

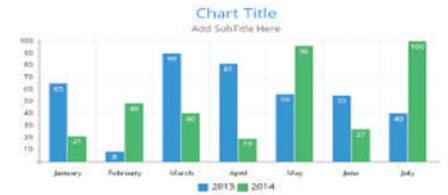


RGYCSM



RAJEEV GANDHI YOUTH COMPUTER SAKSHARTAMMISSION

RGYCSM



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- WORD
- EXCEL
- POWER POINT
- ACCESS

Office



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MS OFFICE WORD



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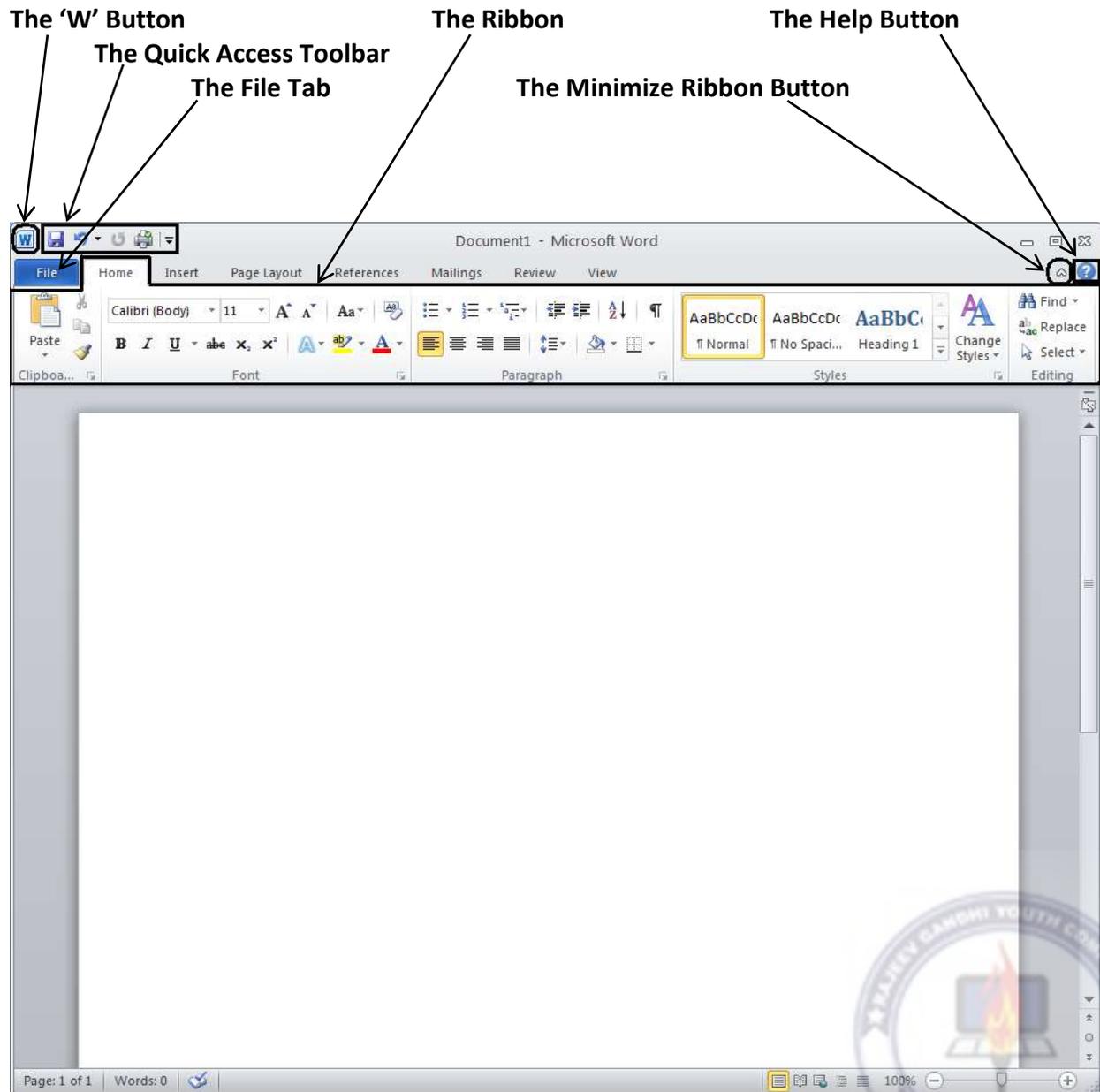
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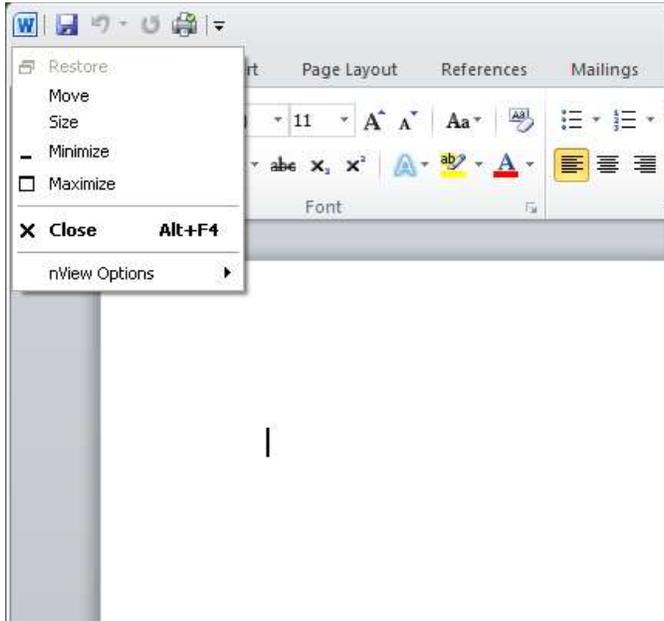
A New Look

In Word 2010, there have been some features that are new or have been re-added and some features that have been removed from past versions of Word. The biggest visual change has been the replacement of the Office 2003 Command Line (File Edit View Insert...) for The Ribbon. The Office Button in Office 2007 has gone away and replaced by the File Tab. These features will be described in the following pages.



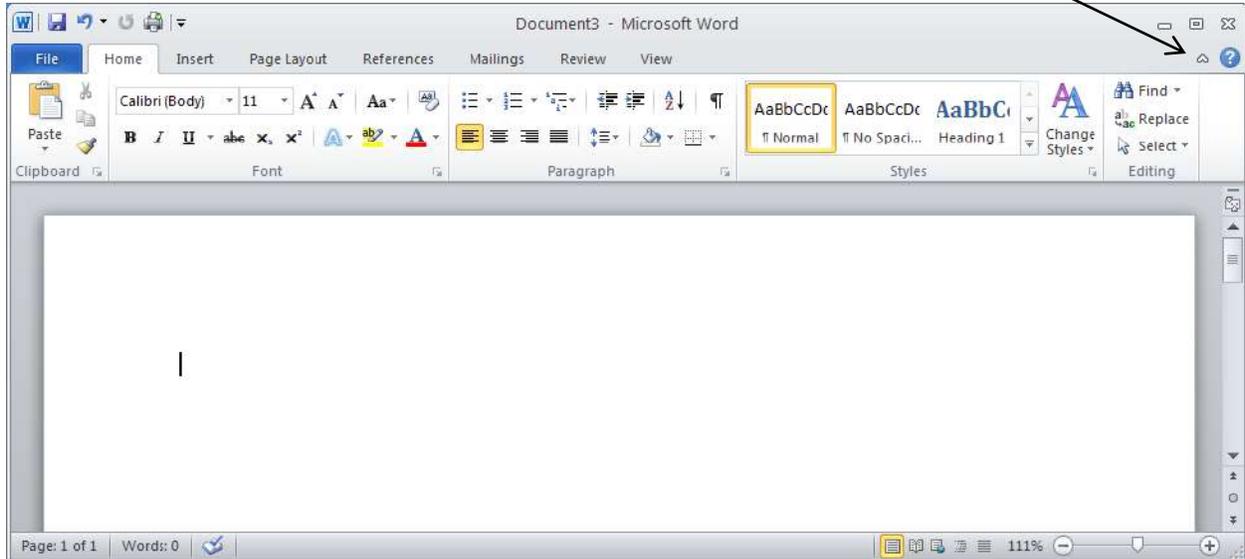
The W Button

This button was removed in Office 2007 and makes its return in 2010. This button is convenient in that you can Minimize, Maximize or Close Word without having to traverse your mouse across the entire screen to the right corner to perform these same actions. With our monitors getting larger, this is a nice feature.



The Minimize Ribbon Button

While reading over a document, it may be convenient at times to minimize the Ribbon. To minimize, just click on the 'up arrow' symbol.

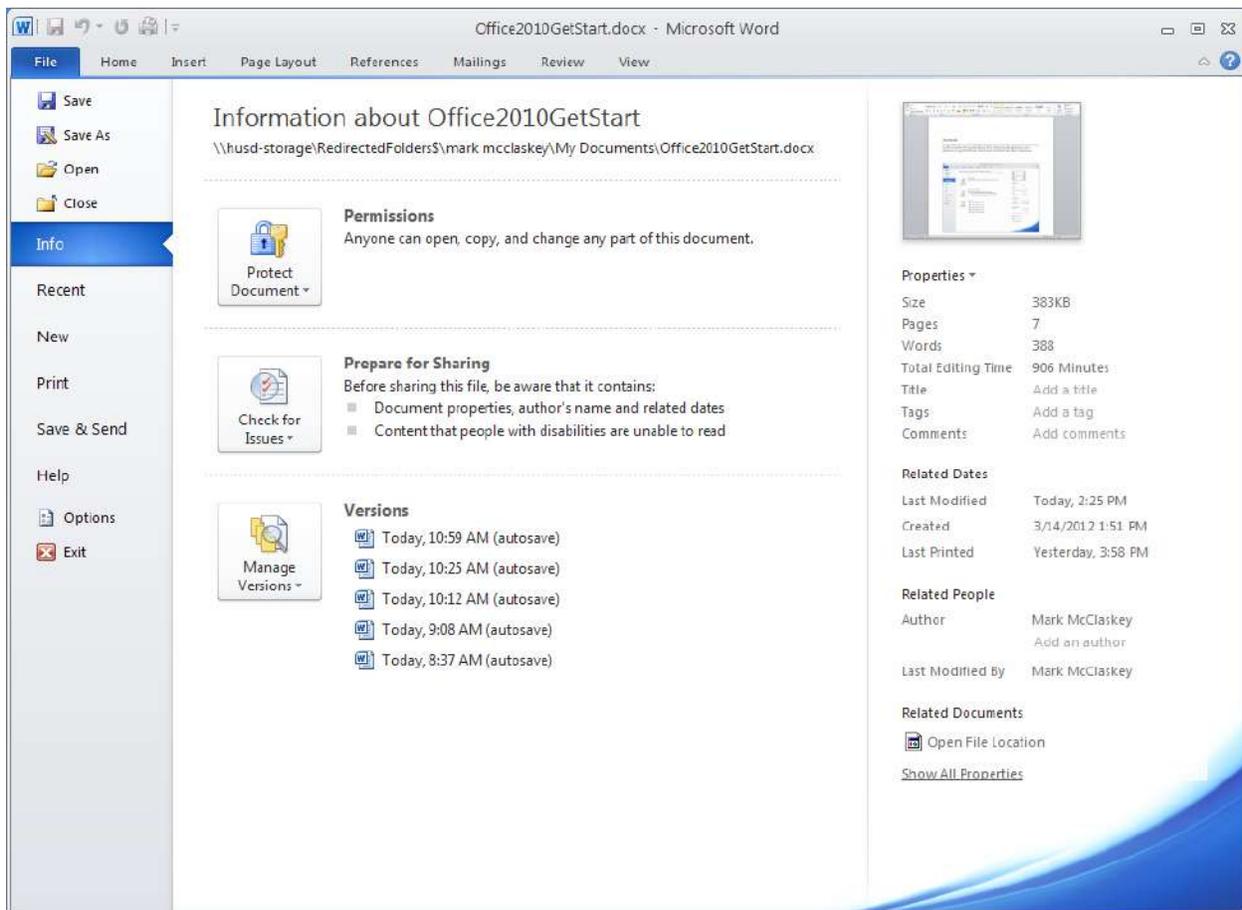


To maximize the Ribbon, click on the 'down arrow' symbol.



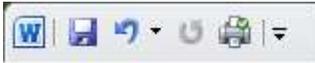
The File Tab

The File tab is basically the same look as the File command for Office 2003 users. You will still see the same commands such as, Save, Save As, New, Print, etc. For Office 2007 users, the Office Button has gone away and has been replaced by the File tab. Here, you will still find the basic file commands. The screen below is the default with Info being highlighted in the left column and the right side giving you more information about your document like file size, number of words and pages.

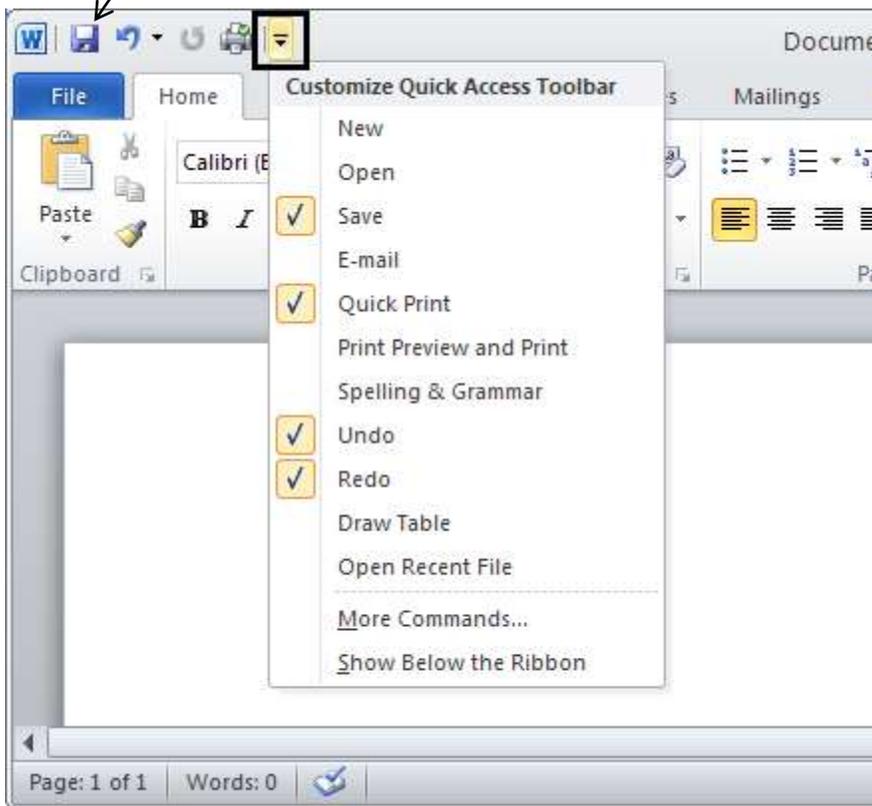


The Quick Access Toolbar

The Quick Access Toolbar is located in the upper left corner and is intended to store the buttons you will use most often.

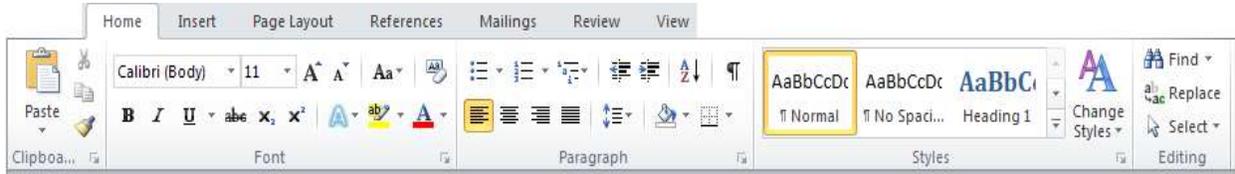


By default, the Quick Access Toolbar shows the Save, Undo, and Redo buttons, however if you click on the drop down arrow just to the right, you can customize it to fit your needs. In the example below, I have added the Quick Print button. The Save icon (which appears as a floppy diskette symbol) is convenient to click on when wanting to save your work instead of clicking on the Save icon from the File tab.



The Ribbon

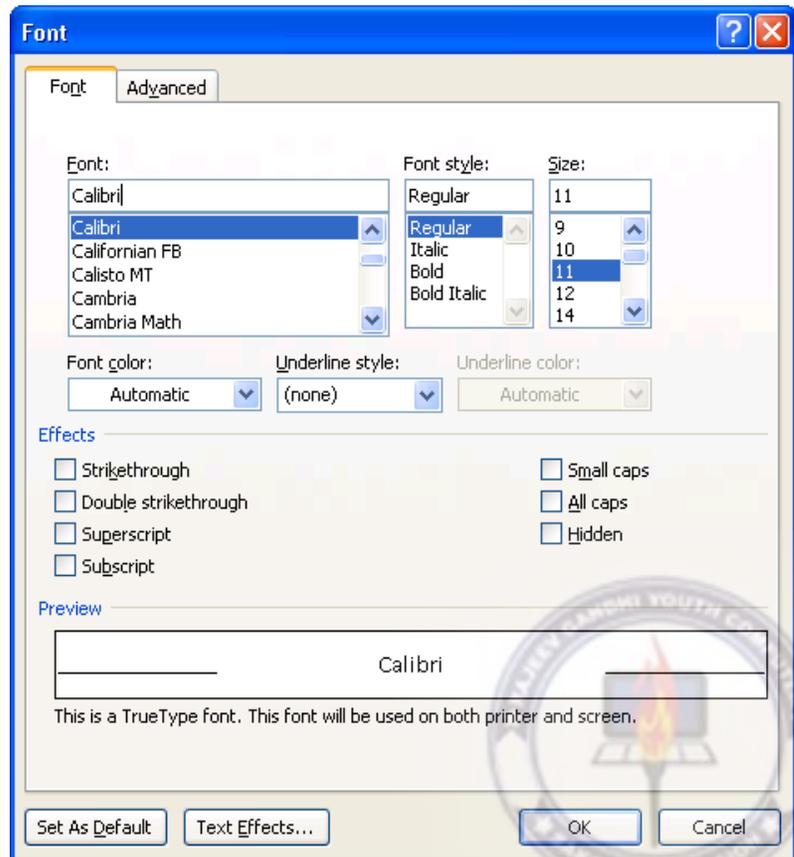
The Ribbon is designed to replace the menus and toolbars of Office 2003. The goal of the Ribbon is to keep commands visually up front so that they are easy to access as you work.



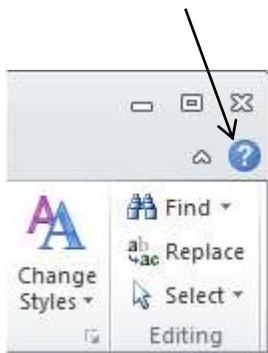
The Ribbon is divided into what are called Groups (Clipboard, Font, Paragraph and Styles, etc.). Each Group has a triangular icon in the lower right hand corner. Clicking this will bring up an additional menu window. For example, clicking the triangle in the Font group brings up the classic Font options window.



