning.

Adding Interest to the Presentation

The presentation has been updated with new content from a variety of sources and contains information that will help new volunteers understand the foundation. After viewing the presentation again, you decide some of the slides need additional changes to add visual interest.

Creating a Numbered List

First, you want to change the second slide, which shows the topics of discussion, to a slide showing the agenda for the orientation. Since the agenda shows a sequential order of events, you want to use a numbered list rather than bullets.

1. **Display slide 2.**
- **Change the title to Agenda.**
- **Select the four bulleted items.**
- **Type the following text to replace the bulleted items:**

  Introductions
  About the Foundation
  Tour
  Lunch
  Animal Angels overview
  Breakout sessions
- **Select the six bulleted items on the slide.**
- **Click Numbering in the Paragraph group of the Home tab.**

Your screen should be similar to Figure 3.28

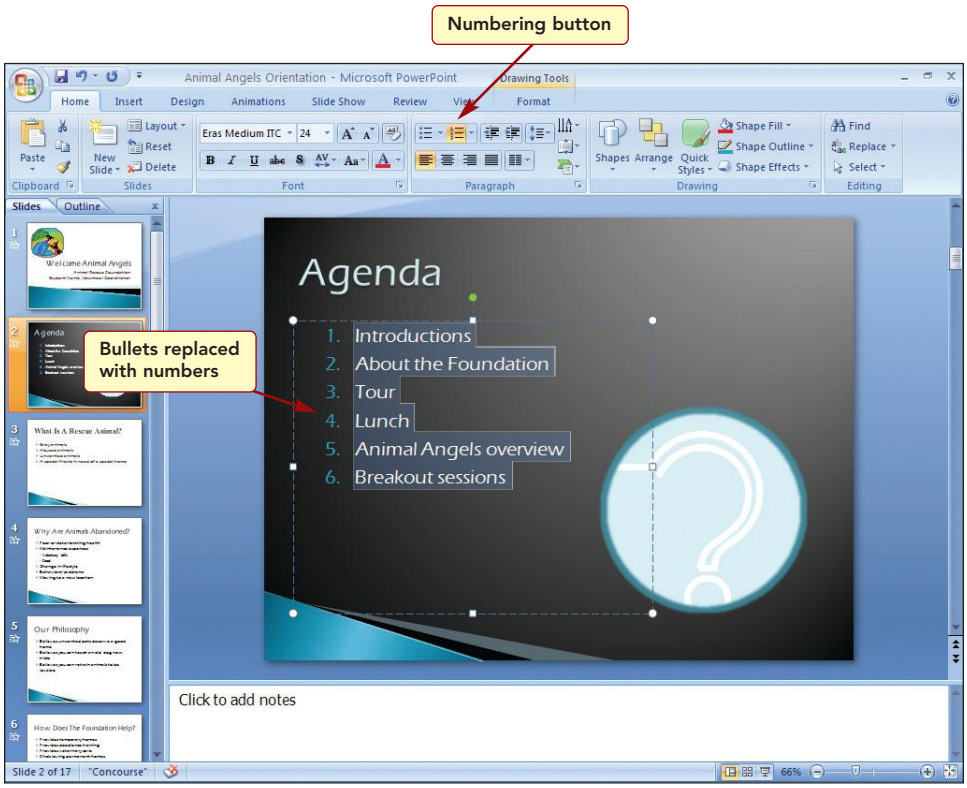


Figure 3.28

The bullets have been replaced with numbers, indicating a sequential order of events.

You would like to change the size of the numbers so they will stand out more on the slide.

Another Method

You also can change a bulleted list to a numbered list by typing. To do this, press ←Backspace to remove the bullet at the beginning of the line, type 1, A, a, I, or i followed by a period or closing parenthesis, type the text, and then press ←Enter to start a new line. The next line is automatically numbered using the same style.

2. **Open the Numbering drop-down list and choose Bullets and Numbering.**
   - **Increase the Size percentage to 125%.**
   - **Click OK.**
   - **Click B Bold.**
   - **Deselect the text.**

Your screen should be similar to Figure 3.29

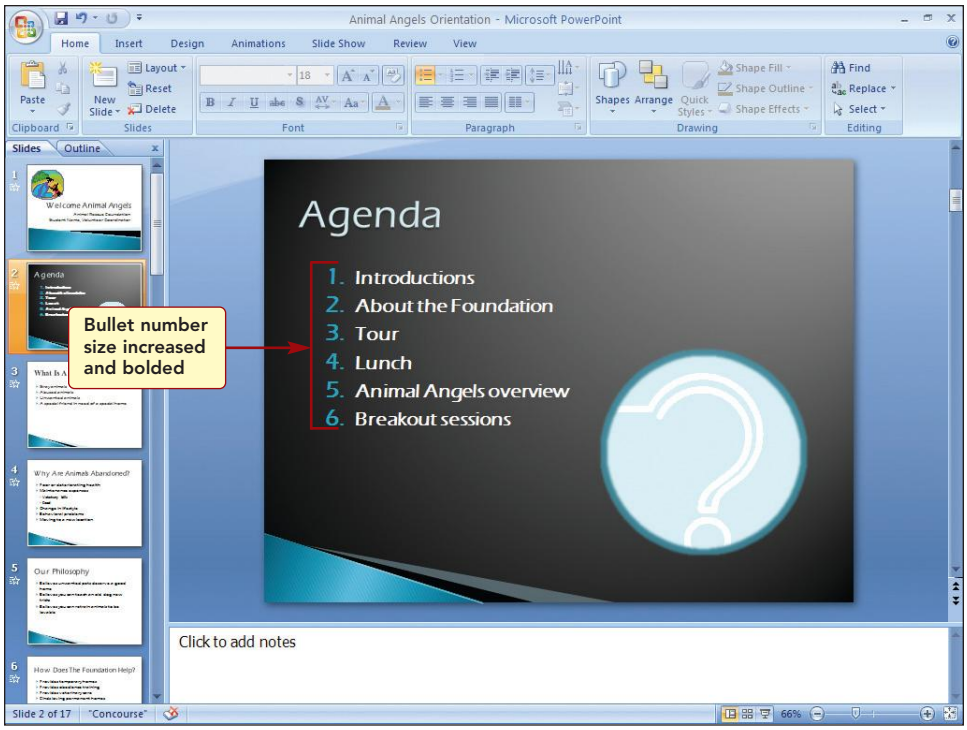


Figure 3.29

Additional Information
The Numbered tab of the Bullets and Numbering dialog box also allows you to select from several other numbering styles as well as specify a starting number.

The numbers have changed to the size you selected and the entire list is bold.

Adding Animated Graphics

Next, you want to enhance the Agenda slide by adding an animated graphic from an animated GIF file.

Concept 4

Animated GIF

4 An **animated GIF** file is a type of graphic file that has motion. It consists of a series of GIF (Graphic Interchange Format) images that are displayed in rapid succession to produce an animated effect. They are commonly used on Web pages and also can be incorporated into PowerPoint presentations.

When an animated GIF file is inserted into a PowerPoint slide, it does not display action until you run the presentation. If you save the presentation as a Web page and view it in a browser, the animated GIF files run as soon as you view the page containing the graphic.

You cannot modify an animated graphic image using the features in PowerPoint. If you want to make changes to the graphic, such as changing the fill color or border, you need to use an animated GIF editing program.

You want to add an animated graphic to slide 2 that will really capture the attention of viewers. To make space for the new graphic, you will first move the question mark graphic to slide 3.

1. **Select the question mark graphic.**
2. **Click Cut.**
3. **Display slide 3.**
4. **Click Paste.**
5. **Reposition and resize the text placeholder and position the graphic as in Figure 3.30.**

Your screen should be similar to Figure 3.30

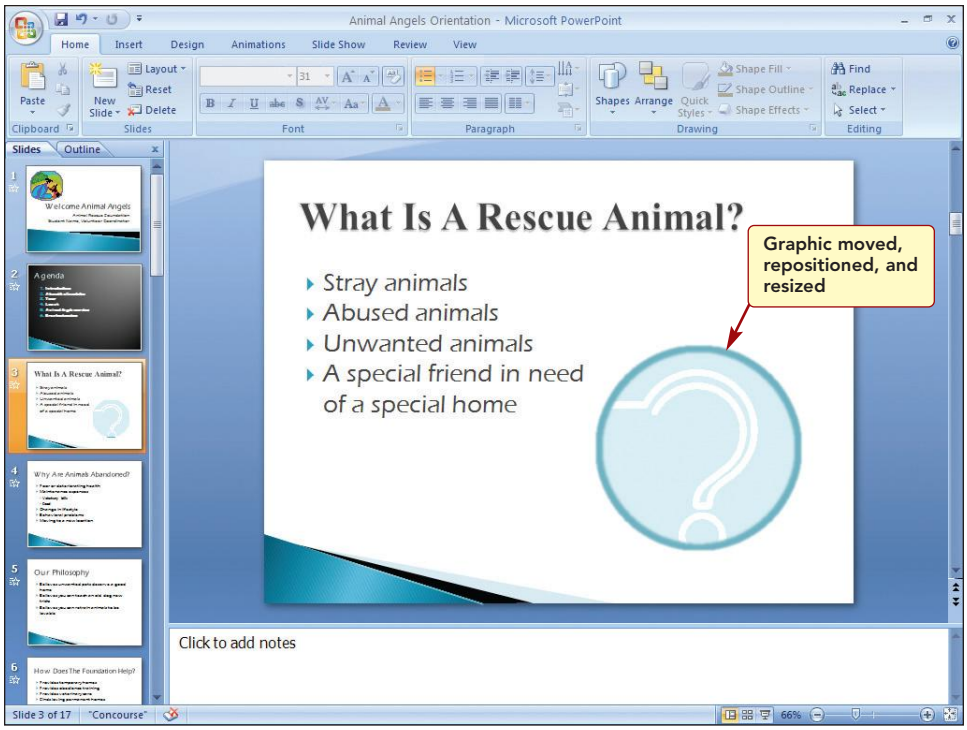


Figure 3.30

Now you will add an animated graphic to slide 2. The graphic will not exhibit motion until you run the slide show.

2. **Display slide 2.**
3. **Click Picture from the Illustrations group on the Insert tab.**
4. **Specify your data file location and select pp03_Adoptions.**
5. **Click Insert.**

Additional Information
The Microsoft Clips Online Web site includes many animated graphics in the Motion category.

Your screen should be similar to Figure 3.31

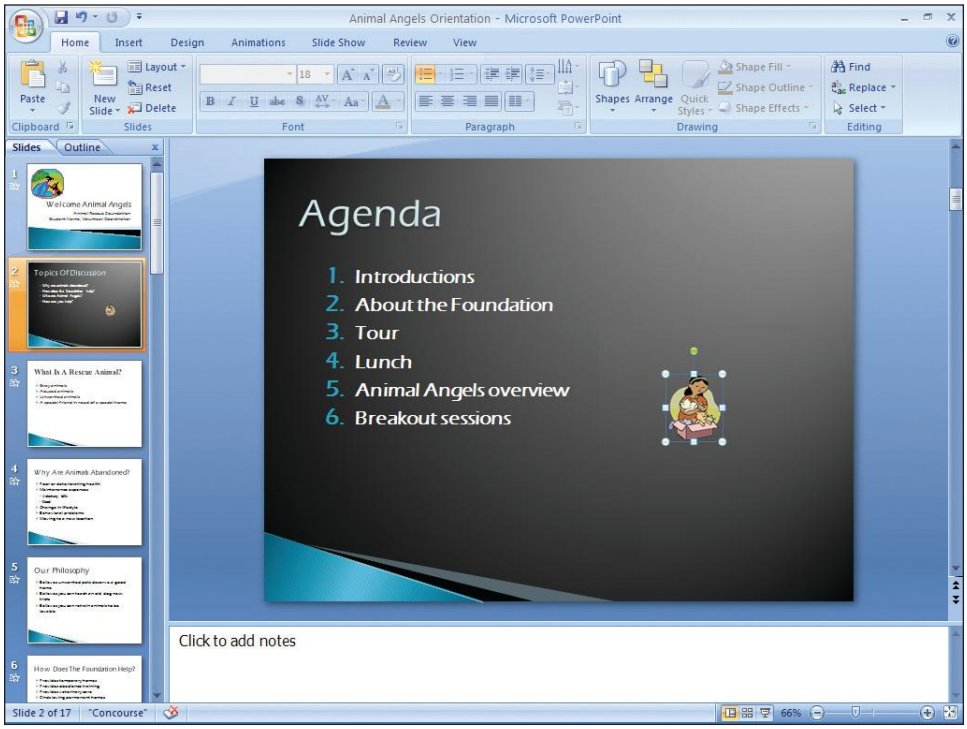


Figure 3.31

Next you will size and position the graphic appropriately then you display the slide in slide show view to see the animation.

3. **Size and position the graphic as shown in Figure 3.32.**

- **Display the slide in Slide Show view to see the animation.**
- **Press Esc to stop the slide show.**

Your screen should be similar to Figure 3.32

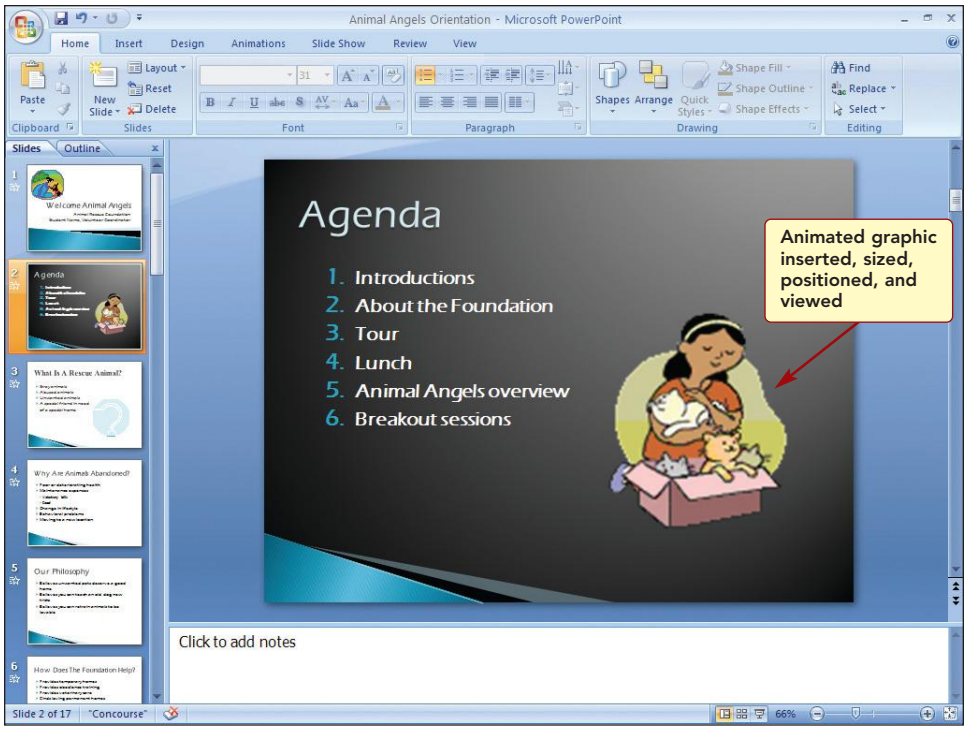


Figure 3.32

Creating a WordArt Object

The next change you want to make is to change the title on slide 1 to make it more interesting. To make the title unique and more interesting, you will enter it using the WordArt feature.

Concept 5

WordArt

5 The **WordArt** feature is used to enhance slides by changing the shape of text, adding 3-D effects, and changing the alignment of text on a line. You also can rotate, flip, and skew WordArt text. The text that is added to a slide using WordArt is a graphic object that can be edited, sized, or moved to any location on the slide.

Use WordArt to add a special touch to your presentations, but limit its use to a single element on a slide. You want the WordArt to capture the viewer's attention. Here are some examples of WordArt.



You will create a WordArt object for the slide title to appear next to the graphic on slide 1. It will replace the title text that is currently on the slide.

1. **Display slide 1.**
2. **Delete the Title text and placeholder.**
3. **Open the Insert tab.**
4. **Click WordArt in the Text group.**

Your screen should be similar to Figure 3.33

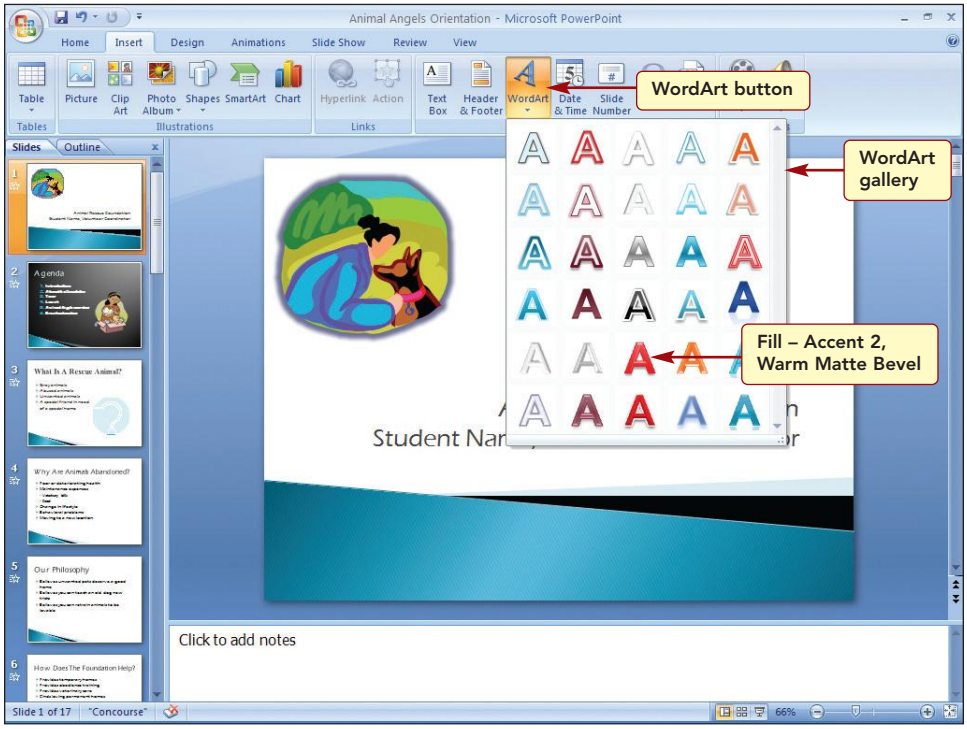


Figure 3.33

The first step is to select one of the 30 styles or designs of WordArt from the WordArt gallery. These styles are just a starting point. As you will see, you can alter the appearance of the style by selecting a different color, shape, and special effect.

2. **Choose Fill – Accent 2, Warm Matte Bevel (fifth row, third column).**
3. **Move the WordArt placeholder to the blank area as shown in Figure 3.34.**

Having Trouble?
Drag the selected object just like any other graphic object to move it.

Your screen should be similar to Figure 3.34

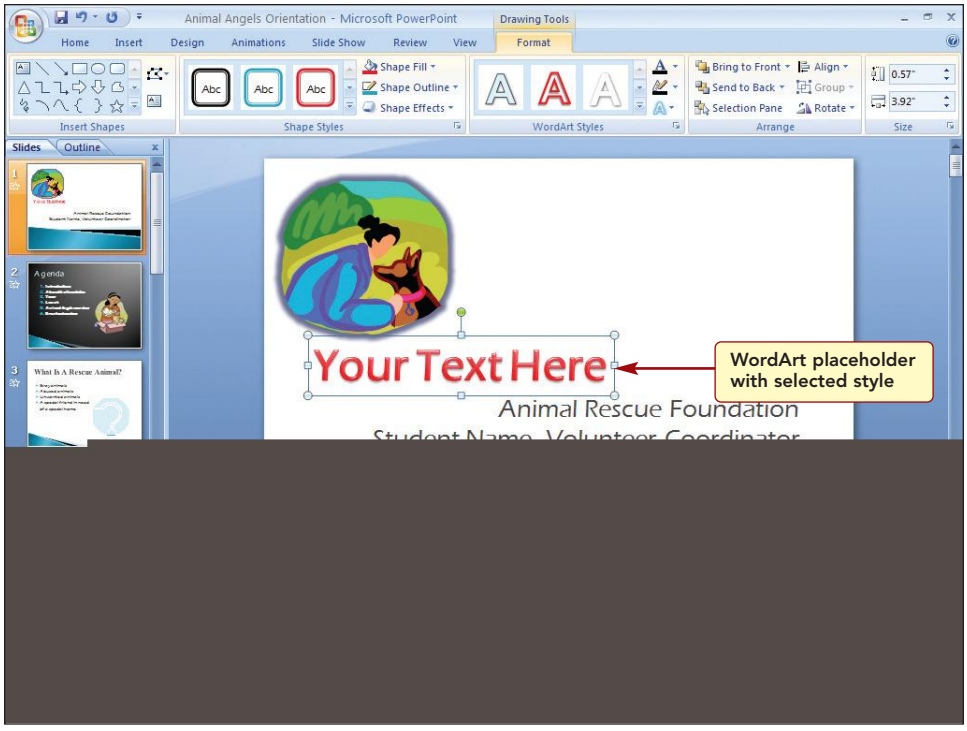


Figure 3.34

A WordArt object placeholder with the selected style is inserted. You need to enter the text you want displayed using the selected WordArt design. The handles surrounding the WordArt object indicate that it is selected. Notice the object is surrounded with a solid border that indicates you can format, size, or move the entire object. Clicking on the object will change the border to a dashed border and display an insertion point. This indicates you can enter or edit the text.

3 **Click in the WordArt object and select the placeholder text.**

Type Welcome Volunteers!.

Your screen should be similar to Figure 3.35

Additional Information
You can easily edit the WordArt text at any point by selecting the object.



Figure 3.35

Now the text you entered is displayed in the selected WordArt style on the slide. Whenever a WordArt object is selected, the Drawing Tools Format tab is available for use with the shape.

Enhancing a WordArt Object

Now you want to change the appearance of the WordArt object to make it more interesting. First you will change the shape of the object.

1. **Click Text Effects in the WordArt Styles group and select Transform.**

Your screen should be similar to Figure 3.36

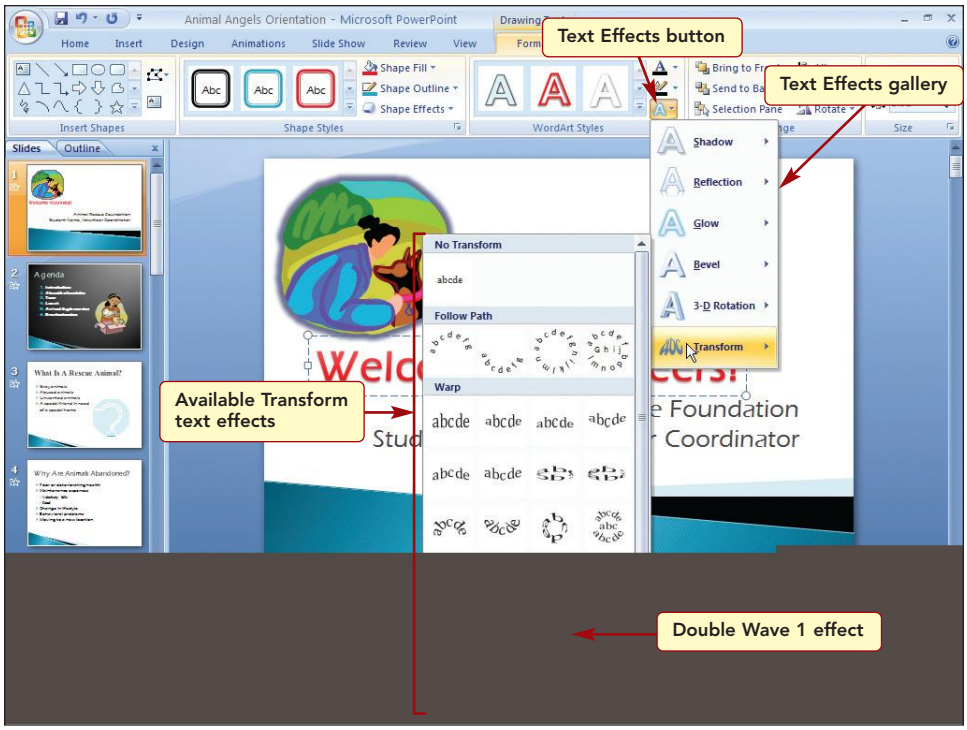


Figure 3.36

A variety of text effects are available that will change the shape of your WordArt object. You will preview several and apply a style.

2. **Point to several effects to see how they look in Live Preview.**
   - **Choose the Double Wave 1 effect.**
   - **Move and size the WordArt object as shown in Figure 3.37.**

Your screen should be similar to Figure 3.37



Figure 3.37

The shape of the WordArt has changed to the selected wave effect.

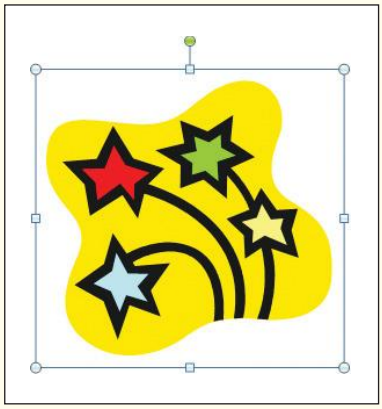
Grouping Objects

You like how the two graphic pieces are positioned on the slide and want to keep this placement. To do this, you will group the objects.

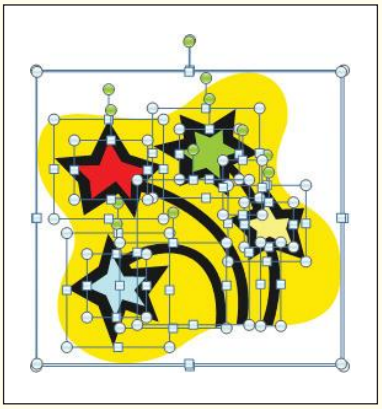
Concept 6

Group

6 A **group** is two or more objects that are treated as a single object. Many clip art pictures are composed of several different elements that are grouped together. This allows you to easily move, resize, flip, or rotate all pieces of the group as a single unit. Features or **attributes** such as line or fill color associated with all objects in the group also can be changed at one time.



Grouped



Ungrouped

Sometimes you may want to ungroup the parts of an object so that the individual parts can be manipulated independently. Other times you may want to combine several objects to create your own graphic object that better suits your needs.

You will combine the two graphics into one by grouping them, and then you will size them appropriately on the slide.

1 **Select both graphics.**

Having Trouble?
Select two or more graphic objects by holding down Shift while clicking on each object.

- **Right-click on one of the selected graphics and choose Group/Group from the shortcut menu.**
- **Size and position the grouped graphic and subtitle objects as in Figure 3.38.**

Your screen should be similar to Figure 3.38



Figure 3.38

Additional Information
To select an object within a grouped object, select the group first, then click on the object you want to select.

Because the objects are grouped, they size and move as a single object. You also could change features associated with all objects in the group at once, such as changing the fill or line color of all objects. Even when objects are grouped, you can still select an object within a group and modify it individually without ungrouping the object.

Delivering Presentations

Typically, presentations are delivered by connecting a computer to a projector to display the slides on a large screen. Before delivering a presentation, it is important to rehearse it so that you are well prepared and at ease with both the equipment and the materials. It is best to rehearse in a setting as close as possible to the real situation with a small audience who will give you honest feedback. Since most presentations are allotted a set amount of time, as part of the rehearsal, you also may want to keep track of the time spent on each slide and the total time of the presentation.

Rehearsing Timing

Additional Information
If your computer has a microphone, you could even record your narration using Record Narration in the Set Up group of the Slide Show tab.

To help with this aspect of the presentation, PowerPoint includes a timing feature that records the length of time spent on each slide and the total presentation time while you are rehearsing. If the presentation runs either too long or too short, you can quickly see which slides you are spending too much or too little time on and adjust the presentation accordingly.

1. **Open the Slide Show tab.**
2. **Click Rehearse Timings in the Set Up group.**

Your screen should be similar to Figure 3.39



Figure 3.39

The Rehearsal toolbar appears and starts a clock to time your delivery. The button advances to the next step in the show and the will pause the timing. You also can return to the previous slide to repeat the rehearsal and apply new timings to the slide using the button on the toolbar.

Normally you would read your narration aloud while you rehearse the timing. For this exercise, think about what you would say for each slide. The toolbar will record the time for each slide. When you reach the end of the presentation, a message box displays the total time for the presentation.

2. **Advance through the slide show as you would during the actual presentation.**

- **When finished, click** Yes **to keep the slide timings.**

Your screen should be similar to Figure 3.40

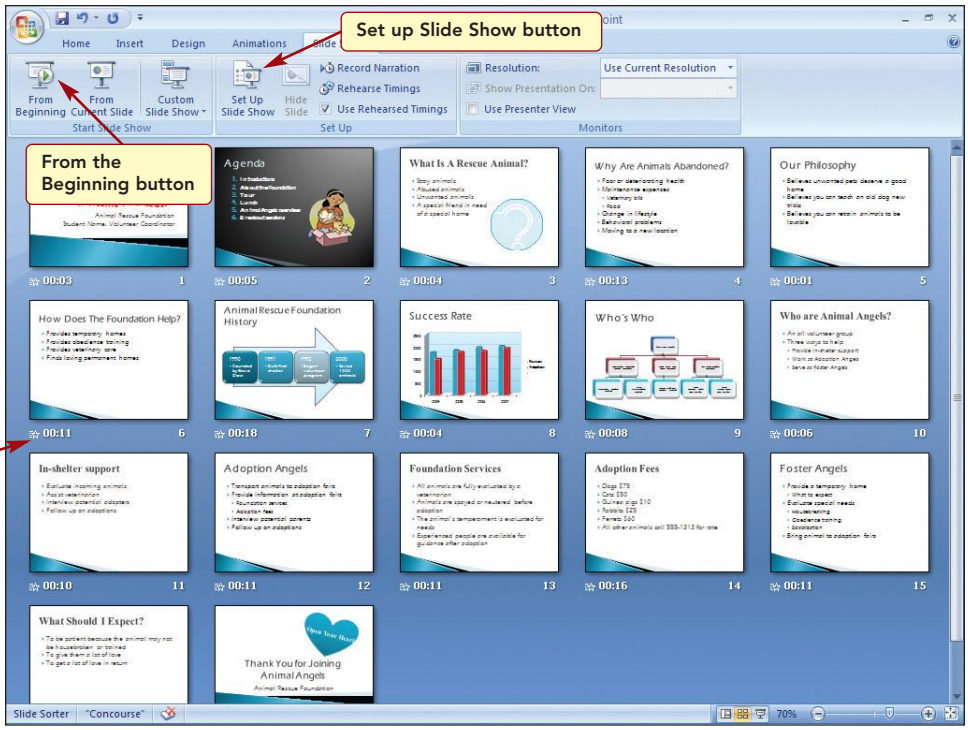


Figure 3.40

Slide Sorter view is displayed and the timings for each slide are displayed below each slide. Now that you can see the individual timings, you can easily see where you are spending too little or too much time. You may have noticed on slide 9 that some of the shapes contained words that were separated and displayed on two lines. If this is the case, resize the shapes to avoid the splitting of words before you proceed.

Using Timings

Once the slide show includes preset timings for each slide, you can use the timings to advance the slides automatically for you during the presentation.

1. **Click** Set Up Slide Show **in the Set Up group on the Slide Show tab.**

- **Choose Using timings, if present in the Advance slides category.**

Another Method

You also can turn this feature on or off using Use Rehearsed Timings in the Set Up group.

- **Click** OK.

- **Click** From Beginning **from the Start Slide Show group and watch the slide show advance automatically.**

- **Press** Esc **to end the slide show.**

Using this feature is ideal for creating a presentation that is self-running, such as in a kiosk, or if you are very sure of your timings. Generally, when presenting a slide show personally, it is just as easy to advance the slides manually; this allows you to pace the show to the audience.

Creating Custom Shows

After rehearsing the presentation, you have decided to divide the presentation into two parts based upon the materials you plan to present in the morning and afternoon sessions. To do this, you will create two custom shows.

Concept 7

Custom Show

7 A **custom show** is a presentation that runs within a presentation. For example, you may have one presentation that you need to give to two different groups. The overview slides are the same for both groups, but there are a few slides that are specific to each group. Rather than create two separate presentations, you can include all the slides in your main presentation and then group the specific slides into two custom shows that run after the overview slides. While you are running the slide show, you can jump to the specific custom show that you created for that audience.

The morning session will cover the materials about the foundation and the afternoon session will cover the materials about the Animal Angels volunteer group. You will create two custom shows that will display only those slides for each session.

You will create the custom show for the afternoon session first.

1. **If necessary, open the Slide Show tab.**
2. **Click** Custom Slide Show **and choose Custom Shows from the Start Slide Show group.**
3. **Click** New... **.**

Your screen should be similar to Figure 3.41

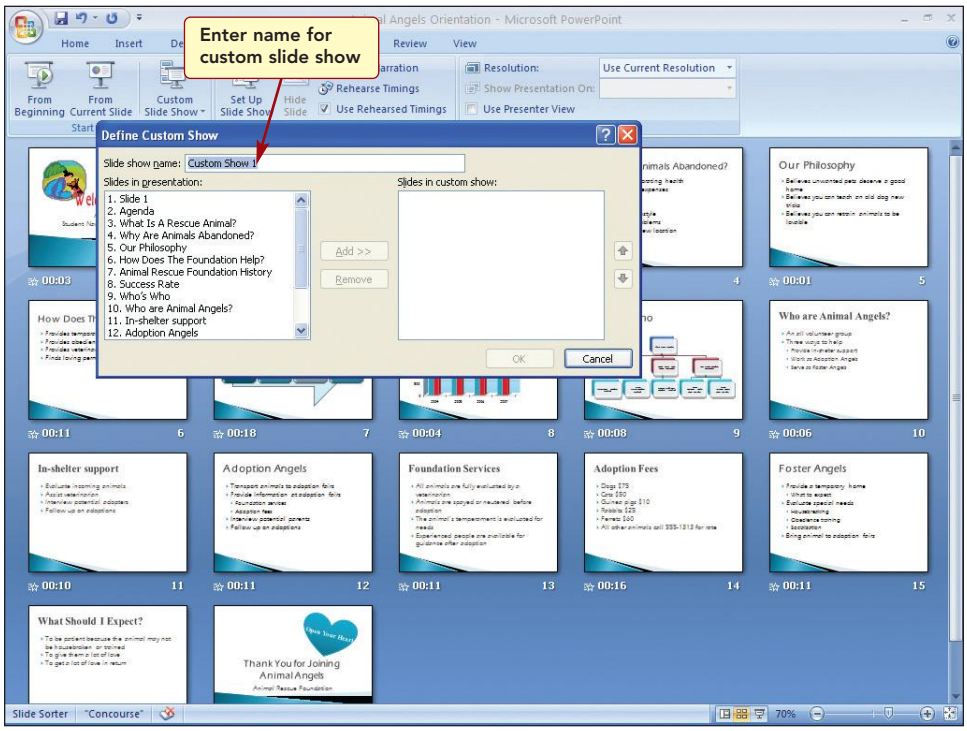


Figure 3.41

In the Define Custom Show dialog box, you name the custom show and select the slides that will run within the show. All the slides in a custom show also must be in the main presentation.

2. **In the Slide Show Name text box, type Animal Angels.**

- **In the Slides in presentation list box, select slides 10 through 17.**
- **Click** Add >> **.**

Your screen should be similar to Figure 3.42

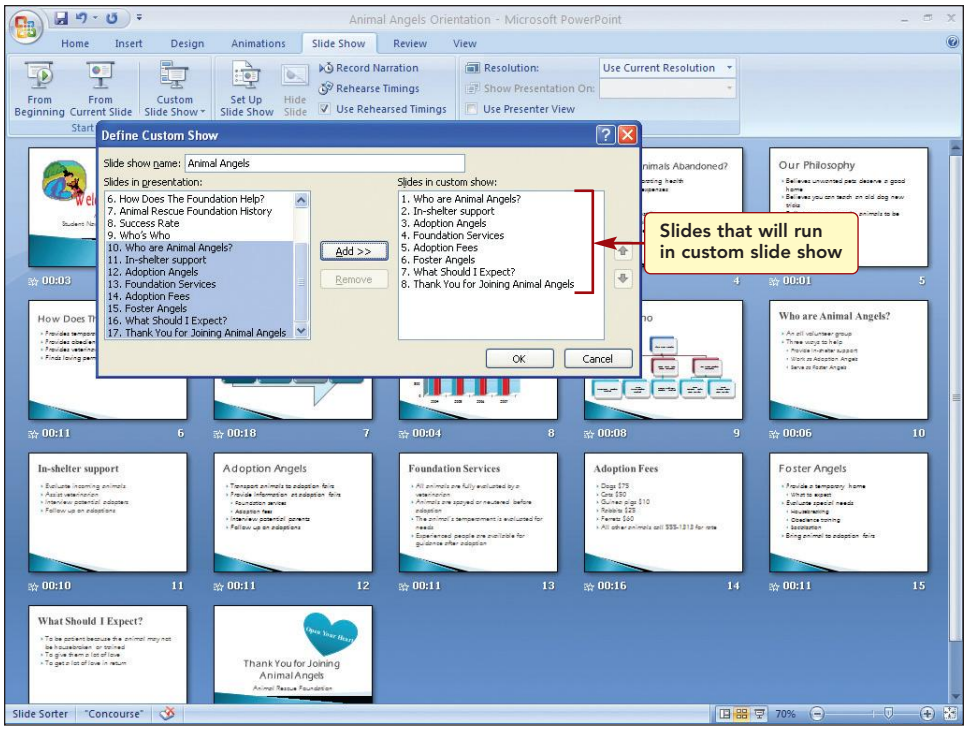


Figure 3.42

The selected slides are listed in the Slides in custom show area.