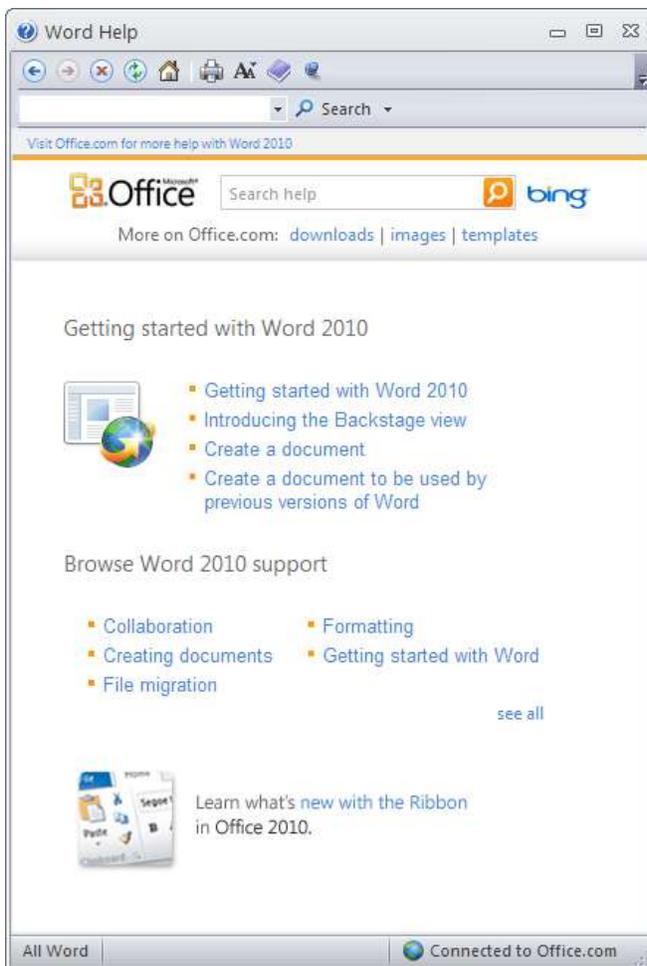
You will find that most of your needs can be found right on the Ribbon Group itself.



The Help Button

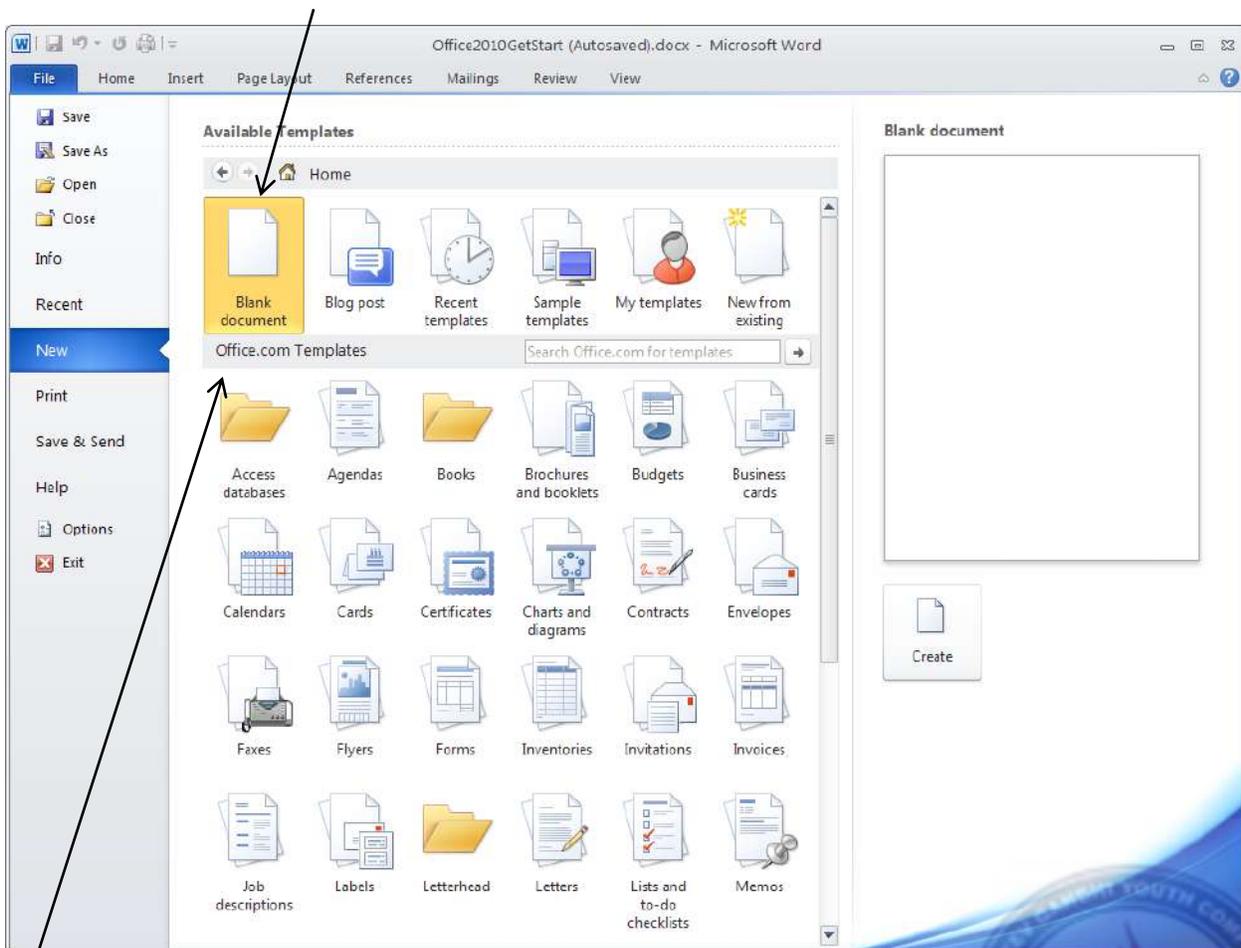
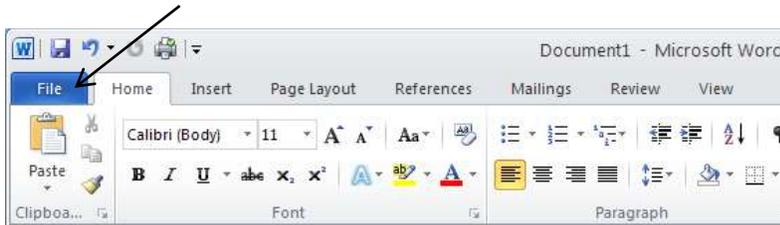


There is so much that Word can do in the latest version that it's hard to know everything. If you want information on a topic, click on the '?' symbol in the upper right hand corner and the Help window will appear like below. You will see common topics to click on or you can type in a word or question in the search field to find further information.



Create a Document

Getting started with a basic document in Microsoft Word 2010 is as easy as opening Word and beginning to type. Or, if you want to create an additional document besides the one you already have opened, click on the **File** tab, click on **New** in the left column, then double click on **Blank document** and a new document window will appear.

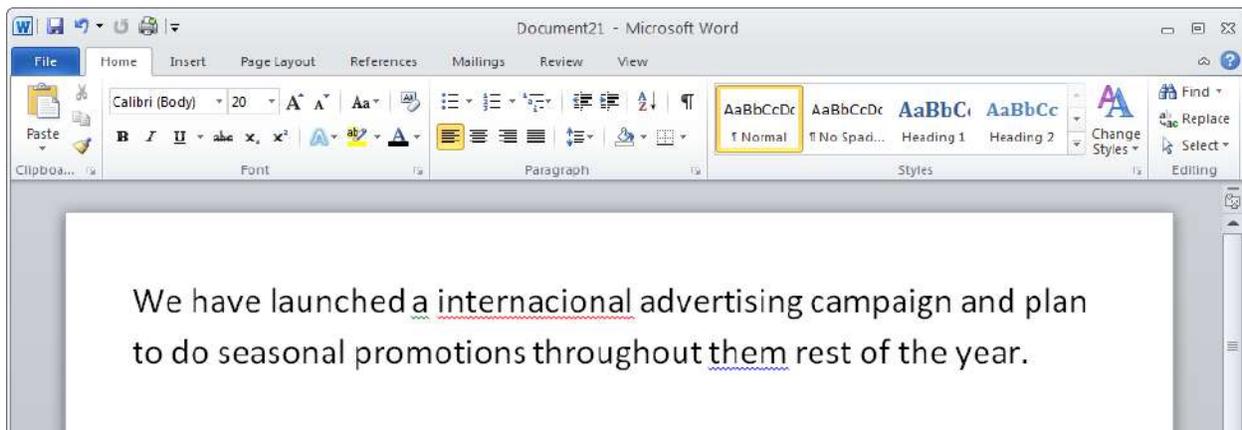


You can also start a document from a template from the **New** view as well. There are many to download and choose from if you are on the Internet from Office.com like Letters, Flyers and Forms. If there is no Internet connection, you may choose from the **Sample templates** under **Available Templates**.

Spelling and Grammar Mistakes

As you type, Word will warn you if you make spelling or grammar mistakes by inserting a wavy red, green, or blue underline beneath the text that it thinks is an error. Red underline: This indicates either a possible spelling error or that Word doesn't recognize a word, such as a proper name or place. Green underline: Word thinks that grammar should be revised. Blue underline: A word is spelled correctly but does not seem to be the correct word for the sentence. For example, you type "too," but the word should be "to."

You right click an underlined word to see the suggested revisions. Click a revision to replace the word in the document and get rid of the underlines.

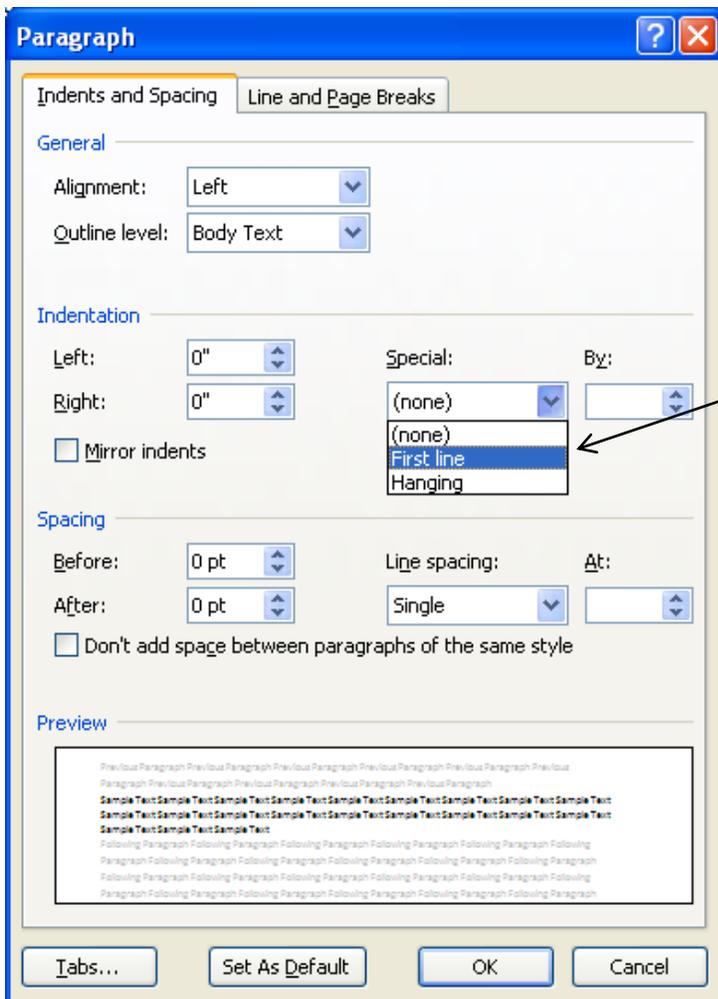
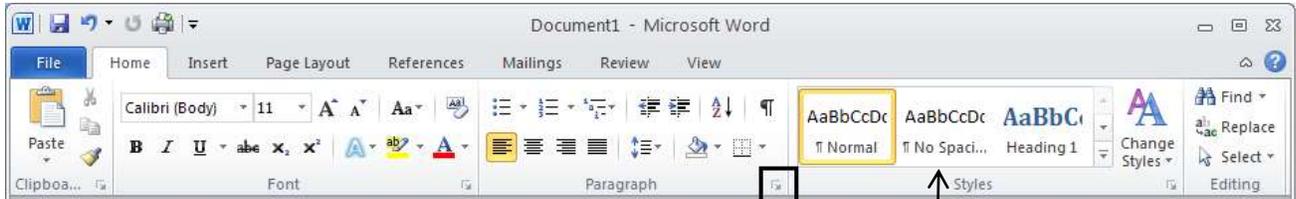


A note of caution about green and blue underlines: Word is really good at spelling, which is pretty straightforward most of the time. But grammar and correct word usage take some judgment.

If you think that you are right, and Word is wrong, then you can right-click the word and ignore the suggested revisions and get rid of the underlines.

Paragraph and Text Formatting

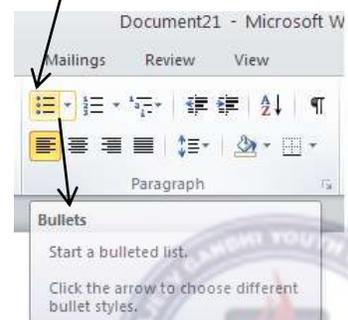
Word 2010 assumes some defaults when you start a new document. For instance, there is no indentation on paragraphs and the line or sentence spacing is set by the default Style called Normal.



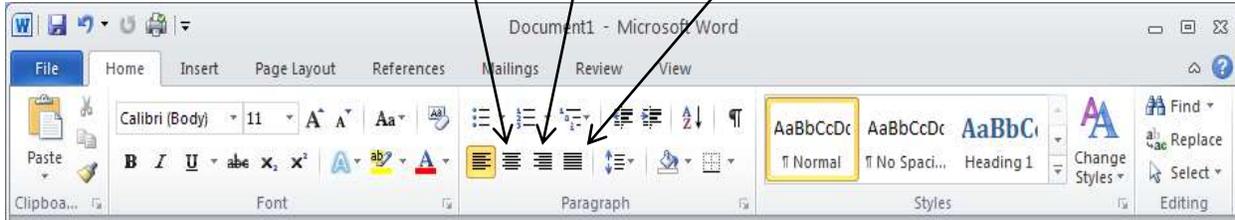
Line Spacing (the space between each sentence) can be tightened up by choosing the No Spacing option on the Styles group.

If Indentation is needed, click the triangle on the Paragraph group. Under Indentation, Special, choose First Line.

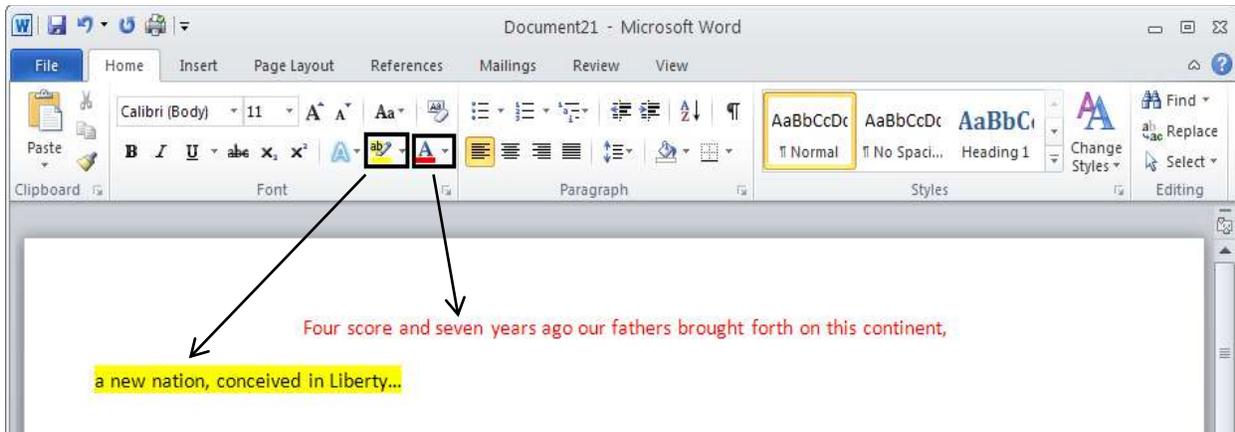
Paragraphs can have Bullets or Numbering added. Hover the cursor over any button produces a description. Clicking the button will execute the feature.



Text alignment is also available on the Paragraph group. The default is Align Text Left which is highlighted. The other options are Center, Align Text Right and Justify which is a clean look with text aligned on both margins.

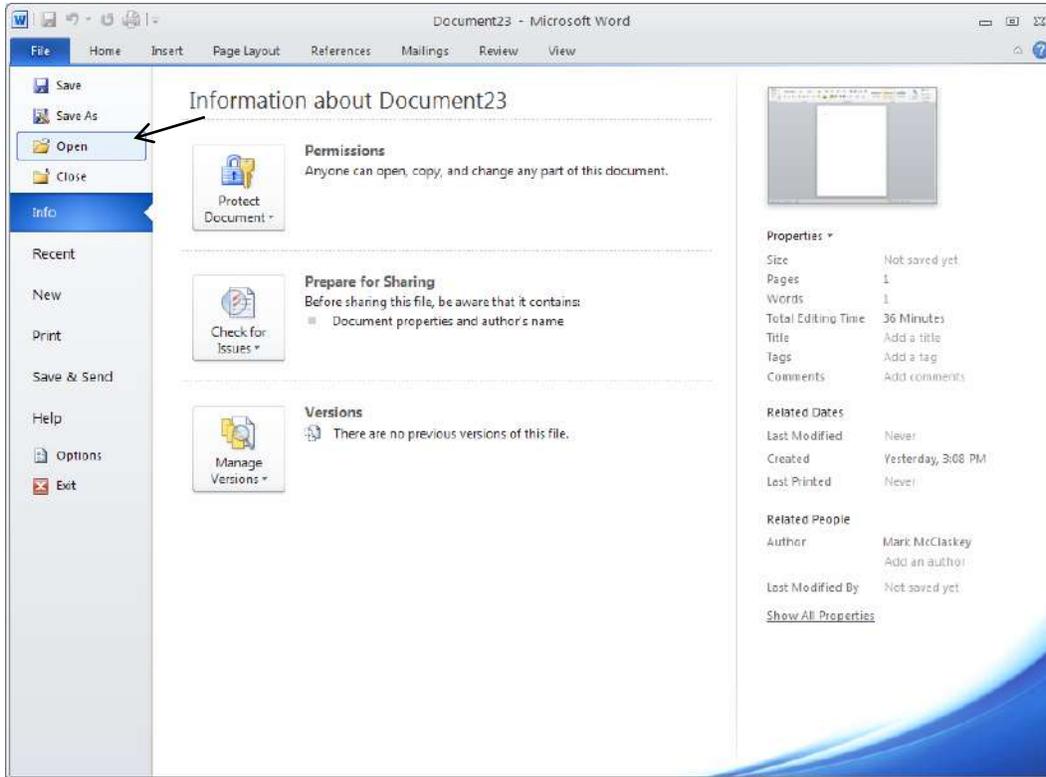


Text can easily be color highlighted or colored. Highlight the text first with your cursor then click on the Font Color button and the text will change to the default of red. To change the font color, click on the down arrow for the color palette and choose your color. To color highlight your text, highlight the text with your cursor, click on the Text Highlight Color button and it changes to the default of yellow. To change the highlight color, click on the down arrow for the color palette and choose your color.

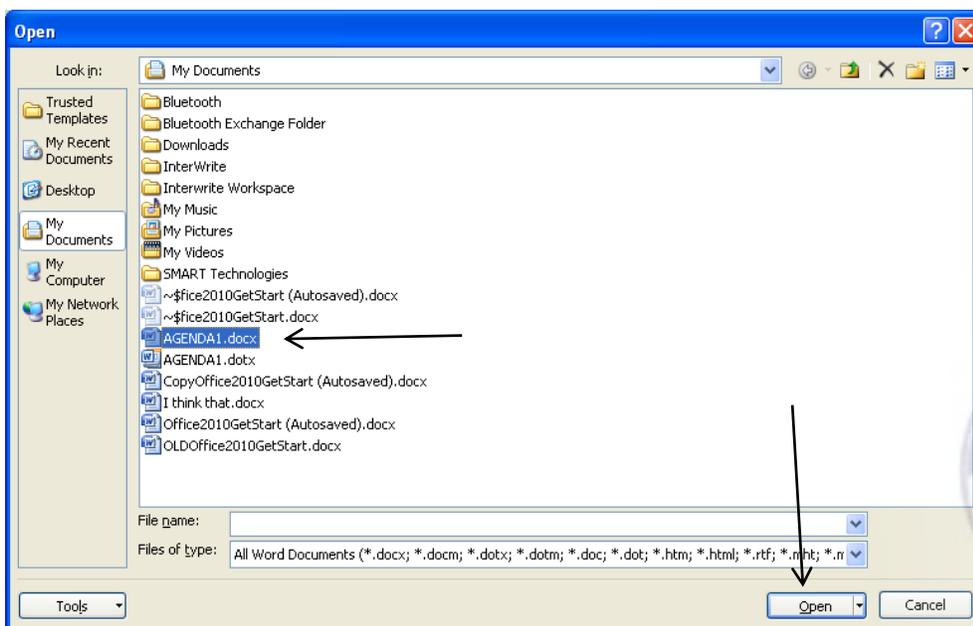


Open an Existing File

To open an existing file you've created, click on the File tab, click the Open button and the familiar Open dialog box appears as seen in the next screen shot below.

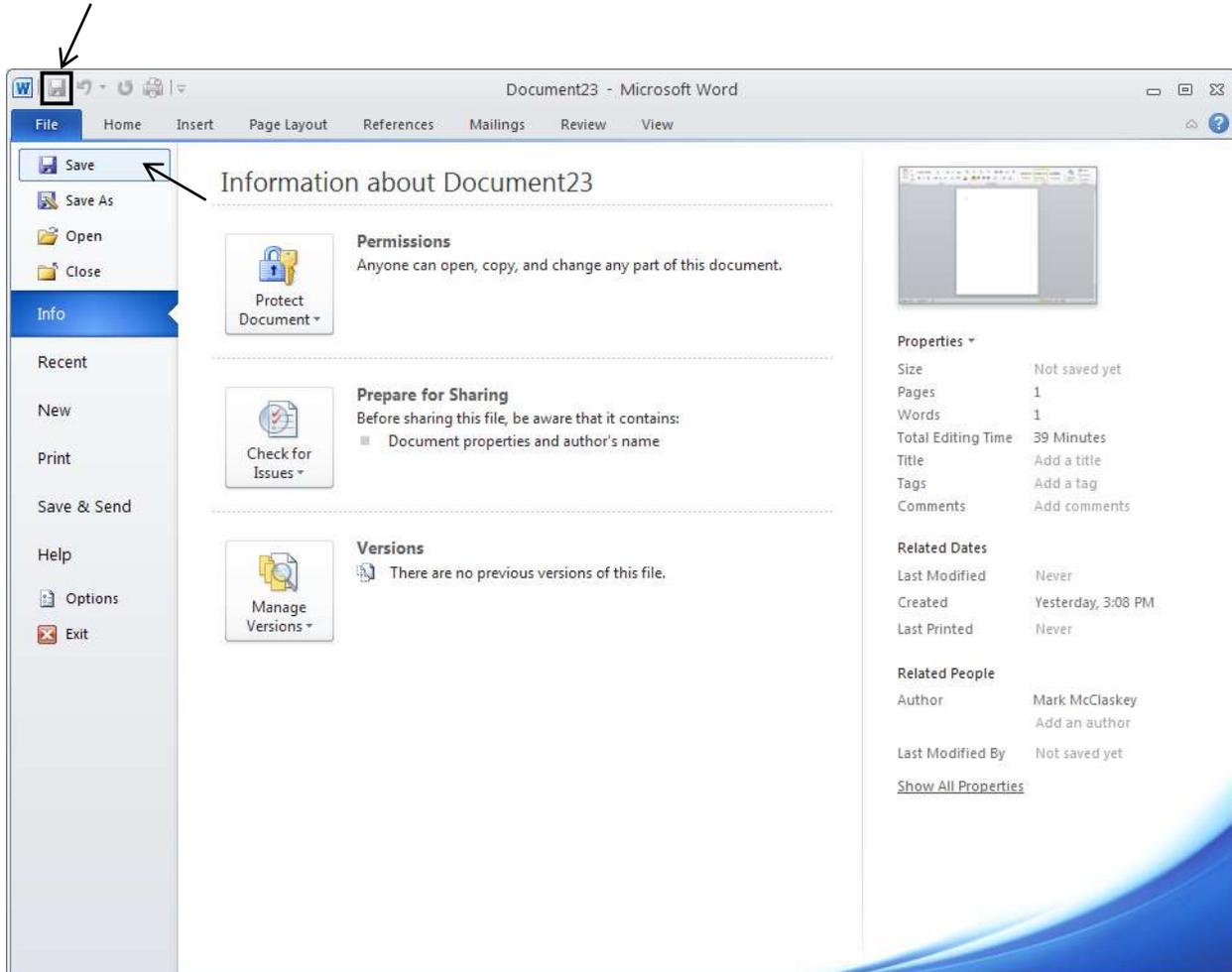


Click on the file you want, then click Open at the bottom right.



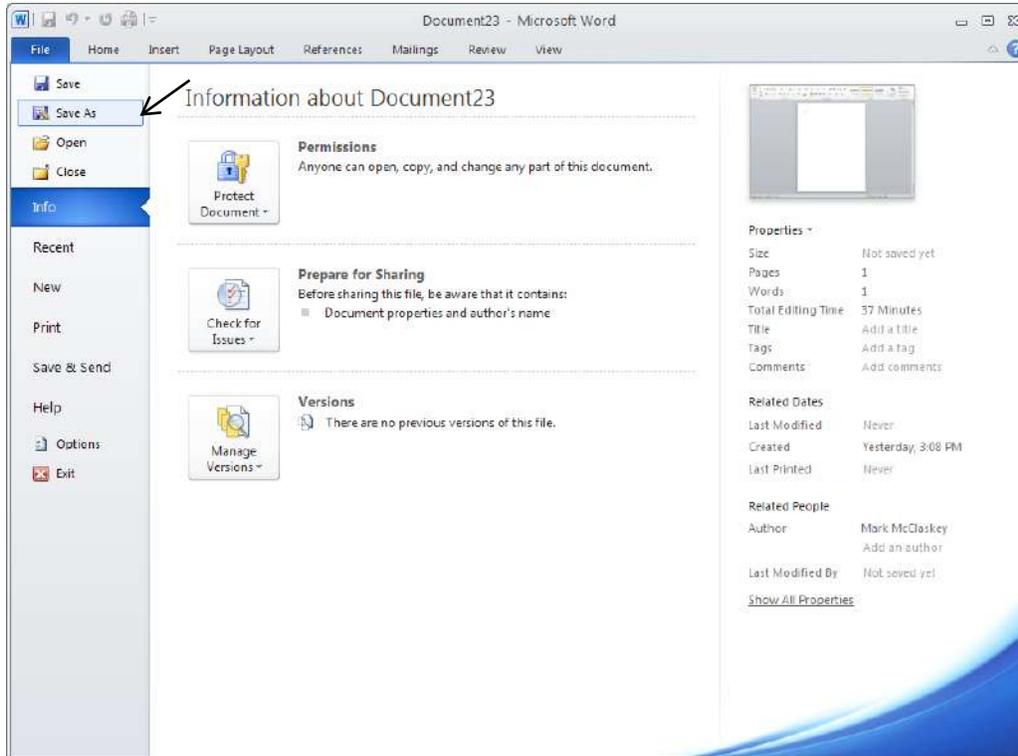
Saving Files Part I

While editing an existing file, it's a good habit to often save your work. There are two different ways to save files. Click the File tab, then just click the Save button. The faster option as described earlier, is to click the Save button in the Quick Access Toolbar.

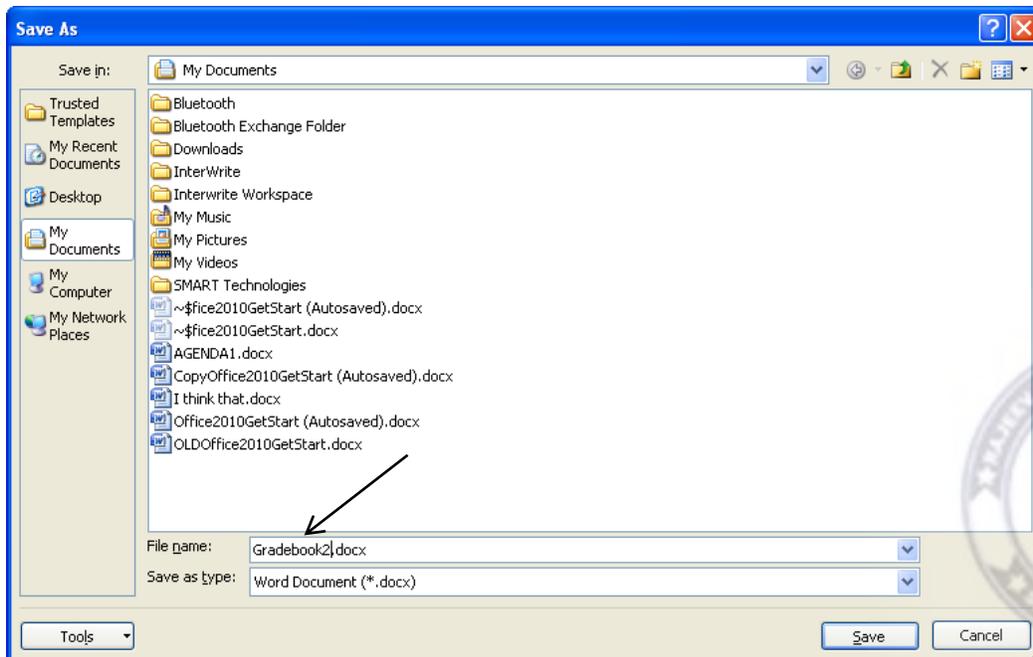


Saving Files Part II

When editing an existing document, you may want to save the file under a different name. Click on the File tab, click the Save As button and the Save As dialog box opens as seen below. In the File name field,

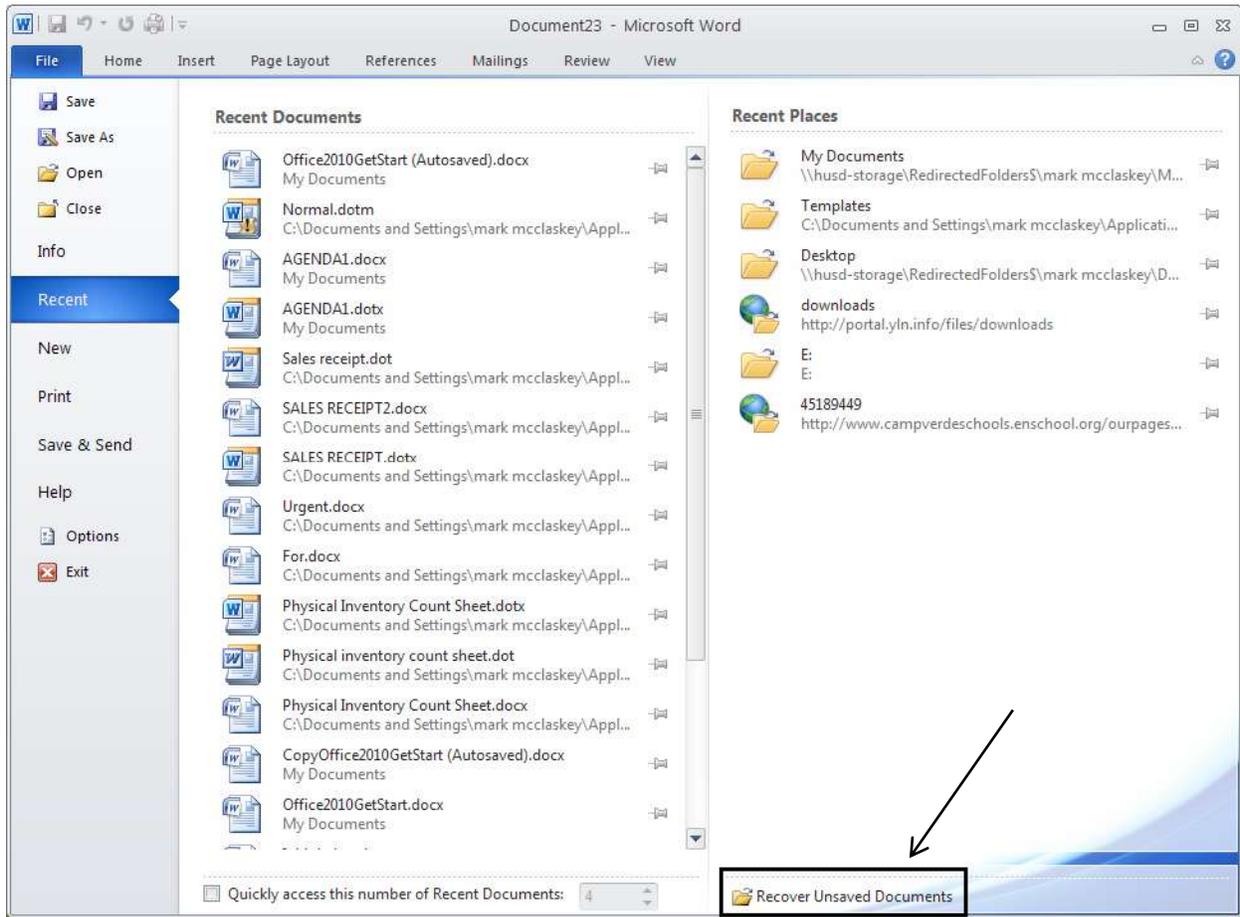


type in the new name without changing the .docx extension. Click the Save button.



File Tab with Recent Option

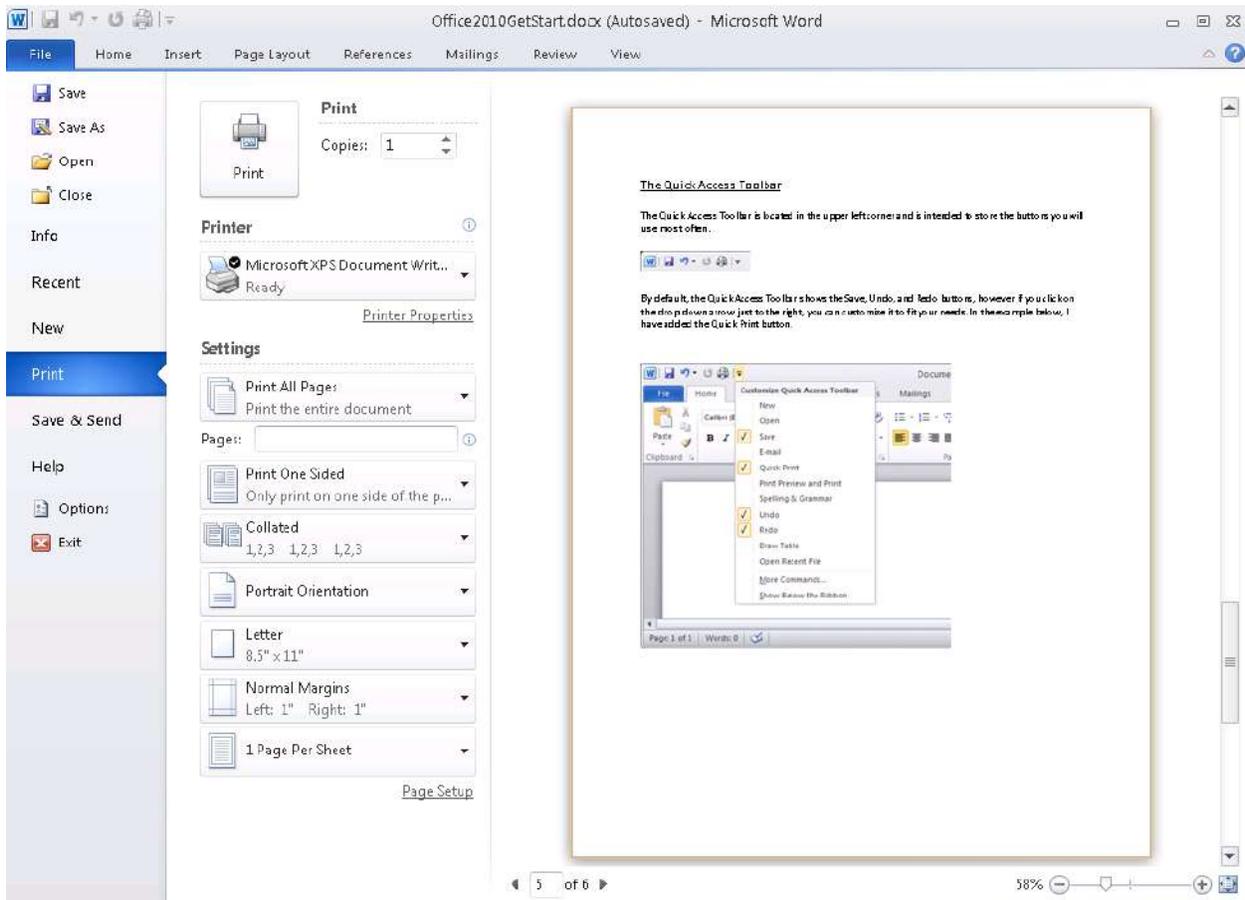
The Recent option on the File tab allows you to quickly go to your other documents and open them. If you accidentally deleted a document or closed Word by mistake, you can recover your documents by clicking on the Recover Unsaved Documents button at the bottom of the page.