Next you want to create the custom slide show for the morning session about the foundation in general. When the custom show ends, you want the Agenda slide to display again, so you are ready to begin the afternoon session. To do this, you will include the Agenda slide as the last slide in the custom show. After adding the slides for the custom show, you will change the slide order so that the Agenda slide will be last. To change the order of the slides in the custom show, select a slide in the Slides in custom show list box and then click ⬆ to move the slide up in the list or ⬇ to move the slide down.

3. Click OK to complete the Animal Angels show.
   - Create another custom show titled **Foundation**.
   - In the Slides in presentation list box, select slides 2 through 9.
   - Click Add >>.
   - Select slide 1 from the Slides in custom show list box.
   - Click ▼ seven times.

Your screen should be similar to Figure 3.43

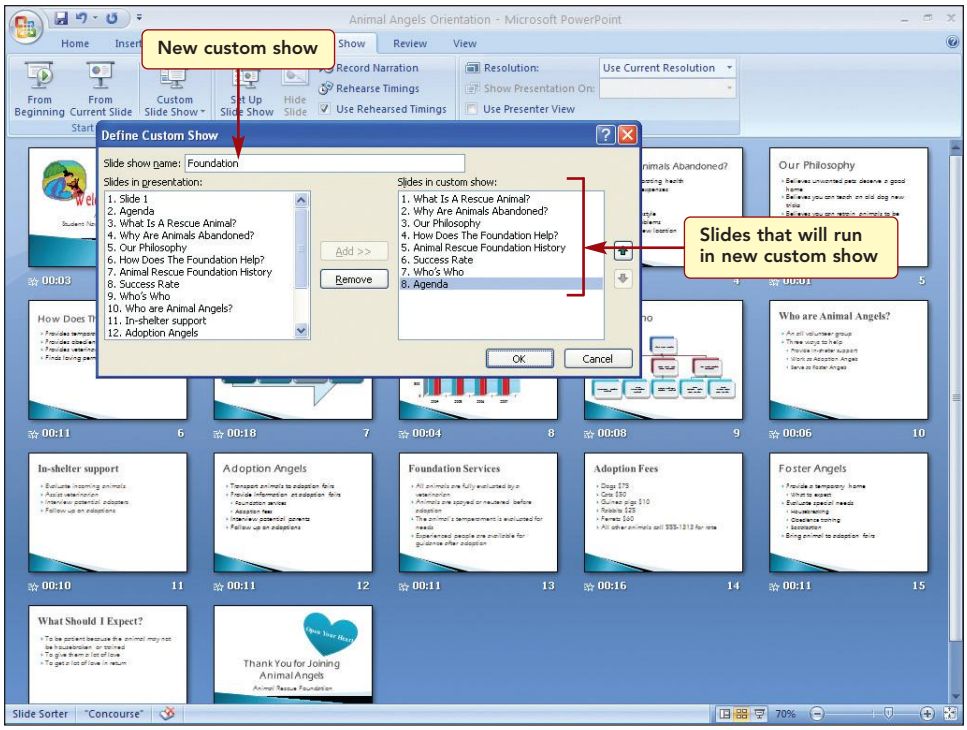


Figure 3.43

Changing the slide order in a custom show does not change the order of the slides in the main presentation. Now you will see how the Foundation custom show runs.

4. Click OK.
   - Click Show to run the Foundation custom show.
   - View the slides and press Esc to end the custom show when the Agenda slide is displayed.

The Foundation custom show displays the slides in the order they were listed in the custom show list. The timings associated with the slides also are used.

Adding Hyperlinks

Next, you need to create a method to start the custom shows from the Animal Angels orientation presentation. To do this, you will add hyperlinks from the bulleted item on the Agenda slide to its corresponding custom show.

Concept 8

Hyperlinks

8 **Hyperlinks** provide a quick way to jump to other slides, custom shows, presentations, objects, e-mail addresses, or Web pages. You can assign the hyperlink to text or to any object, including pictures, tables, clip art, and graphs. You can jump to sites on your own system or network as well as to sites on the Internet and the Web. The user jumps to the referenced location by clicking on the hyperlink.

First, you will add the hyperlink to the Foundation custom show.

1. **Display slide 2 in Normal view.**
2. **Select the second bulleted item.**
3. **Open the Insert tab.**
4. **Click**  **from the Links group.**

Your screen should be similar to Figure 3.44

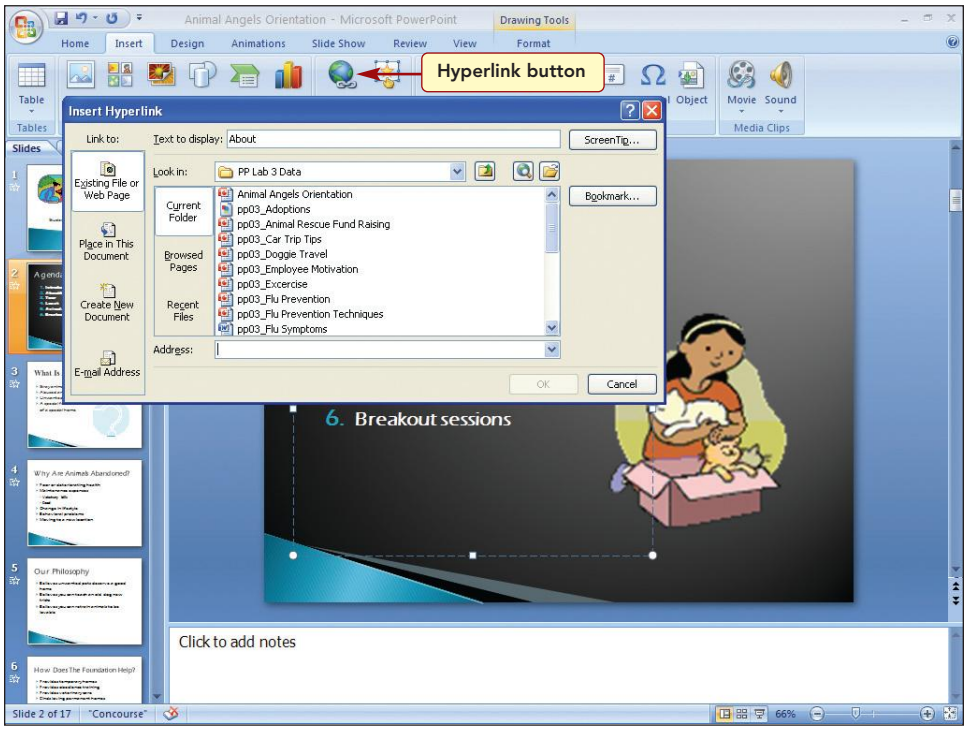


Figure 3.44

You need to specify the location of the document to link to and the specific slide.

2. **Choose Place in This Document from the Link to list.**

   Select Foundation under Custom Shows.

   Click OK **.**

Your screen should be similar to Figure 3.45

Having Trouble?
Use the vertical scroll bar to display the Foundation Custom Show name.

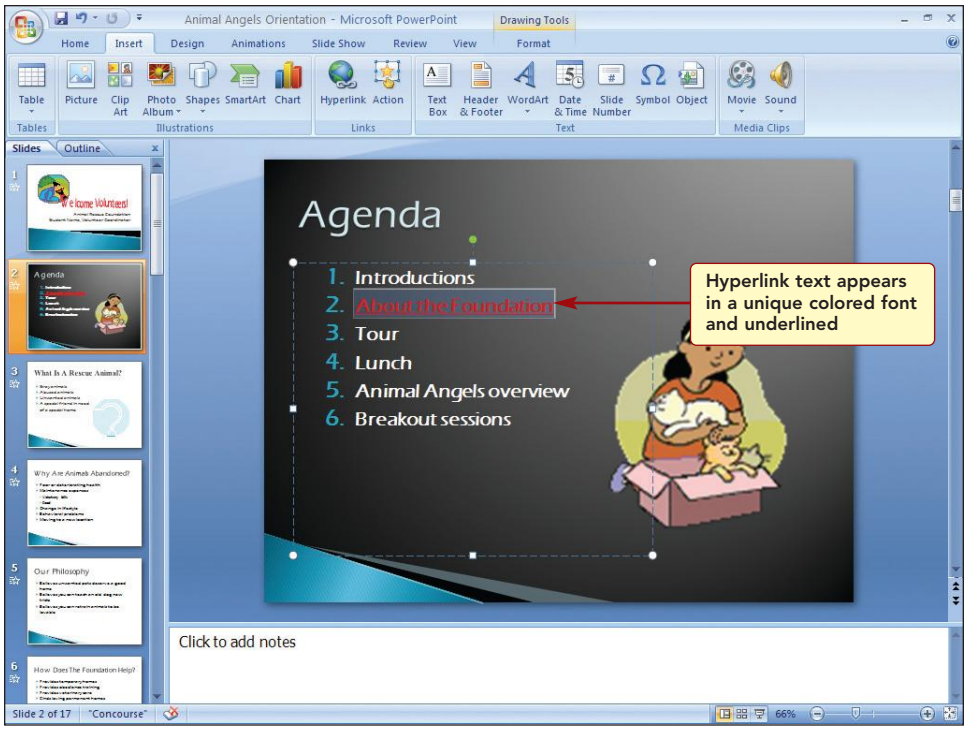


Figure 3.45

The hyperlink text appears underlined and in color. The color of the hyperlink text is determined by the presentation's color scheme. When the second bulleted item is selected, it will start the Foundation custom show.

Next, you need to add the hyperlink to the Animal Angels custom show.

3. **Create another hyperlink from agenda item 5 to the Animal Angels custom show.**

The fifth bulleted agenda item is now a hyperlink to the custom slide show.

Using Hyperlinks

Now you want to try out one of the hyperlinks to see how they work. To activate the hyperlinks, you need to run the slide show.

1. **Run the slide show from the beginning.**

Having Trouble?
Pressing F5 starts the slide show at slide 1.

- **Click on the Animal Angels overview hyperlink when slide 2 is displayed.**

Additional Information
The mouse pointer shape changes to a hand when pointing to a hyperlink.

- **Press Esc to end the show when the last slide is displayed.**

Your screen should be similar to Figure 3.46



Figure 3.46

The slide show jumps to the first slide in the Animal Angels custom show and runs the custom show slides. Now you are ready for the presentation!

2. **Add appropriate file documentation.**

- **Save the presentation.**

- **Print a handout with four slides per page showing slides 1, 2, 8, and 9 in landscape orientation.**

Publishing a Presentation

The Director wants you to **publish** or save a copy of the presentation file for use on the foundation's Web site for volunteers to review whenever they want. You want viewers to be able to easily control the slide show so that they can go back to review a slide immediately or go forward more quickly to see other slides.

Before you publish the presentation, you want to make several changes to the Agenda slide. First, you will change the slide content to display a list of the major topics from the presentation. Then you will edit one of the slides.

1. **Display slide 2 in Normal view.**
2. **Change the slide title to Learn About Us.**
3. **Delete the Introductions, Tour, and Lunch bullets.**
4. **Change "Breakout Sessions" to Adoption Angels.**
5. **Add a fourth bullet, Adoption Fees.**
6. **Add a fifth bullet, Foster Angels.**
7. **Edit the second bullet by capitalizing the first letter of Overview.**

Your screen should be similar to Figure 3.47

Additional Information
If an older browser program is used, features that are not supported are unavailable.

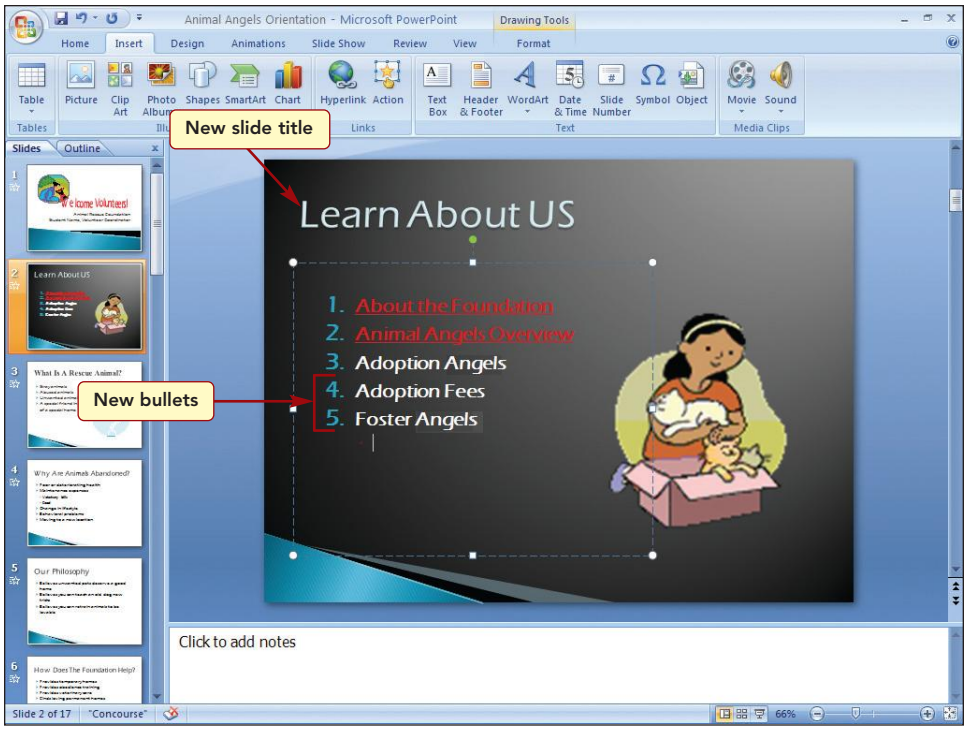


Figure 3.47

Unfortunately, custom shows will not run from a Web browser. Therefore, in order for the presentation to run from the foundation's Web site, you need to change the hyperlinks to the custom shows to links to the appropriate slides in the presentation. Fortunately, most other features in the presentation, including transitions and sound, will run in most new versions of Web browser programs.

You will edit the existing hyperlinks and then add new hyperlinks for the other bulleted items on slide 2. This will allow viewers to make a selection from the bulleted list, and the presentation will jump directly to the slide containing the relevant information.

2. Right-click on the About the Foundation hyperlink and choose Edit Hyperlink.

- Change the link to slide 3.
- Change the Animals Angels Overview hyperlink to link to slide 10.
- To create a hyperlink for the Adoption Angels bullet, select the bullet, right-click on the selection, and choose Hyperlink.
- Select slide 12 and click OK to complete the hyperlink.
- Create a hyperlink for Adoption Fees to slide 14.
- Create a hyperlink for Foster Angels to slide 15.

Your screen should be similar to Figure 3.48

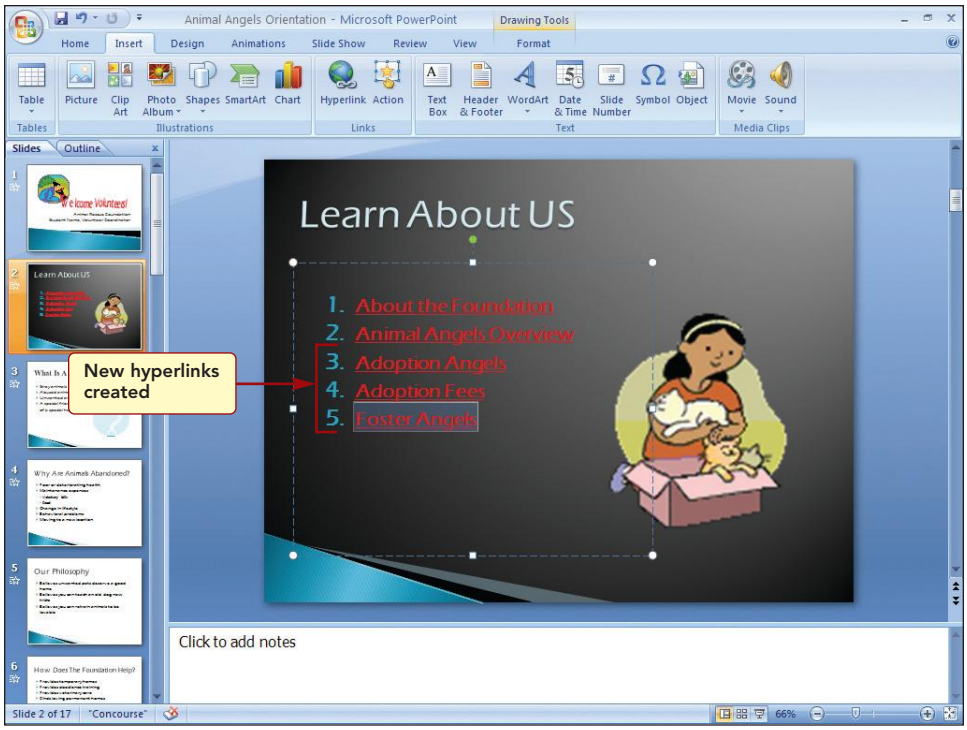


Figure 3.48

Saving the Presentation as a Web Page

Now that the presentation is ready for Web delivery, you will save it as a Web page. Publishing a file saves the file in Hypertext Markup Language (HTML) format.

Concept 9

Hypertext Markup Language

9 All Web pages are written using a programming language called **Hypertext Markup Language (HTML)**. HTML commands control how the information on a page such as font colors and size is displayed. HTML also allows users to click on highlighted text or images and jump to other locations on the same page, to other pages in the same site, or to other sites and locations on the Web altogether.

HTML commands are interpreted by the browser software program you are using to access the WWW. A browser is a program that connects you to remote computers and displays the Web pages you request. The computer that stores the Web pages and sends them to a browser when requested is called the server.

You can save a presentation in two ways:

- Web Page—Saves the presentation as a Web page and creates an associated folder that contains supporting files such as bullets, background textures, and graphics.
- Single File Web Page—Saves the presentation as a Web page that integrates all supporting information, including graphics and other files, into a single file.

You will save it to a single file Web page, which is the default file type.

1 **Click Office Button and choose Save as.**

Specify the location to save the file.

Enter the file name Volunteer Orientation Web**.**

Choose Single File Web Page as the file type.

Your screen should be similar to Figure 3.49

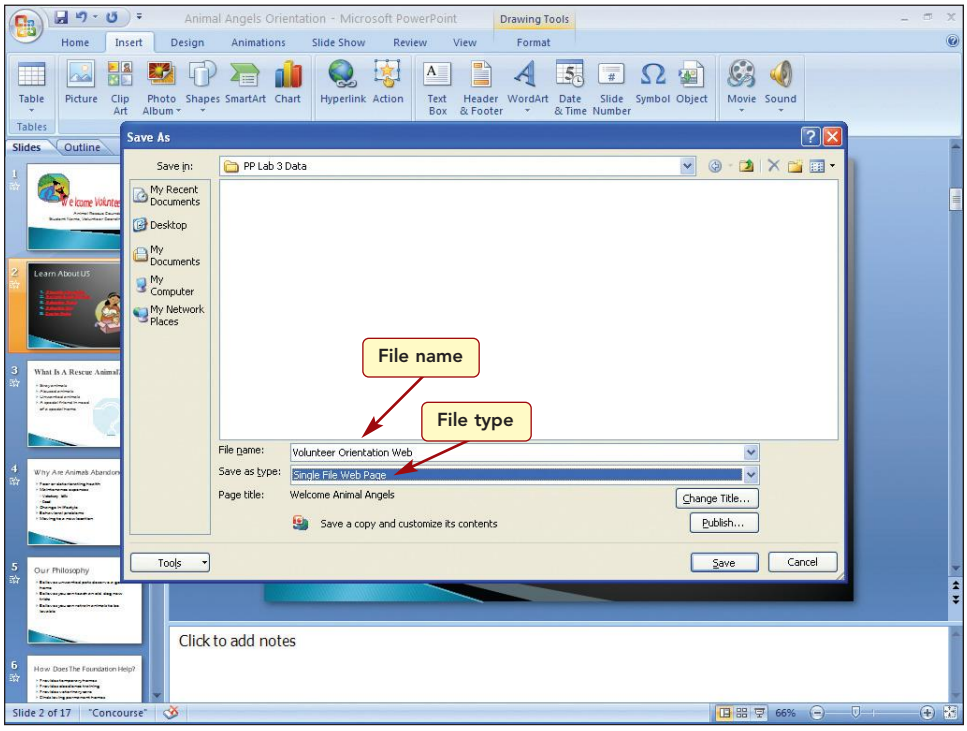


Figure 3.49

Additional Information

Clicking Change Title... allows you to specify a different page title.

Notice that the page title, the name that will appear in the title bar of the browser when the page is displayed, is the same as the title in the first slide. This is an appropriate page title and does not need to be changed. Next, you will set several additional Web page formatting and display options.

2 Click Publish... .

Your screen should be similar to Figure 3.50

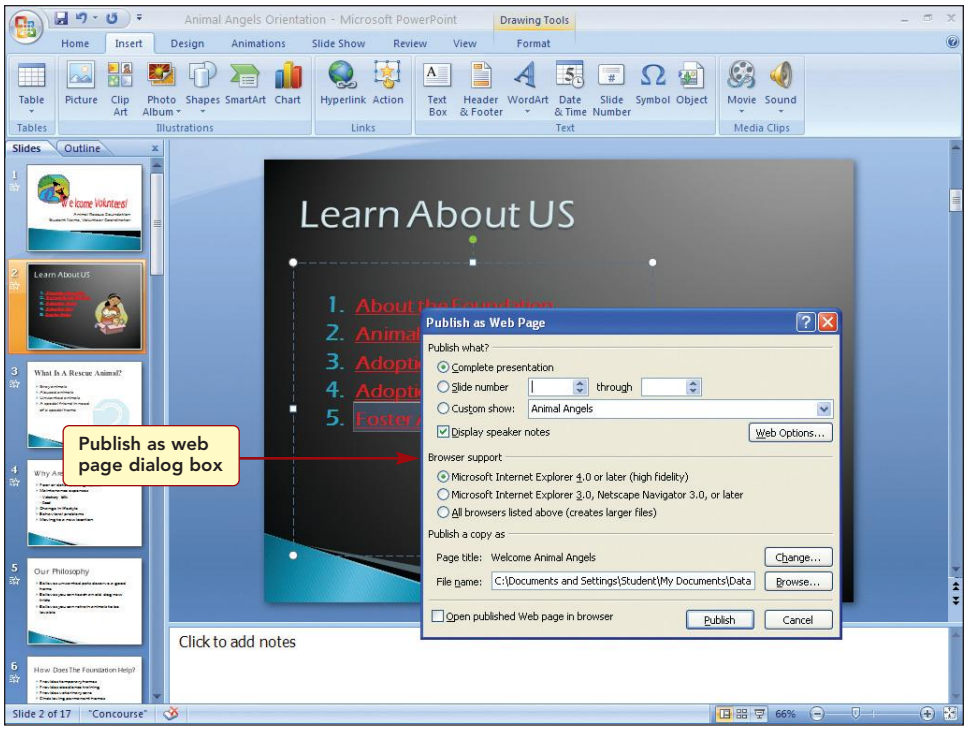


Figure 3.50

In the Publish as Web Page dialog box, you can specify the slides you want to publish under Publish what? and optimize the Web page for a particular browser or browser version, under Browser support. The default settings, Complete Presentation and Microsoft Internet Explorer 4.0 or later, in both areas are appropriate for your needs. You do want to specify some additional Web options.

3 Click Web Options... .

- **In the General tab, choose Show slide animation while browsing.**
- **If necessary, select the other two appearance option.**

Your screen should be similar to Figure 3.51

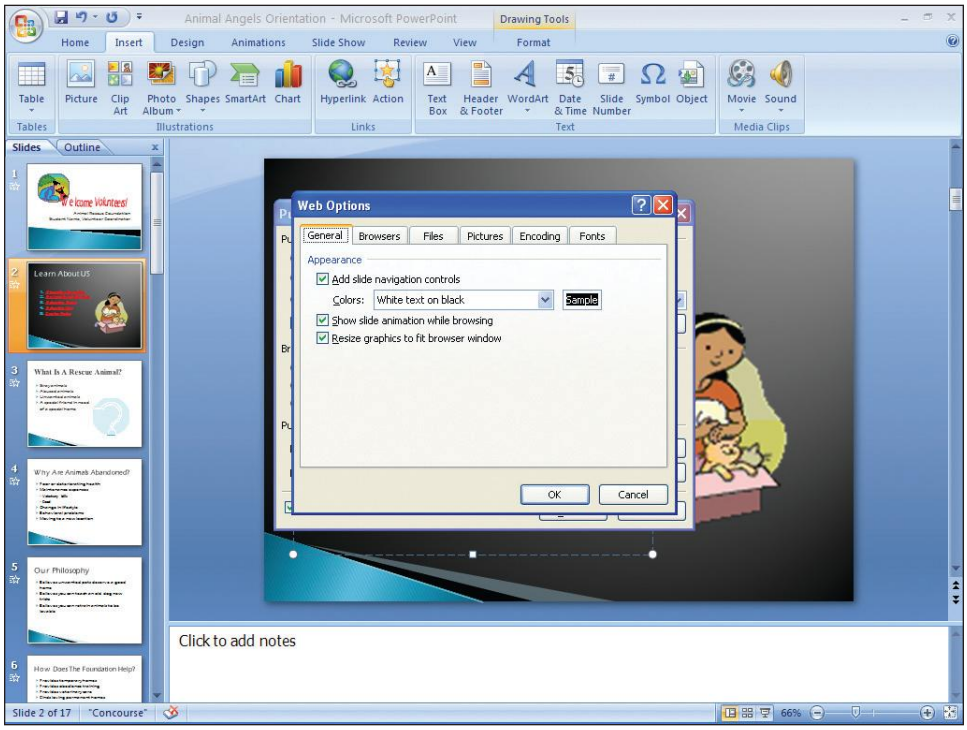


Figure 3.51

The Add slide navigation controls option will display a table of contents listing that can be used to navigate the presentation. The Show slide animation while browsing will display transition effects and other animations as long as the browser supports those features. The Resize graphics to fit browser window automatically sizes the slides to fit the browser window.

4 **Click** OK.

To immediately see how your published Web presentation looks in your browser after you publish it, select the Open published Web page in browser.

Click Publish....

If necessary, respond appropriately to allow blocked content.

Maximize the browser window.

Having Trouble?
Your browser may not allow the presentation to be displayed. If this is the case, skip to the end of this lab.

Your screen should be similar to Figure 3.52

Additional Information
A Single File Web Page file type has a file extension of .mht or .mhtml.

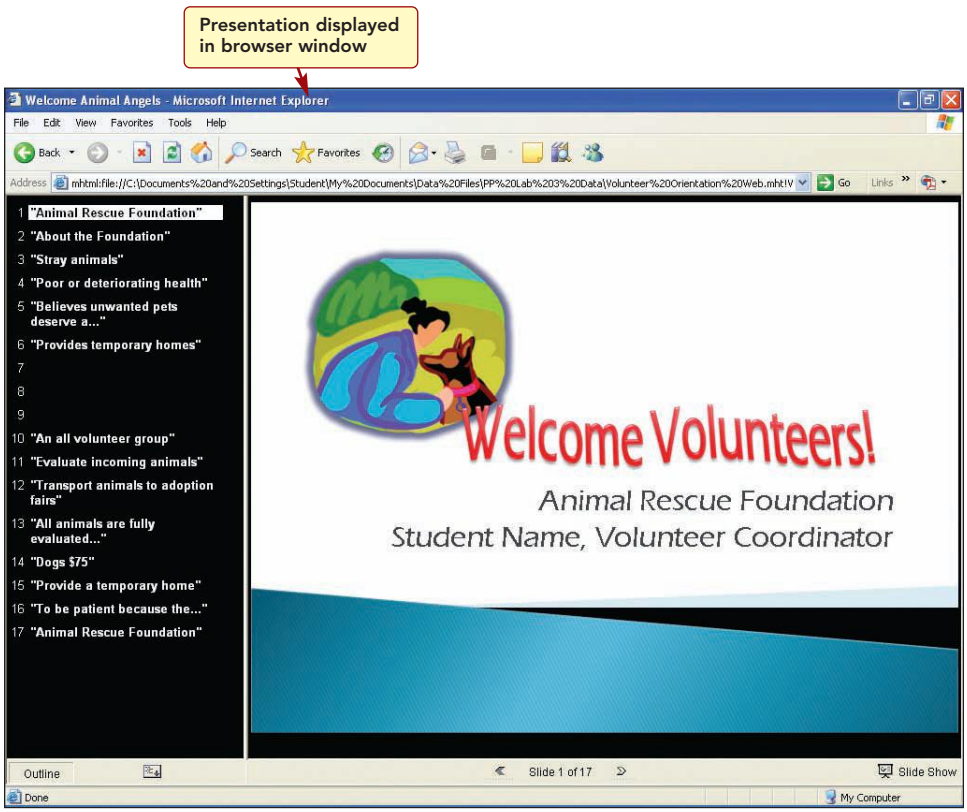


Figure 3.52

The file is converted to an HTML document and saved as a Single File Web Page file type. This file contains all the elements on the page such as images and hyperlinks and all supporting files such as those for bullets, graphics, and background. Any graphics that were added to the page that were not already JPEG or GIF files are converted to that format.

The browser on your system is loaded offline, and the page you created is displayed in the browser window. The left side of the window displays a table of contents relating to the slides of the presentation. Clicking on an item will display the associated slide on the right side. To navigate through the presentation, you can use the table of contents list, the hyperlinks on slide 2, or the navigation buttons located below the slide.

5. **Click on slide 2 in the Navigation pane to display the contents list.**
   - **Click on item 2 in slide 2 to see the first slide in the Animal Angels Overview.**
   - **Try out the various methods of navigation in the presentation.**
   - **When you are finished, click Close to exit the browser.**
   - **Close PowerPoint (do *not* save these changes to the Animal Angels orientation presentation if prompted).**

Additional Information
Slide timings are not saved with the Web page.

Now that you can see how easy it is to convert a presentation to a Web page, you will use this feature often to make information available to more people.

You have two copies of the orientation presentation: the copy you will use to present the program personally to the new volunteers and the other that will be used on the foundation's Web site.



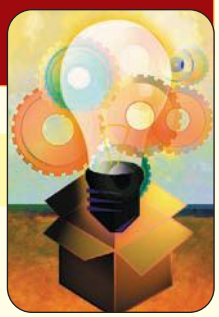
Focus on Careers

EXPLORE YOUR CAREER OPTIONS

Training Specialist

In today's job market, learning new skills is the only way to keep current with ever-changing technology. A training specialist in a corporate environment is responsible for teaching employees how to do their jobs, which usually involves computer training. Training specialists use PowerPoint to create materials for their lectures and can automate the presentations and package to a CD to send to employees at remote locations. The position of training specialist usually requires a college degree. Typical salaries range from $36,500 to $120,000 depending an experience and skill. To learn more about this career, visit the Web site for the Bureau of Labor Statistics of the U.S. Department of Labor.

Concept Summary

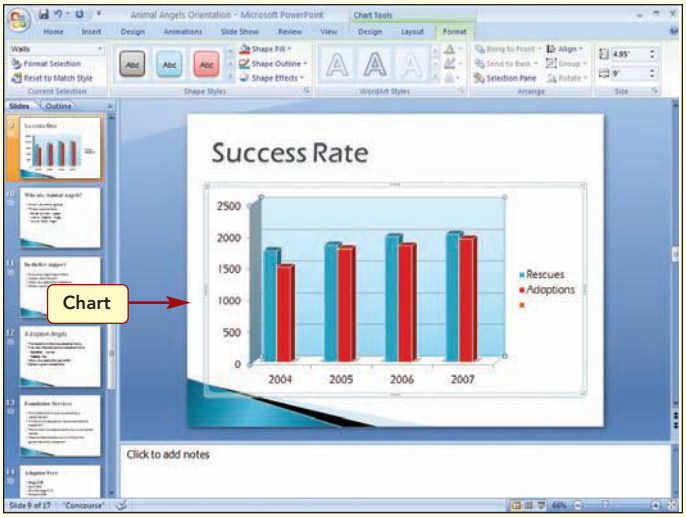


LAB 3

Using Advanced Presentation Features

Chart (PP3.11)

A chart is a visual representation of numeric data that is used to help an audience grasp the impact of your data more quickly.

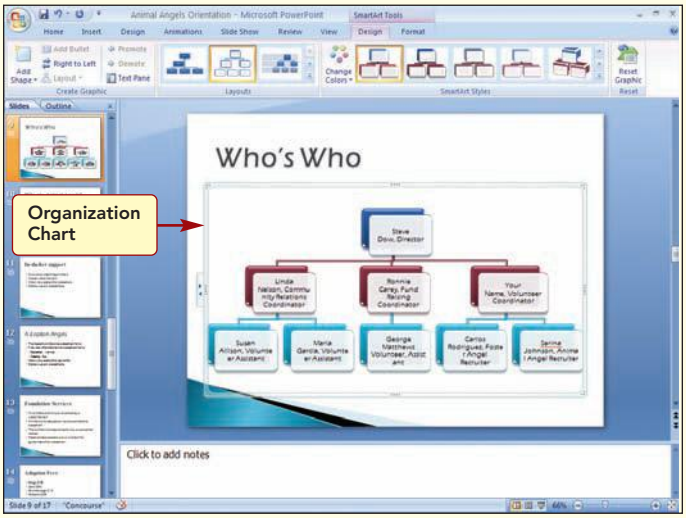


Collect and Paste (PP3.14)

The collect and paste feature is used to store multiple copied items in the Office Clipboard and then paste one or more of the items into another location or document.

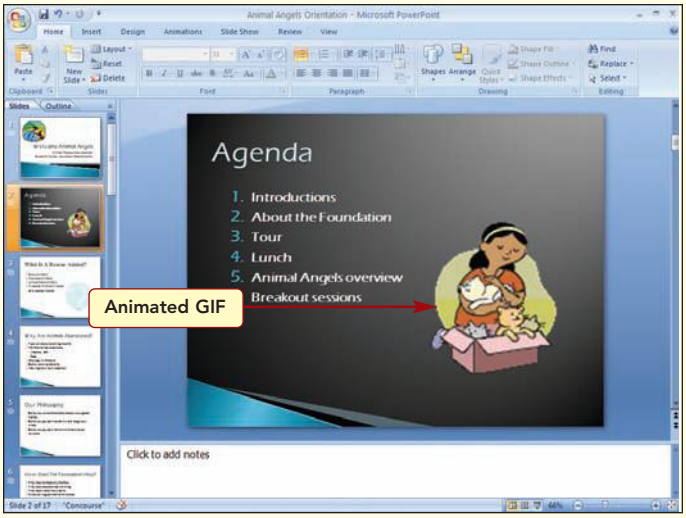
Organization Chart (PP3.19)

An organization chart is a map of a group, which usually includes people but can include any items that have a hierarchical relationship.



Animated GIF (PP3.29)

An animated GIF file is a type of graphic file that has motion.



WordArt (PP3.31)

WordArt enhances slides by changing the shape of text, adding 3-D effects, and changing the alignment of text on a line.

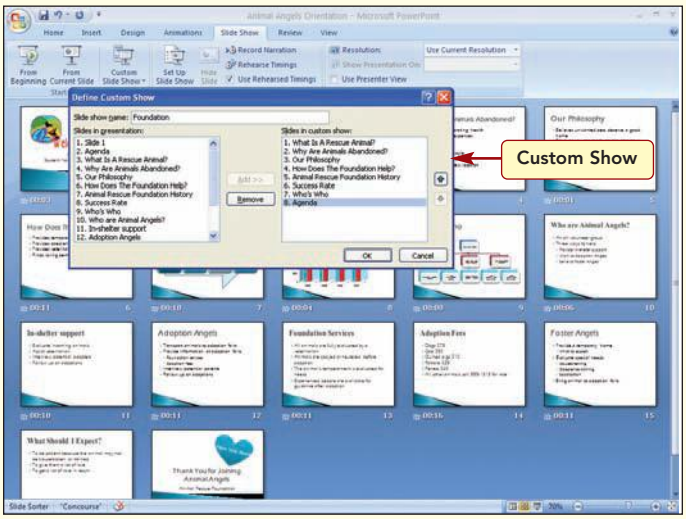
Group (PP3.35)

A group is two or more objects that are treated as a single object.



Custom Show (PP3.39)

A custom show is a presentation that runs within a presentation.