The File Tab with Print Option

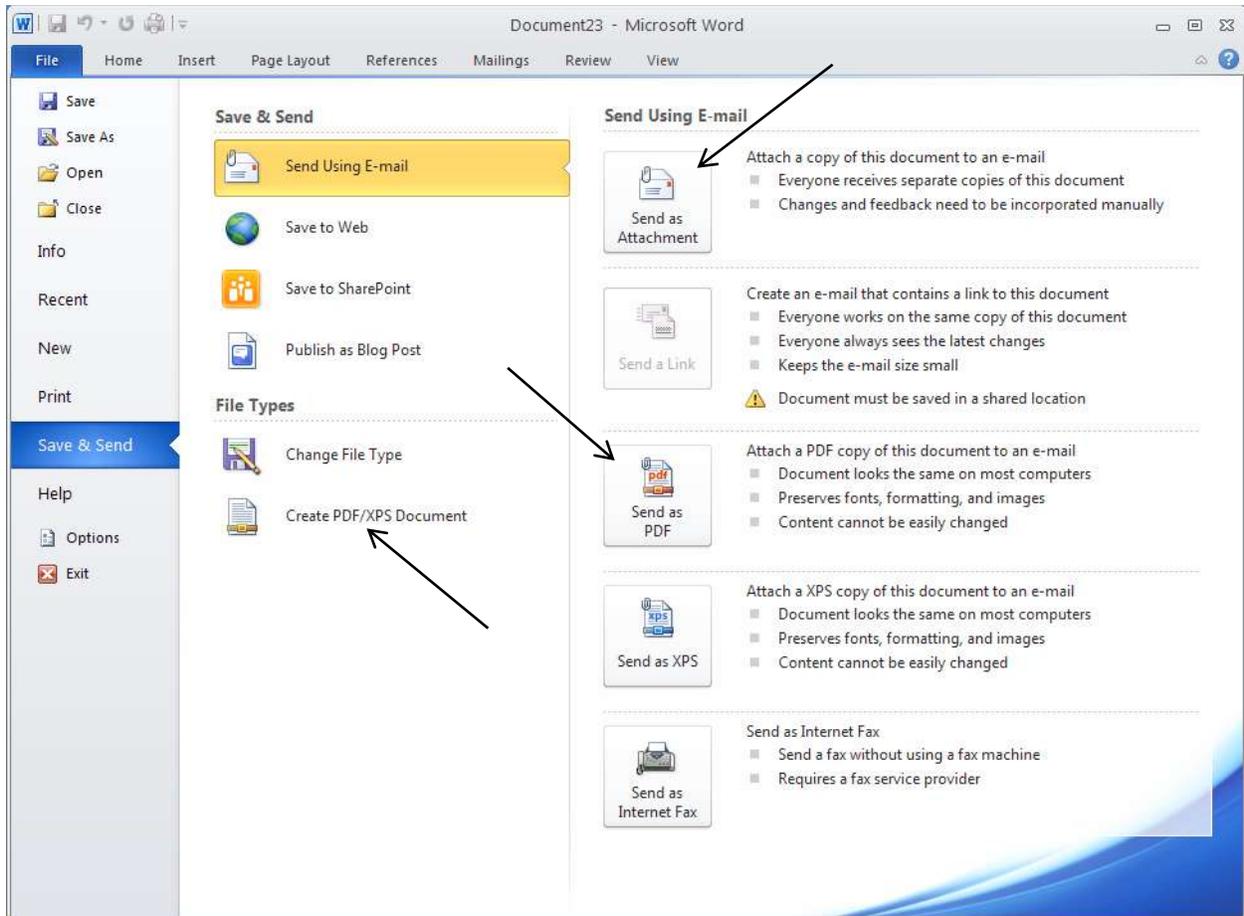
The Print option will be one of the most common choices on the File tab. The example below shows some nice features. Here you can choose Orientation for Potrait or Landscape jobs, Double sided printing, Paper Size, etc. When choosing Print with previous Word versions, the Print dialog box would open and you need to click on Properties to find these needs. With this default Print window, all these choices are listed plus others! If you want to print a particular page, ensure you are on that page, click on the File tab, then click on Print All Pages for the drop down menu and select Print Current Page. If you have more than one printer, click on the button under Printer for the drop down menu, and select your printer.

If there are no special requirements, you just click on the square Print box in the upper left corner.



File Tab Save & Send Option

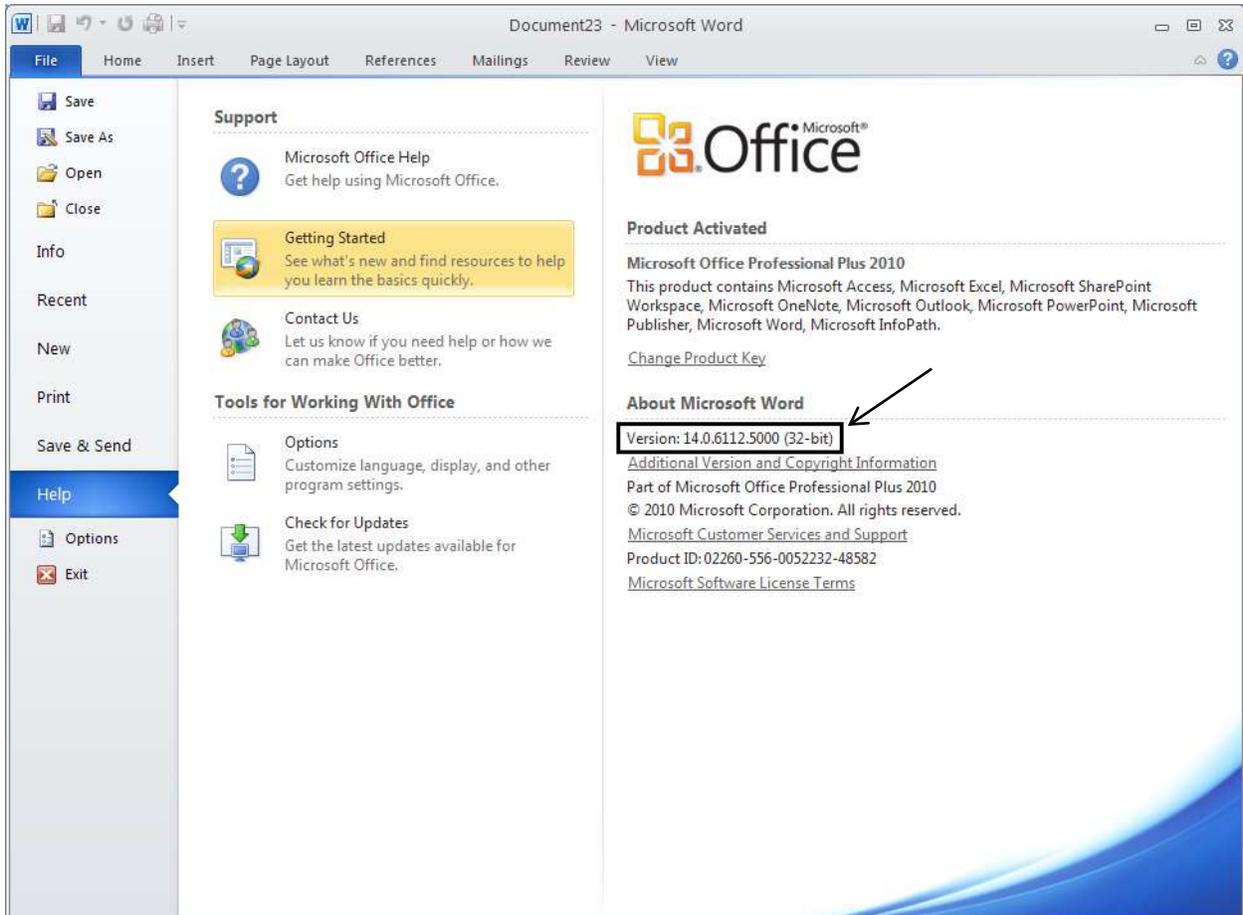
There is a nice email feature on the Save & Send option under the File tab. You can choose to send your document as an email attachment. Clicking the Send as Attachment button causes a new Outlook email box to open with your Word file attached! You can also choose to send it as a PDF file by clicking the Send as PDF button. You may also choose to save your document as a PDF file by clicking the Create PDF/XPS Document button.



File Tab Help Option

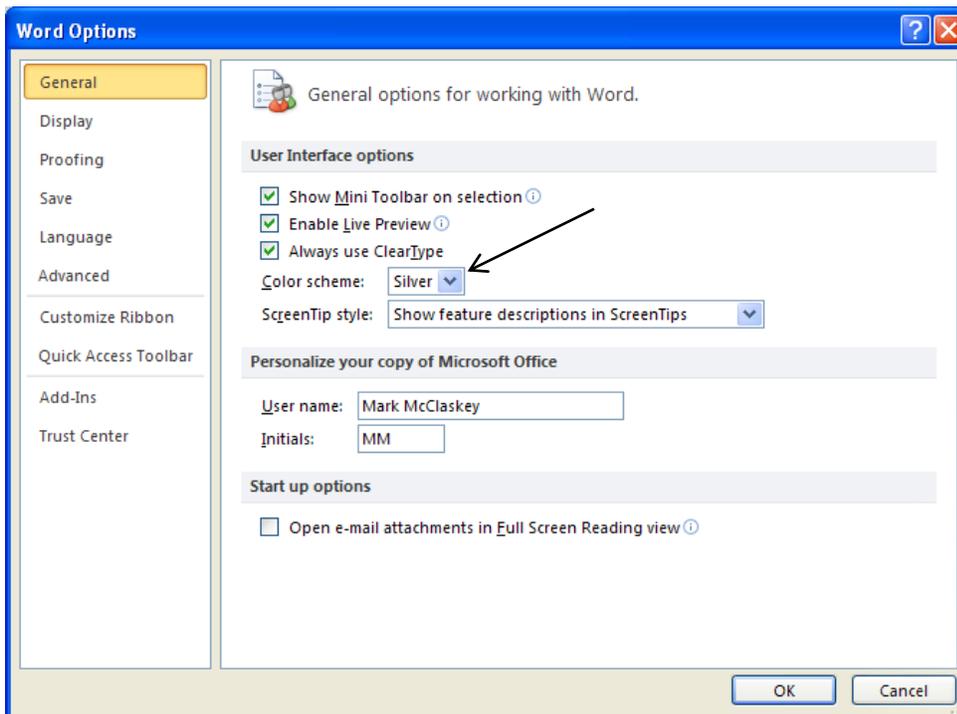
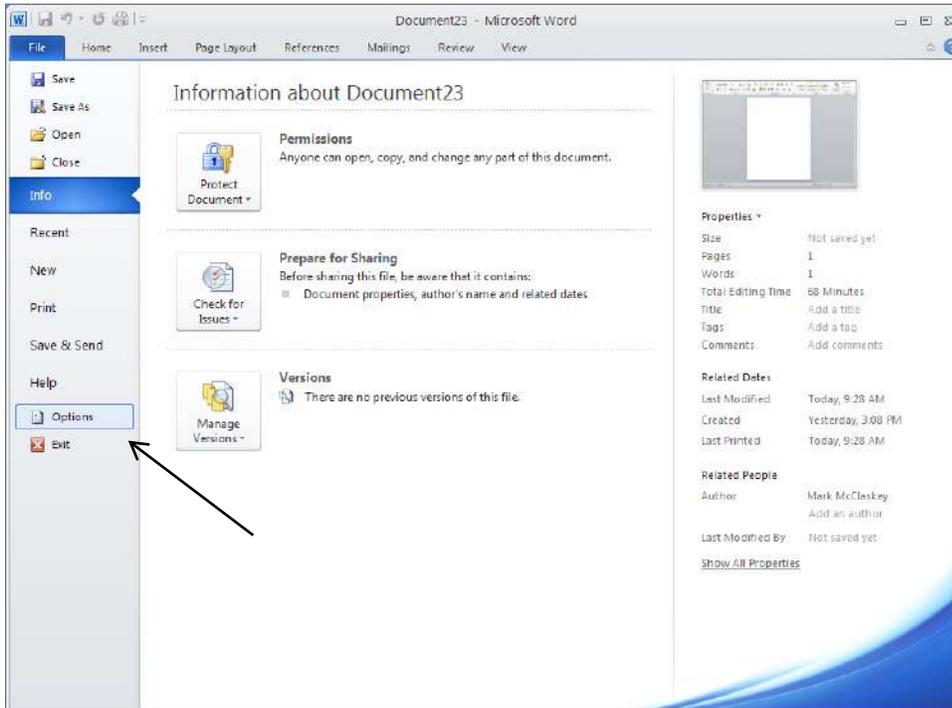
You may also find Help with Word 2010 under the File tab. Clicking the Getting Started button offers nice videos on basics for all the Office suite programs from Microsoft.com. The Microsoft Office Help button offers the same useful help information as the question mark symbol in the upper right corner.

You can also see which version of Word is loaded on this view.



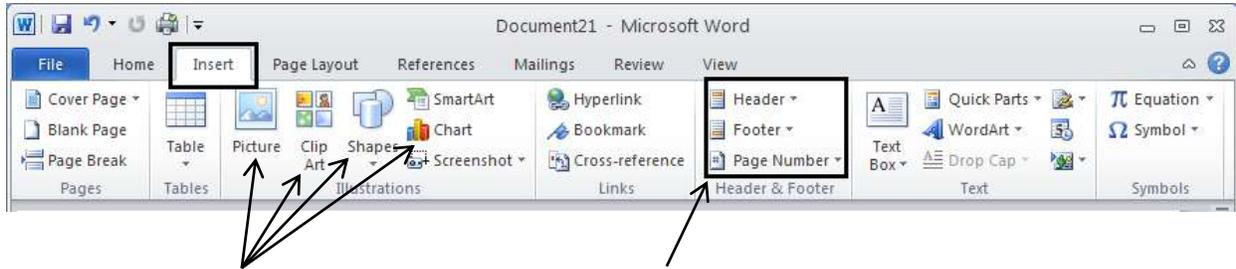
File Tab Options Option

You can customize many tools and features in Word by clicking on the Options button. For example, you can change the color scheme under the General button on the dialog box that opens in the screen shot seen below. Changes can also be made for Display, Proofing and how files can be saved.



The Insert Tab

The Insert Tab offers many tools that can add nice features to a document.



Pictures or drawings can be added by clicking on the **Picture** button. A The Insert Picture box will open prompting you to browse to the picture on your PC. Click the picture you want then click Insert. It will appear on your document.

Clipart are pictures or illustrations that can be added through the Internet from Office.com. Simply click the Clipart button and a dialog box will appear. Type in the subject in the 'Search for:' field, click the box for 'Include Office.com content' and then click the Go button. Click the picture you want from the results that appeared and it will be inserted into your document.

Shapes like lines, arrows, basic geometric shapes, equation shapes, flowchart shapes, stars, and banners can be added. Clicking the **Shapes** button will cause a large dropdown of multiple shapes to appear. Click your choice, and then click your cursor on the document where you want, and the shape will appear.

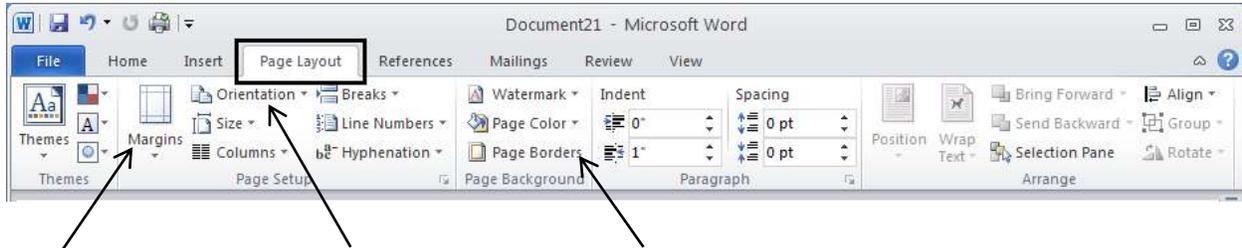
Charts can also be added to a document. There are many to choose from such as column charts, line graphs, pie charts, bar charts, area graphs, and stock charts. Click on the **Chart** button and the Insert Chart box will appear. Select the type of chart on the left, select the chart on the right, click OK and the chart will appear and it then can be manipulated.

Headers, Footers and **Page Numbers** can also be added to a document from the Header & Footer group on the Insert Ribbon. For a multi-page document, the content of the Header will be seen at the top of each printed page and the Footer will be seen at the bottom as well as the page number when added.

These are just a few common examples on the Insert tab. The size of your object can also be changed. After you add the object, a box appears around it with circles in each corner. Hover your cursor over the bottom right circle until the arrow appears, hold the left mouse button and just move your mouse!

Page Layout Tab

The Page Layout Tab lets you control the look and feel of a document in Microsoft Word 2010. You can apply a global design to your document by using one of the available themes and color schemes.



The margins can be controlled on your document giving you smaller or greater size in which to work. Just click on **Margins**, and just click on the desired choice of options.

Click on **Orientation** for Portrait or Landscape layout.

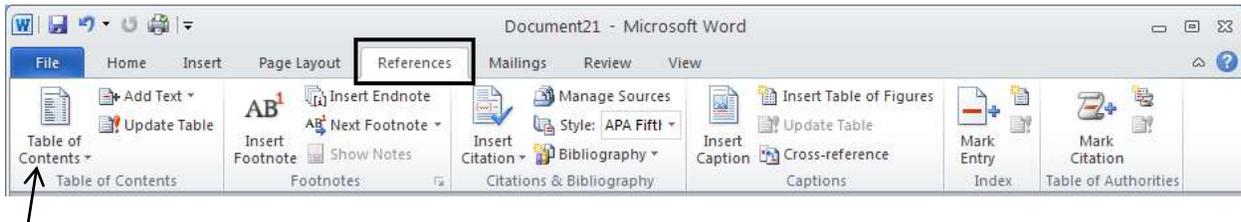
Page Color and **Page Borders** can be added from the Page Background group.

As you may notice, the Page Layout tab has some of the same commands that you will find on the Home tab like Indentation, Spacing and Line Numbering.

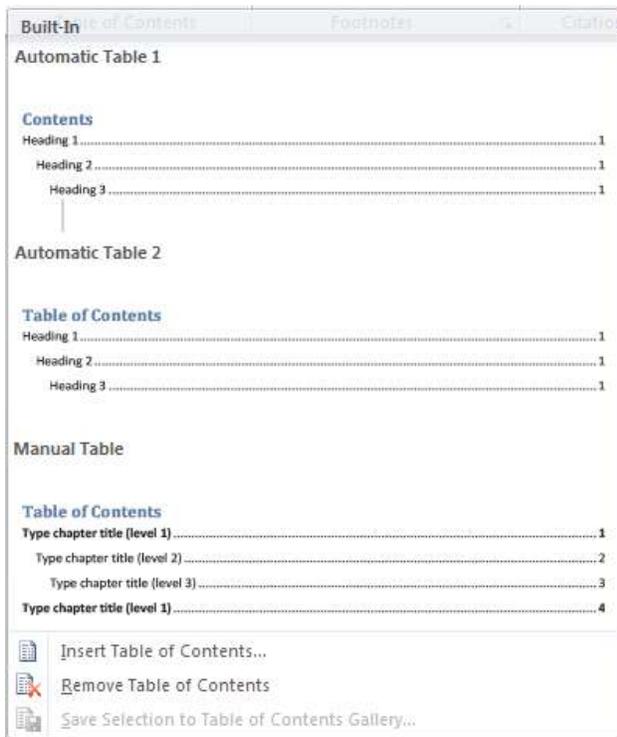
The Page Setup group has the triangle button at the bottom right in which to click and see the more advanced Page Setup options. The Paragraph group also has the triangle button for the advanced box like it does on the Home tab.

References Tab

The References Tab on Microsoft Word 2010's ribbon offers a quick way to enter your document sources, citations etc. On the References tab you will find groups like Table of Contents, Footnotes, Citations & Bibliography, and Captions.

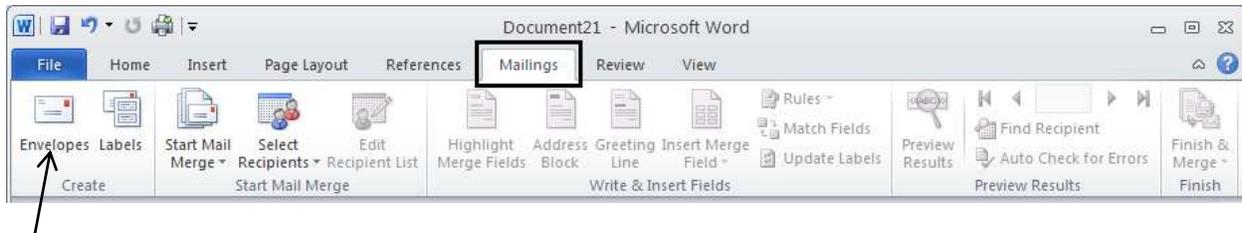


One of the nicest features on the References tab is adding the Table of Contents for a document. One thing you need to make sure is that you type your document using one of the heading styles for the items that need to be included in the Table of Contents. Click the **Table of Contents** button and the table below appears. Automatic Table 2 is a good choice. Click this option and your table is created!

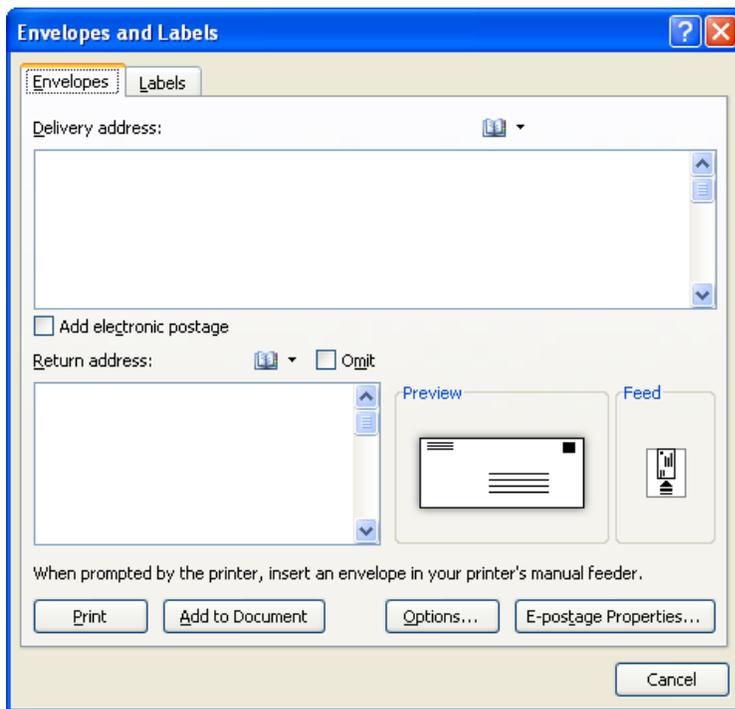


Mailings Tab

One of the most common features on the Mailings tab is the Envelopes and Labels for printing.

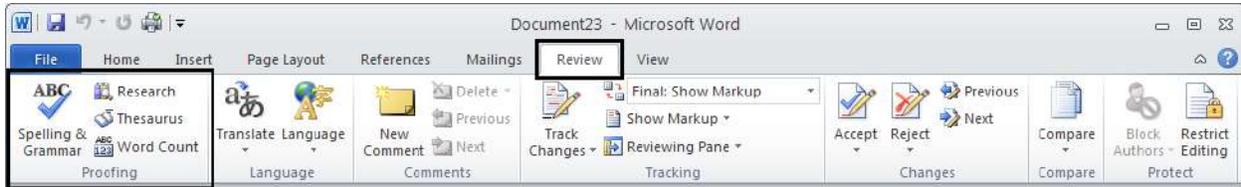


Clicking the **Envelopes** button produces the box below which allows you to enter in the Delivery address and Return address. Clicking the Options button gives the choices for the envelope size. On the Labels tab, the Options button is also available for the needed label size.



Review and View Tabs

The Proofing group is one of the most popular groups on the Review tab.



Once you have finished your document, you can perform one last spell check by choosing the **Spelling & Grammar** button. This is an automated process going through the entire document.

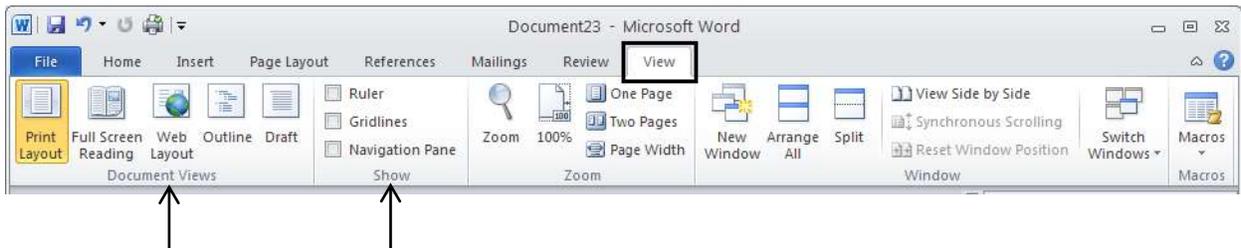
The **Research** button will allow you to access different dictionary lookups of any word you have highlighted.

The **Thesaurus** button will suggest other words with a similar meaning for the word you have highlighted.

The **Word Count** button will give you statistics for the number of pages, words, paragraphs, lines, etc.

View Tab

The View Tab is the last of the tabs on the Microsoft Word 2010 Ribbon.



By the buttons available on the Document Views group, you can view your document in different ways. You can see the **Print Layout, Full Screen Reading, Web Layout, Outline, and Draft** views.

On the Show group, you can measure and line up objects by clicking the **Ruler** button and the ruler will appear at the top and left margin of the document.

The **Gridlines** button also allows you to line up objects by splashing a grid paper view on top of the document.



Creating a document to be used by previous versions of Word

If you create a document to send to people who are working in earlier versions of Word and you know that they have installed the Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint 2007 File Formats, you can work in Microsoft Word 2010 mode.

If you aren't sure whether the people you send your document to have installed the Microsoft Office Compatibility Pack for Word, Excel and PowerPoint Open XML File Formats, you can work in Compatibility Mode. Compatibility Mode makes sure that no new or enhanced features in Word 2010 are available while you work in a document, so that people who are using previous versions of Word will have full editing capabilities.

Note: If you already created a document, and you want to find out what content won't be available for editing in earlier versions, see Features that behave differently in earlier versions.

Turn on Compatibility Mode

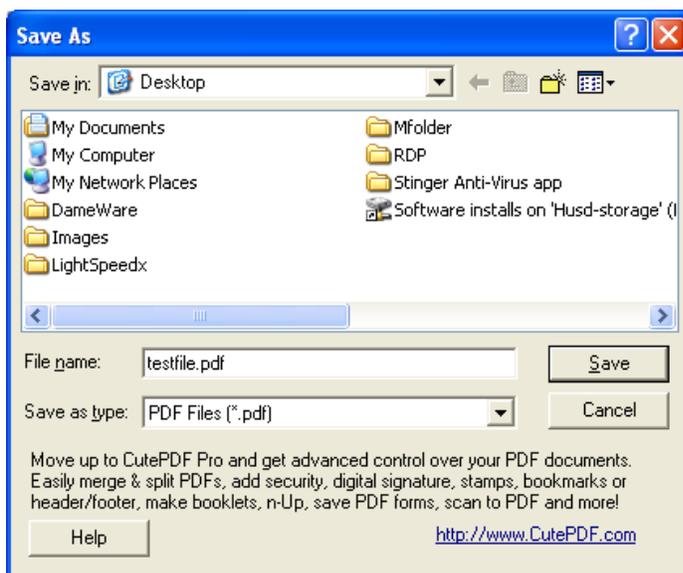
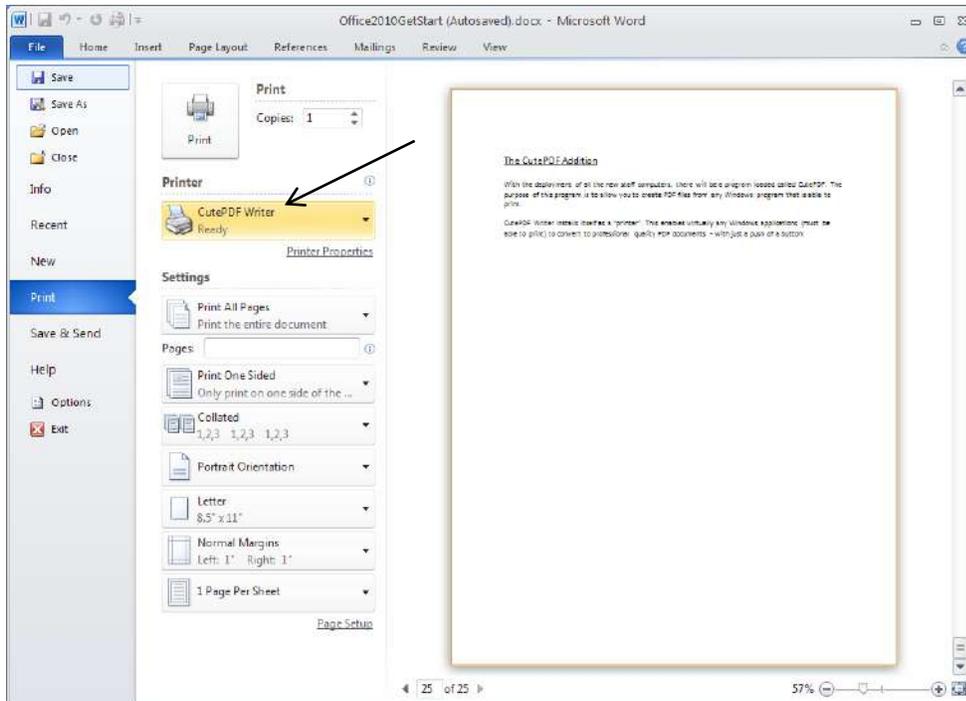
When you create a new document that will be used in an earlier version, you can turn on Compatibility Mode by saving the file in Word 97-2003 format.

1. Open a new document.
2. Click the File tab.
3. Click Save As.
4. In the Save as type list, click Word 97-2003 Document. This changes the file format to .doc.
5. In the File name box, type a name for the document.
6. Click Save.



The CutePDF Writer Addition

With the deployment of all new staff computers, there will be a program loaded called CutePDF Writer. The purpose of this program is to allow you to create PDF files from **any Windows** program that is able to print. If you needed to send a document to someone who doesn't have Word or a compatible version, this is the answer for everyone has access to Adobe Reader. To create the PDF document from Word, click on the Print button from the File tab. From the drop down menu under Printer, choose CutePDF Writer, then click the Print button. The Save As box below appears. You can save the converted PDF to your PC!





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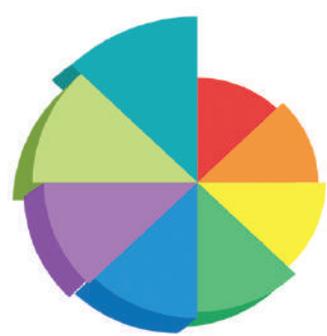
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MS EXCEL

A spreadsheet is essentially a matrix of rows and columns. Consider a sheet of paper on which horizontal and vertical lines are drawn to yield a rectangular grid. The grid namely a cell, is the result of the intersection of a row with a column. Such a structure is called a **Spreadsheet**.

A spreadsheet package contains electronic equivalent of a pen, an eraser and large sheet of paper with vertical and horizontal lines to give rows and columns. The cursor position uniquely shown in dark mode indicates where the pen is currently pointing. We can enter text or numbers at any position on the worksheet. We can enter a formula in a cell where we want to perform a calculation and results are to be displayed. A powerful recalculation facility jumps into action each time we update the cell contents with new data.

MS-Excel is the most powerful spreadsheet package brought by Microsoft. The three main components of this package are

- ❖ Electronic spreadsheet
- ❖ Database management
- ❖ Generation of Charts.

Each workbook provides 3 worksheets with facility to increase the number of sheets. Each sheet provides 256 columns and 65536 rows to work with. Though the spreadsheet packages were originally designed for accountants, they have become popular with almost everyone working with figures. Sales executives, book-keepers, officers, students, research scholars, investors bankers etc, almost any one find some form of application for it.

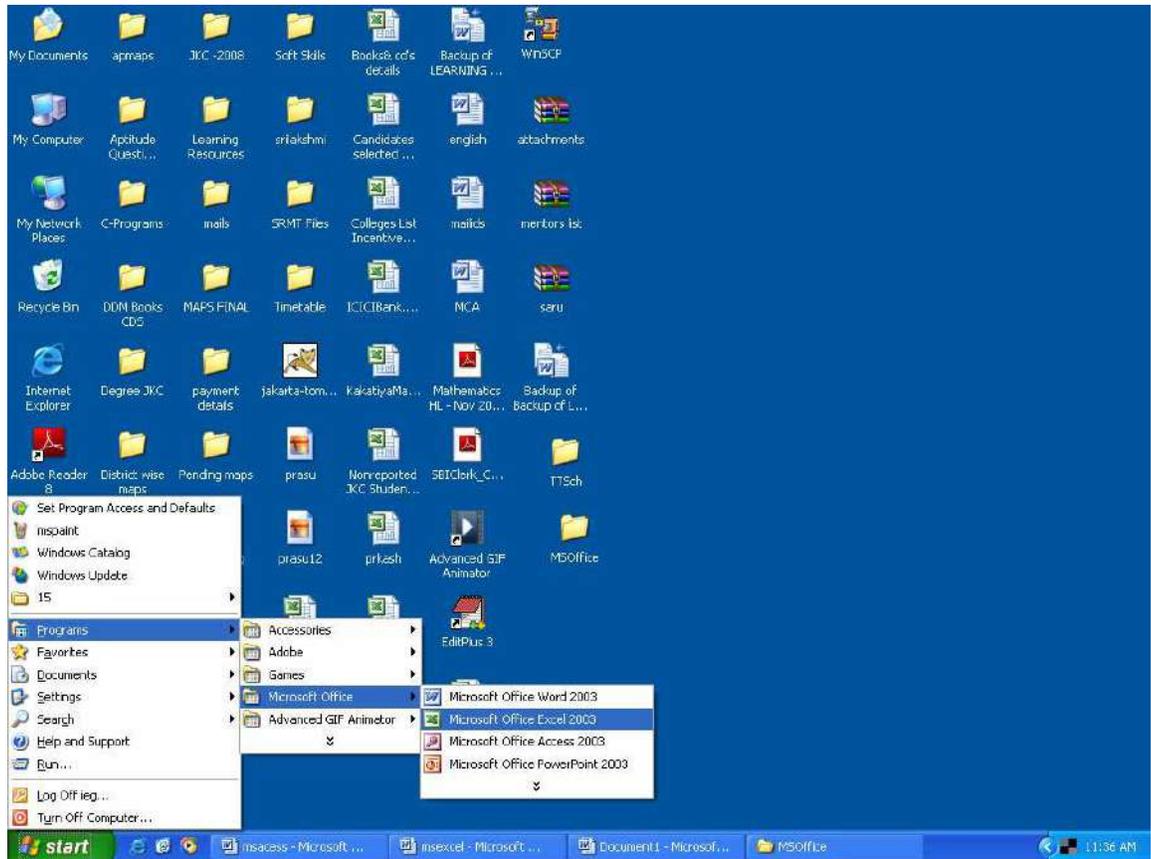
You will learn the following features at the end of this section.

- ❖ Starting Excel 2003
- ❖ Using Help
- ❖ Workbook Management
- ❖ Cursor Management
- ❖ Manipulating Data
- ❖ Using Formulae and Functions
- ❖ Formatting Spreadsheet
- ❖ Printing and Layout
- ❖ Creating Charts and Graphs



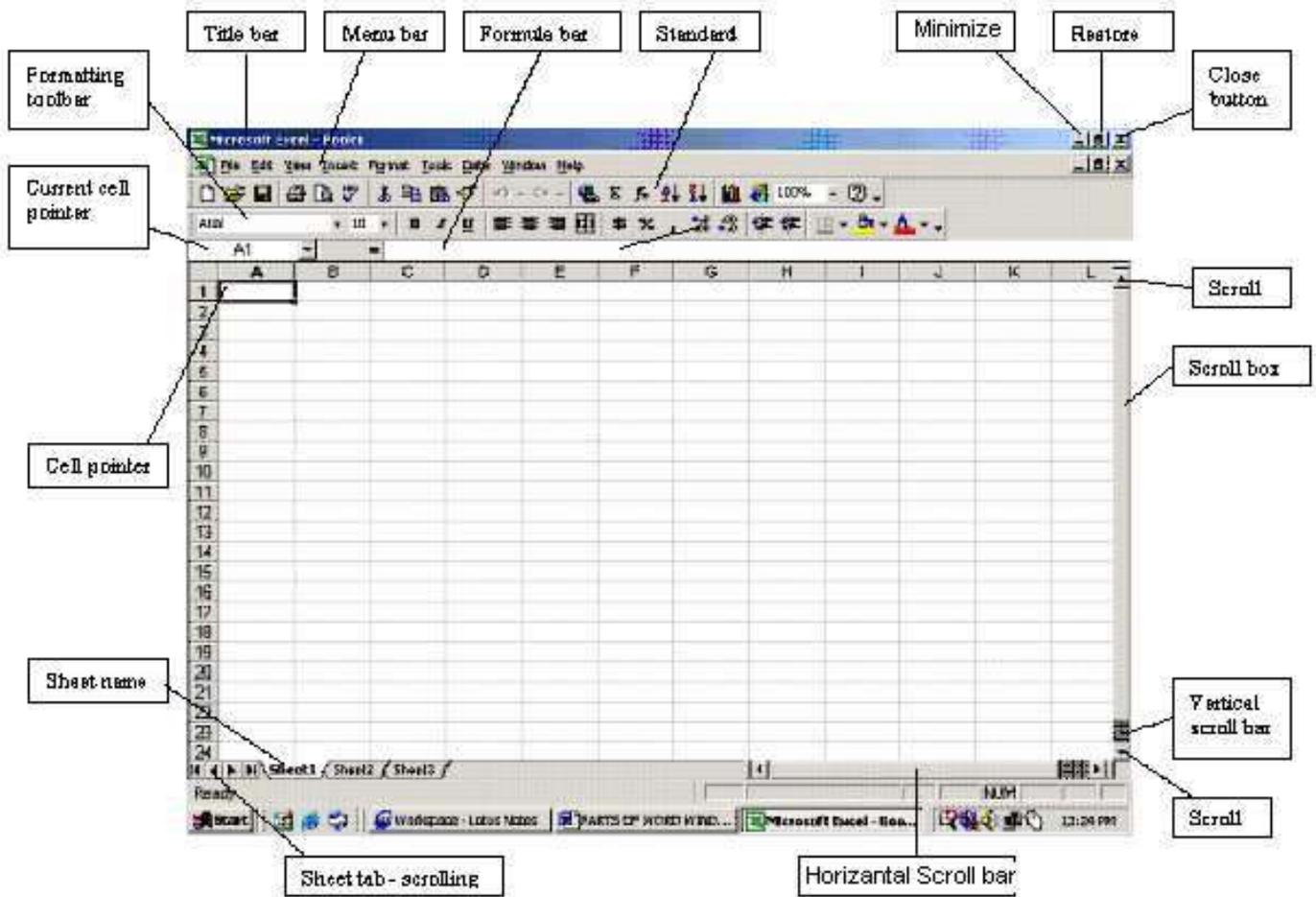
Starting Excel 2003

- ❖ Switch on your computer and click on the **Start** button at the bottom left of the screen.
- ❖ Move the mouse pointer to **Programs**, then across to **Microsoft Excel**, then click on **Excel** as shown in this screen.