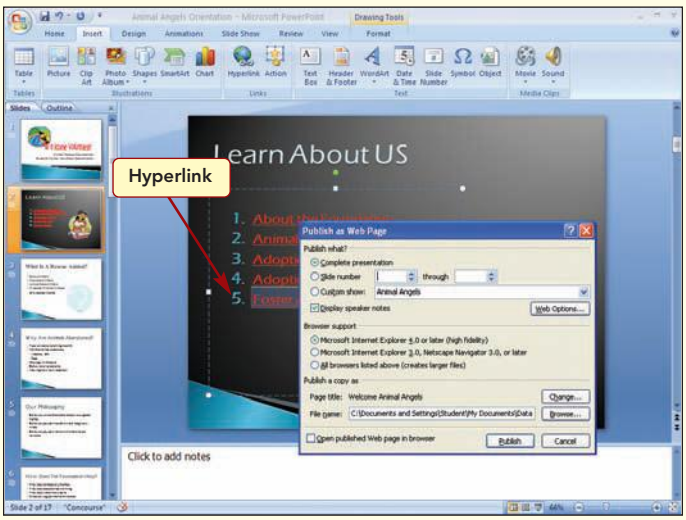


Hyperlinks (PP3.42)

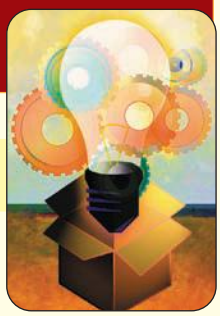
Hyperlinks provide a quick way to jump to other slides, custom shows, presentations, objects, e-mail addresses, or Web pages.

Hypertext Markup Language (PP3.47)

All Web pages are written using a programming language called Hypertext Markup Language (HTML). HTML commands control how the information on a page such as font colors and size is displayed.



Lab Review



LAB 3

Using Advanced Presentation Features

key terms

animated GIF PP3.29
assistant box PP3.19
attribute PP3.35
branch PP3.19
chart PP3.11
collect and paste PP3.14
co-worker box PP3.19
custom show PP3.39
graph PP3.11
group PP3.35
hierarchical relationship PP3.19
hierarchy PP3.19
hyperlink PP3.42
Hypertext Markup Language (HTML) PP3.47
manager box PP3.19
organization chart PP3.19
publish PP3.44
WordArt PP3.31

command summary

Command	Shortcut	Action
Office Button		
New/New from existing		Inserts an existing presentation as a new unnamed presentation
Home tab		
Clipboard group		
		Opens Clipboard task pane
Slides group		
 /Slides from Outline		Inserts new slides using a Word outline
 /Reuse Slides		Inserts new slides from another presentation
Paragraph group		
 Numbering		Creates a numbered list
Insert tab		
Illustrations group		
		Inserts a picture from a file
		Inserts a chart
Text group		
		Inserts a WordArt graphic object
Links group		
	Ctrl + K	Creates a link to a Web page, a picture, an e-mail, or a program
Slide Show tab		
Start Slide Show group		
	F5	Starts the slide show from the first slide of the presentation
		Creates or plays a custom slide show
Set Up group		
		Specifies advanced options for a slide show

command summary

Command	Shortcut	Action
Rehearse Timings		Practices timing or pace of a presentation
Chart Tools Design tab		
Chart Styles group More		Displays Chart Styles gallery, presenting alternative chart styles including chart color and appearance
Chart Tools Format tab		
Shape Styles group More		Opens the Shape Style gallery to choose a visual style for the shape or line
Drawing Tools Format tab		
WordArt Styles group More		Opens the WordArt Style gallery to choose a visual style for the WordArt text.
SmartArt Tools Design tab		
SmartArt graphic *Create Graphic group* Add Shape		Adds a shape to SmartArt graphic
Demote		Demotes selected element of SmartArt graphic
Layouts group More		Opens the Layouts gallery to choose the layout for the SmartArt shape
SmartArt Styles group Change Colors		Changes the color variation of a SmartArt graphic
More		Opens the SmartArt Styles gallery to choose an overall visual style for the SmartArt graphic



matching

Match the item on the left with the correct description on the right.

1. attribute	_____	**a.** Hypertext Markup Language
2. collect and paste	_____	**b.** Feature such as line or fill color associated with an object
3. custom show	_____	**c.** Consists of all the boxes reporting to the same manager, excluding assistant boxes
4. group	_____	**d.** Used to show the hierarchy of an organization
5. hierarchy	_____	**e.** Used to enhance slides by changing the shape of text, adding 3-D effects, and changing the alignment of text on a line
6. hyperlink	_____	**f.** Save a copy of a presentation file for use on a Web site
7. HTML	_____	**g.** Store multiple copied items in the Office Clipboard and then paste one or more of the items into another location
8. organization chart	_____	**h.** Provides a quick way to jump to other slides, custom shows, presentations, objects, e-mail addresses, or Web pages
9. publish	_____	**i.** Shows ranking such as reporting structures within a department in a business
10. WordArt	_____	**j.** Presentation that runs within a presentation

multiple choice

Circle the letter of the correct answer to the following questions.

1. An animated _____ file is a type of graphic file that has motion.
- **a.** AVI
- **b.** MOV
- **c.** MPEG
- **d.** GIF

2. Features or _____ such as line or fill color associated with all objects in the group also can be changed at one time.
- **a.** characteristics
- **b.** themes
- **c.** groups
- **d.** attributes

3. If you needed to create a chart that shows the relationship of each value in the data series to the series as a whole, you would select the _____ chart.
   a. line
   b. pie
   c. column
   d. bar
4. A _____ is a presentation that runs within a presentation.
   a. build
   b. transition
   c. custom show
   d. related show
5. _____ is the capability of a program to store multiple copied items in the Office Clipboard and then paste one or more of the items into another location or document.
   a. Collecting and pasting
   b. Copying and pasting
   c. Collecting and storing
   d. Duplicating and inserting
6. A(n) _____ chart can include any items that have a hierarchical relationship.
   a. pie
   b. organization
   c. bar
   d. area
7. _____ commands control how the information on a page such as font colors and size is displayed.
   a. HTML
   b. Master
   c. Presentation
   d. Alignment
8. Hyperlinks provide a quick way to _____ other slides, custom shows, presentations, objects, e-mail addresses, or Web pages.
   a. copy from
   b. align
   c. jump to
   d. paste to
9. The _____ is the top-level box of a group.
   a. co-worker box
   b. manager box
   c. subordinate box
   d. branch

10. A _____ is two or more objects that are treated as a single object.
    - **a.** property
    - **b.** quality
    - **c.** group
    - **d.** characteristic

true/false

Circle the correct answer to the following questions.

1. An animated GIF is a map of a group, which usually includes people, but can include any items that have a hierarchical relationship. True False
2. Many branches are composed of several different elements that are grouped together. True False
3. Co-workers represent administrative or managerial assistants to a manager. True False
4. A custom show is a presentation that runs within a presentation. True False
5. A bar chart shows the relative importance of a value over time by emphasizing the area under the curve created by each data series. True False
6. In a pie chart, each slice of the pie represents a single value in a data series. True False
7. The WordArt feature is used to enhance slides by changing the shape of text, adding 3-D effects, and changing the alignment of text on a line. True False
8. To make changes throughout a presentation, you must make changes to all pairs of masters. True False
9. The Y axis is also known as the category axis. True False
10. A group is three or more objects that are treated as a single object. True False

fill-in

Complete the following statements by filling in the blanks with the correct terms.

1. _____ boxes have the same manager.
2. A _____ is a visual representation of numeric data that is used to help an audience grasp the impact of the data.
3. A(n) _____ chart emphasizes the area under the curve.
4. A(n) _____ is a box and all the boxes that report to it.
5. A(n) _____ presentation can be opened and viewed from an e-mail.
6. The _____ feature is used to enhance slides by changing the shape of text, adding 3-D effects, and changing the alignment of text on a line.
7. The _____ contains a brief description identifying the patterns or colors assigned to the data series in a chart.
8. All organization charts consist of different levels that represent the _____.
9. When a(n) _____ GIF file is inserted into a PowerPoint slide, it does not display action until you run the presentation.
10. Line color and fill color are features or _____ associated with an object.

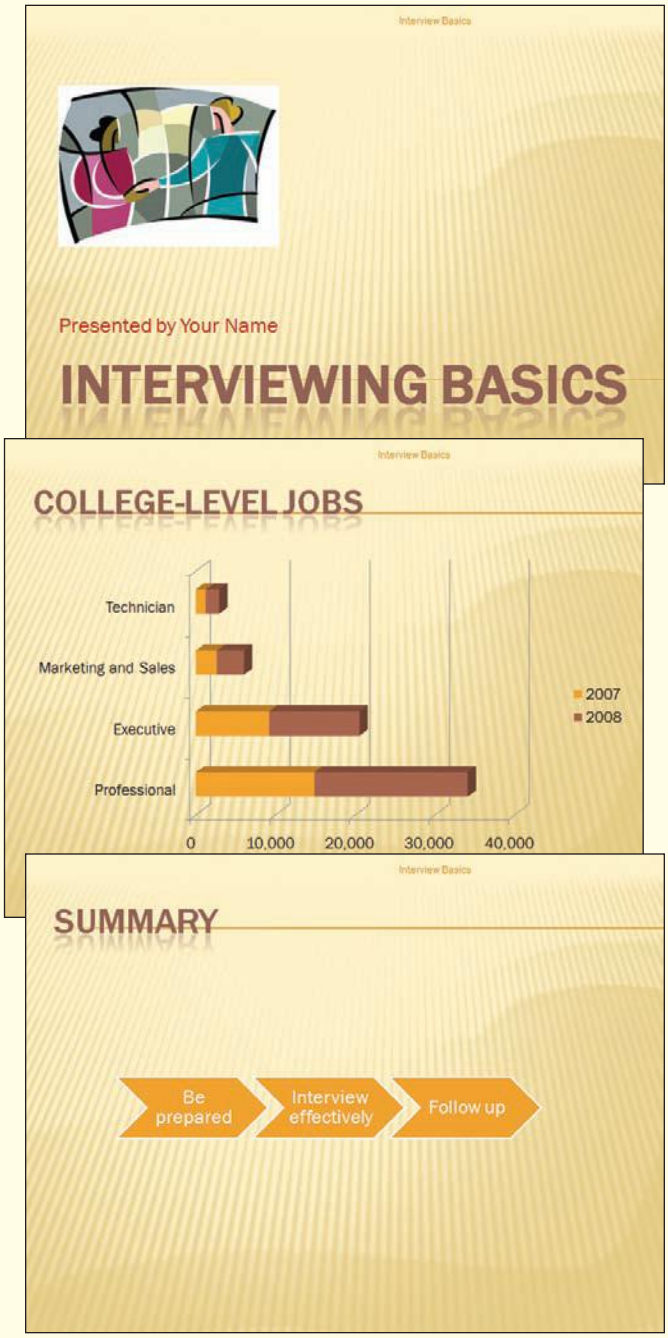
Hands-On Exercises

rating system
★ Easy
★★ Moderate
★★★ Difficult

step-by-step

Future Job Statistics ★

1. The presentation **Interviewing Basics2** created in Lab 2 Step-by-Step Exercise 3 was very well received. You did some additional research on the Department of Labor's Web site and found the projected number of college-level jobs in 2008. You think these new data will fit nicely into the presentation as a chart. Several slides of your completed presentation will be similar to those shown here.



   a. Open the PowerPoint file Interviewing Basics2.
   b. On slide 7, change the bullets to numbers. Change the color of the numbers to red.
   c. Insert a new Title and Content slide after slide 1. Title the slide **College-Level Jobs**. Insert a Stacked Bar in 3-D chart using the following data:

	2007	2008
Professional	14,860	19,250
Executive	9,200	11,320
Marketing and Sales	2,640	3,400
Technician	1,250	1,690

   d. Insert, resize, and position the clip art from file pp03_Interview into slide 6.
   e. Replace the three bulleted items in slide 8 by inserting the SmartArt Basic Chevron Process, cutting and pasting the bulleted text items into the appropriate location in the SmartArt graphic, and deleting the content placeholder.
   f. Save your completed presentation as Interviewing Basics3. Print the presentation as handouts with six slides per page.

Nutrition and Exercise Presentation ★★

2. Annette Ramirez is the new Lifestyle Fitness Club nutritionist. She would like to use a presentation on exercise currently in use by the club to discuss the benefits of a nutrition plan. She has asked you to modify the current presentation to include some nutrition information. Several slides of your completed presentation will be similar to those shown here.

a. Start PowerPoint and open the file pp03_Exercise.

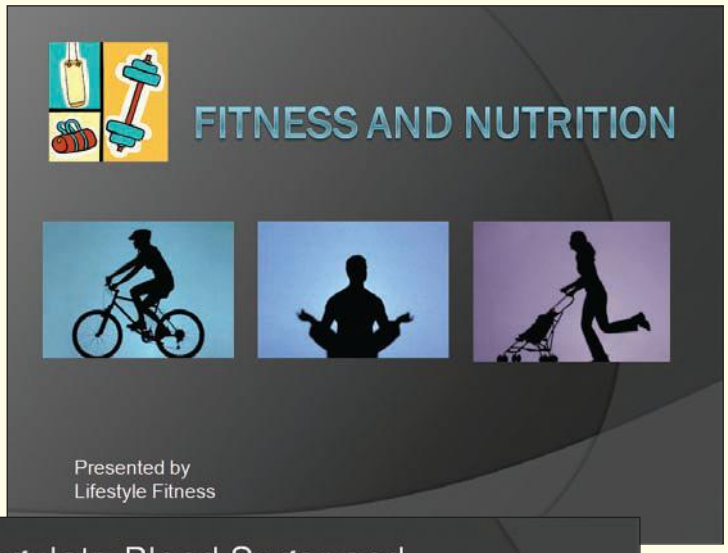
b. Change the Slide Design to one of your choice. Check all slides and adjust the text and graphics as needed throughout.

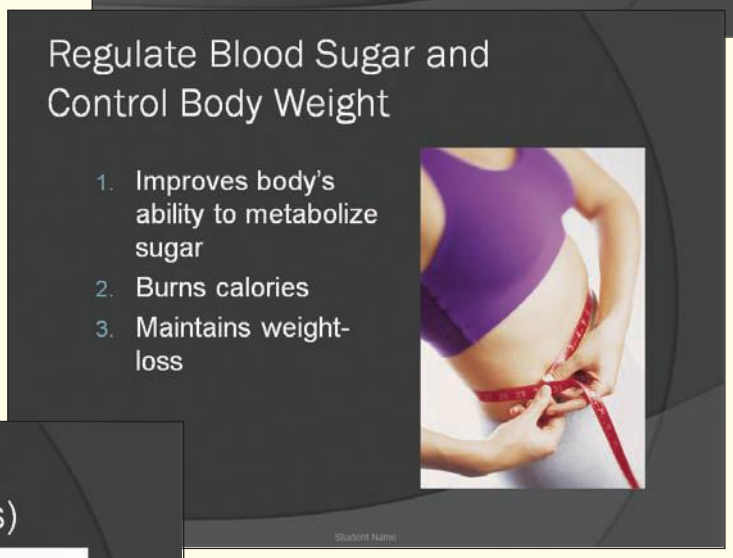
c. On slide 1:
Change the title to **Fitness and Nutrition**.
Select and group the three images and move the group to the center of the slide.
Reposition the title and subtitle as needed.

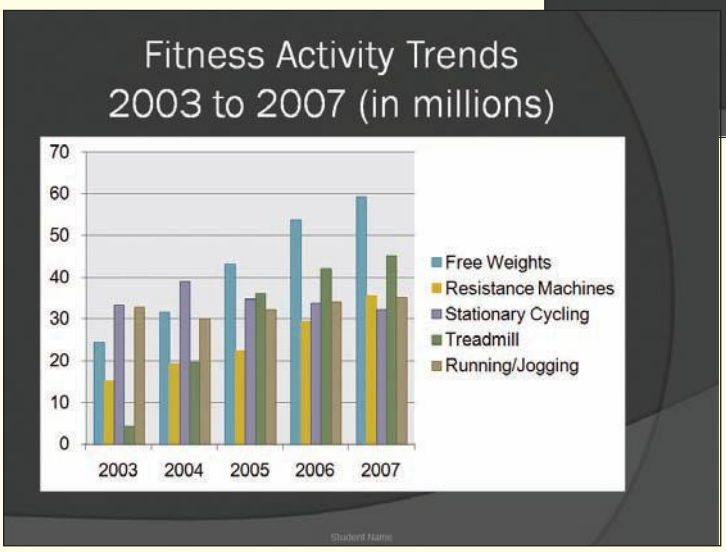
d. Change the title on slide 2 to **What Exercise and Nutrition Can Do for You**.

e. Change the bulleted list on slides 3 and 4 to a numbered list. Change the color of the numbered list to blue.

f. Change the layout of slide 6 to Title and Content. Resize the content placeholder box and reposition the image to fit the slide.







g. On slide 9:
Change the appearance of the table by applying a table style of your choice.
Circuit Training has been changed to Advanced Step. Adjust the entries accordingly and resize the table as needed.

h. Insert a new Title and Content slide after slide 10. On this slide:
Add the title **Fitness Activity Trends 2003 to 2007 (in millions)**.
Insert a 3-D Column chart using the data below:

	2003	2004	2005	2006	2007
Free Weights	24.5	31.7	43.2	53.8	59.3
Resistance Machines	15.3	19.4	22.5	28.4	35.6
Stationary Cycling	33.4	39.1	34.8	33.8	32.3
Treadmill	4.4	19.7	36.1	42.1	45.2
Running/Jogging	32.9	30.1	32.3	34.2	35.1

Change the color and appearance of the chart by selecting a chart style and shape style of your choice.

i. On the last slide, delete the text box and the subtitle placeholder. Create WordArt in a shape of your choice and add the text **Make it part of your life!** Set a WordArt style and shape style of your choice. Size and position the WordArt appropriately.

j. Insert the logo in file pp03_LFC Logo into slides 1 and 12. Position and resize the logo as needed. Include your name in a footer on all slides.

k. Run the presentation and make any changes necessary. Save the presentation as Fitness and Nutrition. Print the presentation as handouts in landscape orientation with six slides per page.

Employee Morale Presentation ★★

3. Chirag Shah works in the personnel department of a manufacturing company. Chirag has recently been studying the ways that employee morale can affect production levels and employee job satisfaction. Chirag has been asked to hold a meeting with department managers to suggest methods that can be used to improve employee morale. He has already started a PowerPoint presentation to accompany his talk but still needs to make several changes and enhancements to the presentation. Several slides of your completed presentation will be similar to those shown here.

a. Open the presentation pp03_Employee Motivation. Replace the Student Name placeholder with your name.

b. Change the design layout on slide 5 to Two Content. Insert the graphic picture from the file pp03_Motivation into the right pane of slide 5.

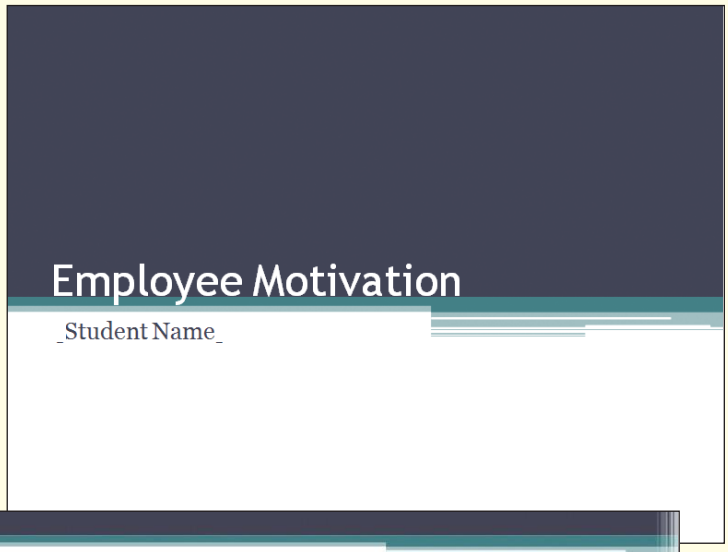
c. Reuse slides from pp03_Motivation Techniques. Insert the slides into the presentation as follows:

"Vision Statement" after slide 2.
"Available Options" after slide 4.
"Recommendation" after slide 8.

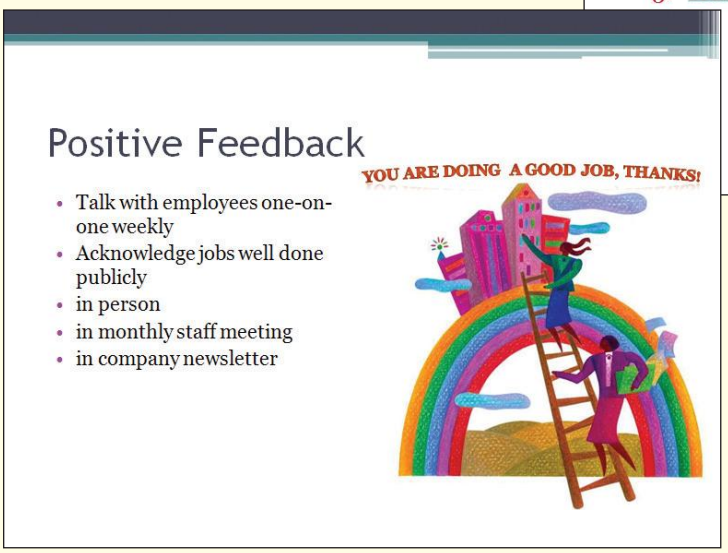
d. Convert the five bullets on slide 4 to a numbered list. Change the color of the numbers.

e. Demote the three bullets on slide 5.

f. Create WordArt using a style of your choice with the text **You are doing a good job, Thanks!** to slide 7. Size and position the shape appropriately on the slide.



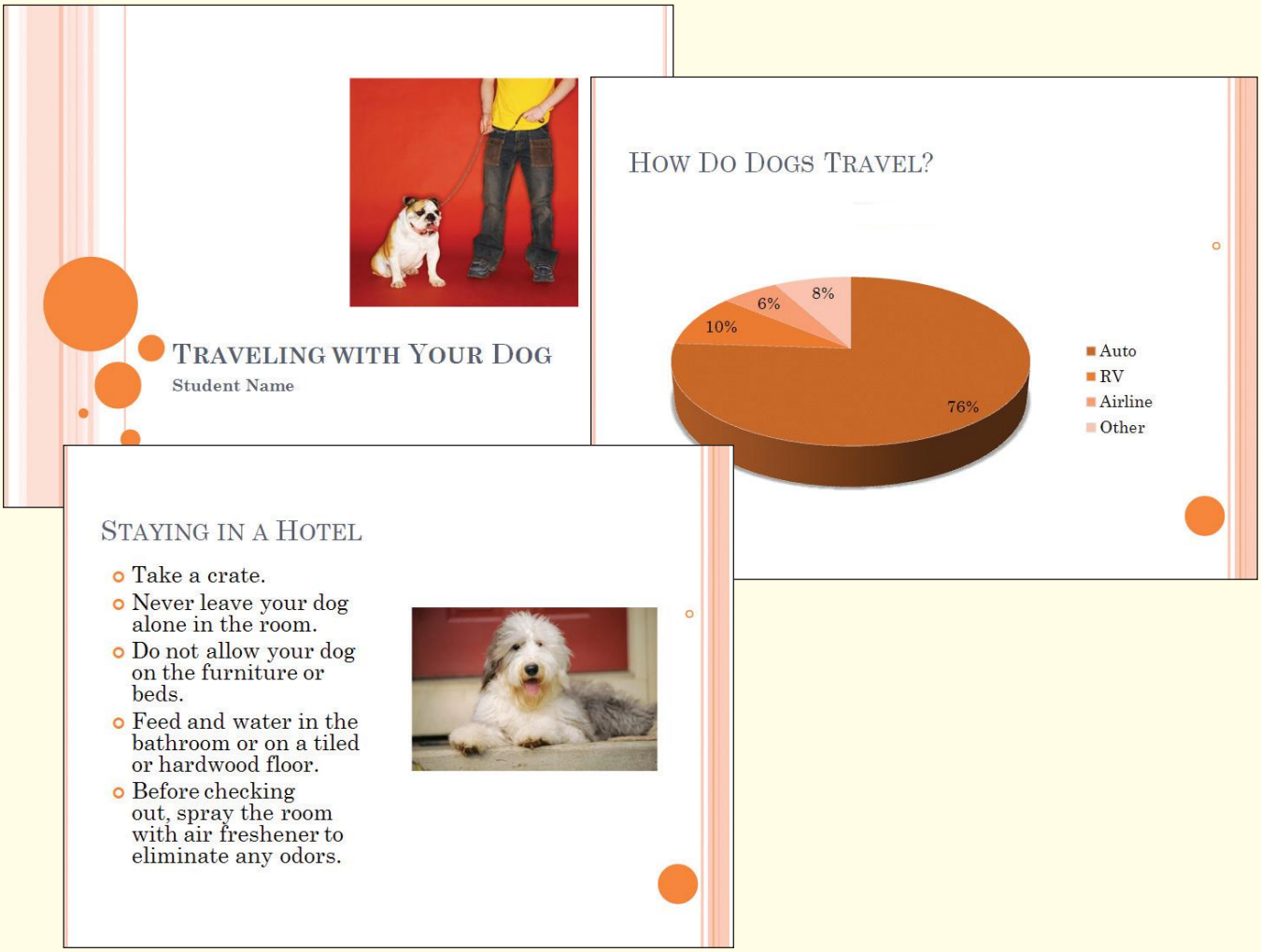




g. Change the theme of the presentation to one of your choice. Adjust the text and graphics on the slides as needed.
h. Add the following hyperlinks to slide 4:
From Flexibility to slide 6.
From Positive feedback to slide 7.
From Expert input to slide 8.
From Sharing the wealth to slide 10.
From Creating a team to slide 11.
i. Run the presentation to review the slides and test the hyperlinks. Make any changes necessary.
j. Save the presentation as Employee Motivation2. Print the presentation as handouts, six slides per page.
k. Save the presentation as a single file Web page as Employee Motivation2 Web.

Traveling with Your Dog ★★

4. The Animal Rescue Foundation has asked you to help them create a presentation to inform the community about traveling with dogs. The presentation is partially completed, and you have been asked to enhance it so that it can be used at an upcoming meeting. You also will reuse some of the slides from another presentation you are working on. Several slides of your completed presentation will be similar to those shown here.



a. Open the pp03_Doggie Travel presentation. Enter your name on the first slide in place of Student Name.

b. Reuse slides from pp03_Car Trip Tips. Insert the slides into the presentation as follows:
"Introduction" after slide 1.
"Lesson 1: Before You Go" after slide 6.
"Lesson 1: Wrap-up" after slide 7.

c. Change the title of slide 7 to **Before You Go**. Change the title of slide 8 to **Car Trip: In Summary**.

d. Insert a Title and Content slide after slide 3. On this new slide:
Insert a Pie in 3-D chart.
Use the data from slide 3 as the chart data.
Display the chart with Chart Style 11 and Chart Layout 6.
Resize and reposition the chart as needed. Delete the chart title.
Copy the slide title from slide 3.

e. Delete slide 3.

f. Slides 10, 11, and 12 are all titled "Trip Tips" and have similar content. Delete slides 10 and 12.

g. On slide 10, change from a bulleted list to a numbered list. Increase the size of the numbers to 110%.

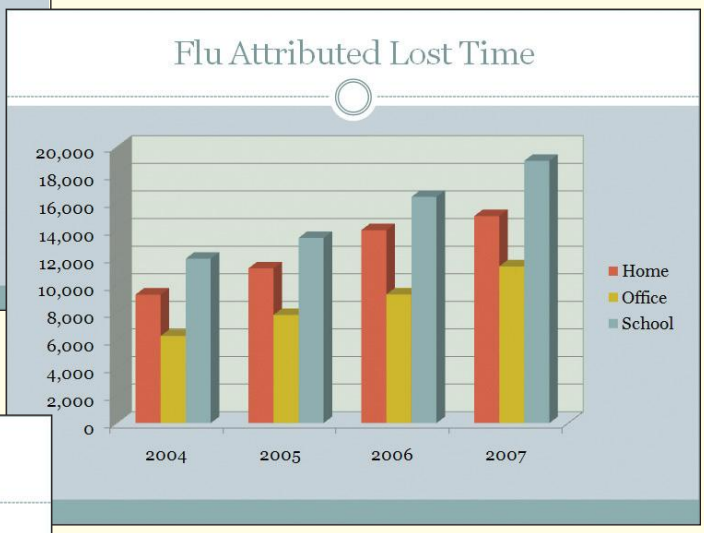
h. Insert a copy of the first slide at the end of the presentation. On this new slide, insert WordArt displaying **Have a great time!**. Set a WordArt style and shape style of your choice. Size and position the WordArt appropriately.

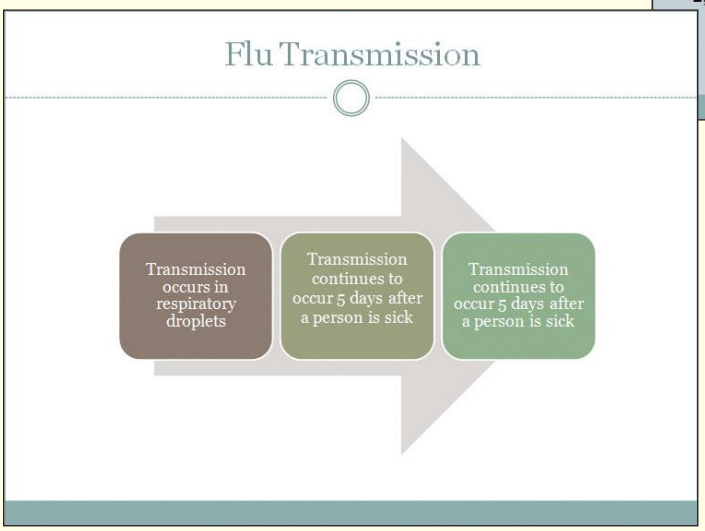
i. Save the presentation as Doggie Travel Tips. Print the presentation as handouts with six slides per page.

Flu Prevention Presentation ★★★

5. You work in the student health services of a local university. You have been asked to create a presentation that will help students stay healthy during flu season. You have already started to compile the information you will present, but you still need to make several changes to the presentation. Your final presentation will include a chart on infection rates and a graphic that describes the life cycle of the virus. Several slides of your completed presentation will be similar to those shown here.







a. Open the file pp03_Flu Prevention.
b. Replace the placeholder with your name in the subtitle on slide 1.
c. Reuse slides from pp03_Flu Prevention Techniques. Insert all the slides, except slide 1, into the presentation after slide 3.
d. Insert the outline pp03_Flu Symptoms as slides before the last slide.
e. Create a numbered list with the bulleted text on slide 9.
f. Insert a new slide using the Title and Content slide layout after slide 5. In this new slide, enter the title **Flu Attributed Lost Time** and create a chart using the data in the following table:

	Home	Office	School
2004	9,314	6,309	11,913
2005	11,211	7,833	13,418
2006	13,981	9,323	16,391
2007	15,002	11,354	19,010

g. Change the color and appearance of the chart by selecting a chart style and shape style of your choice.
h. Add WordArt on the last slide with the text **Flu Prevention Starts with You!** Set a WordArt style and shape style of your choice. Size and position the WordArt appropriately.
i. Using the text in the bulleted items in the "Flu Transmission" slide, create a Continuous Block Process SmartArt graphic for this slide. Remove the bulleted items. Change the colors and design of the SmartArt graphic by selecting a SmartArt style of your choice.
j. Insert and position the following graphics:
File pp03_Flu into slide 1.
File pp03_Objectives into slide 3.
File pp03_Hands into slide 8.
File pp03_Vaccine into slide 12.
k. Add hyperlinks from the five agenda items on slide 2 to an appropriate slide in the presentation.
l. Create a custom slide show named "What to Do if You Get Sick" using slides 4, 5, 7, 8 and 9. Create a second custom show named "Flu Basics" using slides 10 through 13.
m. Run the presentation and make any necessary changes.
n. Save the presentation as Flu Prevention Seminar. Print the presentation with six slides per page. Rehearse the timing of the presentation.

on your own

Digital Darkroom ★

1. You have recently bought a digital camera and are interested in utilizing all of its features and improving your skills as a photographer in general. Use the Web to research basic digital photography techniques. Then, using the skills you have learned so far, create a presentation that includes an organization chart composing shots and other graphic features to add interest to the presentation. Save your presentation as Digital Darkroom and print it with six slides per page.

Lifeguard Orientation ★

2. As part of your job as Head Lifeguard at the local pool, you have been asked to create a presentation for the new lifeguard training seminar. Use the data provided in pp03_Lifeguard to create a presentation on pool safety. Use the skills you have learned in the lab to include a numbered list of steps on water safety. Create an organization chart to explain the chain of command. Format the slides as you like. Include your name as a footer on the first slide. Save your presentation as Lifeguard Presentation. Print the slides.

Updating the Travel Presentation ★★

3. Your fellow Getaway Travel Club members are really excited about choosing the club's upcoming summer trip. Your presentation Travel Favorites created in Lab 2 On Your Own Exercise 5 was a hit and your locale was chosen to be among the finalists to present to the club officers. If chosen, your presentation will be placed on the club's Web site. You need to do more research on your locale to include the costs associated with the trip. You decide that the data would be easier to understand and more convincing if they were presented in chart form. Using your file Travel Favorites, modify the presentation. Create charts for the costs you researched. Update your information on the key tourist attractions with better graphics. Save your updated presentation as Travel Favorites2. Print the handouts nine per page.

Mountain Flyer Presentation ★★★

4. You work in a mountain bike shop called Mountain Flyer. The owner has asked you to put together a new employee orientation presentation. Your completed presentation should include a chart that tracks sales, a numbered list that includes sales tips, animated graphics, and an organization chart. Include your name as a subtitle on the first slide. Save your presentation as Mountain Flyer Orientation and e-mail your presentation to your instructor.

Preventing Network Infection Presentation ★★★

5. Your computer survey class requires you to do a research project on computer viruses and worms. Do some research on the Web to learn more about viruses and worms and how companies and schools are protecting their networks from infection. Create a PowerPoint presentation that includes the features, products, and methodologies you have learned about. Search the Web for appropriate clip art images that you can group or ungroup as necessary to enhance your slides. If appropriate data are available, create a chart that displays the increase in viruses reported over the last five years. Include your name and the current date as a footer on all the slides. Save your presentation as Preventing Network Infection. Print the outline and six-slides-per-page handouts.

Working Together 1: Copying, Embedding, and Linking between Applications

Case Study

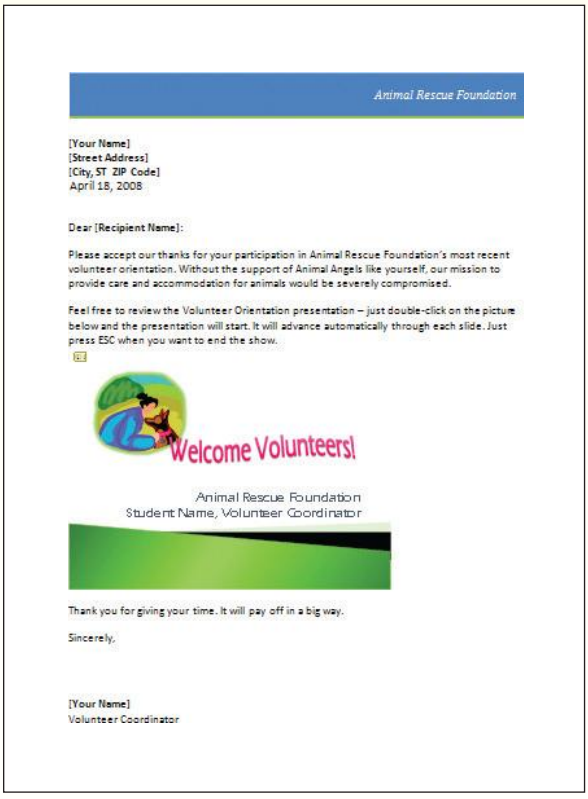
Animal Rescue Foundation

Now that the presentation for the Animal Angels volunteer orientation program is well underway, you want the director to review the presentation. To do this, you send a copy of the presentation to the agency director and request that he add comments and make changes directly in the presentation and return it to you.

One of the comments you receive back from the director suggests that you include information about the steps to becoming a volunteer. These steps are detailed in a Word document. As you will see, you can easily share information between applications, saving you both time and effort by eliminating the need to recreate information that is available in another application. You will learn how to share information between applications while you create the new slides.

Then you will send a revised copy of the presentation back to the director. You will embed it in a letter that you plan to send volunteers thanking them for attending the presentation. The letter containing the embedded presentation is shown here.

Note: The Working Together section assumes that you already know how to use Office Word 2007 and that you have completed Lab 3 of PowerPoint.



A PowerPoint presentation can run within a Word document.

Developer notes and reviewer comments can be inserted directly onto presentation slides.



Text and graphics can be copied from one program's application and pasted into another program's application.

Reviewing a Presentation

You want several people in the Animal Rescue Foundation organization to review the presentation and provide you with feedback about how it can be improved. You will do this by sending a copy of the presentation by e-mail to each person. You will ask them to run the presentation, insert their comments directly in the presentation, and then return it to you.

Adding a Comment

Before you send the presentation for review, you want to add a comment to the reviewers. A **comment** is a remark that is displayed in a separate box and attached to a file. Comments about specific items such as text or an object on a slide can be associated directly with the item by selecting the text or object and then adding the comment. General comments are added to a slide simply by clicking on the slide. First you will add a general comment to the reviewers.

1. **Start Office PowerPoint 2007.**
2. **Open the file** ppwt_Volunteer Orientation**.**
3. **Display slide 1 in Normal view.**
4. **Open the Review tab.**
5. **Click**  **in the Comments group**

Your screen should be similar to Figure 1

Figure 1

Having Trouble?
Do not be concerned if the name and date in your comment are not the same as in Figure 1.