- ❖ When you open Excel a screen similar to this will appear





Parts of Excel Window

❖ The options shown below is called as **Menu Bar**

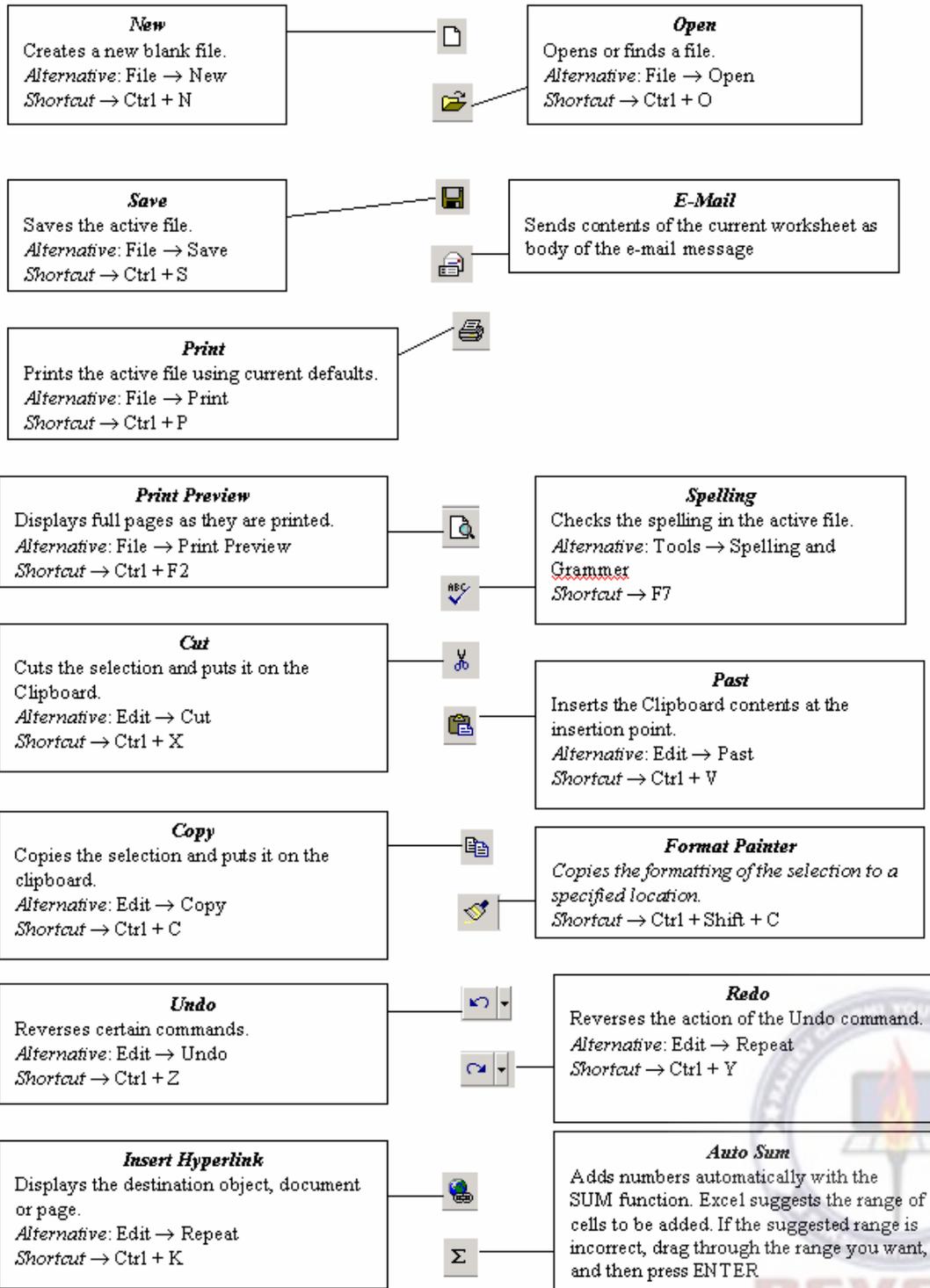


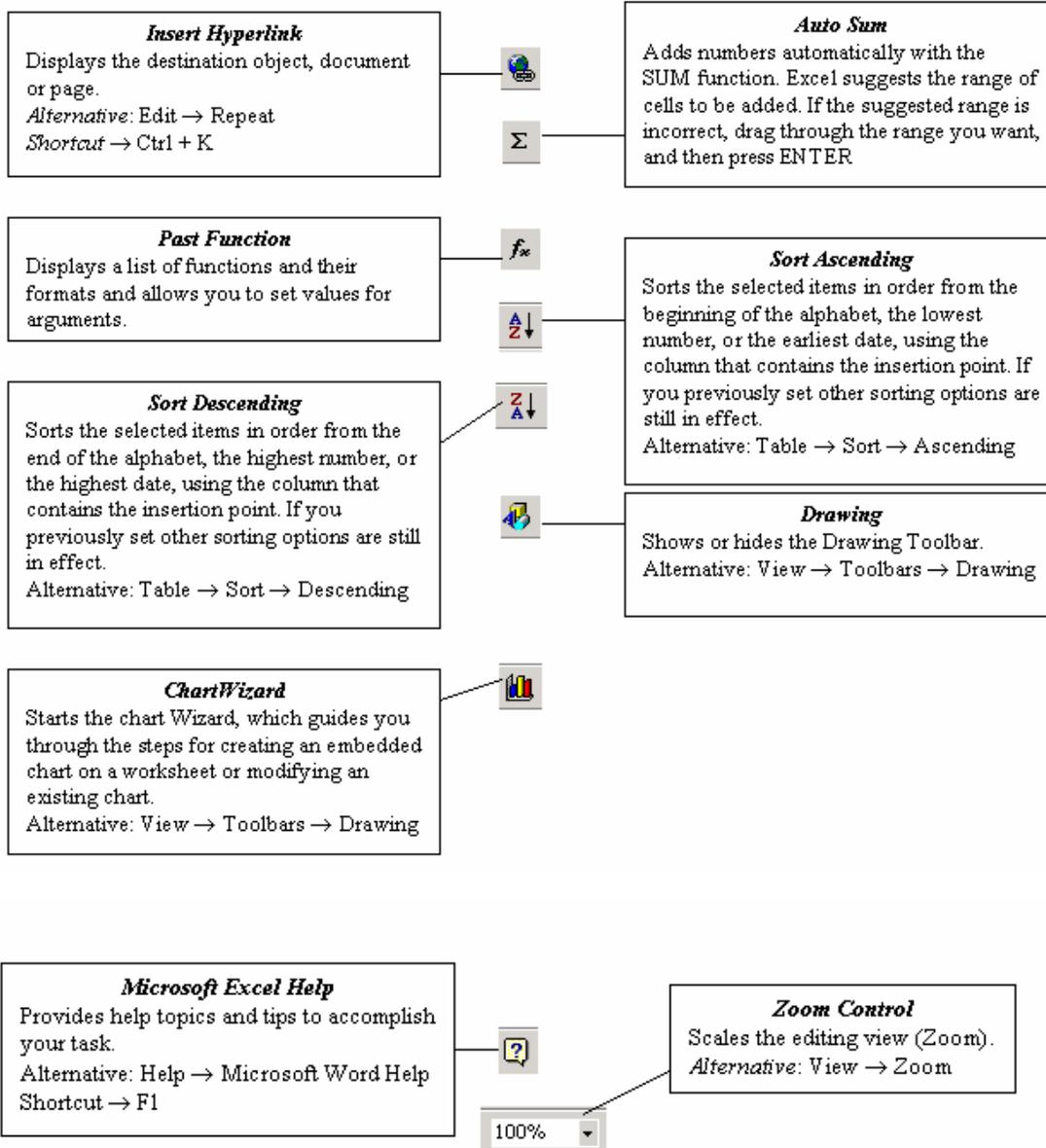
❖ The collection of icons for common operations shown below is called as **Standard Tool Bar**



TOOLBARS AND THE ICONS

Standard Toolbar





❖ The **formula bar** is the place in which you enter the formula(=A3*B5)



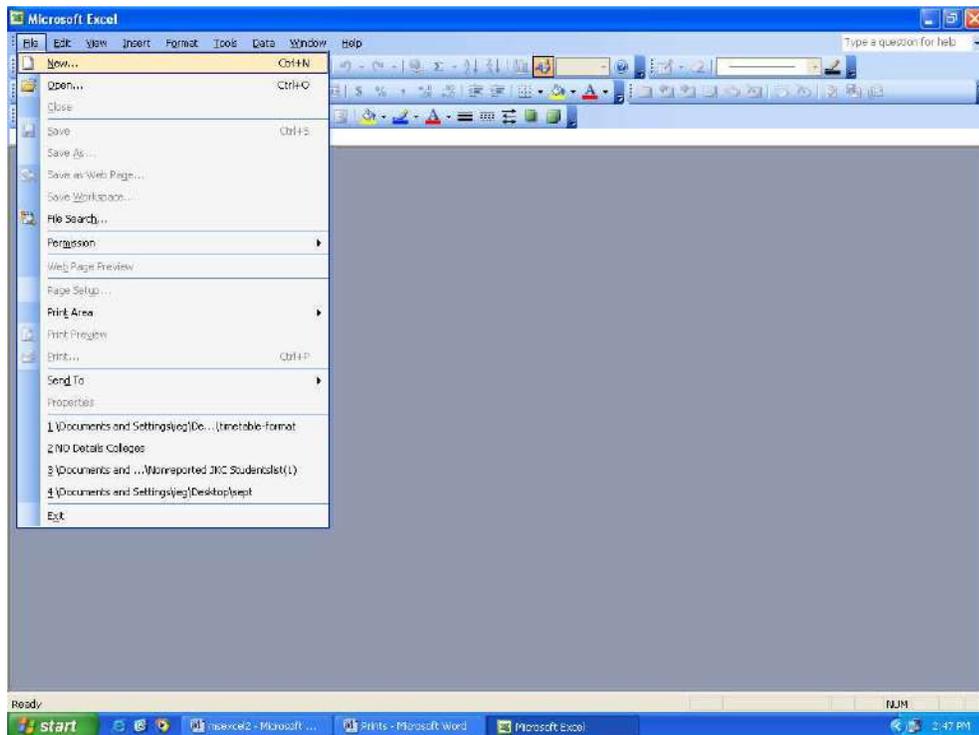
❖ The alphabets **A,B...** are known as **columns**

- ❖ Type the first few letters to see the help entries for those letters.
- ❖ You can get the printout of any help topic by selecting it, right clicking and then clicking **Print Topic**.

Workbook Management

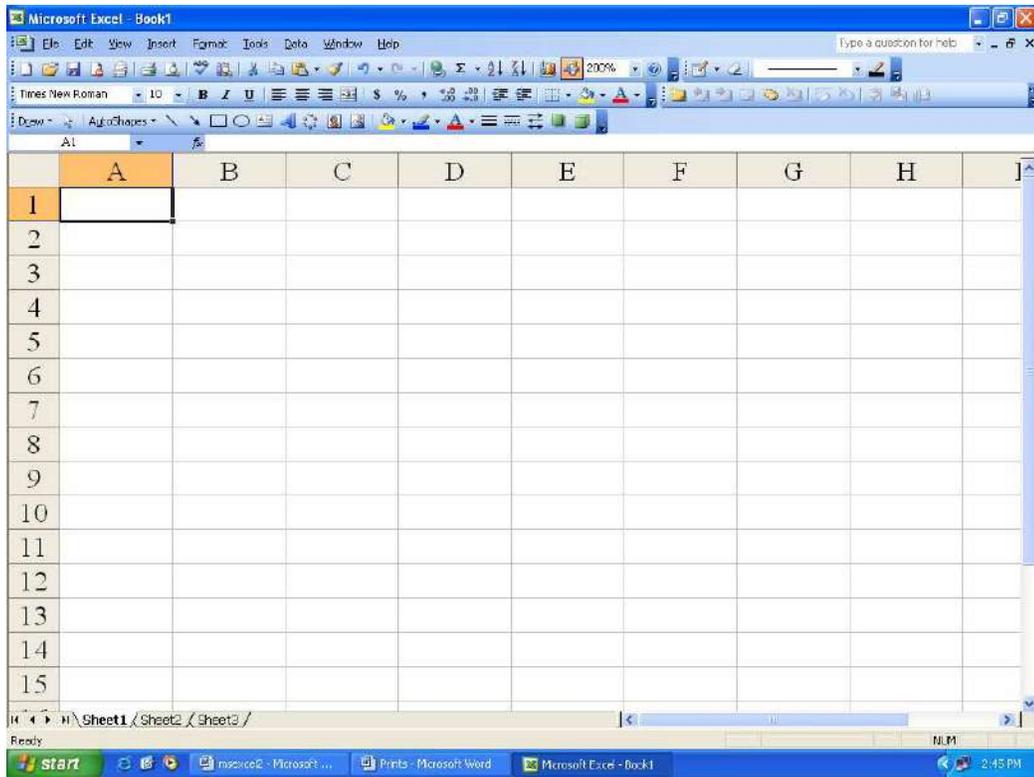
Task 1: Creating a new workbook

- ❖ Click on **File** menu and then click on **New**.

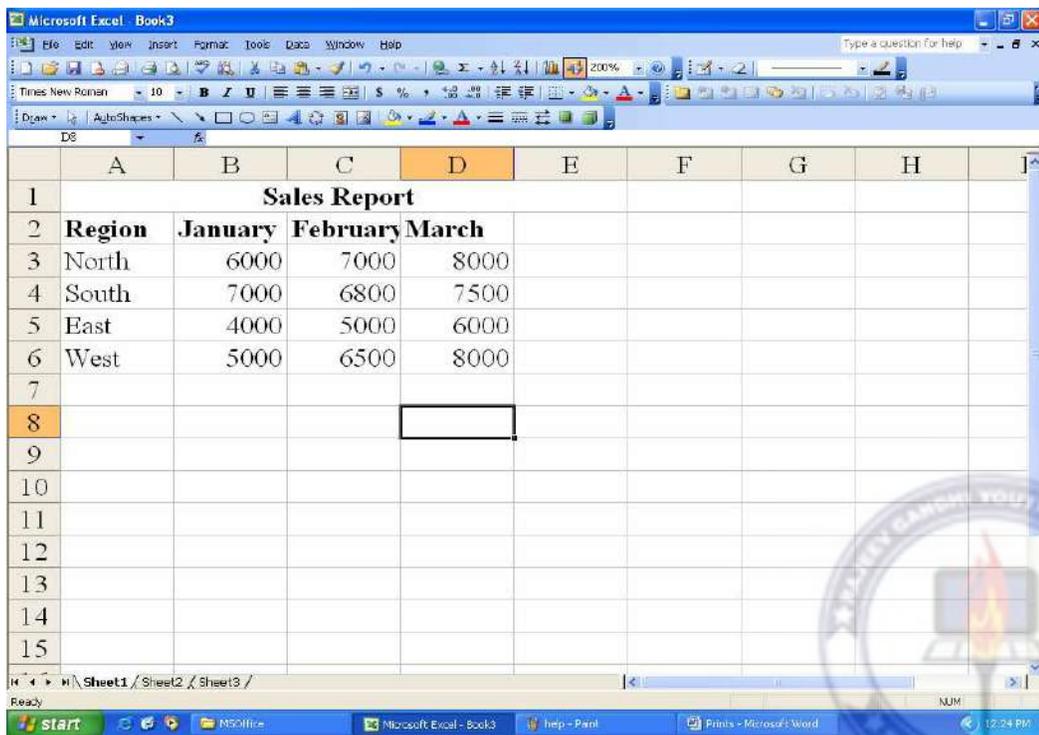


- ❖ Click **Workbook** and then click **OK** button. You will get the screen as shown below.



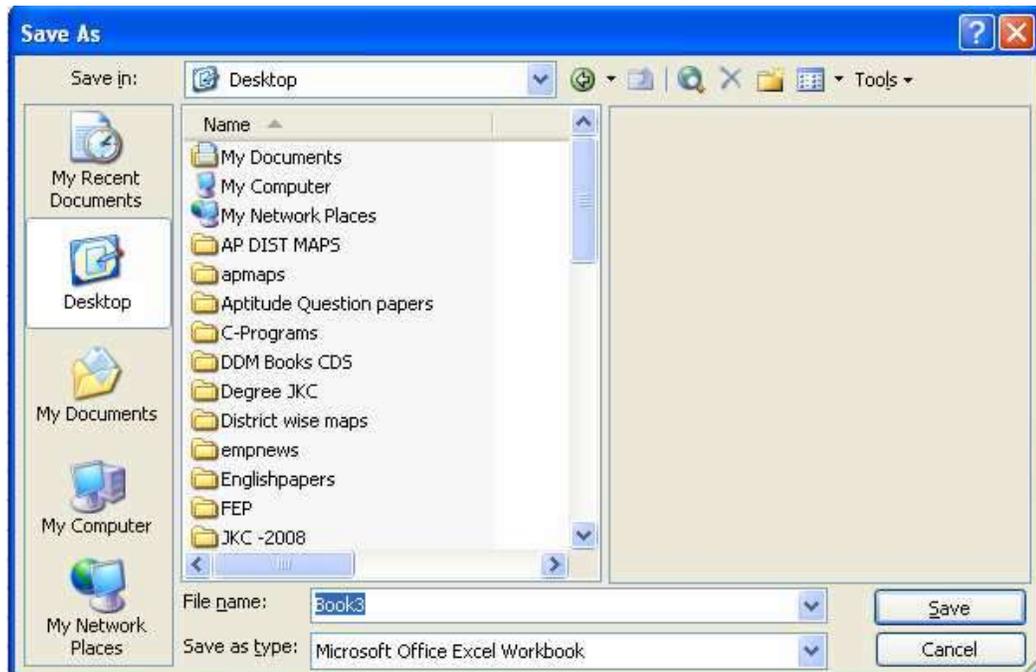


❖ Enter data as shown in the figure below :



Task 2: Saving Workbook

- ❖ Click on **File** menu and then click **save**. You will get the below screen

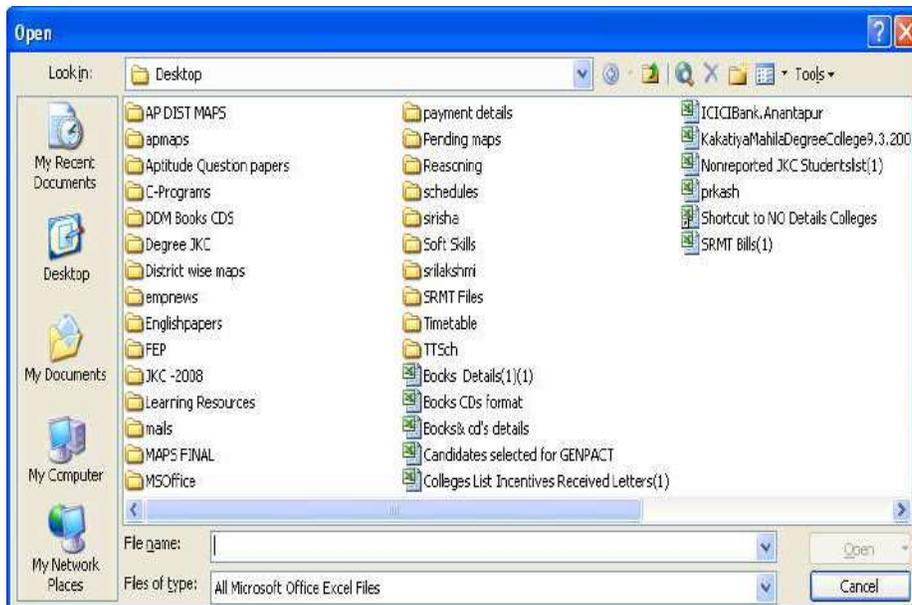


- ❖ In the **File name** text box, type **sample** and then click **Save** button

Task 3: Opening an existing workbook

- ❖ Click on the **File** menu and click on **Open**. The open dialog box will appear





- ❖ Click on some file (Example: **sample.xls**), then click on **Open**.

Task 4: Closing your workbook

- ❖ Click on **File** menu, then click **Close** to close your workbook

Cursor Management

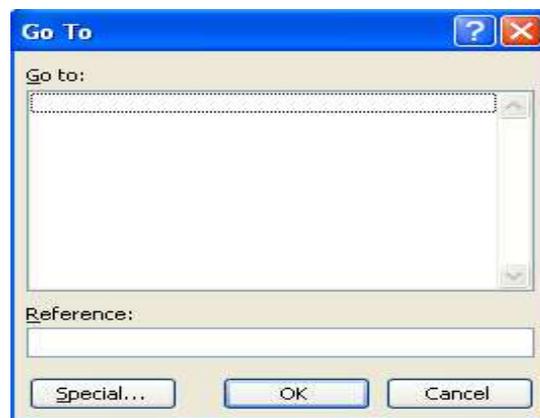
Task 1: Moving around the worksheet

- ❖ Open **sample.xls** workbook.
- ❖ Move the cursor in your worksheet by using the **arrow keys** on the right-hand side of the keyboard.
- ❖ When you have got lots of rows of data you can move the cursor more quickly by using the **PgUp** and **PgDn** keys to move up and down a screen at a time.
- ❖ To move one screen to the right, press the **Alt** key and **PgDn** keys together.
- ❖ To move one screen to the left, press the **Alt** and **PgUp** keys together.
- ❖ To move further to the right, just keep pressing the **right arrow** key
- ❖ To move back to cell A1, press the **Ctrl** and **Home** keys together.
- ❖ Pressing the **Home** key on its own takes you back to column A
- ❖ To move to the last column(**IV**) press the **Ctrl** and **right arrow** keys together.

- ❖ To move to last cell containing data, press **Ctrl** and **End** keys together.
- ❖ To move to the last row(65,536), press **Ctrl** and the **down arrow** keys together.
- ❖ You can also move the cursor with the mouse. Move the mouse pointer to the location you want. Press and release the left mouse button once when the cursor is where you want it.

Task 2: Moving to a Specified cell

- ❖ Click on the **Edit** menu, choose **Go To**. You will get the below screen



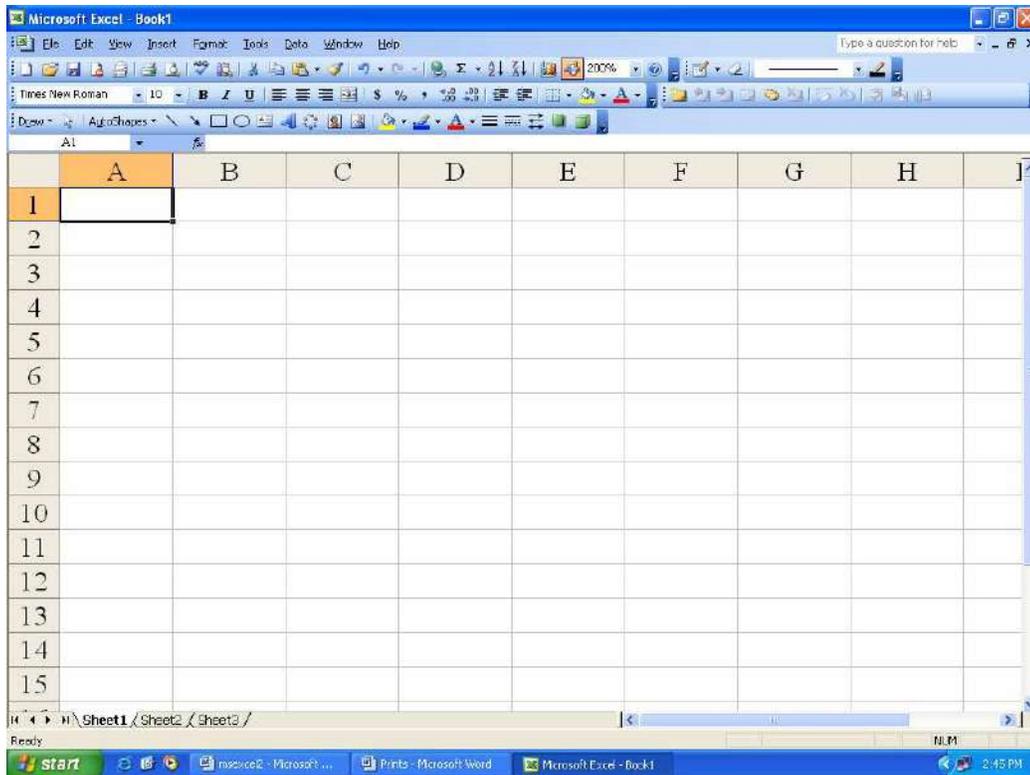
- ❖ Enter the destination cell reference in the **Reference** text box.
- ❖ Click **OK** to move directly to the specified cell.

Data Manipulation

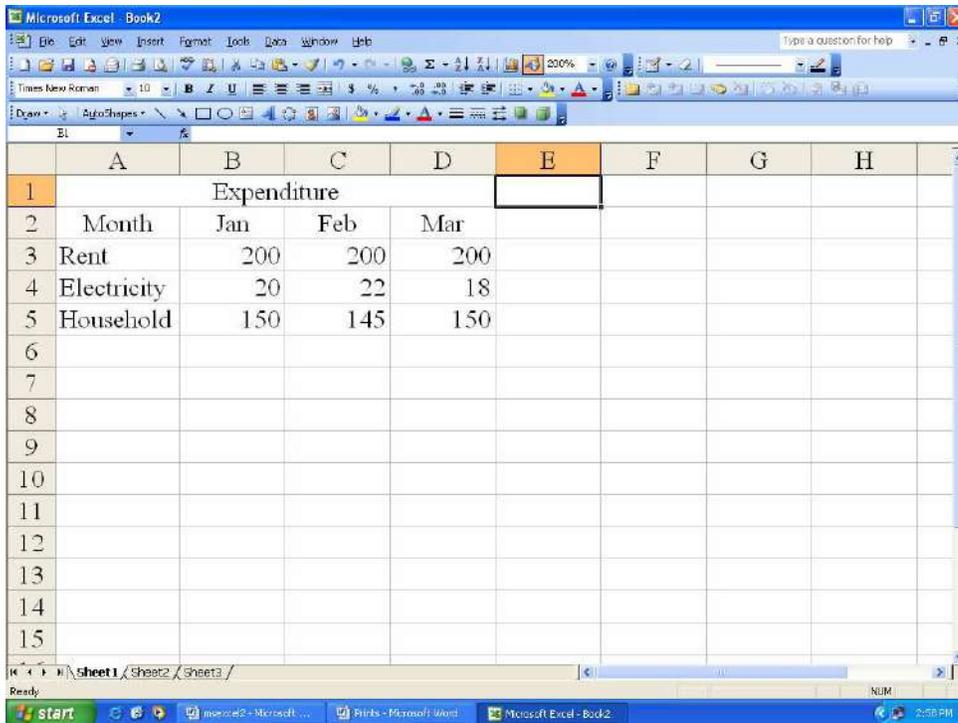
Task 1: Entering data

- ❖ Start **Excel**. Click **File** and then **New**. An empty worksheet appears as shown below

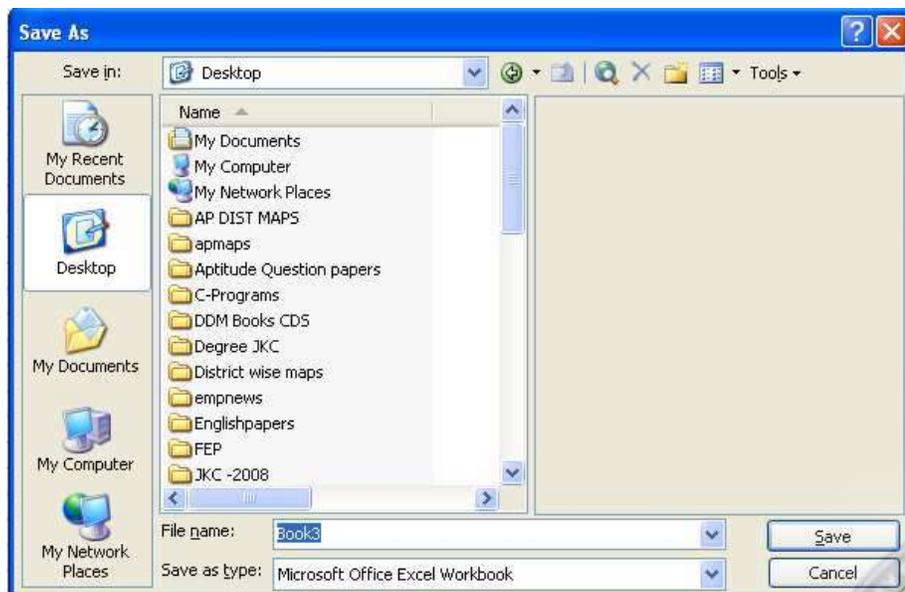




- ❖ Type **Expenditure** in cell A1 then press down arrow key to move to cell A2.
- ❖ Type **Month** then press the down arrow key to move to cell A3
- ❖ Continue to type the data. The resulting worksheet should appear like the following screen.



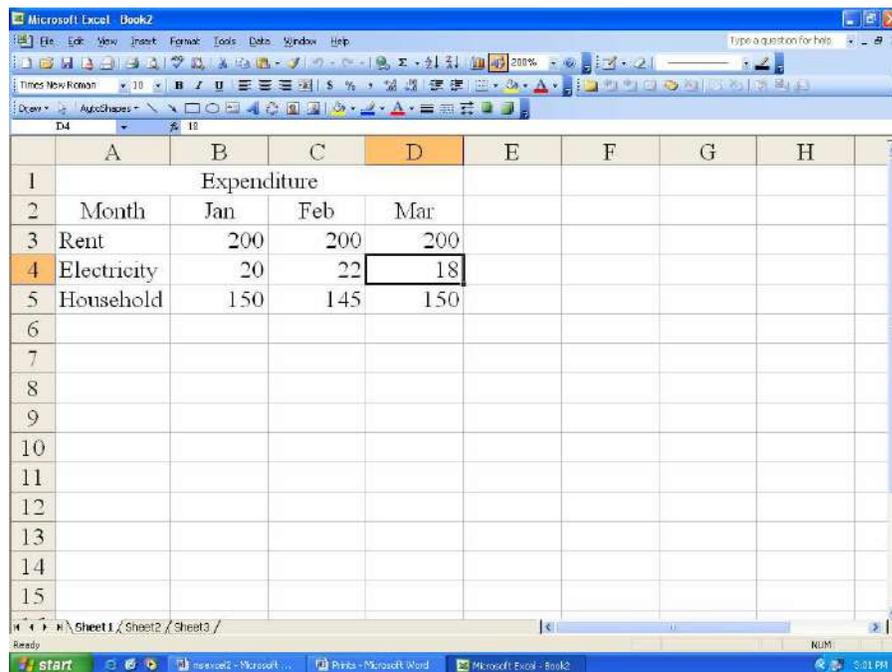
- ❖ Save your work by clicking **File** and then **Save As**. This dialog box appears.



- ❖ Type **cash** in the *File Name* text box and then click **Save** button. Excel automatically adds the extension **.xls** to your file name.

Task 2: Editing data

- ❖ Click **File** and then click **Open**.
- ❖ Click **cash.xls** and then click **Open**.
- ❖ Move the mouse pointer to cell D4, click and release. The cell is highlighted and 18 appears in the formula bar.
- ❖ Move the mouse pointer to the formula bar and click once to the right of 18.



The screenshot shows a Microsoft Excel window titled 'Microsoft Excel - Book2'. The spreadsheet has the following data:

	A	B	C	D	E	F	G	H
1		Expenditure						
2	Month	Jan	Feb	Mar				
3	Rent	200	200	200				
4	Electricity	20	22	18				
5	Household	150	145	150				
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

- ❖ Use the **Backspace** key to delete 8, then type 4 and press **Enter**. Cell D4 now contains the value 14.

Task 3: Replacing cell data

- ❖ Make the cell B5 active by clicking on it.
- ❖ Type 200 and press Enter. The cell B5 will now contain the value 200 replacing old value (150).

Task 4: Deleting cell contents

- ❖ Move to cell C5 and click to select.
- ❖ Press the **Delete** key.
- ❖ The cell becomes blank.



- ❖ Drop down the **Edit** menu and click **Undo** to reinstate the 145. Excel 97 allows 16 levels of undo. You can use **Undo** and **Redo** buttons also.

Task 5: Copying data

- ❖ Open the **cash** spreadsheet.
- ❖ Select the cells D3 to D5
- ❖ Click **Edit** menu and then click **Copy**.
- ❖ Select the cells F3 to F5.
- ❖ Click **Edit** menu and then click **Paste**.
- ❖ Now the cells D3 to D5 are copied into F3 to F5.

Task 6: Moving data

- ❖ Open **cash.xls** spreadsheet.
- ❖ Select the cells from B3 to B5.
- ❖ Click **Edit** menu and then click **Cut**.
- ❖ Select the cells G3 to G5.
- ❖ Click **Edit** menu and then click **Paste**.

Task 7: Data Auto Fill

There is an easy method to fill the data in columns and rows. The data may be *Numeric* or *dates* and *text*.

To fill *Sln* by using *auto fill*

- ◆ Type Sln for 2 cells i.e 1,2 in the cells A1 and A2 respectively.
- ◆ Select two cells and drag the **Fill Handle** +

	A	B	C	D	E	F
1	1	2	3	4	5	6
2	2					
3	3					
4	4					
5	5					
6	6					
7	7					
8	8					
9	9					

To fill dates in the cells

- ◆ Type date in the cell
- ◆ Select the cell and drag the *Fill Handle*

	A	B	C	D
1	01/01/2008	02/01/2008	03/01/2008	04/01/2008
2	02/01/2008			
3	03/01/2008			
4	04/01/2008			
5	05/01/2008			
6	06/01/2008			
7	07/01/2008			
8	08/01/2008			
9	09/01/2008			
10	10/01/2008			
11	11/01/2008			

We can customize the lists with different text data to minimize the redundancy of work.

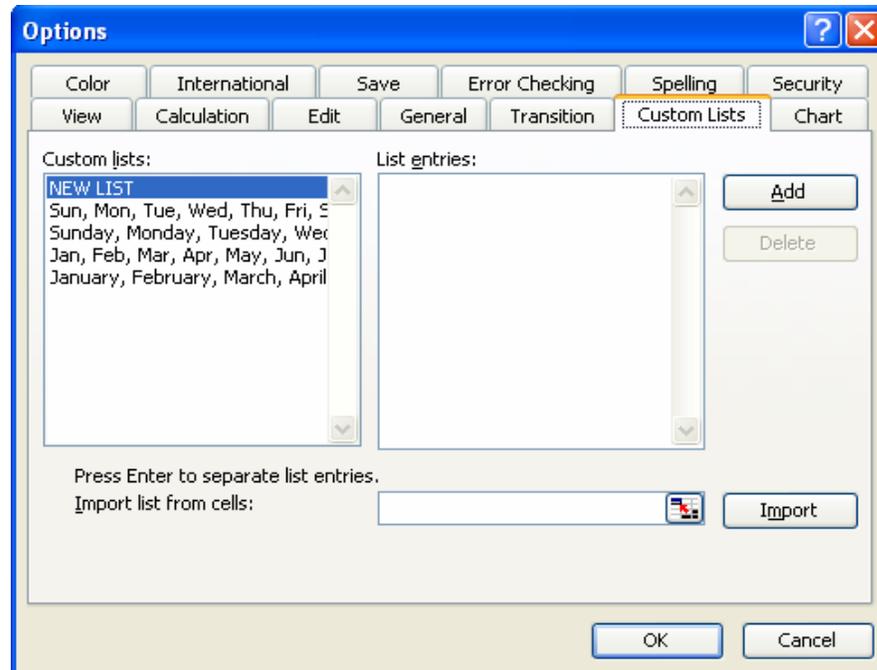
Some of the lists are listed below:

1. Jan, Feb, Mar, Apr, May, June, July.... like months
2. Sunday, Monday, Tuesday, Wednesday, Thursday...Like week days
3. Adilabad, Anaparthi, Chittoor, Cuddapah... like District names
4. Ravi, Kiran, Praveen, Rama.... like employees list

To create a customized list follow the steps given below:

- ◆ Click **Tools** Menu ,Click **Options** then click **Custom Lists** tab, Then you will find the figure given below:





- ◆ Click **NEW LIST** and enter the list in the **List entries** window
- ◆ Click **Add** button then click **OK** button then your list will be added to the **Custom Lists**. That list you can use as and when required to type.
- ◆ Now you can Drag the **fill handle** (+) to get the list automatically.

Using Formulae and Functions

Task 1: Entering a formulae

- ❖ Click **File** and then click **New**.
- ❖ Enter the data in the new worksheet as shown below



	A	B	C	D	E	F	G	H
1				Electricity				
2	Month	Jan	Feb	Mar	Apr	May	Jun	
3	Rent	200	200	200	250	300	250	
4	Electricity	20	22	18	25	30	28	
5	Household	150	145	150	130	150	140	
6	Power							
7								
8								
9								
10								
11								
12								
13								
14								

- ❖ Cell B6 should contain formula. Move the cell pointer to cell B6.
- ❖ Type =B3+B5(*formulae and functions should always begin with = sign*)
- ❖ Cell B6 will now contain the value 350
- ❖ Look at cell B6; you will see the result of the formula in the cell B6 rather than formula.
- ❖ Now repeat the appropriate formula for cell C6, D6.
- ❖ Save your worksheet as **cash3.xls**.

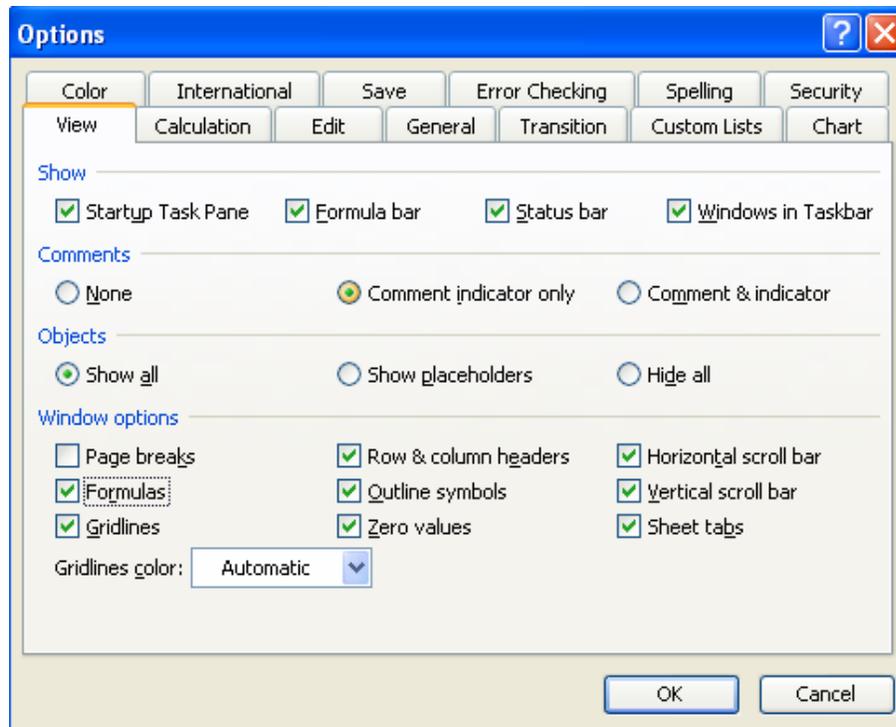
Task 2: Editing Formulae

- ❖ Move the cursor to the formula bar with the mouse, clicking once.
 - ❖ Make the desired changes.
 - ❖ When you have finished editing the formulae, press the Enter key for the changes to take effect.
- (OR)
- ❖ Edit the contents by pressing F2 key on the keyboard

Task 3: Displaying and Printing formulae

- ❖ Click **Tools** menu and then click **Options**.
- ❖ Click **View** tab.
- ❖ In **Window options** check **Formulas** check box. The below screen appears.