A large **comment box** is displayed in which you type the text of the comment. The name of the person inserting the comment appears on the first line followed by the system date. A **review comment thumbnail** containing the initials of the person who created the comment also appears in the upper-left corner of the slide. It is followed by a comment number, in this case 1, because this is the first comment that has been entered by this person.

2 **Type the following comment text: Please add your comments directly in the presentation and return it to me. Thank you for your help.**

Your screen should be similar to Figure 2

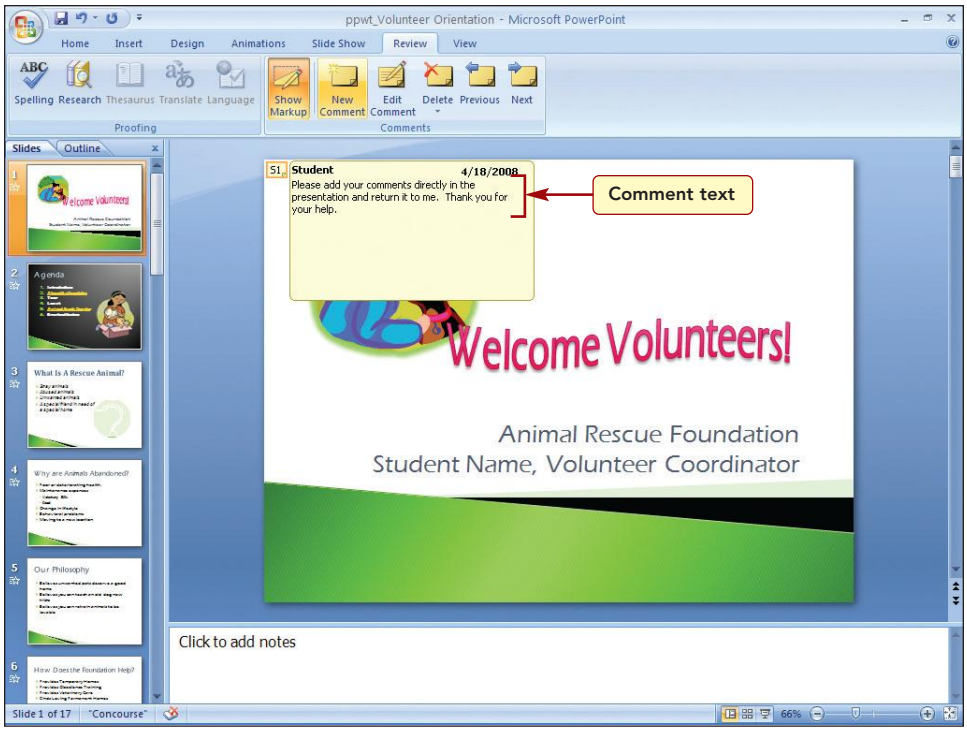


Figure 2

Additional Information
Double-click on the review comment thumbnail to reopen the comment box.

After entering comment text, clicking outside the comment closes the comment box. The review comment thumbnail is still displayed to show that a comment has been added to the slide. To see the comment text again, simply point to the comment thumbnail.

3 **Click outside the comment.**

Point to the comment marker.

Your screen should be similar to Figure 3



Figure 3

The comment is displayed in a balloon that is sized to fit the contents. The comment thumbnail of a general comment is always displayed in the upper-left corner of the slide.

You will add a second comment on slide 2 to advise the reviewers about the two custom shows.

4 **Display slide 2.**

- **Click**  .
- **Type Click on items 2 and 5 to start a custom slide show about these topics.**
- **Click outside the comment box.**
- **Save the presentation as Volunteer Orientation to your solution file location.**

Your screen should be similar to Figure 4

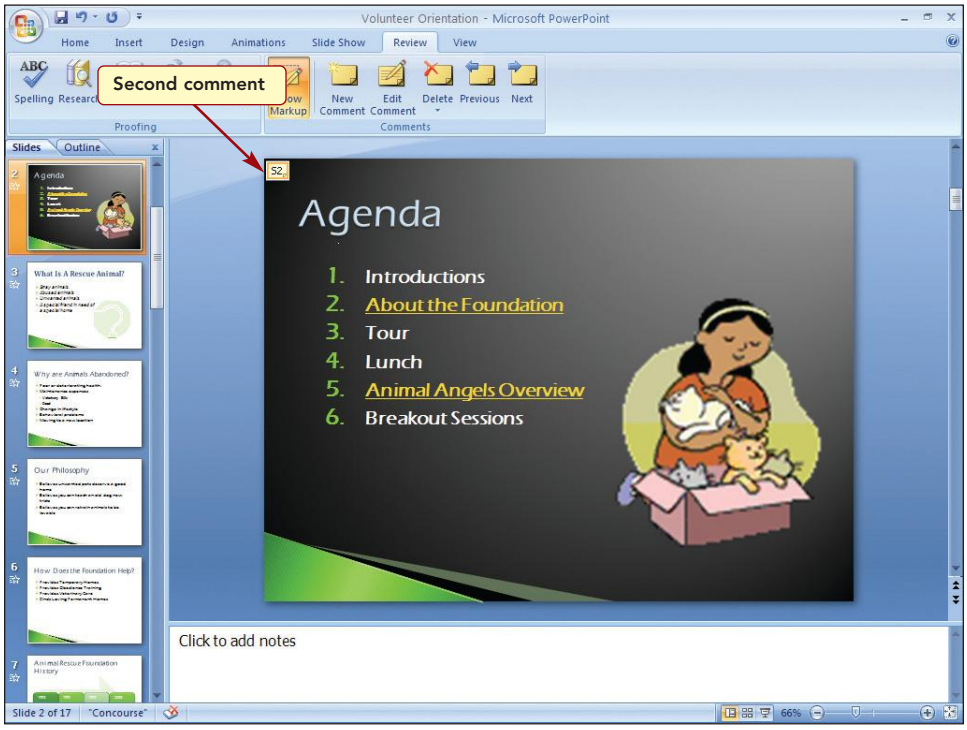


Figure 4

Additional Information
A review comment thumbnail can be moved by clicking the comment and dragging it to any location on the screen.

The review comment thumbnail indicates this is the second comment entered by the same person in the presentation. It is positioned close to the text object to show the comment is associated with the object.

Sending the Presentation for Review

Now you will send the presentation to the director, Steve Dow, and to several foundation coordinators, via e-mail for them to review.

1. **Click Office Button, select Send, and choose E-mail.**
2. **In the To field, enter your e-mail address.**

Your screen should be similar to Figure 5

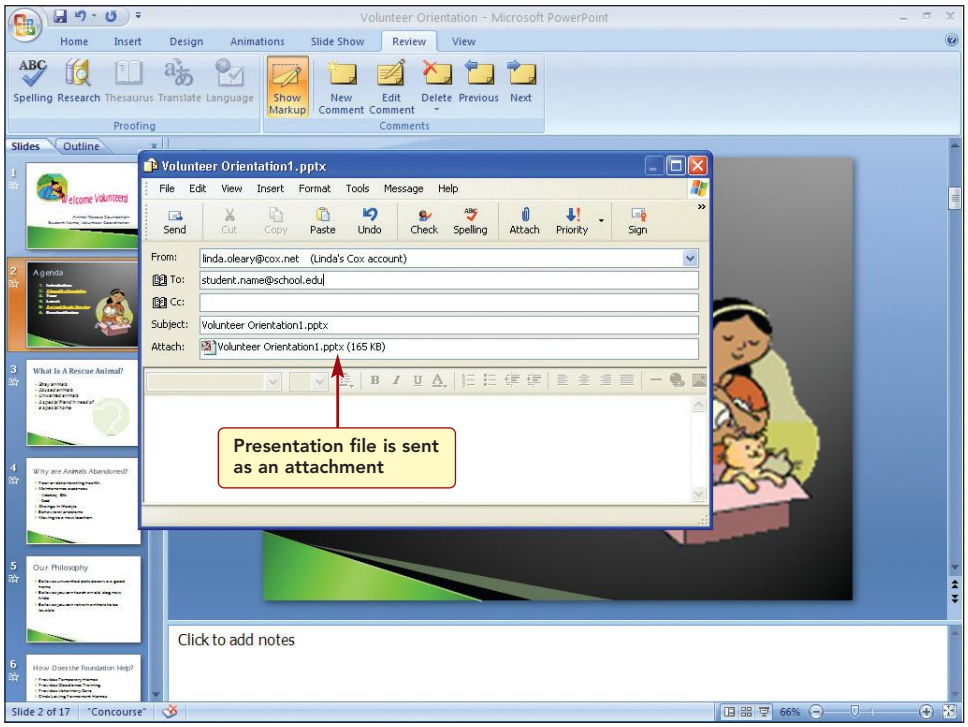


Figure 5

The presentation is automatically included as an attachment to the e-mail message. You will change the subject text and add a brief note.

3. **Replace the information in the subject line with** Volunteer Orientation Presentation**.**
4. **In the body of the e-mail, type the following message: Please review the attached volunteer orientation presentation and return it to me with your comments by Friday. Thanks!.**
5. **Press Enter twice and type your name.**

Your screen should be similar to Figure 6

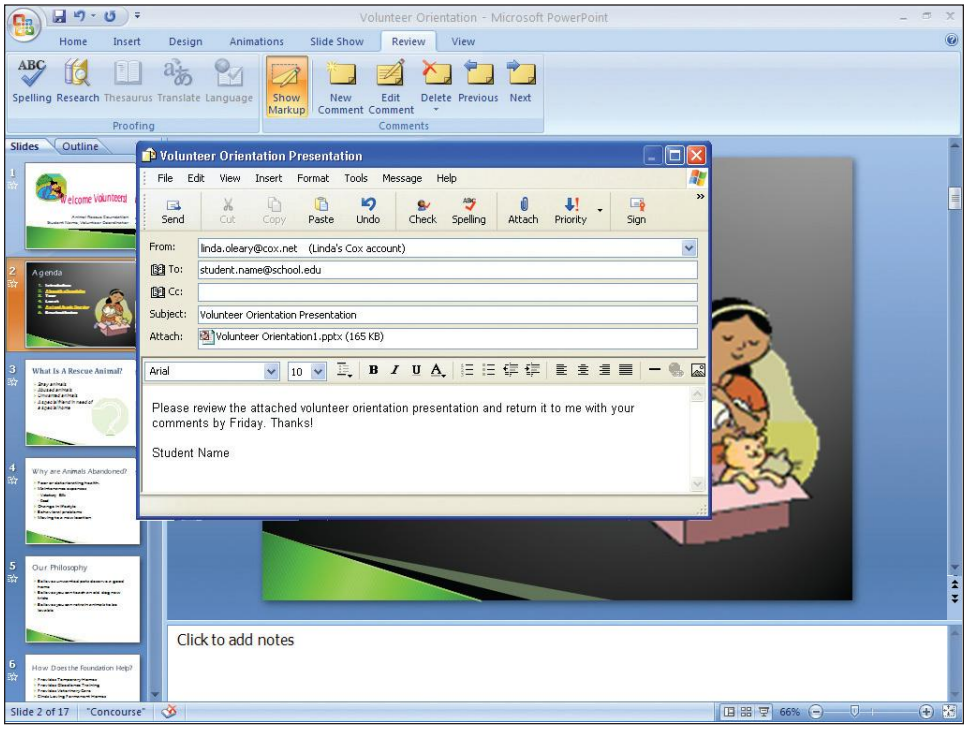


Figure 6

If you were connected to the Internet, you would send the message next. Instead, you will save the message as a text file.

3. **Choose File/Save As (from the e-mail window) and save the message as a Word Document or Text file type using the file name** Volunteer Orientation Email **to your solution file location.**

- **Close the e-mail window.**
- **Close the** Volunteer Orientation **presentation.**

Checking a Reviewed Presentation

The next day while checking your e-mail for new messages, you see that the agency director has returned the presentation with comments. You have downloaded the attachment and saved it on your computer system. Now you want to look at the suggested changes.

1. **Open the file** ppwt_Volunteer Orientation Review**.**

Your screen should be similar to Figure 7



Figure 7

The comments from the reviewed presentation are included in the original presentation that was sent for review. The first slide has two review comment thumbnails in the upper-left corner with the reviewers' initials and the number of the comment. Each reviewer's comments appear in a different color and are numbered independently.

To quickly navigate through a presentation to locate and display comments, you can use the Previous and Next buttons.

2. **Click** Next **repeatedly until you reach the end of the presentation.**

Click Continue **to continue at the beginning.**

Your screen should be similar to Figure 8.



Figure 8

There are five comments in the presentation, including your original comments.

Deleting a Comment

Notice the selected comment placeholder is surrounded in an orange outline. This identifies the comment that will be affected by your next actions. Since this is just a general comment, you will delete it. You also will delete another comment you originally entered.

1. **If necessary, select your comment on slide 1.**
2. **Click** Delete.

Your screen should be similar to Figure 9



Figure 9

The first comment is now from Steve Dow. Before proceeding to read his other comments, you will delete your other comment on slide 2.

1. **Move to slide 2.**
2. **Select and delete your comment on this slide.**
3. **Click** Next.

Your screen should be similar to Figure 10

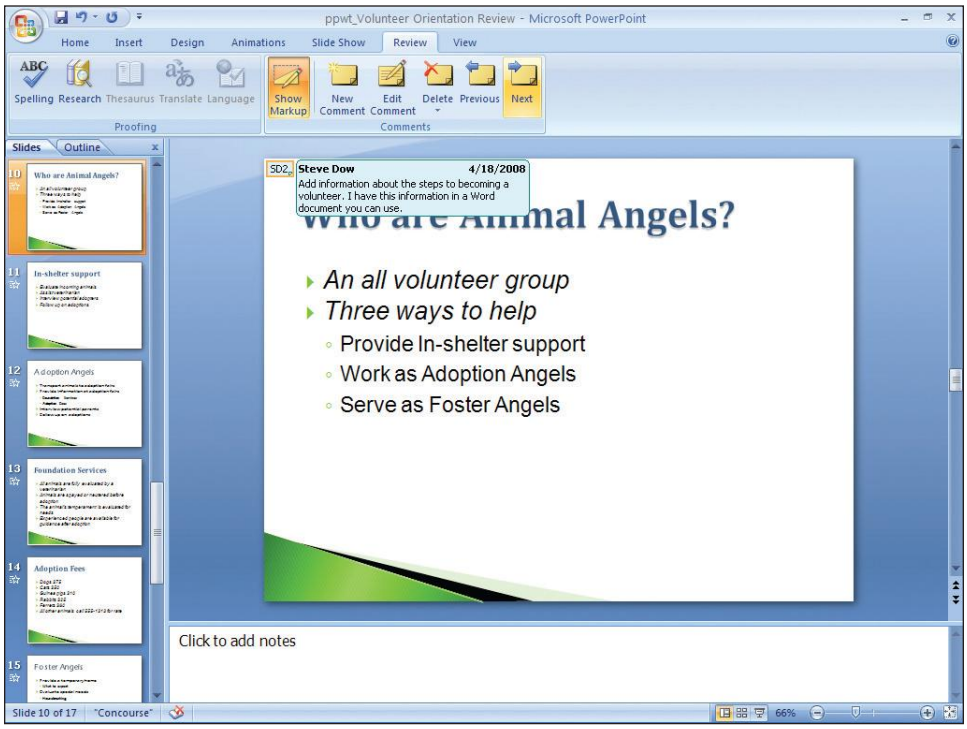


Figure 10

Editing a comment

On this slide, the director has suggested adding the steps to becoming a volunteer. You like this idea but will make the change later when you have the Word document. You will edit the comment to include a reminder to add the new content and add a second bulleted item to the current slide in preparation.

1. **Click** Edit Comment
2. **Press** Enter **2 times.**
3. **Type Create new slide showing suggested content after this slide.**
4. **Add a new bulleted item, Steps to volunteering, as the second item on slide 10.**

Your screen should be similar to Figure 11

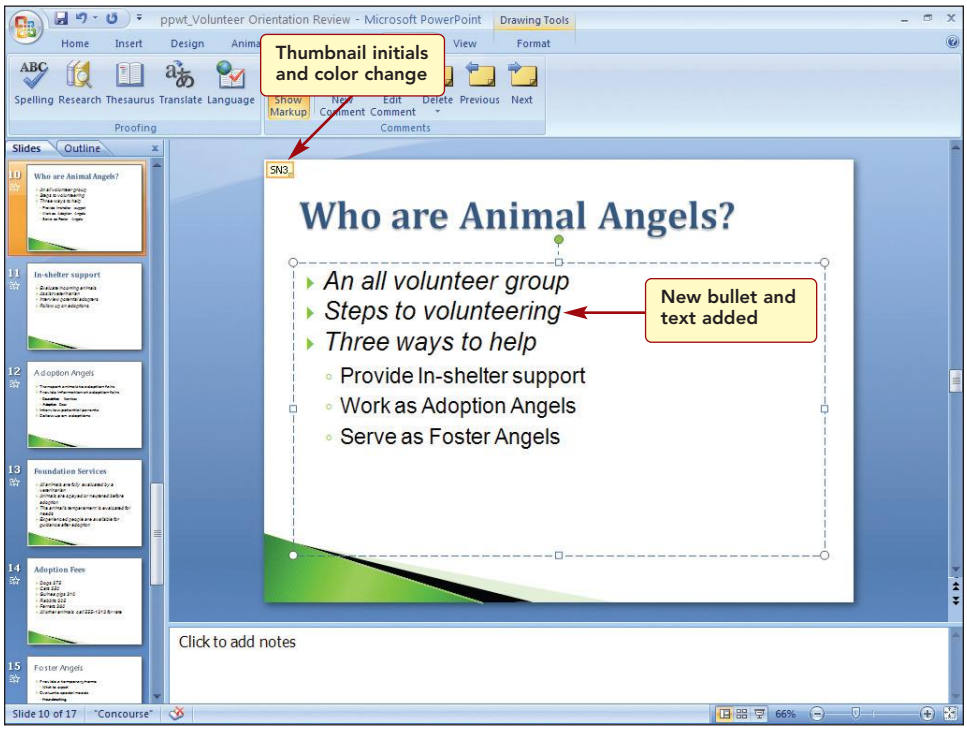


Figure 11

Having Trouble?
The color and number associated with your edited comment may be different than shown in Figure 11 because you are actually a new, third reviewer to look at the presentation.

The review comment thumbnail initials and color have changed to the color and initials of the current reviewer.

Copying between Applications

You contacted the director about the steps-to-volunteering materials and he sent you the file via e-mail. The document contains a graphic that was created using SmartArt in Word. You will use this graphic as the basis for the new slide you need to create.

All the 2007 Microsoft Office System applications have a common user interface such as similar ribbons and features. In addition to these obvious features, they have been designed to work together, making it easy to share and exchange information between applications.

You will copy the graphic from the Word document into a new slide in the presentation. You also can use the same procedures to copy information from PowerPoint or other Office applications into Word.

Copying from Word to a PowerPoint Slide

First, you will insert a new slide after slide 10. Then you will copy the information from the Word document file into the PowerPoint presentation.

1. **Insert a new slide with the Title and Content layout after slide 10.**
2. **Start Office Word 2007.**
3. **Open the document** ppwt_Volunteer Steps**.**

Your screen should be similar to Figure 12

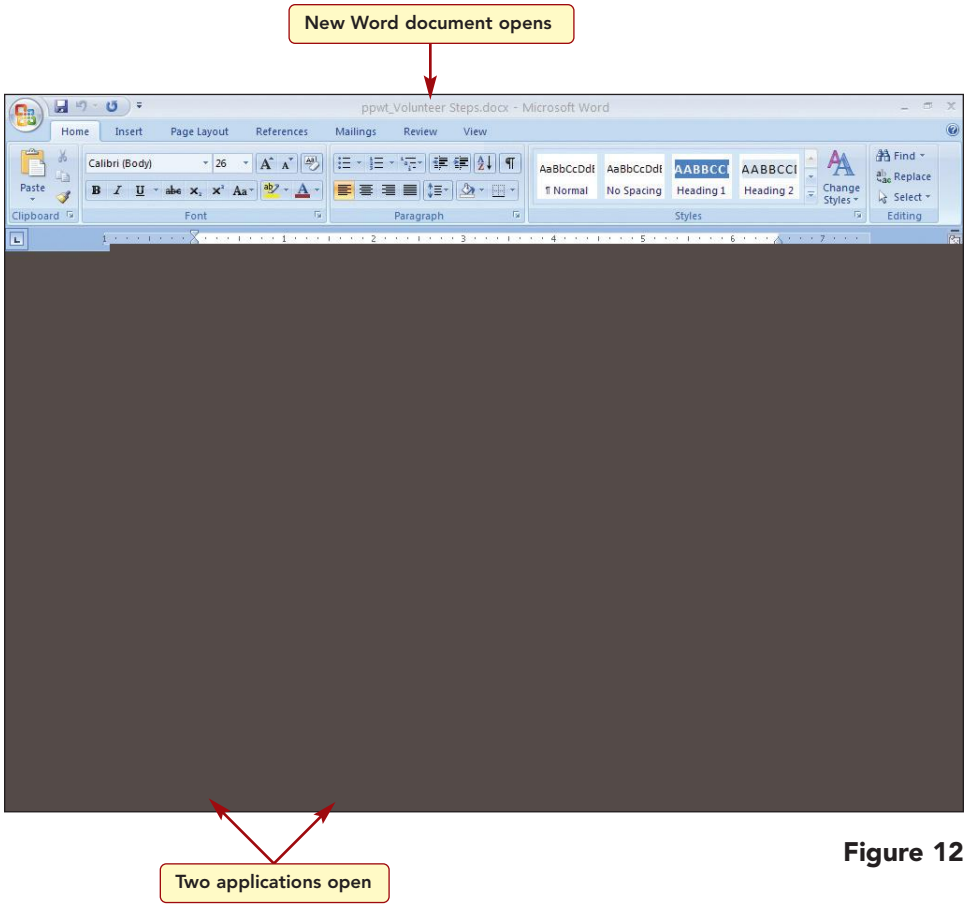


Figure 12

There are now two open applications, Word and PowerPoint. PowerPoint is open in a window behind the Word application window. Both application buttons are displayed in the taskbar. There are also two open files, Volunteer Steps in Word and Volunteer Orientation Review in PowerPoint. To make it easier to work with two applications, you will tile the windows to view both on the screen at the same time.

2. **Right-click on a blank area of the taskbar to open the shortcut menu.**

Choose Tile Windows Vertically.

Click on the Word document window to make it active.

Your screen should be similar to Figure 13

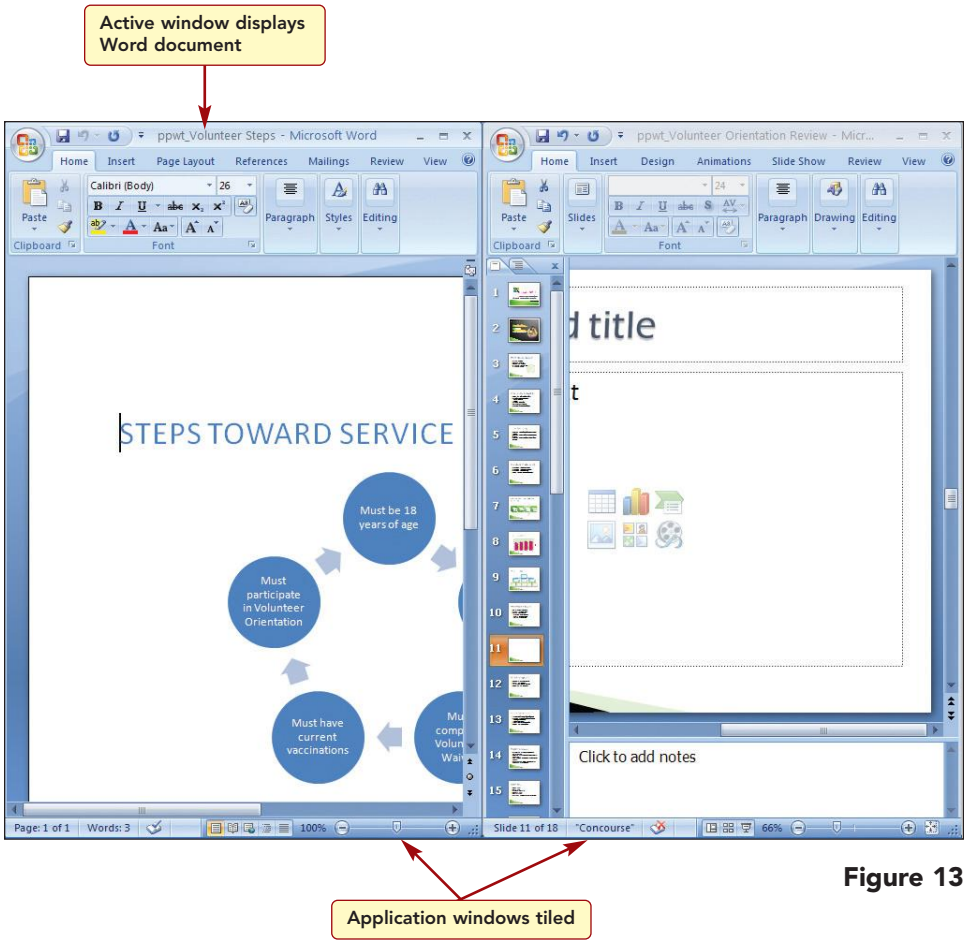


Figure 13

First, you will copy the title from the Word document into the title placeholder of the slide. While using the Office Word and PowerPoint applications, you have learned how to use cut, copy, and paste to move or copy information within the same document. You also can perform these same operations between documents in the same application and between documents in different applications. The information is pasted in a format that the application can edit, if possible.

3 **Select the title "Steps Toward Service." in the Word document window.**

- **Drag the selection to the title placeholder on the slide in the PowerPoint presentation window.**

Another Method

You also could use Copy and Paste to copy the title to the slide.

Your screen should be similar to Figure 14

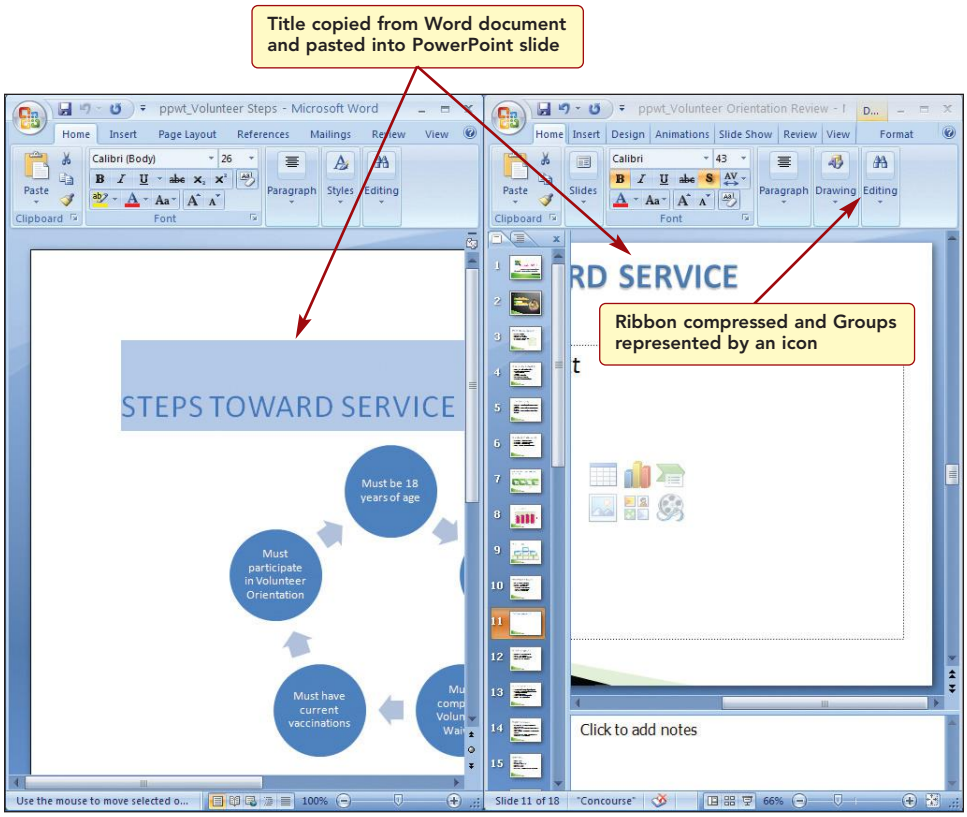


Figure 14

The title has been copied into the slide and can be edited and manipulated within PowerPoint. The formats associated with the slide master are applied to the copied text. However, when the copied text included formatting such as color, it overrides the slide master settings, just as if you formatted a slide individually to make it unique. You will reset the slide to the master slide settings using the Reset command in the Slides group so that all the titles in the presentation are the same.

Because the window is tiled, the Ribbon is smaller and there is not enough space to display all the commands. Depending on how small the ribbon is, the groups on the open tab shrink horizontally and show a single icon that displays the group name. The most commonly used commands or features are left open. Clicking the icon opens the group and displays the commands.

4. **Click Slides and choose Reset from the list.**

Your screen should be similar to Figure 15

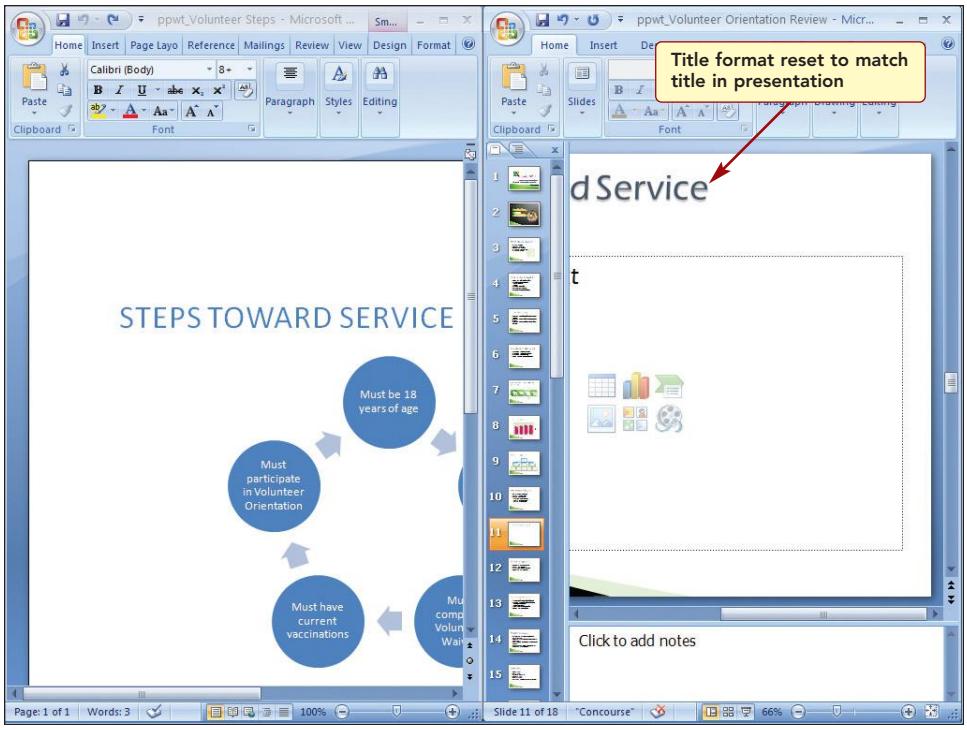


Figure 15

The title text is reset so the title matches the format of other slides in the presentation.

Next you want to copy the graphic of the volunteer steps to the slide.

5. **Select the graphic in the Word document window.**
   - **Click Copy.**
   - **Select the content area in the PowerPoint window.**
   - **Open the Paste drop-down menu and choose Paste Special.**

Your screen should be similar to Figure 16

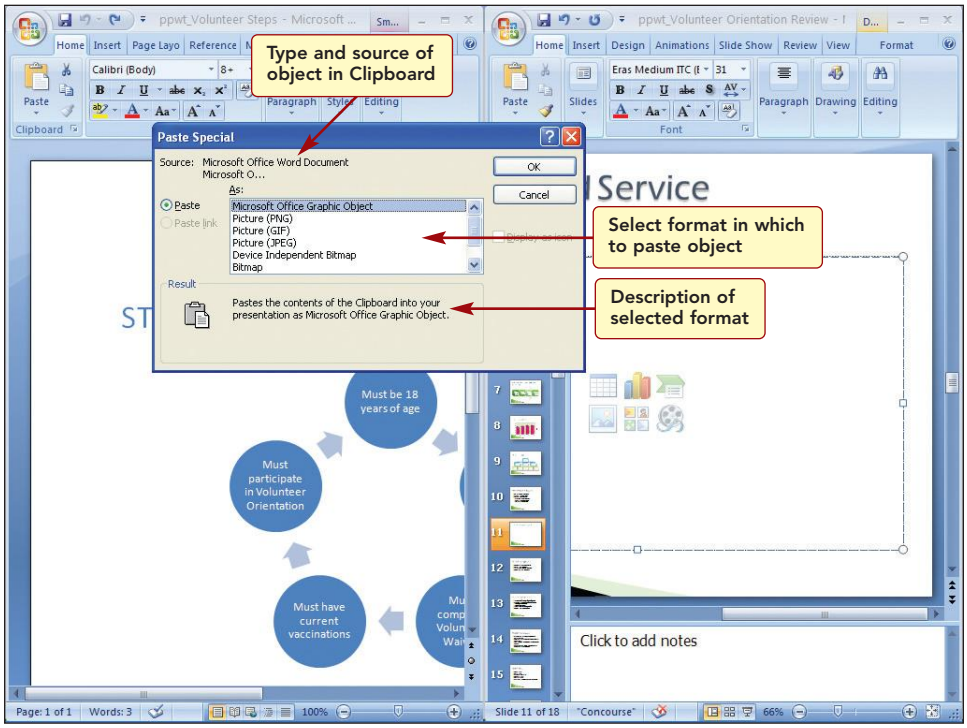


Figure 16

The Paste Special dialog box displays the type of object contained in the Clipboard and its location in the Source area. From the As list box, you select the type of format in which you want the object inserted into the destination file. The default option inserts the copy in HTML (Hypertext Markup Language) format. The Result area describes the effect of your selections. In this case, you want the object inserted as a Microsoft Office Graphic Object.

6 **If necessary, select Microsoft Office Graphic Object from the As list box.**

Click OK **.**

Your screen should be similar to Figure 17

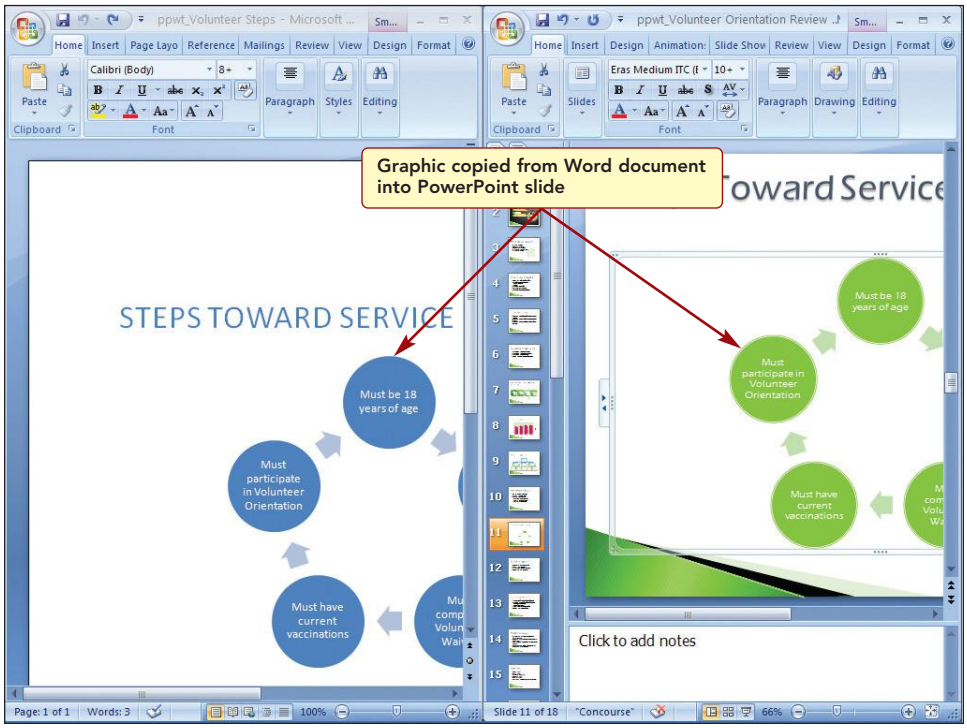


Figure 17

The graphic is copied into the slide as a graphic object that can be manipulated using the SmartArt graphics features of PowerPoint. The graphic's colors are reset to the slide theme colors. However, you want to further change the SmartArt graphic colors.

7. **Right-click on the taskbar and choose Undo Tile from the taskbar shortcut menu.**

- **If necessary, click on the graphic in the slide to select it.**
- **Click**  **in the SmartArt Tools Design tab.**
- **Choose**  **Colorful – Accent Colors.**
- **Save the presentation as** Volunteer Orientation2**.**

Your screen should be similar to Figure 18

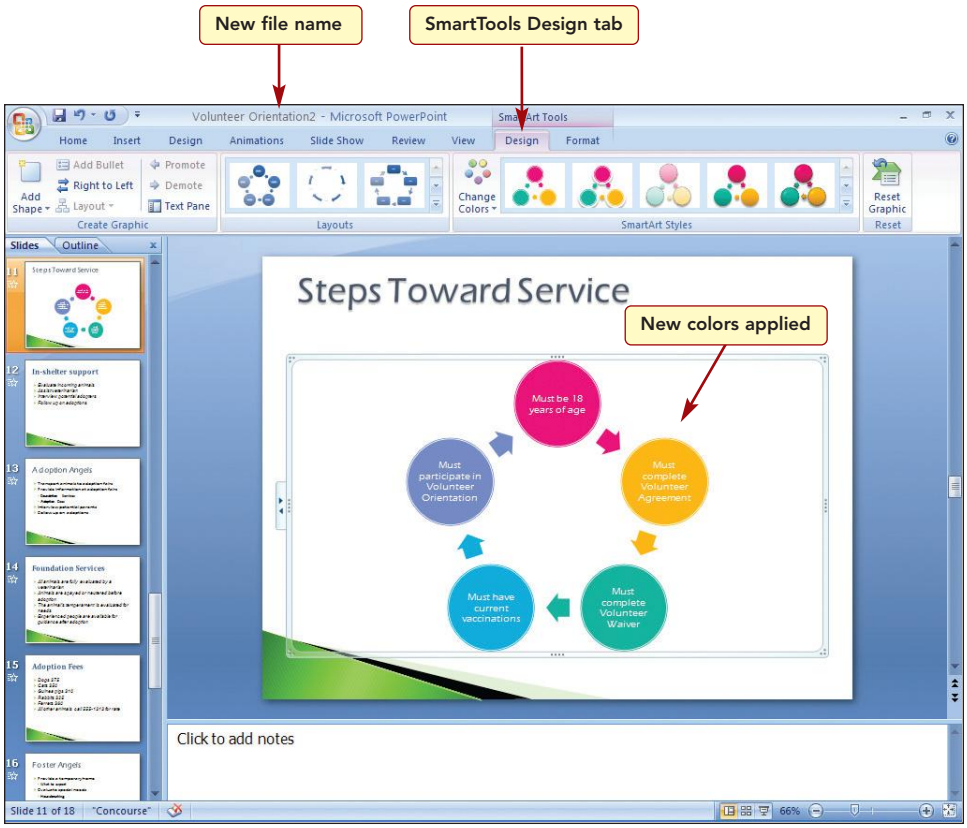


Figure 18

Embedding a Presentation

The agency director has asked you to send a letter to all the new volunteers thanking them for volunteering. You thought it would be a good idea to include a copy of the presentation with the letter for future reference. You have already written the letter and are now ready to insert the presentation.

To insert the presentation in the letter, you will open the letter in Word and embed the PowerPoint presentation file in the document. An **embedded object** is stored in the file that it is inserted into, called the **destination file,** and becomes part of that file. The embedded object can then be edited using features from the **source program,** the program in which it was created. Since the embedded object is part of the destination file, modifying it does not affect the original file, called the **source file.**

1 **Display the Word 2007 application window.**

Having Trouble?
Click on the application icon in the taskbar to switch application windows.

- **Close the** ppwt_Volunteer Steps **document file.**
- **Open the file** ppwt_Volunteer Letter**.**

Your screen should be similar to Figure 19

Additional Information
Always remove your personal information from the file's properties before distributing a presentation to avoid the distribution of this information to others. Use Office Button/Prepare/Inspect Document to check for hidden metadata or personal information.

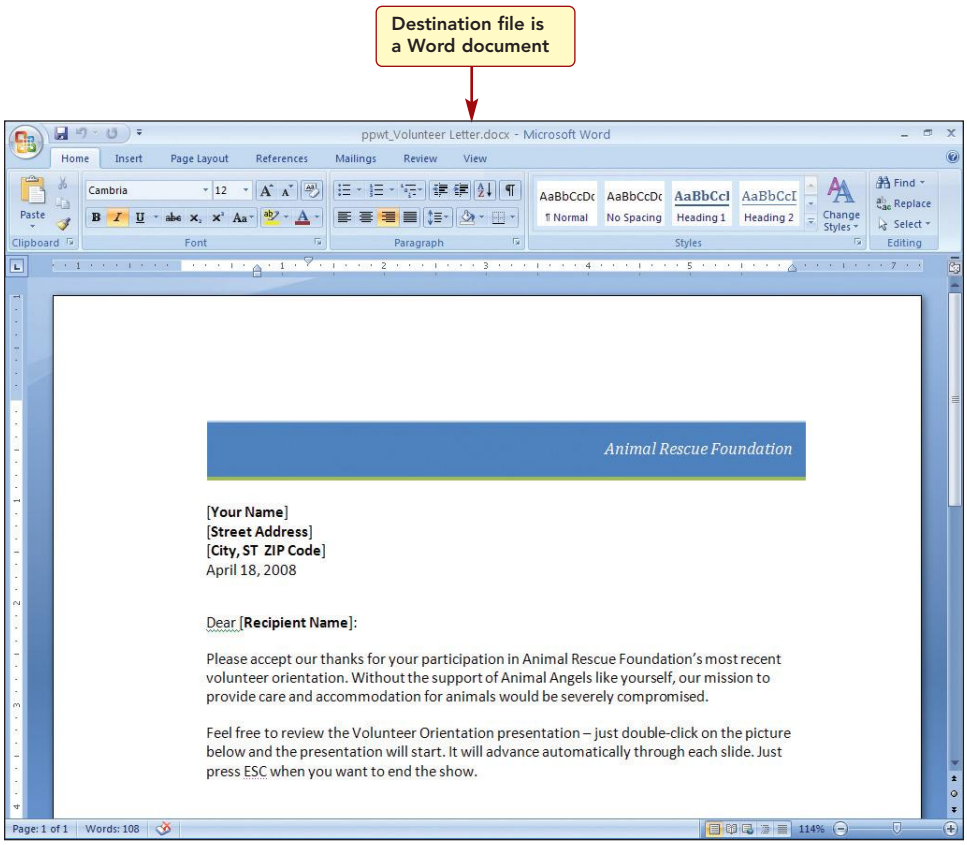


Figure 19

Now you want to embed the presentation. When you embed a PowerPoint presentation, the first slide of the presentation is displayed in the document. You want the embedded presentation to appear below the first paragraph of the letter.

2. **Move to the blank line below the second paragraph.**

- **Switch to the Volunteer Orientation2 presentation.**
- **Switch to Slide Sorter view and select all of the slides.**

Having Trouble?
Use Ctrl + A to quickly select all the slides.

- **Click Copy.**
- **Switch to the open Word file.**
- **Open the Paste drop-down menu and choose Paste Special.**
- **Choose Microsoft Office PowerPoint Presentation Object.**
- **Click OK.**

Your screen should be similar to Figure 20

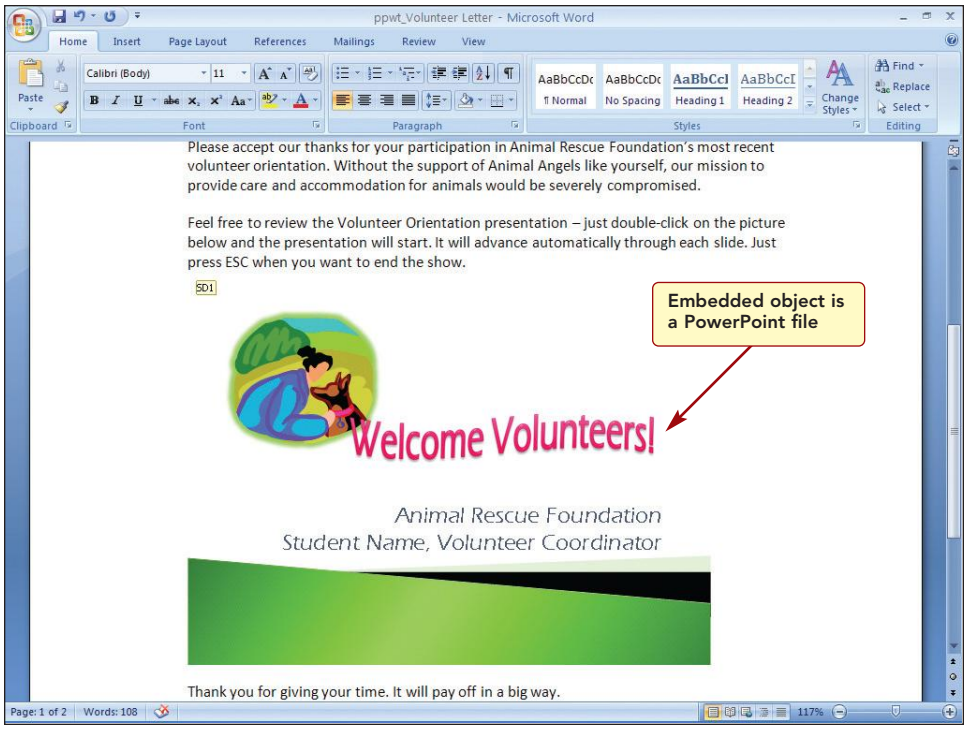


Figure 20

The opening slide of the presentation is displayed in the document. The entire presentation has been inserted as an embedded object in the letter. Before you send the letter, you want to run the slide show to make sure that it looks good and runs correctly. The directions to run the presentation from within the Word document file are included in the second paragraph of the letter.

3 **Select the PowerPoint object.**

- **Resize the object so that the entire letter fits on one page. Reposition the object as needed.**
- **Double-click on the embedded object to start the presentation.**

Another Method
You also can choose Presentation Object/Show from the object's shortcut menu.

- **View the entire presentation and press Esc to end the show.**

Your screen should be similar to Figure 21

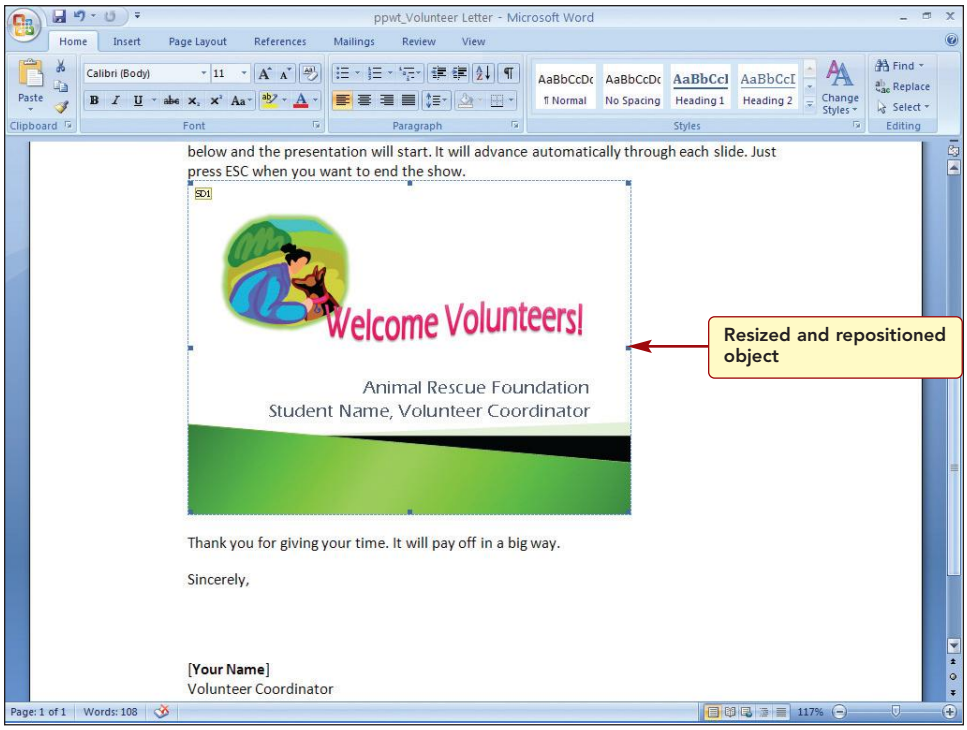


Figure 21

Editing an Embedded Object

As you view the presentation, you think that the last slide would look better if it included an animation. You decide to add an animated graphic of a dog wagging its tail to the slide. You also realize you forget to remove all the reviewer comments.

Rather than editing the PowerPoint presentation file and then reinserting it into the letter, you will make the changes directly to the object that is embedded in the letter. The source program, the program used to create the embedded object, is used to edit data in an embedded object.

1 **Choose Presentation Object/Edit from the object's shortcut menu.**

Having Trouble?
Right-clicking on the object opens the shortcut menu.

Your screen should be similar to Figure 22

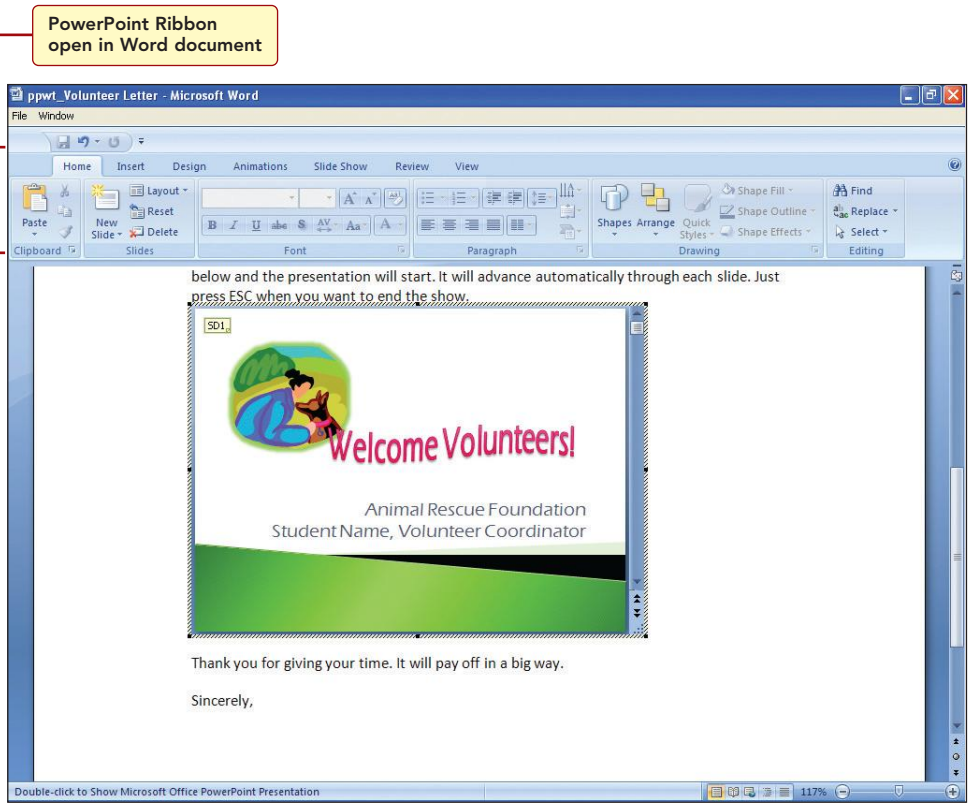


Figure 22

The presentation is open in an editing window, and the PowerPoint Ribbon replaces the Word application Ribbon. Now you can use the PowerPoint commands to edit the object.

2. Use the editing window scroll bar to display the last slide.
- Delete the Heart graphic.
- Insert the graphic ppwt_Dog Wagging from your data file location.
- Position and size the graphic as in Figure 23.
- Use the rotate handle to change the angle of the graphic as in Figure 23.

Your screen should be similar to Figure 23

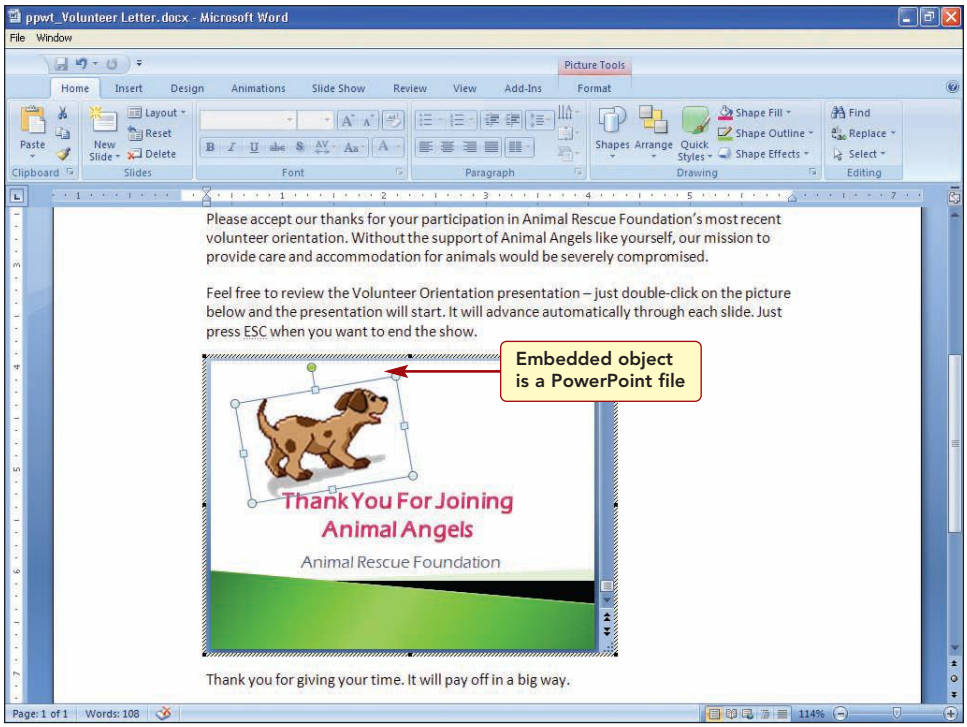


Figure 23

Finally, you will remove all the review comments and view the slide show again to see the animated graphic .

3. Open the Review tab.
- Open the Delete drop down menu and choose Delete all Markup in the Presentation.
- Click Yes in response to the confirm message box.
- Run the slide show from the current slide.
- Press Esc to end the show after seeing the animated graphic.
- Click outside the embedded presentation object to close the source program.

Your screen should be similar to Figure 24

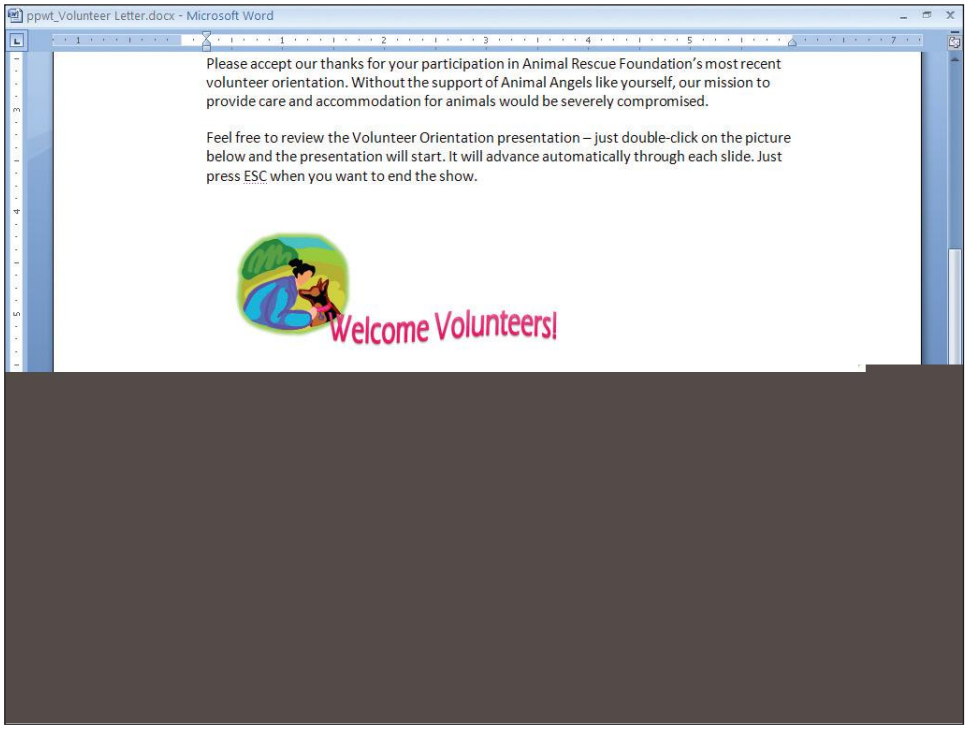


Figure 24

The reviewer comments are no longer displayed in the embedded object.

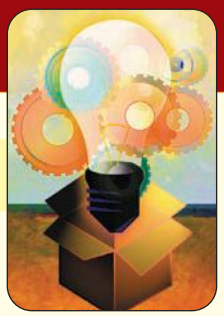
4. **Replace [Your Name] in the closing with your name.**
   - **Save the letter as** Volunteer Presentation Letter **to your solution file location.**
   - **Preview and print the letter.**
   - **Exit Word.**

Now that the letter is complete, you plan to send it as an attachment via e-mail to the director so he can see how embedding the presentation works. You also want him to see the changes you have made to the presentation.

Next you will update the presentation in PowerPoint with the same changes you made in the presentation in the Word document.

5. **Display slide 18 in Normal view.**
   - **Delete the Heart graphic.**
   - **Insert the graphic** ppwt_Dog Wagging **from your data file location.**
   - **Position and size the graphic as you did in the embedded presentation in the letter.**
   - **Remove all reviewer comments.**
   - **Save the revised presentation.**
   - **Exit PowerPoint 2007.**

The presentation still needs some additional work, but you feel you have made good progress. The comments from the director were very helpful and you think you have made good progress toward completing the presentation in time for the orientation meeting.



WORKING TOGETHER 1

Copying, Embedding, and Linking between Applications

key terms

comment PPWT1.2
comment box PPWT1.2
destination file PPWT1.15
embedded object PPWT1.15
review comment
thumbnail PPWT1.2
source file PPWT1.15
source program PPWT1.15

command summary

Command	Shortcut	Action
Office Button		
Prepare/Inspect Document		Checks the presentation file for hidden metadata or personal information
Send/E-mail		Sends e-mail with a copy of a presentation as an attachment
Home tab		
Clipboard group		
Paste/Paste Special	Ctrl + Alt + V	Pastes contents of Clipboard into presentation
Drawing group		
Arrange/Rotate/Flip Horizontal		Rotates selected object
Review tab		
Comments group		
New Comment		Adds a comment about the selection
Edit Comment		Edits the selected comment
Delete		Deletes selected comment
Previous		Moves to previous comment
Next		Moves to next comment

rating system
★ Easy
★★ Moderate
★★★ Difficult

Step-by-Step

Copying from a Word document ★

1. At the Lifestyle Fitness Club, you have been working on a presentation on Massage Therapy. Your manager has reviewed the presentation and has made a few suggestions including the request to include a slide presenting the new massage therapy costs. He has provided these costs to you in a Word document. You are to revise the presentation and return it to him for his approval.

   a. Start Word and open the file ppwt_Massage Prices.

   b. Start PowerPoint and open the file ppwt_Massage Therapy.

   c. In the presentation, replace the current footer with your name.

   d. Add a new slide after slide 9 using the Title Only layout.

   e. Copy the title from the Word document into the slide title placeholder and reset the formatting of the slide.

   f. Copy the table into the open area below the slide title and then exit Word.

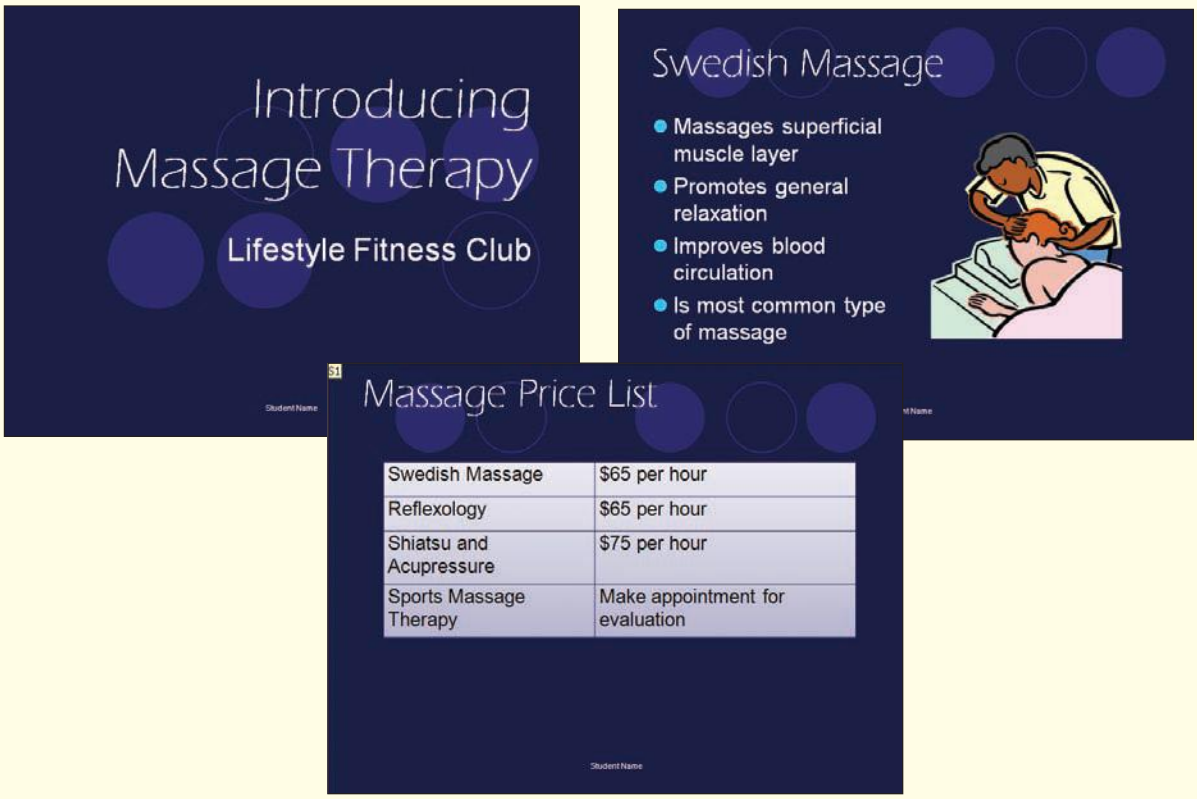
   g. Resize, apply a new design of your choice, and reformat the table as needed.

   h. Add the comment **This is a new slide. Do you like the format and content?**.

   i. Run the presentation and make any changes necessary.

   j. Save the presentation as Massage Therapy.

   k. Print the new slide.



Embedding a Presentation in a Word Document. ★★

2. The Fitness and Nutrition presentation you created in Lab 3 On-Your-Own Exercise 3 has received positive feedback from several members of the Lifestyle Fitness club. You have decided to provide the presentation to affiliated clubs in other states. You will do this by embedding the presentation in a Word document.

a. Start Word and open the file ppwt_Fitness Presentation Letter.

b. Start PowerPoint and open the file ppwt_Fitness and Nutrition Presentation.

c. Embed the ppwt_Fitness and Nutrition Presentation in the letter and then exit PowerPoint.

d. Edit the embedded presentation to include at least two comments about how the recipients can customize the presentation for their own use.

e. Resize and reposition the embedded object in the Word document.

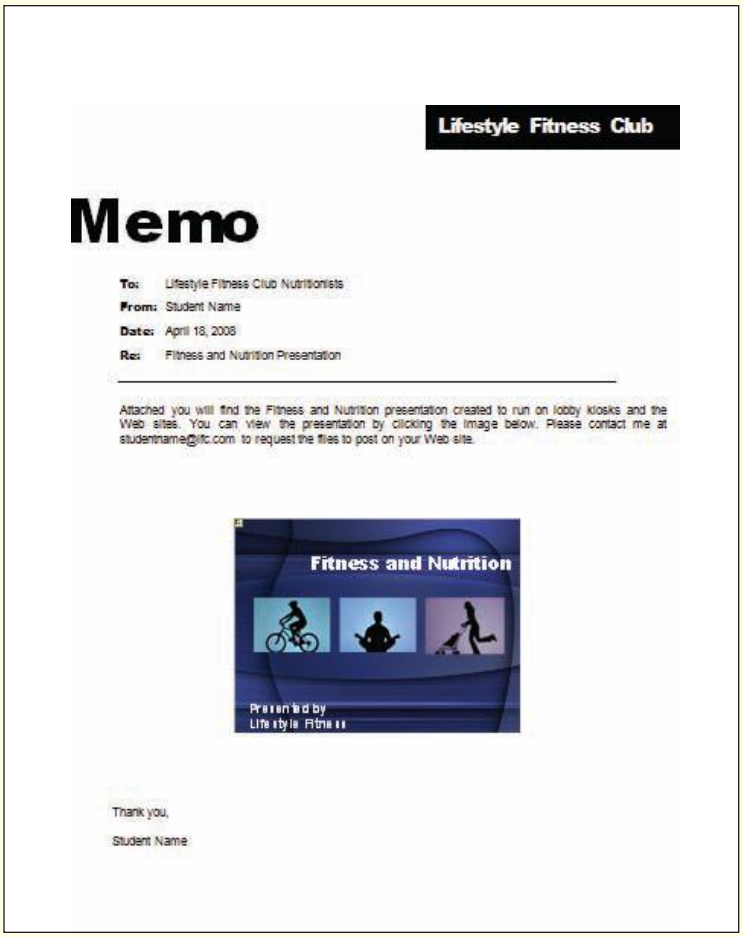
f. Run the presentation and make any necessary changes.

g. Add at least three comments to the presentation offering suggestions to improve the presentation.

h. Replace "Student Name" in the memo with your name.

i. Save the document as Fitness Presentation Letter.

j. Print the letter.



Sending an Embedded Presentation in a Word Document ★★

3. The Sports Company has a kiosk at the company store that continuously runs a Power Point presentation designed to promote the company. You have been asked to send this presentation to store managers of other stores in the state and to encourage them to use the presentation in their stores. You have decided to send the presentation in a Word document attached to an e-mail message.

   a. Start Word and open the file ppwt_Sports Company Letter.

   b. Embed the ppwt_Sports Company Kiosk Presentation in the letter and exit Power Point.

   c. Edit the first slide by replacing "Student Name" with your name. Then add at least five comments recommending changes to the presentation.

   d. Run the presentation and make any changes necessary.

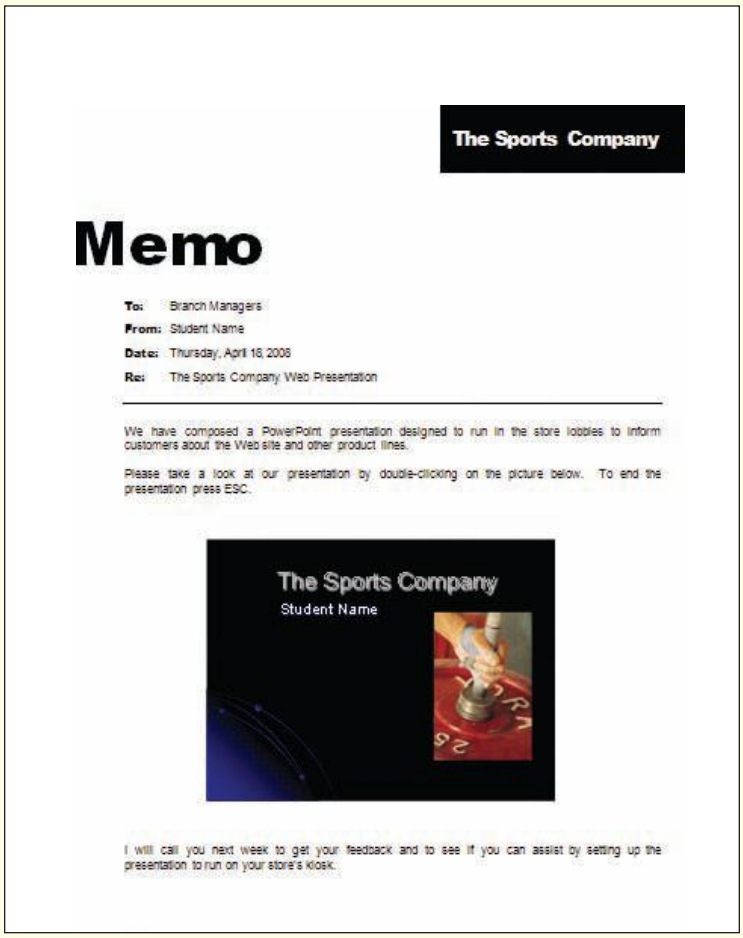
   e. Reduce the size of the embedded object and positon it appropriately.

   f. Insert your name following "From:" in the memo header.

   g. Save the document as Sports Company Letter.

   h. E-mail the document as an attachment to your instructor for review.

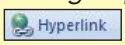
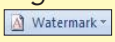
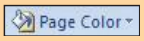
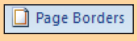
   i. Print the letter.

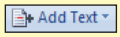
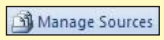
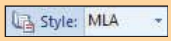
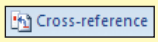
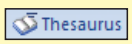
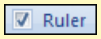
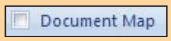
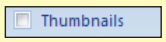


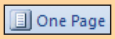
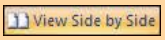
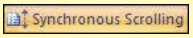
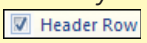
Word 2007 Command Summary

Command	Shortcut	Action
Office Button		**Opens File menu**
New	Ctrl + N	Opens new document
Open	Ctrl + O	Opens existing document file
Save	Ctrl + S,	Saves document using same file name
Save As	F12	Saves document using a new file name, type, and/or location
Save as/Save As type/ Web Page		Saves file as a Web page document
Print	Ctrl + P	Specify print settings before printing document
Print/Print Preview		Displays document as it will appear when printed
Print/Quick Print		Prints document using default printer settings
Prepare/Properties		Opens Document Information Panel
Close	Ctrl + F4	Closes document
Word Options/Proofing		Changes settings associated with Spelling and Grammar checking
Word Options/Advanced/ Mark formatting inconsistencies		Checks for formatting inconsistencies
Exit Word	Alt + F4,	Closes the Word application
Quick Access Toolbar		
Save		Saves document using same file name
Undo	Ctrl + Z	Restores last editing change
Redo	Ctrl + Y	Restores last Undo or repeats last command or action
Home tab		
Clipboard Group		
Cut	Ctrl + X	Cuts selection to Clipboard
Copy	Ctrl + C	Copies selection to Clipboard
Paste	Ctrl + V	Pastes item from Clipboard
Format Painter		Copies format to selection

Command	Shortcut	Action
Font Group		
Calibri (Body) Font		Changes typeface
11 Size		Changes font size
Grow Font		Increases font size
Clear Formatting		Clears all formatting from selected text, leaving plain text
Bold	Ctrl + B	Makes selected text bold
Italic	Ctrl + I	Applies italic effect to selected text
Underline	Ctrl + U	Adds underline below selected text
Change Case		Changes case of selected text
Text Highlight Color		Applies highlight color to selection
Font Color		Changes selected text to selected color
Paragraph group		
Bullets		Creates a bulleted list
Numbering		Creates a numbered list
Indents and Spacing		Indents paragraph from left margin
Sort		Rearranges items in a selection into ascending alphabetical/numerical order
Show/Hide	Ctrl + → + *	Displays or hides formatting marks
Align Text Left	Ctrl + L	Aligns text to left margin
Center	Ctrl + E	Centers text between left and right margins
Align Text Right	Ctrl + R	Aligns text to right margin
Justify	Ctrl + J	Aligns text equally between left and right margins
Line Spacing	Ctrl + #	Changes amount of white space between lines
Styles Group		
More		Opens Quick Styles gallery
Editing Group		
Find	Ctrl + F	Locates specified text
Replace	Ctrl + H	Locates and replaces specified text
Insert tab		
Pages group		
Cover Page		Inserts a preformatted cover page
Blank Page		Inserts a blank page
Page Break	Ctrl + ↵Enter	Inserts a hard page break
Tables group		
Table		Inserts a table

Command	Shortcut	Action
Illustrations group		
		Inserts a picture from file
		Inserts clip art, drawings, movies, sound
		Inserts ready-made shapes
Links group		
	Ctrl + K	Inserts hyperlink
Header and Footer group		
		Inserts predesigned header style
		Inserts predesigned footer style
		Inserts page number in document
Text group		
		Inserts reusable pieces of content
		Inserts current date or time, maintained by computer system, in selected format
Page Layout tab		
Themes group		
		Applies selected theme to document
		Changes colors for current theme
		Changes fonts for current theme
Page Setup group		
		Sets document or section margin sizes
	Ctrl + E	Inserts page and section breaks
 /Text Wrapping		Stops text from wrapping around objects on Web page
Page Background group		
		Inserts ghosted text behind page content
		Adds selected color to page background
 /Fill Effects		Adds selected color effect to page background
		Adds a border around page
Arrange group		
		Controls how text wraps around a selected object

Command	Shortcut	Action
References tab		
Table of Contents group		
		Generates a table of contents
		Adds selected text as an entry in table of contents
	F9	Updates the table of contents field
Footnotes group		
	Alt + Ctrl + F	Inserts footnote reference at insertion point
Citations & Bibliography group		
		Creates a citation for a reference source
		Displays list of all sources cited
		Sets the style of citation to use in document
		Creates a bibliography list of sources cited in document
Captions group		
		Adds a figure caption
		Creates figure cross-references
Review tab		
Proofing group		
	F7	Starts Spelling and Grammar Checker
	Shift + F7	Starts Thesaurus tool
View tab		
Document Views group		
		Shows how text and objects will appear on printed page
		Displays document only, without application features
		Shows document as it will appear when viewed in a Web browser
		Shows structure of document
		Shows text formatting and simple layout of page
Show/Hide group		
		Displays/hides horizontal ruler bar
		Displays or hides Document Map window
		Displays or hides Thumbnails window

Command	Shortcut	Action
Zoom group		
		Opens the Zoom dialog box
		Zooms document to 100% of normal size
		Zooms document so an entire page fits in window
		Zooms document so width of page matches width of window
Window group		
		Arranges all open windows horizontally on screen
		Divides a document into two horizontal sections
		Displays two document windows side by side to make it easy to compare content
		Turns on/off synchronized scrolling
		Switches between open document windows
Picture Tools Format tab		
		Specifies how text will wrap around picture
Table Tools Design tab		
Table Styles group		
More		Opens gallery of predesigned table formats
Table Style Options group		
		Turns on/off formats for header row
		Turns on/off formats for first column
		Turns on/off formats for last column
Table Tools Layout tab		
Rows & Columns group		
		Inserts a new row in table above selected row
Alignment group		
 Align Top Center		Aligns text at top center of cell space
Header & Footer Tools Design tab		
Header & Footer Group		
		Inserts page number in header, footer, or document
Insert group		
		Inserts current date or time in header or footer
 /Document Property		Inserts selected document property

Command	Shortcut	Action
Quick Parts /Field		Inserts selected Quick Part
Navigation group		
Go to Footer		Switches to footer area
Previous Section		Navigates to previous section's header/footer
Next Section		Navigates to next section's header/footer
Link to Previous		Turns on/off link to header or footer in previous section
Options group		
Different First Page		Specify a unique header and footer for the first page
Position group		
Insert Alignment Tab		Inserts a tab stop to align content in header/footer
Close group		
Close Header and Footer		Closes header/footer area
Outlining tab		
Outline Tools group		
Promote to Heading 1		Promotes selected item to Heading 1 level
Promote	Alt + Shift + ←	Promotes selected item one level
Level 1 Outline Level		Choose outline level for selected item
Demote	Alt + Shift + →	Demotes selected item one level
Demote to body text		Demotes selected item to body text
Move Up	Alt + Shift + ↑	Moves selected item up in outline
Move Down	Alt + Shift + ↓	Moves selected item down in outline
Expand	Alt + Shift + +	Expand selected item
Collapse	Alt + Shift + −	Collapse selected item
Level 9 Show Level		Shows only specified outline levels
Show Text Formatting		Show outline as formatted text
Show First Line Only		Show only first line of each item
Close group		
Close Outline View		Closes outline view and displays last used view

Excel 2007 Command Summary

Command	Shortcut	Action
Office Button		
New	Ctrl + N	Opens a new blank workbook
Open	Ctrl + O	Opens an existing workbook file
Save	Ctrl + S	Saves file using same file name
Save As	F12	Saves file using a new file name
Print	Ctrl + P	Prints active worksheet
Print/Print Preview		Displays worksheet as it will appear when printed
Prepare/Properties		View and edit document properties
Close	Ctrl + F4	Closes open workbook file
Excel Options		Display and change program settings
Exit Excel	× or Alt + F4	Exits Excel program
Quick Access Toolbar		
Save	Ctrl + S	Saves document using same file name
Undo	Ctrl + Z	Reverses last editing or formatting change
Redo	Ctrl + Y	Restores changes after using Undo
Home tab		
Clipboard group		
Paste	Ctrl + V	Pastes selections stored in system Clipboard
Paste/Paste Special/Paste		Inserts object as an embedded object
Paste/Paste Special/Paste Link		Inserts object as a linked object
Cut	Ctrl + X	Cuts selected data from the worksheet
Copy	Ctrl + C	Copies selected data to system Clipboard
Format Painter		Copies formatting from one place and applies it to another
Font group		
Calibri Font		Changes font style
11 Font Size		Changes font size
B Bold	Ctrl + B	Bolds selection

Command	Shortcut	Action
Italic	Ctrl + I	Italicizes selection
Underline	Ctrl + U	Underlines selection
Border		Adds border to specified area of cell or range
Fill Color		Adds color to cell background
Font Color		Adds color to entry
Alignment group Align Text Left		Left-aligns entry in cell space
Center		Center-aligns entry in cell space
Align Text Right		Right-aligns entry in cell space
Increase Indent		Indents cell entry
Decrease Indent		Reduces the margin between the cell border and the text in the cell.
Merge & Center		Combines selected cells into one cell and centers cell contents in new cell
Number group General Number Format		Changes the number formatting applied to selection
Accounting		Applies Accounting number format to selection
Percent Style		Applies Percent Style format to selection
Increase Decimal		Increases number of decimal places
Decrease Decimal		Decreases number of decimal places
Styles group Conditional Formatting		Applies Data Bars, Color Scales, and Icon Sets to selected cells based on criteria
Conditional Formatting /Manage Rules		Opens Rules Manager to create, edit, and delete cell rules
Cell Styles		Applies predefined combinations of colors, effects, and formats to selected cells
Cells group Insert /Insert Cells		Inserts blank cells, shifting existing cells down
Insert /Insert Cut Cells	Ctrl + Shift + =	Inserts cut data into new worksheet row, shifting existing rows down

Command	Shortcut	Action
Insert /Insert Copied Cells		Inserts copied data into new worksheet row, shifting existing rows down
Insert /Insert Sheet Rows		Inserts blank rows, shifting existing rows down
Insert /Insert Sheet Columns		Inserts blank columns, shifting existing columns right
Insert /Insert Sheet	Alt + Shift + F1	Inserts new blank sheet into workbook
Delete /Delete Cells		Deletes selected cells, shifting existing cells left or up
Delete /Delete Sheet Rows		Deletes selected rows, shifting existing rows up
Delete /Delete Sheet Columns		Deletes entire column, shifting existing columns left
Delete /Delete Sheet		Deletes entire sheet
Format /Row Height		Changes height of selected row
Format /AutoFit Row Height		Changes row height to match the tallest cell entry
Format /Column Width		Changes width of selected column
Format /AutoFit Column Width		Changes column width to match widest cell entry
Format /Default Width		Returns column width to default width
Format /Rename Sheet		Renames sheet
Format /Move or Copy Sheet		Moves or copies selected sheet
Format /Tab Color		Changes color of sheet tabs
Editing group		
Σ Sum		Calculates the sum of the values in the selected cells
Σ /Average		Calculates the average of the values in the selected cells
Σ /Min		Returns the smallest of the values in the selected range
Σ /Max		Returns the largest of the values in the selected range
/Down	Ctrl + D	Continues a pattern into the adjacent cells below
Clear/Clear All		Removes both contents and formats
Clear/Clear Formats		Removes formats only
Clear/Clear Contents	Delete	Clears cell contents
Find & Select /Find	Ctrl + F	Locates specified text, numbers, and/or formats
Find & Select /Replace	Ctrl + H	Locates specified characters or formats and replaces them with specified replacement characters or format
Find & Select /Go To	Ctrl + G	Moves cell selector to specified cell location in worksheet

Command	Shortcut	Action
Insert tab		
Illustrations group		
		Inserts a picture from a file
		Inserts selected graphic from Clip Organizer and Microsoft Clip Art and Media Web site
Charts group		
		Inserts a column chart
		Inserts a pie chart
Page Layout tab		
Themes group		
		Applies selected theme to worksheet
 /Save Current Theme		Saves modified theme settings as a custom theme
Page Setup group		
 /Narrow		Changes margin settings
 /Custom Margins/Horizontally		Centers worksheet horizontally on page
 /Custom Margins/Vertically		Centers worksheet vertically on page
 /Landscape		Changes page orientation to landscape
 /Portrait		Changes page orientation to portrait
 /Set Print Area		Sets print area to selected range
 /Insert Page Break		Inserts a page break at cell pointer location
 /Remove Page Break		Removes page break at cell pointer location
 /Reset All Page Breaks		Restores automatic page break locations
Scale to Fit group		
		Scales worksheet horizontally to specified number of pages

Command	Shortcut	Action
Height:		Scales worksheet vertically to specified number of pages
Scale:		Scales worksheet both horizontally and vertically by entering a percentage
Sheet Options group Gridlines/Print		Displays/hides gridlines for printing
Formulas tab		
Function Library group Σ AutoSum		Enters Sum, Average, Count, Minimum, or Maximum functions
Formula Auditing group Show Formulas	Ctrl + `	Displays and hides worksheet formulas
Error Checking		Checks worksheet for formula errors
Watch Window		Opens Watch Window toolbar
Data Tab		
Data Tools group What-If Analysis/Goal Seek		Adjusts value in specified cell until a formula dependent on that cell reaches specified result
Review tab		
Proofing group Spelling	F7	Spell-checks worksheet
Thesaurus		Opens the thesaurus for the selected word in the Research task pane
View tab		
Workbook Views group Normal		Changes worksheet view to Normal view
Page Layout		Displays worksheet as it will appear when printed
Page Break Preview		Displays where pages will break when a worksheet is printed
Show/Hide group Gridlines		Turns on/off display of gridlines
Headings		Turns on/off display of row and column headings
Zoom group Zoom		Changes magnification of window
Window group Freeze Panes/Freeze Panes		Keeps rows and columns visible while the rest of the worksheet scrolls

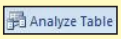
Command	Shortcut	Action
Freeze Panes /Unfreeze Panes		Unfreezes window panes
Split		Divides window into multiple resizeable panes at active cell or removes split
Picture Tools Format tab		
Picture Styles group Picture Styles		Applies a combination of shapes, borders, and effects to picture
Picture Shape		Changes shape of drawing, preserving all formatting
Picture Border		Specifies color, width, and line style for outline of shape
Picture Effects		Adds glow, shadow, and other effects to pictures
Chart Tools Design tab		
Type group Change Chart Type		Changes selected chart to a different type of chart
Data group Switch Row/Column		Swaps the data over the axis
Select Data		Changes the data range included in chart
Chart Layouts group Chart Layouts		Applies selected combination of titles, data labels, and legends to a chart
Chart Styles group Chart Styles		Applies selected combination of colors, backgrounds, and outlines to chart
Location group Move Chart		Moves chart to another sheet in the workbook
Chart Tools Layout tab		
Labels group Chart Title		Adds, removes, or positions the chart title
Axis Titles		Adds, removes, or positions the axis titles
Legend		Adds, removes, or positions the chart legend
Data Labels		Adds, removes, or positions the data labels

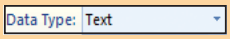
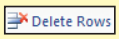
Command	Shortcut	Action
Background group Chart Wall		Formats chart walls
Chart Tools Format tab		
Current Selection group Chart Area Chart Elements		Selects an element on the chart
Format Selection		Opens Format dialog box for selected element
Shape Styles group Shape styles		Applies selected combination of shape outline, fill, and effects
Shape Fill		Adds selected fill to shape
Shape Outline		Specified color, weight, and type of outline
Shape Effects		Adds selected effect to shape
Print Preview tab		
Print group Print	Ctrl + P	Prints selection, worksheets, or workbook
Page Setup		Opens the Page Setup dialog box
Page Setup /Landscape		Changes page orientation to landscape
Page Setup /Fit To		Scales the worksheet to fit specified number of pages
Page Setup /Header/Footer tab		Adds header or footer to worksheet
Page Setup /Margins tab/Horizontally		Horizontally aligns worksheet between margins
Zoom group Zoom		Magnifies worksheet
Preview group Next Page		Displays next page
Previous Page		Displays previous page
Close Print Preview		Closes Print Preview and returns to editing document

Access 2007 Command Summary

Command	Shortcut	Action
Office Button		**Opens File menu**
New		Opens a new blank database
Open	Ctrl + O	Opens an existing database
Save	Ctrl + S	Saves database object
Save As	F12	Saves database object with a new file name
Print/Print	Ctrl + P	Specifies print settings and prints current database object
Print/Print Preview		Displays file as it will appear when printed
Manage/Compact and Repair		Compacts and repairs database file
Manage/Back Up Database		Backs up database
Manage/Database Properties		Allows changes to database properties
Close Database		Closes open window
Access Options		Specifies program settings
Exit Access		Closes Access 2007 application
Quick Access Toolbar		
Undo	Ctrl + Z	Cancels last action
Save	Ctrl + S	Saves the current object
Home tab		
Views group		
Design View		Displays object in Design view
Datasheet View		Displays object in Datasheet view
Form View		Changes to Form view
Form Layout View		Changes to Form Layout view
Report View		Displays report in Report view
Report Layout View		Displays report in Layout view
Clipboard group		
Cut	Ctrl + X	Removes selected item and copies it to the Clipboard
Copy	Ctrl + C	Duplicates selected item and copies to the Clipboard
Paste	Ctrl + V	Inserts copy of item from Clipboard

Command	Shortcut	Action
Font group		
Bold	Ctrl + B	Applies bold effect to all text in datasheet
Font Color		Applies selected color to all text in datasheet
Gridlines		Changes gridline color of datasheet
Alternate Fill/Back Color		Changes background color of datasheet
Records group		
Refresh All		Updates display of data
New	Ctrl + +	Adds new record
Save	Shift + Enter	Saves changes to records
Delete	Delete	Deletes current record
Totals		Displays/hides Totals row
More /Hide Columns		Hides columns in Datasheet
More /Unhide Columns		Redisplays hidden columns
More /Column Width		Adjusts width of selected column
Sort & Filter group		
Ascending		Changes sort order to ascending
Descending		Changes sort order to descending
Clear All Sorts		Clears all sorts and returns sort order to primary key order
Filter		Allows multiple filter criteria in a single field
Selection /Equals		Displays only those records containing selected value
Advanced /Clear all Filters		Removes all filters from table
Toggle Filter		Applies and removes filter from table
Find group		
Find	Ctrl + F	Locates specified data
Replace	Ctrl + H	Locates specified data and replaces it with specified replacement text
Go To		Moves to First, Previous, Next, Last, or New record location
Select /Select		Selects current record
Select /Select All		Selects all records in database
Create tab		
Tables group		
Table		Creates a new table in Datasheet view
Table Design		Creates a new table in Design view

Command	Shortcut	Action
Forms group		
		Creates a new form using all the fields from the underlying table
		Displays a blank form to which you add the fields from the table that you want to appear on the form
 /Form Wizard		Creates a new form by following the steps in the Form Wizard
Reports group		
		Creates a report using all fields in current table
		Creates a report using Report Design view
		Creates a report using the Report Wizard
Other group		
		Creates a query using the Query Wizard
		Creates a query using Query Design view
External Data tab		
Export group		
		View and run saved exports
		Exports selected object to an Excel workbook
		Exports selected object to a Rich Text Format file
Database Tools tab		
Show/Hide group		
		Define how the data in tables is related
		Specifies general properties associated with the database file
		Shows the objects in the database that use the selected object
Analyze group		
		Creates a report showing object properties and settings
		Evaluates table design
Table Tools Datasheet tab		
Views group		
 Design View		Displays table in Design view
 Datasheet View		Displays table in Datasheet view

Command	Shortcut	Action
Fields & Columns group		
		Inserts a new field
		Removes selected field column
		Renames selected field
		Creates a lookup column
Data Type & Formatting group		
		Changes the data type for current field
Table Tools Design tab		
Views group		
 Design View		Displays table in Design view
 Datasheet View		Displays table in Datasheet view
Tools group		
		Makes current field a primary key field
		Inserts a new field in Table Design view
		Deletes selected field row
Form Layout Tools Format tab		
Views group		
 Form view		Displays form in Form view
 Form Layout view		Displays form in Layout view
AutoFormat group		
 More		Displays gallery of form design styles
Form Layout Tools Arrange tab		
Control layout group		
		Removes selected control
Position group		
		Brings selected control to top of stack
Query Tools Design tab		
Results group		
		Displays query results in Query Datasheet view
Query Setup group		
		Displays/hides Show Table dialog box
Show/Hide group		
		Displays/hides the Tables row

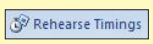
Command	Shortcut	Action
Report Layout Tools Format tab		
Views group Report View		Displays report in Report view
Report Layout View		Displays report in Report Layout view
Report Design View		Displays report in Report Design view
Font group Center		Centers text in selected control
Controls group Add Existing Fields		Displays/hides Add Existing Fields task pane
AutoFormat group AutoFormat		Applies selected predesigned styles to report
Report Layout Tools Page Setup tab		
Page Layout group Margins		Sets margins of printed report
Page Setup		Sets features related to the page layout of printed report
Report Design Tools Design tab		
Font group Center		Centers text in selected control
20 Size		Sizes text in selected control
Tools group Add Existing Fields		Displays/hides the Fields List task pane
Relationship Tools Design tab		
Tools group Relationship Report		Creates a report of the displayed relationships
Print Preview Tab		
Print group Print		Prints displayed object
Page Layout group Portrait		Changes print orientation to portrait
Landscape		Changes print orientation to landscape
Margins		Sets margins of printed output

Command	Shortcut	Action
Zoom group		
		Displays one entire page in Print Preview
		Displays two entire pages in Print Preview
Close Preview group		
		Closes Print Preview window

PowerPoint 2007 Command Summary

Command	Shortcut	Action
Office Button		**Opens File menu**
New		Opens a new presentation
New/New from existing		Inserts an existing presentation as a new unnamed presentation
Open	Ctrl + O	Opens an existing presentation
Save	Ctrl + S	Saves presentation
Save As	F12	Saves presentation using new file name and/or location
Print/Print	Ctrl + P	Prints presentation
Print/Print Preview		Displays preview of presentation
Print/Print Preview/Print Preview/Print What		Specifies what is to be printed
Print/Print Preview/ Print Preview/ Orientation		Sets either Portrait or Landscape layout
Prepare/Properties		Specifies presentation properties such as Title, Author, and keywords
Prepare/Inspect Document		Checks presentation file for hidden metadata or personal information
Send/E-mail		Sends e-mail with a copy of a presentation as an attachment
Close		Closes presentation
Exit PowerPoint		Closes PowerPoint
Quick Access Toolbar		
Save	Ctrl + S	Saves presentation
Undo	Ctrl + Z	Reverses last action
Home tab		
Clipboard group		
Paste	Ctrl + V	Pastes item from Clipboard
Paste/Paste Special	Ctrl + Alt + V	Pastes contents of Clipboard into presentation

Command	Shortcut	Action
Cut	Ctrl + X	Cuts selection to Clipboard
Copy	Ctrl + C	Copies selection to Clipboard
		Opens Clipboard
Slides group New Slide	Ctrl + M	Inserts new slide with selected layout
New Slide/Slides from Outline		Inserts new slides using a Word outline
New Slide/Reuse Slides		Inserts new slides from another presentation
Layout		Changes layout of a slide
Delete		Deletes slide
Font group Eras Medium ITC Font		Specifies font type
48 Size		Specifies font size
Increase Font Size	Ctrl + Shift + >	Increases font size of selected text
Paragraph group Bullets/Bullets and Numbering/Bulleted		Formats bullets and numbers
Numbering		Creates a numbered list
Align Left	Ctrl + F	Aligns text to the left
Align Center	Ctrl + E	Centers text
Align Right	Ctrl + R	Aligns text to the right
Justify	Ctrl + F	Aligns text to both the left and right margins
Align Text		Sets vertical alignment of text
Drawing group Arrange/Rotate/Flip Horizontal		Rotates an object
Editing group Find	Ctrl + F	Finds specified text
Replace	Ctrl + H	Replaces located text with replacement text
Select/Select All	Ctrl + A	Selects everything in the placeholder box
Insert tab		
Illustrations group Picture		Inserts a picture from a file
Clip Art		Inserts clip art

Command	Shortcut	Action
		Inserts a shape
		Inserts SmartArt shape
		Inserts a chart
Text group 		Inserts text box or adds text to selected shape
		Inserts a header and/or footer
		Inserts WordArt
Links group 	Ctrl + K	Creates a link to a Web page, a picture, an e-mail, or a program
Design tab		
Themes group  More		Opens gallery of document themes
		Changes the color for the current theme
Animations tab		
Animations group 		Creates custom animation for individual objects
Transition to This Slide group 		Applies transitions in current slide to all slides
Slide Show tab		
Start Slide Show group 	F5	Displays presentation starting with the first slide
	Shift + F5	Displays presentation starting with the current slide
		Creates or plays a custom slide show
Set Up group 		Specifies advanced options for a slide show
		Hides current slide so that it does not appear during the presentation
		Practices timing or pace of a presentation

Command	Shortcut	Action
Review tab		
Proofing group		
	F7	Spell-checks presentation
Comments group		
		Adds a comment about the selection
		Edits the selected comment
		Deletes the selected comment
		Moves to previous comment
		Moves to next comment
View tab		
Presentation Views group		
		Switches to Normal view
		Switches to Slide Sorter view
		Displays current slide in Notes view to edit the speaker notes
		Runs slide show
		Opens Slide Master view to change the design and layout of the master slides
Chart Tools Format tab		
Shape Styles group		
 More		Opens the Shape Styles gallery to choose a visual style for the shape or line
Chart Tools Design tab		
Chart Styles group		
 More		Applies a chart style including chart color and appearance

Command	Shortcut	Action
Drawing Tools Format tab		
Shape Styles group More		Opens the Shape Styles gallery to select a visual style to apply to a shape
Shape Effects		Applies a visual effect to a shape
WordArt Styles group More		Opens the WordArt Styles gallery to choose a visual style for the WordArt text
Arrange group Rotate		Rotates or flips a selected object
Picture Tools Format tab		
Adjust group Recolor		Recolors picture
Picture Styles group More		Opens Picture Styles gallery to select an overall visual style for picture
Picture Shape		Changes shape of drawing
Picture Border		Applies a border style to picture
Picture Effects		Applies a visual effect to picture
Size group Crop		Crops selected picture to remove unwanted parts
SmartArt Tools Design tab		
Create Graphic group Add Shape		Adds a shape to SmartArt graphic
Demote		Demotes selected element of SmartArt graphic
Layouts group More		Opens the Layouts gallery to choose the layout for the SmartArt shape
SmartArt Styles group Change Colors		Changes the color variation of a SmartArt graphic
More		Opens the SmartArt Styles gallery to choose an overall visual style for the SmartArt graphic

Command	Shortcut	Action
Table Tools Design tab		
Table Styles group More		Opens the Table Styles gallery to choose a visual style for a table
Shading		Colors background behind selected text or paragraph
Border		Applies a border style
Effects		Applies a visual effect to the table such as shadows and reflections
Print Preview tab		
Page *Setup group* Slides Print What		Specifies what is to be printed
Orientation		Sets either Portrait or Landscape layout

Word Glossary of Key Terms

active window The window containing the insertion point and that will be affected by any changes you make.

alignment How text is positioned on a line between the margins or indents. There are four types of paragraph alignment: left, centered, right, and justified.

antonym A word with the opposite meaning.

author The process of creating a Web page.

AutoCorrect A feature that makes basic assumptions about the text you are typing and automatically corrects the entry.

bibliography A listing of source references that appears at the end of the document.

browser A program that connects you to remote computers and displays the Web pages you request.

building blocks Document fragments that include text and formatting and that can be easily inserted into a document.

bulleted list Displays items that logically fall out from a paragraph into a list, with items preceded by bullets.

caption A title or explanation for a table, picture, or graph.

case sensitive The capability to distinguish between uppercase and lowercase characters.

cell The intersection of a column and row where data are entered in a table.

character formatting Formatting features such as bold and color that affect the selected characters only.

citations Parenthetical source references that give credit for specific information included in a document.

Click and Type A feature available in Print Layout and Web Layout views that is used to quickly insert text, graphics, and other items in a blank area of a document, avoiding the need to enter blank lines.

clip art Professionally drawn graphics.

control A graphic element that is a container for information or objects.

cross-reference A reference in one part of a document related to information in another part.

cursor The blinking vertical bar that shows you where the next character you type will appear. Also called the insertion point.

custom dictionary A dictionary of terms you have entered that are not in the main dictionary of the spelling checker.

default The initial Word document settings that can be changed to customize documents.

destination The location to which text is moved or copied.

Document Map A feature that displays the headings in the document in the navigation window.

document properties Details about a document that describe or identify it and are saved with the document content.

document theme A predefined set of formatting choices that can be applied to an entire document in one simple step.

document window The area of the application window that displays the contents of the open document.

drag and drop A mouse procedure that moves or copies a selection to a new location.

drawing layer The layer above or below the text layer where floating objects are inserted.

drawing object A simple object consisting of shapes such as lines and boxes.

edit The process of changing and correcting existing text in a document.

embedded object An object such as a picture graphic that becomes part of the Word document and that can be opened and edited using the program in which it was created.

end-of-file marker The horizontal line that marks the end of a file.

endnote A reference note displayed at the end of the document.

field A placeholder that instructs Word to insert information in a document.

field code The code containing the instructions about the type of information to insert in a field.

field result The results displayed in a field according to the instructions in the field code.

floating object A graphic object that is inserted into the drawing layer and can be positioned anywhere on the page.

font A set of characters with a specific design. Also called a typeface.

font size The height and width of a character, commonly measured in points.

footer The line or several lines of text at the bottom of every page just below the bottom margin line.

footnote A reference note displayed at the bottom of the page on which the reference occurs.

format To enhance the appearance of the document to make it more readable or attractive.

Format Painter The feature that applies formats associated with the current selection to new selections.

gradient A gradual progression of colors and shades, usually from one color to another, or from one shade to another of the same color.

grammar checker The feature that advises you of incorrect grammar as you create and edit a document, and proposes possible corrections.

graphic A nontext element in a document.

hard page break A manually inserted page break that instructs Word to begin a new page regardless of the amount of text on the previous page.

header The line or several lines of text at the top of each page just above the top margin line.

heading style A style that is designed to identify different levels of headings in a document.

HTML (HyperText Markup Language) The programming language used to create Web pages.

hyperlink A connection to locations in the current document, other documents, or Web pages. Clicking a hyperlink jumps to the specified location.

indent To set in a paragraph from the margins. There are four types of indents: left, right, first line, and hanging.

inline object An object that is inserted directly in the text at the position of the insertion point, becoming part of the paragraph.

Insert mode Method of text entry in which new characters are inserted into existing text, which moves to the right to make space for the new characters; the text on the line is reformatted as necessary.

insertion point The blinking vertical bar that shows you where the next character you type will appear on the line. Also called the cursor.

leader characters Solid, dotted, or dashed lines that fill the blank space between tab stops.

line spacing The vertical space between lines of text.

Live Preview A feature that allows you to preview in your document the results of applying formatting changes as you select different format options.

main dictionary The dictionary of terms that comes with Word 2007.

navigation window A separate window that displays the Document Map and thumbnails.

note pane Lower portion of the window that displays footnotes.

note reference mark A superscript number or character appearing in the document at the end of the material being referenced.

note separator The horizontal line separating footnote text from the main document text.

note text The text in a footnote.

numbered list Displays items that convey a sequence of events in a particular order, with items preceded by numbers or letters.

object An item that can be sized, moved, and manipulated.

Office Clipboard A temporary Windows storage area in memory.

outline numbered list Displays items in multiple outline levels that show a hierarchical structure of the items in the list.

page break Marks the point at which one page ends and another begins.

page margin The blank space around the edge of the page.

paragraph formatting Formatting features such as alignment, indentation, and line spacing that affect an entire paragraph.

picture An illustration such as a scanned photograph.

placeholder A graphic element that is designed to contain specific types of information.

quick styles A gallery of predefined sets of formatting characteristics that allows you to quickly apply a whole group of formats in one simple step to a selection.

ruler The ruler located below the Formatting toolbar that shows the line length in inches.

sans serif font A font such as Arial or Helvetica that does not have a flair at the base of each letter.

section A division into which a document can be divided that can be formatted separately from the rest of the document.

section break Marks the point at which one section ends and another begins.

selection rectangle The rectangular outline around an object that indicates it is selected.

serif font A font such as Times New Roman that has a flair at the base of each letter.

sizing handles Black squares around a selected object that can be used to size the object.

soft page break A page break automatically inserted by Word to start a new page when the previous page has been filled with text or graphics.

soft space A space between words automatically entered by Word to justify text on a line.

sort To arrange alphabetically or numerically in ascending or descending order.

source The location from which text is moved or copied.

source program The program in which an object was created.

spelling checker The feature that advises you of misspelled words as you create and edit a document, and proposes possible corrections.

split window A division of the document window into two horizontal sections making it easier to view different parts of a document.

synchronized Documents in multiple open windows that move together when you scroll the window.

synonym A word with a similar meaning.

system Clipboard Where a selection that has been cut or copied is stored.

tab stop A marked location on the horizontal ruler that indicates how far to indent text when the Tab key is pressed.

table Displays information in horizontal rows and vertical columns.

table of contents A listing of topic headings and associated page numbers in a document.

table of figures A listing of figures and associated page numbers in a document.

table reference The letter and number (for example, A1) that identify a cell in a table.

tag Embedded codes that supply information about a Web page's structure, appearance, and contents.

template A document that includes predefined settings and content that is used as the basis for a new document.

text box A container for text and other graphic objects.

text wrapping Controls how text appears around a graphic.

thesaurus Word feature that provides synonyms and antonyms for words.

thumbnail A miniature representation of a picture or object.

TrueType A font that is automatically installed when you install Windows.

typeface A set of characters with a specific design. Also called a font.

URL The address that indicates the location of a document on the World Wide Web. URL stands for Uniform Resource Locator.

watermark Text or pictures that appear behind document text.

Web page A document that can be used on the World Wide Web and viewed in a browser.

word wrap A feature that automatically determines where to end a line and wrap text to the next line based on the margin settings.

Excel Glossary of Key Terms

3-D reference A reference to the same cell or range on multiple sheets in the same workbook.

absolute reference A cell or range reference in a formula whose location remains the same (absolute) when copied. Indicated by a $ character entered before the column letter and row number.

active cell The cell displaying the cell selector that will be affected by the next entry or procedure.

active sheet A sheet that contains the cell selector and that will be affected by the next action.

adjacent range A rectangular block of adjoining cells.

alignment The vertical or horizontal placement and orientation of an entry in a cell.

antonym Words with opposite meaning, such as "cheerful" and "sad."

area chart A chart that shows trends by emphasizing the area under the curve.

argument The data used in a function on which the calculation is performed.

AutoCorrect Makes some basic assumptions about the text you are typing and, based on these assumptions, automatically corrects the entry.

AutoFill Feature that logically repeats and extends a series.

AutoFit Feature that automatically adjusts the column width or row height to fit the contents.

AutoRecover Feature that periodically saves your open files to a temporary recovery file as a protection against accidental loss of work.

bar chart Displays data as evenly spaced bars.

bubble chart A chart that compares sets of three values, similar to a scatter chart. The third value determines the size of bubble markers.

category axis Another name for the X axis of a chart.

category-axis title A label displayed along the X axis in a chart to identify the data being plotted.

cell The space created by the intersection of a vertical column and a horizontal row.

cell reference The column letter and row number of a cell.

cell selector The heavy border surrounding a cell in the worksheet that identifies the active cell.

cell style A named combination of formats that can be applied to a selection.

character effect A modification to the characters, such as bold or italics, that enhances the appearance of text.

chart A visual representation of data in a worksheet.

chart gridlines Lines extending from the axis lines across the plot area that make it easier to read and evaluate the chart data.

chart layout A predefined set of chart elements that can be quickly applied to a chart.

chart object One type of graphic object that is created using charting features included in Excel 2007. A chart object can be inserted into a worksheet or into a special chart sheet.

chart style A predefined set of chart formats that can be quickly applied to a chart.

chart title Appears at the top of a chart and is used to describe the contents of the chart.

clip art A collection of graphics that is usually bundled with a software application.

column A vertical block of cells one cell wide in the worksheet.

column chart A chart that represents data as evenly spaced bars.

column letter The border of letters across the top of the worksheet that identifies the columns in the worksheet.

conditional formatting Formatting that changes the appearance of a range based on a condition that you specify.

constant A value that does not change unless you change it directly by typing in another entry.

copy area The cell or cells containing the data to be copied; also called the source.

custom dictionary An additional dictionary you create to supplement the main dictionary.

data label A label for a data point or bar that shows the values being plotted on a chart.

data marker Represents a data series on a chart. It can be a symbol, color, or pattern, depending upon the type of chart.

data series The numbers to be charted.

default Initial program settings.

destination The cell or range of cells that receives the data from the copy area or source; also called the paste area.

destination file A document in which a linked object is inserted.

doughnut chart Like a pie chart, this chart shows the relationship of each value in a data series to the series as a whole. Each data series is displayed as a segment of a ring. It can contain more than one data series.

drawing object An object consisting of shapes such as lines and boxes that can be created using features on the Drawing toolbar.

embedded chart A chart that is inserted into another file.

embedded object Information inserted into a destination file of another application that becomes part of this file but can be edited within the destination file using the server application.

explode To separate a slice of a pie chart slightly from the other slices in the pie.

external reference A connection between the information in the destination file and the source file in a linked object. Also called a link. The external reference contains references to the location of the source file and the selection within the document that is linked to the destination file.

file property A setting that is associated with a file, such as the date or author.

fill handle A small black square located in the lower-right corner of the selection that is used to create a series or copy to adjacent cells with a mouse.

Find and Replace Feature that quickly finds and automatically replaces specific information with new information.

font A set of characters with a specific design; also called a typeface.

footer A line (or several lines) of text that appears at the bottom of each page just above the bottom margin.

format Settings such as font, color, patterns, and so forth, that affect the display of entries in a worksheet.

Format Painter A feature that applies the formats associated with the current selection to new selections.

formula An entry that performs a calculation.

formula bar The bar near the top of the Excel window that displays the cell contents.

freeze panes To fix in place on the screen specified rows or columns or both when scrolling.

function A prewritten formula that performs certain types of calculations automatically.

Goal Seek Tool used to find the value needed in one cell to attain a result you want in another cell.

gradient A gradual progression of colors and shades that can be from one color to another or from one shade to another of the same color.

graphic A nontext element or object such as a drawing or picture that can be added to a document.

group Two or more objects that behave as a single object when moved or sized.

header A line (or several lines) of text that appears at the top of each page just below the top margin.

heading Row and column entries that are used to create the structure of the worksheet and describe other worksheet entries.

keyword A word or phrase descriptive of a type of graphic.

landscape The orientation of the printed document so that it prints sideways across the length of the page.

legend A brief description of the symbols that represent the data ranges in a chart.

line chart A chart that represents data as a set of points along a line.

link A connection between the information in the destination file and the source file in a linked object. Also called an external reference. The link contains references to the location of the source file and the selection within the document that is linked to the destination file.

linked object Information created in a source file from one application and inserted into a destination file of another application while maintaining a link between files.

live link A linked object that automatically reflects in the destination document any changes made in the source document when the destination document is opened.

Live Preview An Office 2007 feature that shows how a selected formatting effect will appear in the document if it is chosen.

main dictionary The dictionary included with Office 2007.

margin The blank space around the edge of the paper.

merged cell A cell made up of several selected cells combined into one.

mixed reference A cell address that is part absolute and part relative.

Name box The area located on the left side of the formula bar that provides information about the selected item such as the reference of the active cell.

nonadjacent range Cells or ranges that are not adjacent but are included in the same selection.

number A cell entry that contains any of the digits 0 to 9 and any of the special characters + = ( ) , . / $ % ? =.

number format Affects how numbers look onscreen and when printed.

object An element that can be added to a workbook and that can be selected, sized, and moved.

operand A value on which a numeric formula performs a calculation.

operator Specifies the type of calculation to be performed.

order of precedence Order in which calculations are performed; can be overridden by the use of parentheses.

orientation The direction the output is printed on a page; portrait or landscape.

page break The location where one printed page ends and another starts.

pane A division of the worksheet window, either horizontal or vertical, through which different areas of the worksheet can be viewed at the same time.

paste area The cells or range of cells that receive the data from the copy area or source; also called the destination.

picture An illustration such as a scanned photograph.

pie chart A chart that compares parts of the whole. Each value in the data range is a slice of the pie (circle).

placeholder A graphic element that is designed to contain specific types of information.

plot area The area of the chart bounded by the axes.

point Measure used for height of type; one point equals $^{1}/_{72}$ inch.

portrait The orientation of the printed document so that it prints across the width of the page.

print area The area that is highlighted and where a page break shows where the selected range will print on a page.

radar chart A chart that compares the aggregate values of a number of data series. It displays changes in values relative to a center point.

range A selection consisting of two or more cells in a worksheet.

range reference Identifies the cells in a range.

recalculation A feature that, when a number in a referenced cell in a formula changes, automatically recomputes all formulas that are dependent on the changed value.

relative reference A cell or range reference that automatically adjusts to the new location in the worksheet when the formula is copied.

row A horizontal block of cells one cell high in the worksheet.

row number The border of numbers along the left side of the worksheet that identifies the rows in the worksheet.

sans serif A font, such as Arial or Helvetica, that does not have a flair at the base of each letter.

selection rectangle An outline border that surrounds an object when it is selected.

serial value The way Excel stores dates, with each day numbered from the beginning of the 20th century.

series formula A formula that links a chart object to the source worksheet.

serif A font, such as Times New Roman, that has a flair at the base of each letter.

sheet Used to display different types of information in Excel, including charts. The primary sheets are worksheets and chart sheets.

sheet name A descriptive name that you create to help identify the contents of the sheet.

sheet reference Used in references to other worksheets. Consists of the name of the sheet enclosed in quotes and separated from the cell reference by an exclamation point.

sheet tab On the bottom of the workbook window, the tabs where the sheet names appear.

size The height and width of a character in a font, commonly measured in points, abbreviated pt.

sizing handle Box used to size a selected object.

source The cell or range of cells containing the data to be copied.

source file The document that stores the data for the linked object.

source program The program in which an object was created.

spelling checker Feature that locates misspelled words and proposes corrections.

split window A feature that allows you to divide a worksheet window into sections.

spreadsheet A rectangular grid of rows and columns used to enter data.

stack The order in which objects are added in layers to the worksheet.

stacked-column chart A chart that displays the data values as columns stacked upon each other.

stock chart A chart that shows fluctuations in values, such as stock prices and temperature.

surface chart A chart that shows trends in values across two dimensions in a continuous curve.

synonym Words with similar meanings, such as "cheerful" and "happy."

syntax Rules of structure for entering functions.

tab scroll buttons Located to the left of the sheet tabs, they are used to scroll sheet tabs right or left.

template A file that contains settings that are used as the basis for a new file you are creating.

text A cell entry that contains text, numbers, or any other special characters.

theme A predefined set of formatting choices, consisting of different combinations of colors, fonts, and effects, that can be applied to an entire workbook in one step.

thesaurus A reference tool that provides synonyms, antonyms, and related words for a selected word or phrase.

typeface A set of characters with a specific design; also called a font.

value axis Y axis of a chart that usually contains numerical values.

value-axis title A label that describes the values on the Y axis.

variable The resulting value of a formula that changes if the data it depends on changes.

what-if analysis A technique used to evaluate what effect changing one or more values in formulas has on other values in the worksheet.

workbook The file in which you work and store sheets created in Excel 2007.

workbook window A window that displays an open workbook file.

worksheet Similar to a financial spreadsheet in that it is a rectangular grid of rows and columns used to enter data.

X axis The bottom boundary line of a chart.

XY (scatter) chart A chart that shows the relationship among the numeric values in several data series, or plots two groups of numbers as one series of XY coordinates.

Y axis The left boundary line of a chart.

Z axis The left boundary line of a 3-D chart.

Access Glossary of Key Terms

Action query A query that is used to make changes to many records in a table at once.

active window The window you can work in when multiple application windows are displayed on the screen at the same time.

aggregate functions Calculations that are performed on a range of data.

Allow Zero Length property Specified if an entry containing no characters is valid.

AND operator Used in criteria expression to narrow a search by specifying that a record must meet both conditions to be included.

ascending sort order Data that is arranged in A to Z or 0 to 9 order.

attachment control A control for a field that has an attachment data type.

Attachment data type Data type that allows multiple files of different types to be attached to a field.

AutoNumber data type Data type that enters a unique sequential number for each record as it is added to a table.

Best Fit feature A feature that automatically adjusts column width to fit the longest entry.

bound control A control that is linked to a field in an underlying table.

Caption property A property that specifies the field label other than the field name.

cell The intersection of a row and column in a datasheet where field data is entered.

character string A group of text characters.

Clipboard A temporary storage area in memory where copied or cut data is stored.

column selector bar In Query Design view, the thin gray bar just above the field name in the grid.

column width The size of a field column in Datasheet view. It controls the amount of data you can see on the screen.

common field A field that is found in two or more tables. It must have the same data type and the same kind of information in each table but may have different field names.

compact To make a copy of the database file and rearrange how the file is stored on disk for optimal performance.

comparison operator A symbol used in expressions that allows you to make comparisons. The > (greater than) and < (less than) symbols are examples of comparison operators.

composite key A primary key that uses more than one field.

compound control Controls that are associated and act as one when manipulated.

compound criterion Used to instruct the query to locate records meeting multiple criteria. The AND and OR operators are used to create a compound criterion.

control An object in a form or report that displays information, performs actions, or enhances the design.

criteria Limiting conditions that are used when specifying the information you want to appear in the query results.

criteria expression An expression that will select only the records that meet certain limiting criteria.

Crosstab query A query that summarizes large amounts of data in an easy-to-read, row-and-column format.

Currency data type Data type that allows entry of digits only and formats them to display decimal places and a currency symbol.

current field The field that is selected and will be affected by any changes you make.

current record The record containing the insertion point and that will be affected by the next action.

data type Attribute for a field that determines what type of data it can contain.

database An organized collection of related information.

Datasheet view View used to display table data or query results in a row and column format.

Date/Time data type Data type that accepts date and time entries only.

Default Value property A property used to specify a value that is automatically entered in a field when a new record is created.

descending sort order Data that is arranged in Z to A or 9 to 0 order.

design grid The lower part of the Query Design window, which displays settings that are used to define the query.

Design view View that is used to create or modify the structure of a table, form, query, or report.

destination The location where cut or copied data is inserted.

destination file The document in which a linked object is inserted.

drawing object A simple graphic consisting of shapes such as lines and boxes that can be created using a drawing program such as Paint.

export The process of copying data, tables, queries, forms, or report objects to a file outside the database.

expression A combination of operators, identifiers, and values that produce a result.

field A single category of data in a table, the values of which appear in a column of a datasheet.

field list In Query Design view, a list box that lists all the fields in the record source table. In Report Design view, a task pane that displays all the fields in the record source table.

field name A label used to identify the data stored in a field.

field property An attribute of a field that affects its appearance or behavior.

Field Size property Field property that limits a Text data type to a certain size or limits numeric data to values within a specific range.

field template A set of predefined fields from which you can select. Each field includes a field name, data type, and format settings that control the behavior and display of the field data.

filter A restriction placed on records in an open form or datasheet to temporarily isolate a subset of records.

Find and Replace A feature that helps you quickly find specific information and automatically replace it with new information.

foreign key A field that refers to the primary key field in another table.

form A database object used primarily to display records onscreen to make it easier to enter new records and make changes to existing records.

Form view View used to display records in a form.

format To enhance the appearance of the document to make it more readable or attractive.

Format property A property that specifies the way data is displayed.

graphic A nontext element or object, such as a drawing or picture, that can be added to a table.

hard-coded criteria Criteria that are entered in the criteria cell and are used each time the query is run.

header row The row at the top of a datasheet that displays the field names.

Hyperlink data type Data type that accepts hyperlink entries.

identifier A part of an expression that refers to the value of a field, a graphic object, or a property.

Indexed property Sets the field to an indexed field that controls the order of the records.

inner join Tells a query that rows from one of the joined tables correspond to rows in the other table on the basis of the data in the joined fields.

Input Mask property Restricts data that can be entered in a field to the entries you specify and controls the way the data is displayed.

join An association between fields of the same data type in multiple tables or queries.

join line In the Query Design window, the line that joins the common fields between one or more table field lists.

junction table When an association between two tables is created in which one record in either table can relate to many records in the other table, a third table, called a junction

table, is used to hold the primary key fields from the other two tables and serves as a bridge between them.

label control An unbound control that displays descriptive labels.

landscape orientation Printing orientation that prints across the length of the page.

layout Designs that control how data is displayed in a form or report.

Layout view View used to display data while allowing modifications to the design and layout of the table, query, form, or report object.

lookup field A field that lets you choose from a list of values you entered or that are from another table or query.

lookup list The list of values from which you select when using a lookup field.

Lookup Wizard Creates a lookup field.

many-to-many A type of relationship in which there is an association between two tables where one record in either table can relate to many records in the other table.

margin The blank space around the edge of a page.

Memo data type Allows up to 1GB of characters or 2GB of storage in a field of which 65,535 characters can be displayed. Entries in this field can be formatted.

multitable query A query that uses more than one table.

navigation buttons Used to move through records in Datasheet and Form views. Also available in the Print Preview window.

Navigation pane The pane to the left of the work area that is used to open and manage database objects.

normal form A set of constraints or standards that must be satisfied to meet normalization.

normalization A design technique that identifies and eliminates redundancy by applying a set of rules to your tables to confirm that they are structured properly.

Number data type Data type that allows storage of digits only in a field.

object A table, form, or report that can be selected and manipulated as a unit.

OLE Object data type Use in fields to store an object such as a graphic (picture), sound, document, or graph.

one-to-many A type of relationship in which there is an association between two tables where each record in the first table contains a field value that corresponds to the field value of many records in the other table.

one-to-one A type of relationship in which there is an association between two tables where each record in the first table contains a field value that corresponds to the field value of one record in the other table.

operator A symbol or word used to specify the type of calculation to perform in an expression.

OR operator Used in a criteria expression to broaden a search by specifying that a record may include either condition in the output.

orientation The direction the paper prints, either landscape or portrait.

outer join Specifies that although some of the rows on both sides of the join correspond exactly, the query should include all rows from one table even if there is no match in the other table.

Parameter query A query that displays a dialog box prompting you for the criteria information you want the query to use.

parameter value In a Parameter query, the value that is entered in the criteria cell rather than a specific value. The parameter value tells the query to prompt you for the specific criteria you want to use when you run the query.

picture An illustration such as a scanned photograph.

portrait orientation Printing orientation that prints the report across the width of a page.

primary key One or more fields in a table that uniquely identify a record.

Print Preview View that displays a datasheet, form, or report as it will appear when printed.

query Used to view data in different ways, to analyze data, and to change data.

record A row of a table, consisting of a group of related fields.

record number indicator A small box that displays the current record number in the lower-left corner of most views. The record number indicator is surrounded by the navigation buttons.

record source The table or query that is the underlying source of data for a form or report.

referential integrity Rules that ensure that relationships between tables are valid and that related data is not accidentally changed or deleted.

relational database A database in which a relationship is created by having a common field in the tables. The common field lets you extract and combine data from multiple tables.

relationship A relationship establishes the association between common fields in two tables.

report Professional-appearing output generated from tables or queries that may include design elements, groups, and summary information.

Report view View that displays the data in a report.

required property Specifies whether a value must be entered in a field.

row label In the design grid of Query Design view, identifies the type of information that can be entered in the row.

Select All button The square to the left of each row in Datasheet view that is used to select an entire record.

Select query A type of query that retrieves the specific data you request from one or more tables, then displays the data in a datasheet.

serial value Sequential numbers assigned to each day beginning with January 1, 1900, whose serial number is 1 through December 31, 9999, whose serial number is 2958465.

Show box A box in the Show row of the design grid that, when checked, indicates that the field will be displayed in the query result.

sort To temporarily reorder table records in the datasheet.

source The data that is copied or cut; the underlying table that provides the values in a lookup list.

source file The document in which a linked object was created.

SQL query A query that is created using SQL (Structured Query Language).

stacked layout A layout that arranges data vertically with a field label to the left of the field data.

subdatasheet A data table nested in another data table that contains data related or joined to the table where it resides.

tab order The order in which Access moves through a form or table when the Tab key is pressed.

table Consists of vertical columns and horizontal rows of information about a particular category of things.

tabular layout A layout that arranges data in rows and columns with labels across the top.

template A ready-to-use database file that includes the data structure for a selected type of database.

text control A control that is linked to a field in the record source and displays the information contained in that field.

Text data type Data type that allows up to 255 characters (combinations of letters and numbers not used in calculations) to be entered in a field.

theme colors Combinations of coordinating colors that are used in the default datasheet.

unbound control A control that is not connected to a field in an underlying table.

unequal join Records to be included in the query results are based on the value in one join field being greater than, less than, not equal to, greater than or equal to, or less than or equal to the value in the other join field.

Validation Rule property An expression that defines the acceptable values in a validity check.

Validation Text property Text that is displayed when a validation rule is violated.

value A part of an expression that is a number, date, or character string.

value list A lookup field that uses fixed values as the source for values in the list.

view One of several windows or formats that Access provides for working with and looking at data.

wildcards Symbols that are used to represent characters when specifying criteria.

wizard A feature that guides you through the steps to create different database objects based upon your selections.

Yes/No data type Data type that accepts only Yes/No, True/False, or On/Off entries.

PowerPoint Glossary of Key Terms

alignment Controls the position of text entries within a space.

animated GIF A type of graphic that has motion.

animation Effect that adds action to text and graphics so they move around on the screen.

assistant box An element in an organization chart that represents administrative or managerial assistants to a manager.

attribute A feature such as line or fill color associated with all objects in a group.

AutoCorrect Feature that makes certain types of corrections automatically as you enter text.

AutoRecover Feature that automatically saves work to a temporary recovery file.

branch A box and all the boxes that report to it in an organization chart.

cell The intersection of a row and column in a table.

character formatting Formatting features that affect the selected characters only.

chart A visual representation of numeric data.

clip art Professionally drawn images.

collect and paste Used to store multiple copied items in the Office Clipboard and then paste one or more of the items into another location or document.

comment Remark that is displayed in a separate box and attached to a presentation file.

comment box Rectangular box that displays comments.

co-worker box Boxes that have the same manager in an organization chart.

current slide The slide that will be affected by any changes you make.

custom dictionary A dictionary you can create to hold words you commonly use but that are not included in the dictionary that is supplied with the program.

custom show A presentation that runs within a presentation.

default setting The initial program setting.

demote To move a topic down one level in the outline hierarchy.

destination file The document receiving the linked or embedded object.

document theme Predefined set of formatting choices that can be applied to an entire document in one simple step.

drawing object An object consisting of shapes such as lines and boxes that can be created using the Drawing toolbar.

embedded object An object that is inserted into another application and becomes part of the document. It can be edited from within the document using the source program.

Find and Replace A feature that allows you to find text in a presentation and replace it with other text.

font A set of characters with a specific design. Also called a typeface.

font size The height and width of a character, commonly measured in points.

formatting Enhancing the appearance of a slide to make it more readable or attractive.

graph A visual representation of numeric data.

graphic A nontext element, such as a chart, drawing, picture, or scanned photograph, in a slide.

group Two or more objects that are treated as a single object.

hierarchical relationship Relative positions of elements in a group.

hierarchy Shows ranking, such as reporting structures within a department in a business.

hyperlink A connection to locations in the current document, other documents, or Web pages. Clicking a hyperlink jumps to the specified location.

Hypertext Markup Language (HTML) Language used to create Web pages.

keyword A word or phrase that is descriptive of the type of graphic you want to locate.

landscape Orientation of the printed output across the length of the paper.

layout A predefined slide organization that is used to control the placement of elements on a slide.

Live Preview Feature that automatically displays how a selected item affects a slide.

main dictionary Dictionary that comes with the Office 2007 programs.

manager box The top-level box in an organization chart.

master A special slide on which the formatting of all slides in a presentation is defined.

notes page Printed output that shows a miniature of the slide and provides an area for speaker notes.

Notes pane Working area in Normal view for entering notes to a current slide.

object An item on a slide that can be selected and modified.

object animation Used to display movement of a bullet point, text, paragraph, or graphic independently of the other text or objects on the slide.

organization chart Graphic representation of the structure of an organization.

Outline tab Working area in Normal view that displays the text content of each slide in outline format.

paragraph formatting Formatting features that affect entire paragraphs.

picture An image such as a graphic illustration or a scanned photograph.

picture style A combination of border, shadow, and shape effects applied to all pictures in a presentation.

placeholder Box that is designed to contain objects such as the slide title, bulleted text, charts, tables, and pictures.

placeholder text Sample text suggesting content for a slide.

point A unit of type measurement. One point equals about 1/72 inch.

portrait Orientation of the printed output across the width of the paper.

promote To move a topic up one level in the outline hierarchy.

publish Save a copy of a presentaion file in a format suitable to show the presentation on a Web site.

review comment thumbnail Graphic containing the initials of a person who created a comment.

rotate handle The  on the selection rectangle of a selected object that allows you to rotate the object in any direction.

sans serif font A font that does not have a flair at the base of each letter, such as Arial or Helvetica.

selection rectangle Hashed border that surrounds a selected placeholder.

serif font A font that has a flair at the base of each letter, such as Roman or Times New Roman.

sizing handles Small boxes surrounding selected objects that are used to change the size of the object.

slide An individual page of the presentation.

Slide panel Working area in Normal view that displays the selected slide.

slide show Used to practice or to present the presentation. It displays each slide in final form.

Slides tab Working area in Normal view that displays each slide as a thumbnail.

SmartArt Graphic that presents a visual representaion of textual information.

source file The file from which a linked or embedded object is obtained.

source program The program used to create the linked or embedded object.

spelling checker Locates all misspelled words, duplicate words, and capitalization irregularities as you create and edit a presentation, and proposes possible corrections.

stacking order The order in which objects are inserted into layers in the slide.

table An arrangement of horizontal rows and vertical columns.

table reference The letter and number that identify a table cell.

table style Combinations of shading, colors, borders, and visual effects such as shadows and reflection that can be applied to a table.

template A file that includes predefined settings that can be used as a pattern to create many common types of presentations.

text box A container for text or graphics.

thumbnail A miniature representation of a slide.

transition An effect that controls how a slide moves off the screen and the next one appears.

typeface A set of characters with a specific design. Also called a font.

view A way of looking at the presentation.

WordArt Feature to enhance slides by changing the shape of text, adding 3-D effects, and changing the alignment of the text on a line.

workspace The large area containing the slide where your presentations are displayed as you create and edit them.

Word Appendix

MORE ABOUT WORD 2007

1. CREATING AND CUSTOMIZING DOCUMENTS

1.1 CREATE AND FORMAT DOCUMENTS

SET THEMES AS DEFAULT

Whenever you start Microsoft Office Word 2007, the Normal.dotm template opens. It includes default settings such as margins, page size, and theme that determine the basic look of a document. You can change the settings in the Normal.dotm template so that whenever a new document is opened, the settings you specified are used in all new documents you create. To change the default theme from the Office theme to another, follow these steps:

- Click Office Button.
- Choose Open.

Do one of the following:
In Microsoft Windows Vista:

- Choose Templates, and then double-click the Normal.dotm file to open it.

In Microsoft Windows XP or Microsoft Windows Server 2003:

- Click Templates next to File name.
- Double-click Normal.dotm to open it.

Having Trouble?
If no templates are listed in the Open dialog box, open the Files of type list box, and then choose All Word Templates.

The default document template file is opened and Normal.dotm appears in the Word title bar. This file can be modified like any other file. Next, to change the theme associated with the default document template,

- Open the Page Layout tab.
- Click Themes and select a built-in theme of your choice or create your own custom theme.

If you wanted, you also could make changes to the fonts, margins, spacing, and other settings. Once you are done and the file contains the settings you want the Normal.dotm to include, you save the changes you have made to the template.

- Click Office Button and choose Save.
- Save the document as Normal.dotm to replace the contents of the template file with the new settings you specified.

Next time you open a new blank document, the new settings you specified will be the default document settings.

RESTORE TEMPLATE THEMES

Many times after applying a different theme or customizing a theme, you may decide you want to restore the default document theme. Use the following steps to restore the theme associated with the template you are using:

- Open the Page Layout tab.
- Click Themes and choose Reset to Theme from Template in the Themes menu.

The theme associated with the template file you are using is reapplied to the entire document.

CHANGE THEME COLORS

Each theme has a color scheme that consists of a set of 12 theme colors that are applied to different elements of the theme. To customize a theme, you can apply a different built-in color scheme to your selected theme or customize the theme's color scheme by changing the colors associated with the different elements. The new color scheme can then be saved as a Custom Theme Color and can then be quickly applied to other themes. Follow these steps to change theme colors:

- Open the Page Layout tab.
- Click 

and choose a theme of your choice.
- Click  Theme Colors.
- Choose Create New Theme Colors.

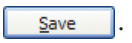
The Theme Colors dialog box identifies the colors associated with the different elements. The Sample box shows where the selected colors are used in a document. Theme colors contain four text and background colors, six accent colors, and two hyperlink colors.

- Click the button of the theme color element that you want to change.
- Choose the color that you want to use.
- In the same manner, select and change colors for all of the theme color elements that you want to change.

Additional Information

To return all theme color elements to their original theme colors, you can click Reset before you click Save.

The Sample box reflects the new colors you selected so you can see the effect of the changes that you make. Once you are satisfied with your selections, you save the color scheme.

- In the Name text box, type a name that will identify the color scheme.
- Click 

.

The custom theme color name appears at the top of the Theme Colors menu so you can quickly select and apply it to other themes.

CHANGE THEME EFFECTS

Each theme includes a set of lines and fill effects. Although you cannot create your own set of theme effects, you can apply a different built-in theme effect from another theme to your own document theme. To do this, follow these steps:

- Open the Page Layout tab.
- Click  Theme Effects in the Themes group.

The lines and fill effects that are used for each set of theme effects appear in the graphic that is displayed next to the theme effects name.

- Select the effect that you want to use.

The effects for the current theme have been changed to the selected theme effects.

1.2 LAY OUT DOCUMENTS

ADD PAGE NUMBERS

In addition to adding page numbers in headers and footers, you can insert page numbers within the text of the document. To do this, follow these steps:

- Move to the location in the text where you want the number to appear.
- Click Quick Parts in the Text group of the Insert tab.
- Choose Field.
- Choose the Numbering category.
- Select Page from the field list.
- Select a format of your choice.
- Click OK.

The number of the current page is inserted in the document at the location of the insertion point. It is a field that can be updated if the page number changes.

1.3 MAKE DOCUMENTS AND CONTENT EASIER TO FIND

ADD TEXT TO TABLE OF CONTENTS

You also can add static text (not a field) to a table of contents. For example, in the table of contents you created in Lab 3, you might want to add the continents above each country. To insert text in a table of contents, follow these steps:

- Click in the table of contents to select it.
- Move the insertion point to the location where you want to enter text.
- If you want the text on a new line, press Enter to insert a new line.
- Type the text you want to include.

Because the text you entered is static, if you regenerate the table of contents list, the text is lost and would need to be entered again. If you simply update the page numbers of the table of contents, the text remains.

MARK AN ENTRY FOR INDEXING

An index is a list of the terms and topics that are discussed in a document, along with the pages that they appear on. An index generally appears at the end of the document and makes it easy for readers to locate information in the document.

To create an index, you first mark the index entries by providing the name of the main entry and the cross-reference in your document. Then you select an index design and build the index.

To identify the text you want to appear in the index, you select the text and mark it as an index entry. Word then adds a special XE (Index Entry) field that includes the marked main entry and any cross-reference information that you choose to include.

You can create an index entry for an individual word, phrase, or symbol; a selection; or a cross-reference that refers to another entry.

To mark existing words or phrases as index entries:

- Select the text.
- Click 

in the Index group of the References tab.
- Click Mark.

To enter your own text as an index entry:

- Click where you want to insert the index entry.
- Click  in the Index group of the References tab.
- Type or edit the text in the Main entry box.
- Click Mark.

To mark entries that span a range of pages:

- Select the range of text that you want the index entry to refer to.
- Click Bookmark in the Links group of the Insert tab.
- In the Bookmark name box, type a name and then click Add.
- In the document, click at the end of the text that you marked with a bookmark.
- Click  in the Index group of the References tab.
- In the Main entry box, type the index entry for the marked text.
- Under Options, choose Page range.
- In the Bookmark box, type or select the bookmark name that you typed.
- Click Mark.
- Click Close to end marking entries.

If you want, you can customize the entry by creating a subentry, a third-level entry, or a cross-reference to another entry. You also can format the page numbers that will appear in the index using bold or italic.

CREATE THE INDEX

After you mark all the index entries, you choose an index design and build the finished index. Word collects the index entries, sorts them alphabetically, references their page numbers, finds and removes duplicate entries from the same page, and displays the index in the document.

- Click where you want to add the index.
- Click Insert Index in the Index group of the References tab.
- Select a design in the Formats box or click Modify... to design a custom index layout by modifying a built-in design.
- Select any other index options that you want, such a number of columns and page number alignment.
- Click OK to complete the command.

MODIFY AND UPDATE THE INDEX

An index, like a table of contents, is a field that can easily be updated if you add, edit, format, or delete index entries after the index is generated.

To edit or format an existing index entry:

- Locate and click on the index entry in the text (each index entry is enclosed in a special XE (Index Entry) field).
- Change the text inside the quotation marks or apply formatting.

To delete an index entry

- Select the entire index entry field, including the braces ({}), and then press Delete.

After modifying the index entries, you update the index.

- Click the index and press F9 or click Update Index in the Index group on the References tab.

The index is updated using the same index design settings. If you want to both change the design and update the index, you can regenerate the entire index again.

- Click the index and click Insert Index in the Index group of the References tab.
- Select a design in the Formats box or click Modify... to design a custom index layout by modifying a built-in design.
- Select any other index options that you want, such as number of columns and page number alignment.
- Click OK twice to complete the command and replace the existing index.

1.4 PERSONALIZE OFFICE WORD 2007

CUSTOMIZE AUTOCORRECT OPTIONS

Word includes many default program settings that you can change to personalize how Word works for you. The AutoCorrect settings make corrections to text automatically as you type. To change these settings:

- Click Office Button and click Word Options.
- Choose the Proofing group.
- Click AutoCorrect Options....
- On the AutoCorrect tab, select or clear any of the following check boxes:

  Correct TWo INitial CApitals
  Capitalize first letter of sentences
  Capitalize first letter of table cells
  Capitalize names of days
  Correct accidental use of cAPS LOCK key
  Replace text as you type
  Automatically use suggestions from the spelling checker
- Click OK.

The changes you make to the AutoCorrect settings will remain in effect until you change them again.

CUSTOMIZE THE QUICK ACCESS TOOLBAR

The Quick Access Toolbar includes three buttons initially: Save, Undo, and Redo. You can customize the Quick Access Toolbar to personalize it for your own use by adding and removing any commands that you want. The first method you can use to do this is to select the commands from a list.

- Click Office Button and click Word Options.
- Open the Customize group.
- Open the Choose commands from drop-down list and choose the command category that you want.
- In the list of commands in the selected category, click the command that you want to add to the Quick Access Toolbar and then click Add >>.
- Alternatively, to remove commands from the Quick Access Toolbar, select the command that you want to remove from the Quick Access Toolbar list and click Remove.
- After you finish adding/removing any commands that you want, click OK.

You also can add a command to the Quick Access Toolbar directly from commands that are displayed on the Ribbon. Only commands can be added to the Quick Access Toolbar. The contents of most lists, such as indent and spacing values and individual styles, which also appear on the Ribbon, cannot be added to the Quick Access Toolbar.

- On the Ribbon, click the appropriate tab or group to display the command that you want to add to the Quick Access Toolbar.
- Right-click the command and then choose Add to Quick Access Toolbar from the shortcut menu.

SET THE DEFAULT SAVE LOCATION

Word includes many default program settings that you can change to personalize how Word works for you. Among these settings are the default document format (.docx), the time interval to perform automatic backup for recovery, and locations to save files and recovered files. The default location to save a file is in the current user's My Document folder. To change the default location to save a file:

- Click Office Button and click Word Options.
- Open the Save group.
- Click Browse... next to the Default Save Location text box.
- Find the location where you want your files saved and click OK.
- Click OK to complete the change.

PERSONALIZE USER NAME AND INITIALS

Word includes many default program settings that you can change to personalize how Word works for you. You can personalize your copy by adding your user name and initials to the program settings so that this information is automatically recorded in a file's document properties.

- Click Office Button and click Word Options.
- Open the Popular group.
- Enter your name in the User Name text box.
- Enter your initials in the Initials text box.
- Click OK to complete the change.

2. FORMATTING CONTENT

2.1 FORMAT TEXT AND PARAGRAPHS

CHANGE ALL TEXT FORMATTED WITH ONE STYLE TO ANOTHER STYLE

Sometimes, you may have applied a Quick Style such as a heading to many areas in a document and then you decide to change the style to another for all those entries. To quickly change all text that is formatted in one style to another throughout the document, follow these steps:

- Select the text that is formatted using the Quick Style you want to change.
- Right-click on the selection and choose Styles/Select text with similar formatting.
- Choose another Quick Style.

All text that is formatted in the original quick style is updated to the newly selected style.

2.3 CONTROL PAGINATION

SECTION BREAKS

Section breaks, like hard page breaks, can easily be removed. When deleting section breaks, however, all formatting that was associated with that section before the break is removed and the text assumes the formatting of the following section.

- Switch to Draft view or display paragraph marks in Print Layout view so that you can see the double-dotted-line section break line.
- Select the section break that you want to delete.
- Press Delete.

4. ORGANIZING CONTENT

4.1 STRUCTURE CONTENT USING QUICK PARTS

INSERT, EDIT, AND SORT BUILDING BLOCKS

As you learned, building blocks are predesigned pieces of content, such as cover pages, that give you a head start in creating many common types of content. A feature, called the Building Block Organizer, allows you to view, organize, edit properties of, and insert building block elements.

- Click where you want to insert a building block in the document.
- Click Quick Parts in the Text group of the Insert tab.
- Choose Building Blocks Organizer.
- If you know the name, gallery, or category of the building block you want to use or modify, click the column header button to sort the building blocks by the information in the column.
- Select the building block you want to use. (A preview and description of the selected item are displayed.)
- To edit the properties of the selected item, click Edit Properties... and make any changes to the properties, such as the category or description of the building block.
- Click OK and click Yes to update the existing building block with the property changes you made.
- Click Insert to insert the building block in the document.

SAVE COMPANY CONTACT INFORMATION AS BUILDING BLOCKS

In Lab 2, you created a building block for a closing. In a similar manner, you could create a building block to save company contact information. To do this, follow these steps:

- Enter the text for the company contact information as you want it to appear when inserted in the document.
- Select the text.
- Click Quick Parts in the Text group of the Insert tab.
- Choose Save Selection to Quick Part Gallery.
- Enter a name and other information that is needed to identify and use the building block in the Create New Building Blocks dialog box and click OK.

MODIFY AND SAVE BUILDING BLOCKS

You also can modify an existing building block and use the same name. For example, you may have created a building block for the company contact information but have forgotten to include the telephone number. To do this, follow these steps:

- Insert the existing building block in the document.
- Edit the building block as needed.
- Select the text to include in the building block.
- Click Quick Parts in the Text group of the Insert tab.
- Choose Save Selection to Quick Part Gallery.
- Enter the same name to identify the building block in the Create New Building Blocks dialog box and click OK.
- Click Yes to redefine the existing building block.

INSERT HEADERS FROM QUICK PARTS AND EDIT DOCUMENT TITLES

Another way you can add information in a header or footer is to use the Quick Parts Organizer and select the header or footer building block you want to use. To do this, follow these steps:

- Click Quick Parts in the Text group of the Insert tab.
- Choose Building Blocks Organizer.
- Double-click the Gallery heading to sort the building blocks by gallery.
- Select the header building block you want to use. (A preview and description of the selected item are displayed.)
- Click Insert.

The selected header building block is inserted in the document and the header area is active, ready for you to complete or modify the placeholder information.

4.4 INSERT AND FORMAT REFERENCES AND CAPTIONS

CREATE, MODIFY, AND UPDATE A TABLE OF AUTHORITIES

A table of authorities is a list of the references in a legal document, such as to cases, statutes, and rules, along with the numbers of the pages the references appear on. The process of creating a table of authorities is similar to creating a bibliography.

First, you identify the citations by marking them. As you mark citations, you specify the category you want the citation to appear in, such as cases or statutes. You also can change or add categories of citations. To do this, follow these steps:

- Select the legal citation text that has already been entered in the document.
- Click 

in the Table of Authorities group of the References tab.
- Select the category for the citation and click Mark. Use Mark All to locate and mark identical citations in the document.
- Click Close when you are finished.
- Continue to mark all citations in the document in the same manner.

Next, you build the table of authorities. When you build a table of authorities, Word searches for the marked citations, organizes them by category, references their page numbers, and displays the table of authorities in the document. To do this, follow these steps:

- Move to the location in the document where you want the table of authorities inserted.
- Click Insert Table of Authorities in the Table of Authorities group of the References tab.

- Select All from the Categories list if you want to display citations in all categories, or select only the category you want generated.
- Select a design from the Format list or click Modify... to design a custom format by modifying the built-in template design.
- Select any other options for the table of authorities that you want to use, such a tab leaders.
- Click OK.

The table of authorities is generated. Citations appear listed in the categories that they were assigned along with the page number the citation is on. The table of authorities is a field that can be updated, just like updating a table of figures. To do this, follow these steps:

- Click the table of authorities and press F9 or click Update Table of Authorities in the Table of Authorities group on the References tab.

The table of authorities is updated using the same format settings. If you want to both change the format and update the table, you can regenerate the entire table of authorities again.

- Click the table of authorities and click Insert Table of Authorities in the Table of Authorities group of the References tab.
- Select the category and format and any other options that you want.
- Click OK to complete the command and click Yes to replace the existing table of authorities.

6. SHARING AND SECURING CONTENT

6.1 PREPARE DOCUMENTS FOR SHARING

SAVE TO APPROPRIATE FORMATS

Word 2007 uses a new file format based on the Office Open XML format (XML is short for Extensible Markup Language). This new format makes your documents safer by separating files that contain scripts or macros to make it easier to identify and block unwanted code or macros that could be dangerous to your computer. It also makes file sizes smaller and makes files less susceptible to damage. The file extensions shown in the table below are used to identify the different types of Word document files.

FILE EXTENSION	DESCRIPTION
.docx	Word 2007 document without macros or code
.dotx	Word 2007 template without macros or code
.docm	Word 2007 document that could contain macros or code
.xps	Word 2007 shared document (see note below)
.doc	Word 95–2003 document

Note: XPS file format is a fixed-layout electronic file format that preserves document formatting and ensures that when the file is viewed online or printed, it retains exactly the format that you intended. It also makes it difficult to change the data in the file. To save as an XPS file format, you must have installed the free add-in.

There are several ways to save a Word document as any of these types:

- Click Office Button and choose Save As.
- Choose Word Document or Other Formats to open the Save As dialog box.
- Open the Save as Type drop-down list and select the file type.
- Specify a name for the file and location to save it.
- Click Save.

OR

- Click Office Button and choose Save As.
- Select Word Document, Word Template, or Word 97-2003 Document. (The default file type in the Save as Type drop-down list will reflect the file type of your selection. You could still change it to any other type.)
- Specify a name for the file and location to save it.
- Click Save.

If you open a file in Word 2007 that was created in an earlier version, the automatic option in the Save As dialog box is to save it as the previous version type (.doc).

USE THE COMPATIBILITY CHECKER

In Word 2007, you can open files created in previous versions of Word, from Word 95 to Word 2003. You also can create a file in Word 2007 format and then save it as the previous version (.doc). If any 2007 features are not compatible with the previous version, the Compatibility Checker tells you so and any new features will not work. The Compatibility Checker runs automatically; however, you can run it manually if you want to find out what features in a document you are creating will be incompatible. The Compatibility Checker identifies those features that are incompatible and the number of occurrences in the document.

Follow these steps to run the Compatibility Checker:

- Click Office Button and choose Prepare.
- Choose Run Compatibility Checker.
- Click OK after looking at the features that were identified and the number of occurrences.

Excel Appendix

MORE ABOUT EXCEL 2007

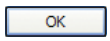
1.3 MODIFY CELL CONTENTS AND FORMATS

MORE PASTE SPECIAL OPTIONS

While copying or cutting data, you can further specify how the data is pasted into a worksheet using features in the Paste Special dialog box. Two convenient features are Transpose and Paste Values.

The Transpose option changes columns of copied data to rows, and vice versa when you select this check box. Follow these steps to transpose data:

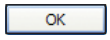
- Copy or cut the rows and columns of data you want transposed.
- Move to the location in the worksheet where you want the data pasted.
- Click 

and choose Paste Special.
- Choose Transpose from the Paste Special dialog box.
- Click 

.

The Values option pastes only the values of the copied data as displayed in the cells, without the underlying formulas. Follow these steps to copy values only:

- Copy or cut the rows and columns of data whose values you want copied.
- Move to the location in the worksheet where you want the data pasted.
- Click 

and choose Paste Special.
- Choose Values or Values and number formats from the Paste Special dialog box.
- Click 

.

1.5 MANAGE WORKSHEETS

COPY WORKSHEETS BETWEEN WORKBOOKS

Sometimes you will want to copy (or move) an entire worksheet to another workbook. The process is similar to copying between sheets in the same workbook.

To copy (or move) worksheets between workbooks, follow these steps:

- Open the workbook file you want to copy to.
- In the workbook that contains the sheets that you want to move or copy, select the sheets.
- Right-click the selected sheet tab and choose Move or Copy on the shortcut menu.
- In the To book list of the Move or Copy dialog box, select the workbook to which you want to move or copy the selected sheets or select New book to move or copy the selected sheets to a new workbook.
- In the Before sheet list, select the sheet before which you want to insert the moved or copied sheets.
- Select the Create a copy check box. (Do not select this box if you want to move the sheet.)

The entire sheet is copied (or moved) to the specified location in the selected workbook.

Another Method

You also could click 

in the Cells group of the Home tab and choose Move or Copy Sheet.

2.2 INSERT AND MODIFY ROWS AND COLUMNS

INSERT MULTIPLE ROWS OR COLUMNS SIMULTANEOUSLY

You also can insert multiple rows or multiple columns simultaneously by selecting the same number of rows or columns as you want to insert before using the command. For example, to insert three new rows, you need to select three rows. To insert three columns, select three columns. You also can insert nonadjacent rows and columns by holding down Ctrl while you make your selections.

To insert multiple rows simultaneously, follow these steps:

- Select the same number of rows as you want to insert above the row where you want them inserted.
- Open the Insert drop-down menu in the Cells group.
- Choose Insert Sheet Rows.

All rows below the selection are shifted down and the number of rows you specified in the selection are inserted.

To insert multiple columns simultaneously, follow these steps:

- Select the same number of columns as you want to insert immediately to the right of where you want to insert columns.
- Open the Insert drop-down menu in the Cells group.
- Choose Insert Sheet Columns.

The specified number of columns are inserted and all columns to the right of the selection are shifted to the right.

2.3 FORMAT CELLS AND CELL CONTENT

CREATE CUSTOM CELL FORMATS

You also can create a custom cell format by following these steps:

- Select Custom from the Number format dialog box.
- Select the format code that you want to customize from the list.
- Edit the number format code using the existing code as a starting point.

Once a custom format is created, you can apply the custom format by selecting it from the Custom list.

3.1 REFERENCE DATA IN FORMULAS

A mixed cell reference stops the adjustment of only that part of the cell reference that is absolute when the formula is copied.

To create a mixed cell reference, follow these steps:

- Move to the cell containing the formula with the cell reference you want to change.
- Change to Edit mode.
- Type a $ in front of the letter or row number of the cell reference that you want to stop adjusting.
- Press ↵Enter.

3.2 SUMMARIZE DATA USING A FORMULA

The Count and CountA functions are entered just like the Sum, Average, Min, and Max functions. The Count function returns the number of cells in a range that contain numbers and the CountA function counts the number of cells in a range that are not empty.

Follow these steps to use the Count function:

- Select Count Numbers from the Σ AutoSum drop-down menu or choose COUNT from the More Functions/Statistical category of the Function Library group in the Formulas tab.
- Select the range you want the function to apply to.
- Press ↵Enter.

The number of cells containing a number is displayed in the cell.

Follow these steps to use the CountA function:

- Choose COUNTA from the More Functions/Statistical category of the Function Library group in the Formulas tab.
- Select the range you want the function to apply to.
- Press ↵Enter.

The number of cells containing any type of entry is displayed in the cell.

4.3 APPLY CONDITIONAL FORMATTING

ALLOW MORE THAN ONE RULE TO BE TRUE

Sometimes you may want to apply several conditional formatting cell rules to the same range of cells. When this occurs, the rules are evaluated in order of precedence by how they are listed in the Rules Manager dialog box. A rule higher in the list has greater precedence than a rule lower in the list. By default, new rules are always added to the top of the list and therefore have a higher precedence, but you can change the order of precedence by using the Move Up and Move Down arrows in the dialog box.

Sometimes when multiple rules are applied to the same range, a conflict can occur if more than one conditional formatting rule evaluates to true. For example, if one rule formats a cell with a bold font and another rule formats the same cell with a red color, the cell is formatted with both a bold font and a red color. Because there is no conflict between the two formats, both rules are applied. In contrast, if one rule sets a cell font color to red and another rule sets a cell font color to green, a conflict occurs and only one can apply. The rule that is applied is the one that is higher in precedence.

To change the order of precedence of cell rules, follow these steps:

- Click 

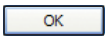
and choose Manage Rules.
- Choose This Worksheet from the Show formatting rules list.
- Select the rule that you want to move up or down in the list.
- Use the Move Up and Move Down arrows to move the selected rule above or below the rule in the list that you want to have a lower or higher precedence.
- Click Apply.

APPLY TOP AND BOTTOM RULES, COLOR SCALES, AND ICON SETS CONDITIONAL FORMATS

TOP AND BOTTOM RULES

You can find the highest and lowest values in a range of cells based on a cutoff value that you specify. For example, you can find the top five highest values or the bottom 10 percent.

To apply a Top and Bottom cell rule, follow these steps:

- Select a range of cells
- Click  and choose Top/Bottom Rules.
- Select the command that you want, such as Top 10 items or Bottom 10%.
- Enter the values that you want to use for the rules.
- Select a format you want to apply.
- Click  .

The cells in the range meeting the conditions are formatted using the selected format.

COLOR SCALES

Color scales apply a gradation of two colors to cells in a range to help you understand data distribution and variation. The shade of the color represents higher or lower values. For example, in a green and red color scale, you can specify higher-value cells have a more green color and lower-value cells have a more red color.

To apply a color scale, follow these steps:

- Select a range of cells
- Click  and choose Color Scales.
- Select a two-color scale format.

A two-color gradient color scale is applied to all cells in the range.

ICON SETS

Icon sets are used to annotate and classify data into three to five categories separated by a threshold value. Each icon represents a range of values. For example, in the 3 Arrows icon set, the red up arrow represents higher values, the yellow sideways arrow represents middle values, and the green down arrow represents lower values.

To apply an icon set to a range of cells, follow these steps:

- Select a range of cells.
- Click  and choose Icon Sets.
- Select the icon set you want to use.

The icon set you selected is applied to the range of cells.

5.4 SAVE WORKBOOKS

SAVE WORKBOOKS FOR USE IN A PREVIOUS VERSION OF EXCEL

In Excel 2007, you can open files created in previous versions of Excel, from Excel 95 to Excel 2007. You also can create a file in Excel 2007 format and then save it as the previous version (.xls). If any 2007 features are not compatible with the previous version, the Compatibility Checker tells you so and any new features will not work. The Compatibility Checker runs automatically; however, you can run it manually if you want to find out what features in a workbook you are creating will be incompatible. The Compatibility Checker identifies those features that are incompatible and the number of occurrences in the workbook.

Follow these steps to run the Compatibility Checker:

- Click Office Button and choose Prepare.
- Choose Run Compatibility Checker.
- Click OK after looking at the features that were identified and the number of occurrences.

Once you have identified those features that are incompatible, you may want to save the workbook in the format of a previous version of Excel. To do this, follow these steps:

- Click Office Button and choose Save As.
- Enter the location and file name in the Save As dialog box.
- Select Excel 97-2003 workbook (*.xls) from the Save as Type drop-down menu.
- Click Save.

If you open a file in Excel 2007 that was created in an earlier version, the automatic option in the Save As dialog box is to save it as the previous version type (.xls).

SAVE A WORKBOOK AS A TEMPLATE, A WEB PAGE, A MACRO-ENABLED WORKBOOK, OR ANOTHER APPROPRIATE FORMAT

Excel 2007 uses a new file format based on the Office Open XML formats (XML is short for Extensible Markup Language). This new format makes your workbooks safer by separating files that contain scripts or macros, which makes it easier to identify and block unwanted code or macros that could be dangerous to your computer. It also makes file sizes smaller and makes files less susceptible to damage. The file extensions shown in the table below are used to identify the different types of Excel workbook files.

FILE EXTENSION	DESCRIPTION
.xlsx	Excel 2007 workbook without macros or code
.xltx	Excel 2007 template without macros or code
.xltm	Excel 2007 workbook that could contain macros or code
.xps	Excel 2007 shared workbook (see note below)
.xls	Excel 97-2003 workbook

There are also many other formats in which a workbook file can be saved. For example, there are many situations where it is useful to save your file in a fixed-layout format that is easy to share and print and hard to modify. Two common types of file that do this are Portable Document Format (PDF) file format and XML Paper Specification (XPS) file types.

To save a workbook as either a PDF or XPS file, you must have first installed the free add-in to save or export this type of file. Then, to view a PDF file, you must have a PDF reader installed on your computer. One reader is the Acrobat Reader, available from Adobe Systems. To view a file in XPS format, you need a viewer. You or the recipient of your file can download a free viewer from Downloads on Microsoft Office Online.

Follow these steps to learn several different ways to save an Excel workbook as any of these types:

- Click Office Button and choose Save As.
- Choose Excel workbook or Other Formats to open the Save As dialog box.
- Open the Save As Types drop-down list and select the file type.
- Specify a name for the file and location to save it.
- Click Save.

OR

- Click Office Button and choose Save As.
- Select Excel Workbook, Excel Template, PDF or XPS, or Excel 97-2003 Workbook. (The default file type in the Save As Types drop-down list will reflect the file type of your selection. You could still change it to any other type.)
- Specify a name for the file and location to save it.
- If necessary, select the file type from the Save As Types list.
- Click Save.

Access Appendix

MORE ABOUT ACCESS 2007

1 STRUCTURING A DATABASE

1.3 ADD, SET, CHANGE, OR REMOVE PRIMARY KEYS

DEFINE AND MODIFY MULTIFIELD PRIMARY KEYS

Most tables have at least one field that is selected as the primary key. Some tables may use two or more fields that, together, provide the primary key of a table. When a primary key uses more than one field, it is called a composite key. The fields do not need to be the same data type.

To define multiple fields as primary keys in a table, follow these steps:

- Open the table in Design view.
- Select (highlight) the two or more fields you want to be primary keys.
- Click 

.

Now the data in both fields will operate as primary key fields. Multifield primary keys can be removed by selecting the primary key field and clicking 

to turn off this setting.

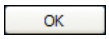
2 CREATING AND FORMATTING DATABASE ELEMENTS

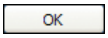
2.2 CREATE TABLES

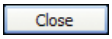
CREATE TABLES BY COPYING THE STRUCTURE OF OTHER TABLES

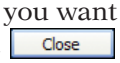
You can copy the structure of a table to another database file as a shortcut to creating a new table. Exporting the definition creates a blank copy of the table in the destination database. Follow these steps to export a table's definitions to another database:

- Open the database file that contains the table whose structure you want to copy.
- Click 

in the Export group of the External Data tab.
- Choose Access Database.
- In the File name box, specify the name of the destination database and then click 

.
- In the Export dialog box, change the name of the new object if you do not want to overwrite an existing object with the same name in the destination database.
- Select Table definition only.
- Click 

to finish the operation.
- Choose the Save export steps option if you want to save the steps and click 

; otherwise, simply click 

.

2.4. CREATE FIELDS AND MODIFY FIELD PROPERTIES

CREATE COMMONLY USED FIELDS

The steps to create Memo and Yes/No fields is the same, the only difference being the data type that you select. The resulting format and properties associated

with each data type, of course, are different. See Concept 3 in Lab 1 to review data types. The following steps are used to create Memo and Yes/No data types.

- Open the table in which you want to create a new field in Design view.
- Click in a blank Field Name row and enter a new field name.
- Open the Data Type drop-down list and choose the Memo or Yes/No data type.

MODIFY FIELD PROPERTIES: SET MEMO FIELDS AS APPEND ONLY

When creating a Memo data type field, you can set the field to Append only. When this feature is on, users can add data to the Memo field, but they cannot change or remove existing data. Follow these steps to enable append only in a memo field.

- Open the table in which you want to change the properties of a Memo field in Design view.
- Click in the memo field's Field Name row.
- Click in the Append Only property box.
- Click  Design View to open the drop-down list of options and choose Yes.

By default, when you try to position the mouse pointer in a Memo field with this property enabled, Access hides the text.

2.5 CREATE FORMS

CREATE DATASHEET FORMS

The Datasheet tool is used to create a form using all the fields in the table.

- Open the table in which you want to create a form.
- Open the Create tab.
- Click 

.
- Choose Datasheet.

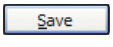
The newly created form is displayed in Datasheet view. It can be modified just like any other form by adding controls and other design elements.

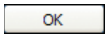
3 ENTERING AND MODIFYING DATA

3.4 ATTACH DOCUMENTS TO AND DETACH FROM RECORDS

EXPORT ATTACHMENTS

Files that have been added to an attachment field can be saved to other locations on your computer. To do this, follow these steps:

- Open the table in Datasheet view and double-click on the Attachment field cell for the record containing the attachment you want to export.
- Select the file you want to export from the Attachments dialog box.
- Choose Save As.
- In the Save Attachments dialog box, specify the name and location where you want a copy of the attached file saved.
- Click 

and then 

.

A copy of the file is saved to the specified location.

Additional Information
If you want to save all the attachments, choose Save All.

4 CREATING AND MODIFYING QUERIES

4.1 CREATE QUERIES

CREATE QUERIES BASED ON MORE THAN ONE TABLE

When two tables have fields with the same name, it is important to select the field from the table list that contains the data you want displayed in the query output. To identify which table to draw a field from, follow these steps:

- Create a query that contains multiple tables that use the same field name in at least one field.
- In Query Design view, add the field that has the same name from each table to the grid.
- Run the query to see the content from both fields.
- Remove the field from the grid whose content you do not want displayed.

SAVE FILTERS AS QUERIES

You can save a filter as a query so that the results are always available or to provide a head start in creating a query. To do this, follow these steps:

- Open the table you want to filter and specify the filter criteria.
- Click 

in the Sort & Filter group and choose Filter by Form.
- Click 

and choose Save as Query.
- Enter a name for the query in the Save As Query dialog box.

4.2 MODIFY QUERIES

ADD TABLES TO AND REMOVE TABLES FROM QUERIES

There are times that you may want to add a second copy of a table to a query to produce the results you need. To do this, follow these steps:

- Create a query that contains the table you want to use as the source.
- In Query Design view, open the Show Tables dialog box and select the same table from the list.

The duplicate table is identified with a number following the table name so that you can easily identify from which table you are specifying fields in the design grid.

CREATE JOINS

As you learned in Lab 3, an inner join is created by default. (See Concept 3 in Lab 3 to review this feature.) You also can create a left or right outer join. Left outer joins include all of the records from the first (left) of two tables, even if there are no matching values for records in the second (right) table. Right outer joins include all of the records from the second (right) of two tables, even if there are no matching values for records in the first (left) table. To change the join to a left or right outer join, follow these steps:

- Open the database file that contains the tables you want to join.
- Click 

in the Show/Hide group of the Database Tools tab.
- Click 

in the Relationships group of the Relationship Tools Design tab.

- If necessary, first create a relationship between the tables.
- Right-click the relationship line and choose Join Type.
- Select option 2 from the Join Properties dialog box to create an inner join or option 3 to create an outer join.
- Click OK twice.

5 PRESENTING AND SHARING DATA

5.5 SAVE DATABASE OBJECTS AS OTHER FILE TYPES

In addition to the Access 2007 object types, database objects can be saved in other file formats that make it easy to share and print the file and hard to modify. Two common types of files that do this are the Portable Document Format (PDF) file format and the XML Paper Specification (XPS) file types. Both these file formats preserve the original document formatting and make it ease to view the file online and print it. They also make it difficult to change the data in the file.

To save a table (or other Access object) as either a PDF or XPS file, you must have first installed the free add-in to save or export this type of file. Then, to view a PDF file, you must have a PDF reader installed on your computer. One reader is the Acrobat Reader, available from Adobe Systems. To view a file in XPS format, you need a viewer. You or the recipient of your file can download a free viewer from Downloads on Microsoft Office Online.

Follow these steps to learn how to save a database object as a PDF or XPS file type:

- Open the table or report that you want to save as PDF or XPS.
- Click Office Button, select Save As, and then choose PDF or XPS.
- Enter a file name and location to save the file.
- Open the Save as type list and choose XPS Document or PDF.
- Next to Optimize for, do one of the following, depending on whether file size or print quality is more important to you:
  - If the report requires high print quality, click Standard (publishing online and printing).
  - If the print quality is less important than file size, click Minimum size (publishing online).
- Choose Options to specify various options for the file.
- Click OK.
- In the Publish as PDF or XPS dialog box, choose Publish.

6 MANAGING AND MAINTAINING DATABASES

6.1 PERFORM ROUTINE DATABASE OPERATIONS

SAVE DATABASES AS A PREVIOUS VERSION

If you have an Office Access 2007 (.accdb) database that you want to save in an earlier Access file format (.mdb), you can do so as long as your .accdb database does not contain any multivalued lookup fields, offline data, or attachments. This is because older versions of Access do not support these new features. If you try to convert an .accdb database containing any of these elements to an .mdb file format, Access displays an error message.

Follow these steps to save an Access 2007 database file as a previous version:

- Open the database file you want to save as a previous version. Do not have any objects open.
- Click Office Button, select Save As, and from the Save the database in another format section of the menu, choose the appropriate Access file format for your needs.
- In the Save As dialog box, enter a file name for the copy of the database in the File name box and then click Save.

Access creates the copy of the database and then opens the copy. Access automatically closes the original database.

6.2 MANAGE DATABASES

CONFIGURE DATABASE OPTIONS: ENABLE ERROR CHECKING

Access can display error indicators in controls in forms and reports that experience one or more types of errors. The indicators appear as triangles in the upper-left or upper-right corner of the control, depending on how you set the default text direction. The default indicator color is green, but you can change that to suit your needs. Error checking is on by default, and clearing this check box disables all types of error checking.

To enable error checking if it is off, follow these steps:

- Click Office Button and click Access Options.
- Open the Object Designer area and choose Enable error checking from the Error Checking section of the dialog box.
- Click OK.

CONFIGURE DATABASE OPTIONS 2: SHOW/HIDE THE NAVIGATION PANE

The Navigation pane is on by default and displayed automatically when you open a database file. If you do not want the pane to appear when you open a specific database file, you can turn off this feature.

To turn on or off the display of the Navigation pane, follow these steps:

- Click Office Button and click Access Options.
- Open the Current database area and choose Display Navigation Pane in the Navigation section to select or deselect this option.
- Click OK.

PRINT DATABASE INFORMATION USING THE DATABASE DOCUMENTER

Access 2007 includes a feature that will quickly create a report showing all the properties and details of the different objects in a database. This report is created using the Database Documenter tool.

To create a database report using the Database Documenter, follow these steps:

- Open the database file on which you want to create a report.
- On the Database Tools tab, click Database Documenter in the Analyze group.
- From the Documenter dialog box, select the tab that corresponds to the type of object on which you want to create a report.
- Select the objects that you want to document and then click OK.

The database report is created, opened, and displayed in Print Preview by default.

Word Reference 1

Data File List

Use	Create
Lab 1	
wd01_Flyer1.docx	
wd01_Lions.wmf	Flyer.docx
wd01_Parrot.wmf	Flyer1.docx
Step-by-Step	
1.	Web Site Memo.docx
2. wd01_Child on Bike.wmf	Bike Event.docx
3. wd01_Coffee.wmf	Grand Re-Opening.docx
4. wd01_Note Taking Skills.docx	Note Taking Skills.docx
5. wd01_History of Ice Cream.docx wd01_Ice Cream.wmf	Ice Cream History.docx
On Your Own	
1.	Mexico Adventure.docx
2.	Pool Rules.docx
3.	Astronomy Basics.docx
4.	Volunteer Opportunities.docx
5.	Career Report.docx
Lab 2	
wd02_Tour Letter.docx wd02_Flyer2.docx	Tour Letter2
Step-by-Step	
1. wd02_Note Taking Tips.docx Note Taking Skills.docx (Lab 1)	Note Taking Skills2.docx
2. wd02_Water Conservation.docx wd02_Conservation Tips.docx wd02_Water Hose	Water Conservation Column.docx
3. wd02_Fitness Fun.docx	Fitness Fun Flyer.docx
4.	Conference Volunteers.docx
5. wd02_Coffee Flyer.docx	Weekly Specials.docx

Use	Create
On Your Own	
1.	Reference Letter.docx
2.	Cell Phone Rates.docx
3.	Yard Sale Flyer.docx
4.	Wyoming Facts.docx
5.	Ethics Report.docx
Lab 3	
wd03_Tour Research.docx	Research Outline.docx
wd03_Giraffe.wmf	Tour Research.docx
wd03_Parrots.wmf	
Step-by-Step	
1.	Spam Outline.docx
2.	ARS Department Contacts.docx
3. wd03_Digital Cameras.docx	Digital Cameras.docx
wd03_Camera.wmf	
wd03_Computer.wmf	
4. wd03_ATT Brochure.docx	ATT Brochure.docx
wd03_ATT.wmf	
wd03_Hiking.wmf	
wd03_Kayaking.wmf	
wd03_Tracey.wmf	
wd03_Train.wmf	
5. wd03_Yoga Guide.docx	Yoga Guide.docx
wd03_History.wmf	
wd03_Yoga Pose.wmf	
On Your Own	
1. wd03_Kayaking flyer.docx	Kayaking Flyer.docx
wd03_Kayaking.wmf	
2. wd03_Coffee Outline.docx	Coffee Report.docx
3.	Job Search.docx
4.	Research.docx
5.	Computer Viruses.docx
Working Together 1	
wdwt_Presentations.docx	New Tour Presentations.html
wdwt_Locations.docx	Tour Locations.html
Step-by-Step	
1. wdwt_LosAngeles.docx	LosAngeles.html
Tour Locations (Lab WT1)	
2. Bike Event.docx (Lab 1)	Celebrate Bicycling.html
3. Grand Re-Opening.docx (Lab 1)	Café Locations.html
	Cafe Flyer.html
wdwt_Coffee.wmf	
wdwt_Café Locations.docx	

Excel Reference 1

Data File List

Open	Create/Save As
Lab 1	
ex01_Cafe Forecast1	Café Forecast Café Forecast1
Step-by-Step	
1. ex01_Animal Housing	Animal Housing Analysis
2. ex01_US Hurricanes	US Hurricanes Analysis
3. ex01_Family Income	Family Income
4. ex01_Publishing Salaries	Publishing Salaries2
5. ex01_Pecan Groves Budget	Pecan Groves Budget2
On Your Own	
1.	Calorie Tracking
2.	Personal Budget
3.	Project Hours
4.	Music Analysis
5.	Home Electronics Analysis
Lab 2	
Ex02_Cafe Sales Ex02_Internet Café.wmf	Café Sales Forecast
Step-by-Step	
1. ex02_Credit Data ex02_Credit Card.bmp	Teens and Credit
2. ex02_Music Download Analysis ex02_MP3 player.bmp	Music Download Analysis
3. ex02_Adoptions ex02_Pets.bmp	Adoption Tracking
4. ex02_Basketball.bmp ex02_Volleyball.bmp	Youth Sports Data
5. ex02_Computer Girl.bmp ex02_Computer Boy.bmp	Teen Online Activities

Open	Create/Save As
On Your Own	
1. ex02_Job Market	Seminar
2.	Grades
3.	Mutual Funds
4. ex02_Graduate School	Graduate School2
5.	Insurance
Lab 3	
ex03_First Quarter Forecast	Forecast3
ex03_Annual Forecast	Café Forecast/Annual Forecast
Step-by-Step	
1. ex03_Juice Bar	Juice Bar
2. ex03_Cookie Time	Cookie Time
3. ex03_Paris Tour	Tour Analysis/Paris Tour
4. ex03_Grade Report	Grade Analysis/Grade Report
5. ex03_Doggie Day Care	Doggie Day Care
On Your Own	
1. Personal Budget (from Lab 1)	Personal Budget2
2.	Business/Company Expenses
3.	Housing/House Analysis
4.	Inventory Tracking
5.	My Business
Working Together 1	
exwt1_Sales Forecast Memo.docx	Sales Forecast Memo.docx
exwt1_Sales Charts	Sales Forecast Linked
exwt1_Second Quarter Memo.docx	Second Quarter Memo.docx
exwt1_Second Quarter	
Step-by-Step	
1. exwt1_Rescue Memo.docx exwt1_Contributions	Rescue Memo Linked.docx Contributions
2. exwt1_Tour Status Report.docx exwt1_Adventure Travel Status	March Status Report.docx Adventure Travel Status
3. exwt1_Home Price Memo.docx exwt1_Real Estate Prices	Home Price Memo.docx

Access Reference 1

Data File List

Supplied/Used	Created/Saved As
Lab 1	
ac01_Roberta.jpg (graphic) ac01_Resume (Word document)	Club Employees: Employee Records (table) Job (table)
Step-by-Step	
1.	Oak Ridge School: Students (table)
2. ac01_Guitar.jpg (graphic)	EchoPlex: Records
3.	County Library: Catalog (table)
4. ac01_Flavoring.jpg (graphic)	Cafe Inventory: Stock (table)
5. ac0_Valdez.jpg (graphic)	Kodiak Construction: Jobs, Clients, Foremen (tables)
On Your Own	
1.	Valley View News: Advertisers (table)
2.	Music Collection: CD Catalog (table)
3.	Dental Patients: Personal Information (table)
4.	Timeless Treasures: Watches (table)
5.	EMP Enterprises: Employee Expenses, Employee Info (table)
Lab 2	
ac02_Employees ac02_Employees: Records (form) ac02_Carlos.jpg (graphic)	
Step-by-Step	
1. ac02_Second Time Around	ac02_ Second Time Around: Inventory (form)
2. ac02_Enterprise Employment Agency	ac02_Enterprise Employment Agency: Candidate Information (form)
3. ac02_ARF Database ac02_WhiteDog.jpg (graphic)	ac02_ARF Database: Animals (form)
4. ac02_Kodiak Construction	ac02_Kodiak Construction: Jobs (form)
5. ac02_EchoPlex	ac02_EchoPlex: Records (form)

Supplied/Used	Created/Saved As
On Your Own	
1. ac02_ATT Database	ac02_ATT Database: Travel Packages (form)
2. EMP Enterprises (from Lab 1)	EMP Enterprises: Expenses (form)
3. Dental Patients (from Lab 1)	Dental Patients: Patient Data (form)
4. ac02_Lewis Personnel	ac02_Lewis Personnel: Phone List (form)
5. Timeless Treasures (from Lab 1)	Timeless Treasures: Watches (form)
Lab 3	
ac03_Personnel	ac03_Personnel: City/State/Zip Code (table) Car Pool Query (query) Location Query (query) Find duplicates for Personal Data (query) Personal Data without Matching Job Information (query) Maldin to Landis Car Pool Report (report) Job Position Report (report) ac03_Personnel/current date
Step-by-Step	
1. ac03_ Scensations Spa	ac03_ Scensations Spa: City/State/Zip 40+ Clients (query) 40+ Clients Report (report)
2. ac02_EchoPlex (from Lab 2)	ac02_EchoPlex: Shipping List (query)
3. ac03_Cafe Inventory	ac03_Cafe Inventory: Low Stock (query) Stock Report (report)
4. ac02_ Kodiak Construction (from Lab 2)	ac02_ Kodiak Construction: Priority (query) Job Priority Report (report)
5. ac03_ARF3	ac03_ARF3: 2008 Foster Parents (query) 2008 Foster Parents Report (report)
On Your Own	
1. Timeless Treasures (from Lab 2)	Timeless Treasures: Clocks (table) Timeless Treasures Watches Inventory (report) Timeless Treasures Watches Inventory (report)
2.	P&P Employees: Employees (table) Employee Addresses (report)
3. ac03_LearnSoft	ac03_Learnsoft: Project Manager Report
4. ac03_ARF3	ac03_ARF3: Animal-Foster Query (query) Foster Report (report)
5. EMP Enterprises (from Lab 2)	EMP Enterprises: Pending Payment (query) Open Expense Requests (report)

Supplied/Used	Created/Saved As
Working Together 1	
acwt1_Personnel	Landis Job Positions (Excel) River Mist Job Positions (Excel) Job Position Report (Word document)
acwt1_Job Positions (Word document)	Job Positions (Word document)
Step-by-Step	
1. ac03_ Scensations Spa (from Lab 3)	40+ Spa Clients (Word document)
2. ac03_Cafe Inventory (from Lab 3)	ac03_Cafe Inventory: Special Orders (query) Special Orders (Excel worksheet)
3. ac02_Kodiak Construction (from Lab 3)	ac02_Kodiak Construction: Top Priority (query) Kodiak Top Priority (Word document)

PowerPoint Reference 1

Data File List

Supplied/Used	Created/Saved As
Lab 1	
Within Lab	
pp01_Product (template)	
	Volunteer
pp01_Volunteer1	Volunteer1
pp01_Puppy (graphic)	
pp01_Dog (graphic)	
Step-by-Step	
1. pp01_Triple Crown	Triple Crown Presentation
pp01_Jump (graphic)	
pp01_Stream (graphic)	
2. pp01_Resume	Resume1
pp01_Success (graphic)	
3. pp01_Distracted Driving	Distracted_Driving
pp01_Cell Phone	
pp01_Car Logo (graphic)	
4. pp01_Claremont Hotel	
pp01_Claremont Hotel Logo (graphic)	Claremont Hotel Orientation
5. pp01_Interviewing	Interviewing Basics
pp01_Interview (graphic)	
On Your Own	
1. pp01_Internet Policy	Internet Policy
2. pp01_Memo	Phone Etiquette
3.	Car Maintenance
4.	School Rules
5. pp01_Animal Careers	Careers with Animals

Supplied/Used	Created/Saved As
Lab 2	
Within Lab	
pp02_Volunteer2	Volunteer2
pp02_Question Mark (graphic)	
Step-by-Step	
1. pp02_Fad Diets	Fad Diets
pp02_Grape Fruit (graphic)	
2. pp02_Sleepy Time Staff Training	Sleepy Time Training
3. Interviewing Basics (from Lab 1)	Interviewing Basics2
4. Triple Crown Presentation (from Lab 1)	Triple Crown Presentation2
5. pp02_Coffee Talk	Coffee Talk
pp02_Coffee Pot (graphic)	
On Your Own	
1.	Custom Closets
2. Car Maintenance (from Lab 1)	Car Maintenance2
3. Careers with Animals (from Lab 1)	Careers with Animals2
4. Internet Policy (from Lab 1)	Internet Policy2
5.	Travel Favorites
Lab 3	
Within Lab	
pp03_Volunteer3	Animal Angels Orientation
pp03_Animal Rescue Fund Raising	Volunteer Orientation Web
pp03_Orientation Outline (Word)	
pp03_Adoptions (graphic)	
Step-by-Step	
1. Interviewing Basics2 (from Lab 2)	Interviewing Basics3
pp03_Interview (graphic)	
2. pp03_Exercise	Fitness and Nutrition
pp03_LFC Logo (graphic)	
3. pp03_Employee Motivation	Employee Motivation2
	Employee Motivation2 Web
pp03_Motivation Techniques	
pp03_Motivation (graphic)	

Supplied/Used	Created/Saved As
4. pp03_Doggie Travel	Doggie Travel Tips
pp03_Car Trip Tips	
5. pp03_Flu Prevention	Flu Prevention Seminar
pp03_Flu Prevention Techniques	
pp03_Flu Symptoms	
pp03_Flu (graphic)	
pp03_Objectives (graphic)	
pp03_Hands (graphic)	
pp03_Vaccine (graphic)	
On Your Own	
1.	Digital Darkroom
2. pp03_Lifeguard	Lifeguard Presentation
3. Travel Favorites (from Lab 2)	Travel Favorites2
4.	Mountain Flyer Orientation
5.	Preventing Network Infection
Working Together	
Within Lab	
ppwt_Volunteer Orientation	Volunteer Orientation
	Volunteer Orientation Email (Word)
ppwt_Volunteer Orientation Review	Volunteer Orientation2
ppwt_Volunteer Steps (Word)	
ppwt_Volunteer Letter (Word)	Volunteer Presentation Letter (Word)
ppwt_Dog Wagging (graphic)	
Step-by-Step	
1. ppwt_MassagePrices (Word)	
ppwt_Massage Therapy	Massage Therapy
2. ppwt_Fitness Presentation Letter (Word)	Fitness Presentation Letter (Word)
ppwt_Fitness and Nutrition Presentation	
3. ppwt_Sports Company Letter (Word)	Sports Company Letter (Word)
ppwt_Sports Company Kiosk Presentation	

Word Reference 2

Microsoft Certified Applications Specialist (MCAS)

Microsoft Office Word 2007

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment.

After completing the labs in the Microsoft Office Word 2007 Brief edition, you have learned the following MCAS skills:

Description	Lab
1. Creating and Customizing Documents	
1.1 Create and Format documents	
Work with templates	Lab 1
Apply Quick Styles to documents	Lab 3
Format documents by using themes	Lab 3, More About
Customize themes	Lab 3, More About
Format document backgrounds	Lab 1
Insert blank pages or cover pages	Lab 3
1.2 Lay Out Documents	
Format Pages	Labs 1, 2, More About
Create and modify headers and footers	Lab 3
1.3 Make Documents and Content Easier to Find	
Create, modify, and update tables of contents	Lab 3, More About
Create, modify, and update indexes	More About
Modify document properties	Lab 1
Insert document navigation tools	Lab 3, Working Together 1
1.4 Personalize Office Word 2007	
Customize Word options	Lab 1

Description	Lab
2. Formatting Content	
2.1 Format text and paragraphs	
Apply styles	Labs 2, 3, More About
Create and modify styles	Lab 3
Format characters	Labs 1, 2
Format paragraphs	Labs 1, 2
Set and clear tabs	Lab 2
2.2 Manipulate text	
Cut, copy, and paste text	Lab 2
Find and replace text	Lab 2
2.3 Control pagination	
Insert and delete page breaks	Labs 2, 3
Create and modify sections	Lab 3
3. Working with Visual Content	
3.1 Insert illustrations	
Insert pictures from files and clip art	Labs 1, 3
Insert shapes	Lab 2
3.2 Format illustrations	
Format text wrapping	Lab 3, Working Together 1
Format by sizing	Lab 1
Add text to SmartArt graphics and shapes	Lab 2
4. Organizing Content	
4.1 Structure content by using Quick Parts	
Insert building blocks in documents	Lab 3, More About
Save frequently used data as building blocks	Lab 3, More About
Insert formatted headers and footers from Quick Parts	Lab 3, More About
Insert fields from Quick Parts	Lab 3
4.2 Use tables and lists to organize content	
Create tables and lists	Labs 2, 3
Sort content	Labs 2, 3
Modify list formats	Lab 2
4.3 Modify tables	
Apply Quick Styles to tables	Lab 3
Modify table properties and options	Lab 3
Merge and split table cells	Lab 3

Description	Lab
4.4 Insert and format references and captions	
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Insert citations and captions	Lab 3
Insert and modify bibliographies	Lab 3
Select reference styles	Lab 3
Create, modify, and update tables of figures	Lab 3
Create, modify, and update tables of authorities	More About
5. Reviewing Documents	
5.1 Navigate documents	
Move quickly using the Find and Go To commands	Labs 2, 3
Change window views	Labs 1, 2, 3
6. Sharing and Securing Content	
6.1 Prepare documents for sharing	
Save to appropriate formats	Lab 1, Working Together 1
Identify document features not supported by previous versions	More About

Excel Reference 2

Microsoft Certified Applications Specialist (MCAS)

Microsoft Office Excel 2007

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment.

After completing the labs in the Microsoft Office Excel 2007 Brief edition, you have learned the following MCAS skills:

Skill/Description	Lab
1. Creating and Manipulating Data	
1.1 Insert data using AutoFill	Labs 1, 3
1.3 Modify cell contents and formats	Labs 1, 2, 3, WT1, More About
1.4 Change worksheet views	Labs 2, 3, Common Features
1.5 Manage worksheets	Lab 3, More About
2. Formatting Data and Content	
2.1 Format worksheets	Labs 1, 2, 3
2.2 Insert and modify rows and columns	Lab 1, More About
2.3 Format cells and cell content	Labs 1, 2, 3, More About
3. Creating and Modifying Formulas	
3.1 Reference data in formulas	Labs 1, 3, More About
3.2 Summarize data using a formula	Labs 1, 3, More About
3.8 Display and print formulas	Lab 1
4. Presenting Data Visually	
4.1 Create and format charts	Lab 2
4.2 Modify charts	Lab 2

Skill/Description	LAB
4.3 Apply conditional formatting	Lab 3, More About
4.4 Insert and modify illustrations	Lab 2
5. Collaborating and Securing Data	
5.3 Prepare workbooks for distribution	Lab 2
5.4 Save workbooks	Lab 1, More About
5.5 Set print options for printing data, worksheets, and workbooks	Labs 1, 2, 3

Access Reference 2

Microsoft Certified Applications Specialist (MCAS)

Microsoft Office Access 2007

The Microsoft Certified Applications Specialist (MCAS) certification program is designed to measure your proficiency in performing basic tasks using the Office 2007 applications. Getting certified demonstrates that you have the skills and provides a valuable industry credential for employment.

After completing the labs in the Microsoft Office Access 2007 Brief edition, you have learned the following MCAS skills:

Skill	Lab
1. Structuring a Database	
1.1 Define data needs and types	Lab 1
1.2 Define and print table relationships	Lab 3
1.3 Add, set, change, or remove primary keys	Lab 1, More About
1.4 Split databases	
2. Creating and Formatting Database Elements	
2.1 Create databases	Lab 1
2.2 Create tables	Lab 1, More About
2.3 Modify tables	Labs 1, 2, 3
2.4 Create fields and modify field properties	Labs 1, 2, 3, More About
2.5 Create forms	Lab 2, More About
2.6 Create reports	Lab 3
2.7 Modify the design of reports and forms	Labs 2, 3
3. Entering and Modifying Data	
3.1 Enter, edit, and delete records	Lab 1
3.2 Navigate among records	Labs 1, 2
3.3 Find and replace data	Lab 2
3.4 Attach documents to and detach from records	Lab 1, Working Together 1, More About
3.5 Import data	
4. Creating and modifying queries	
4.1 Create queries	Lab 3, More About
4.2 Modify queries	Lab 3, More About

Skill	Lab
5. Presenting and Sharing Data	
5.1 Sort data	Labs 2, 3
5.2 Filter data	Labs 2, 3
5.3 Create and modify charts	
5.4 Export data	Working Together 1
5.5 Save database objects as other file types	More About
5.6 Print database objects	Labs 1, 2, 3
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6.1 Perform routine database operations	Labs 1, 2, 3, More About
6.2 Manage Databases	Lab 2, More About

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