- ❖ Click **OK** button.
- ❖ To print the worksheet with formulae displayed, click **File** menu and click on **Print Preview**. If the layout is satisfactory, click on the **Print** button.

Task 4: Using the SUM function

- ❖ Open **cash3.xls** spreadsheet.

	A	B	C	D	E	F	G	H
1		Electricity						
2	Month	Jan	Feb	Mar	Apr	May	Jun	
3	Rent	200	200	200	250	300	250	
4	Electricity	20	22	18	25	30	28	
5	Household	150	145	150	130	150	140	
6	Power							
7								

- ❖ Suppose if you want the summation of the cells B3 to B5 should appear in the cell B6, then first select the cells from B3 to B6.

- ❖ Click the **Auto Sum** Σ icon on the toolbar.
- ❖ The result of (B3+B4+B5) will appear in the cell B6.

Task 4: Copying Formulae

- ❖ Open **cash3.xls** spreadsheet.
- ❖ If you want to copy the formula in the cell B6 to C6,D6,E6 then first select the cell B6.
- ❖ Move the cursor to the lower right corner of the cell B6. The cursor will change to **+** icon.
- ❖ Drag the cursor from B6 to E6 and release left mouse button.
- ❖ You will notice that the cells C6, D6 and E6 are updated immediately as shown below.

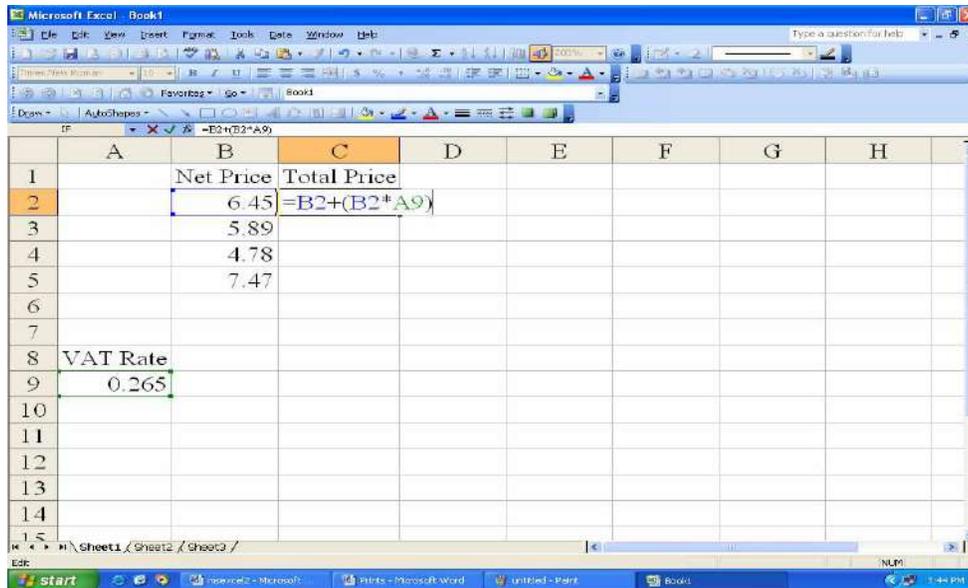
The screenshot shows a Microsoft Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H
1								
2	Month	Jan	Feb	Mar	Apr	May	Jun	
3	Rent	200	200	200	250	300	250	
4	Electricity	20	22	18	25	30	28	
5	HouseHold	150	145	150	130	150	140	
6	Power	370	367	368	405	480	418	
7								
8								
9								
10								
11								
12								
13								
14								
15								

Task 5: Copying formulae using absolute addressing

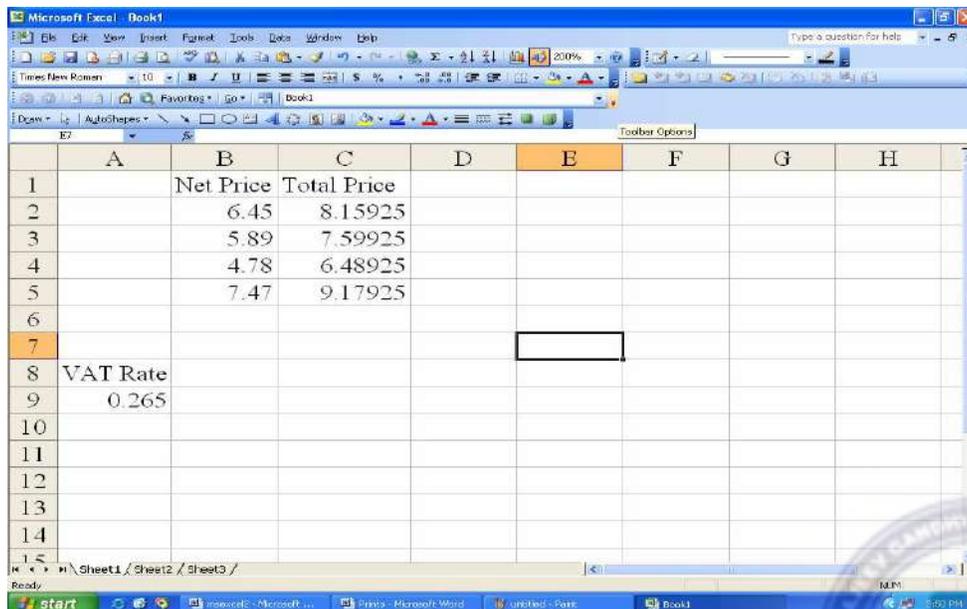
- ❖ Create the worksheet shown below and save **ABS**
- ❖ If you copy the formula in the cell c2 to c3, c4, c5 you will get the incorrect





- ❖ result because the formula will change in the cell (C3) to B3*A10 but the value in the A10 is not defined. The reason is that we are copying relative address but not absolute address. To use absolute address move to c2 cell.

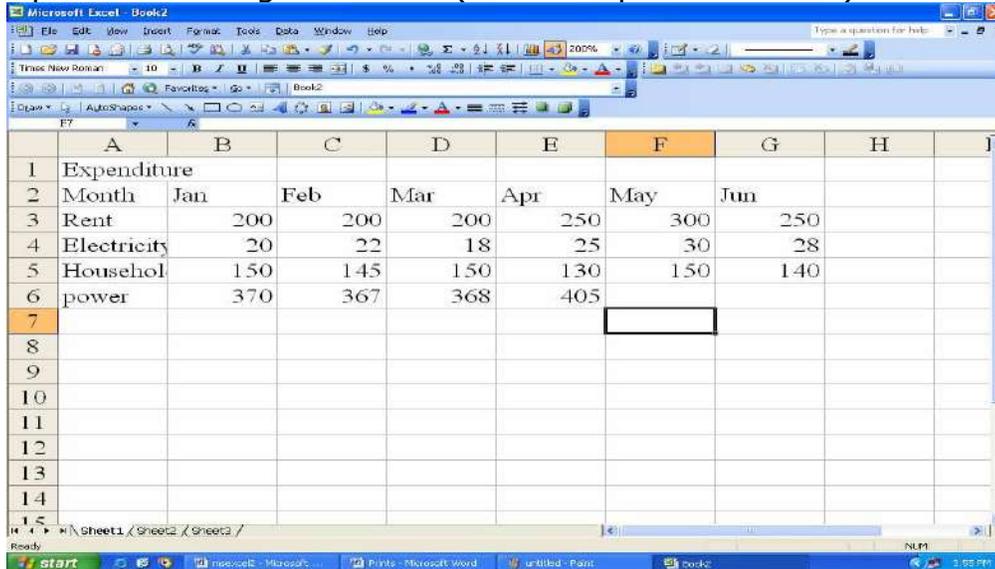
- ❖ Edit the formula to **=B2+(\$B\$2*\$A\$9)** and press **Enter** key.
- ❖ Copy the formula to cells C3 to C5.



Formatting Spreadsheet

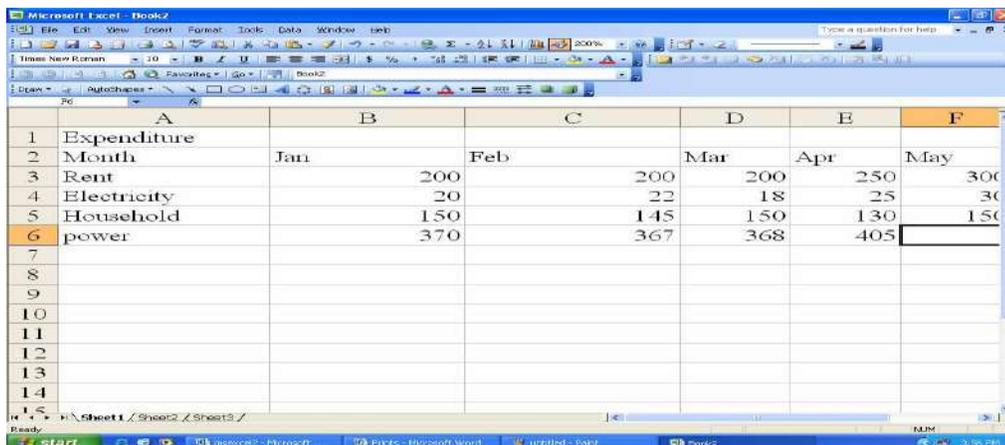
Task1: Increasing column width

- ❖ Open an existing worksheet(For example **cash3.xls**)



	A	B	C	D	E	F	G	H
1	Expenditure							
2	Month	Jan	Feb	Mar	Apr	May	Jun	
3	Rent	200	200	200	250	300	250	
4	Electricity	20	22	18	25	30	28	
5	Household	150	145	150	130	150	140	
6	power	370	367	368	405			
7								
8								
9								
10								
11								
12								
13								
14								

- ❖ Move the mouse pointer to the position(column B)shown below in the column header. When the black cross appears, hold down the left button and drag the mouse to the right to increase the column width by the required amount.



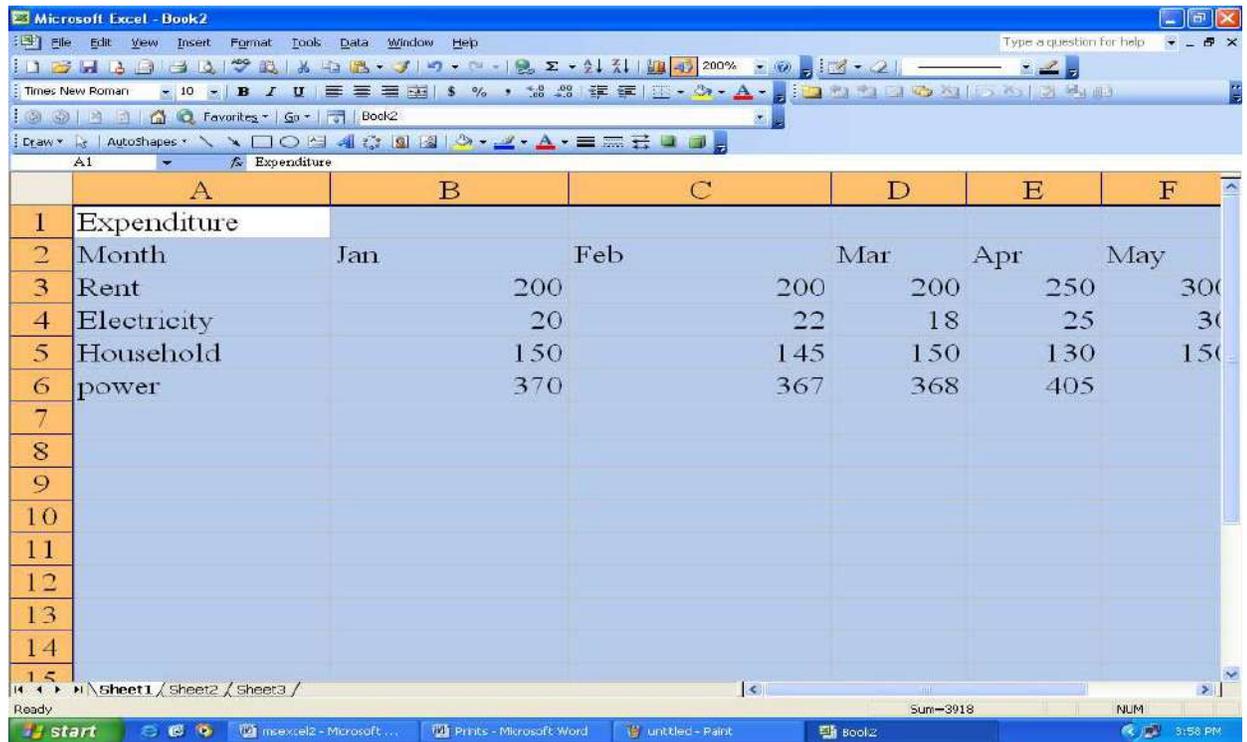
	A	B	C	D	E	F
1	Expenditure					
2	Month	Jan	Feb	Mar	Apr	May
3	Rent		200	200	250	300
4	Electricity		20	22	18	25
5	Household		150	145	150	130
6	power		370	367	368	405
7						
8						
9						
10						
11						
12						
13						
14						

Task 2: Decreasing column width

- ❖ Open **cash3.xls** spreadsheet.
- ❖ Move the mouse pointer to the **column B**. When the black cross appears, hold down the left button and drag the mouse to the left to reduce the cell width.

Task 3: Changing width of all cells in a spreadsheet

- ❖ Open **cash3.xls** spreadsheet
- ❖ Select the entire worksheet by clicking the **Select All** button (to the left of A1 cell) at the top left corner of the worksheet. The worksheet changes from white to black.

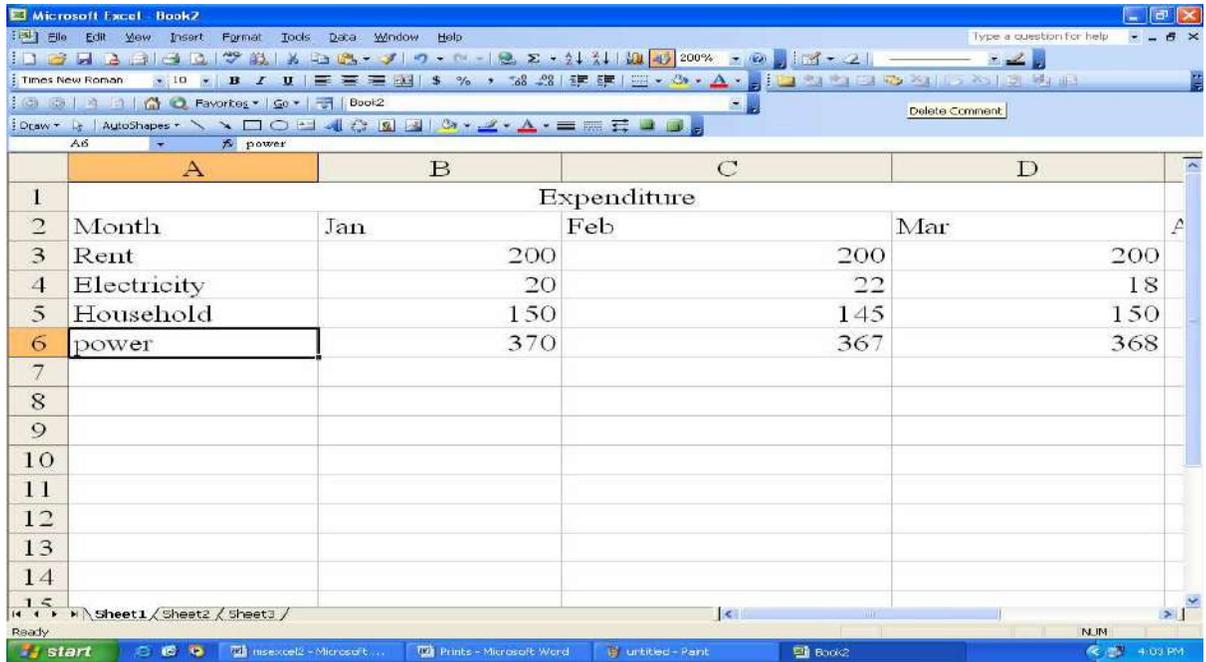


- ❖ Click **Format** menu, click **Column**, then click **Width**
- ❖ In the column width text box type 20, then click **OK** button. Your worksheet cells should all increase in width.



- ❖ You will get the below screen. You will notice that widths of all columns are now changes to 20

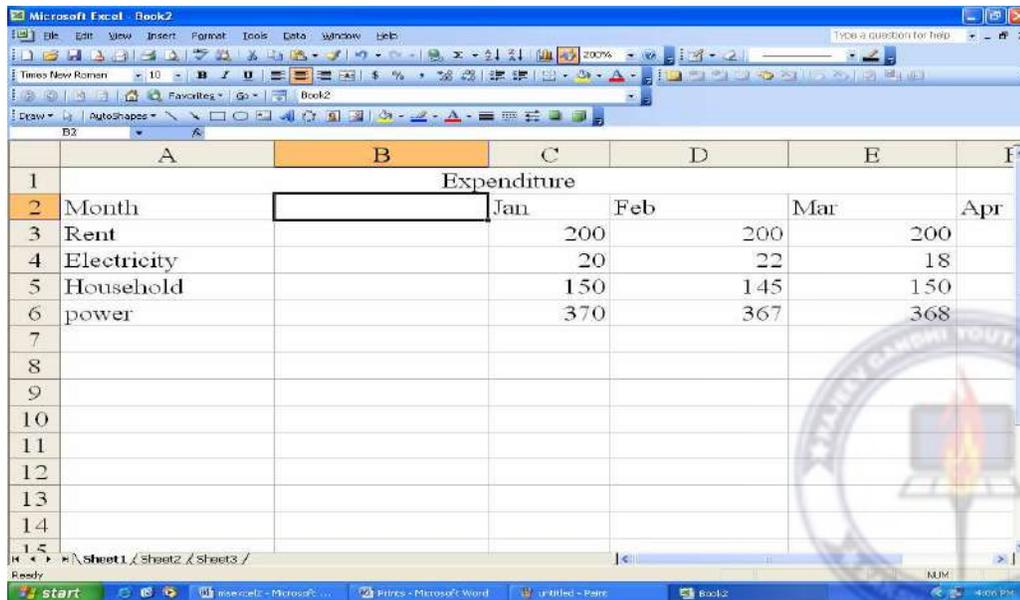




- ❖ Click the **Undo** button to revert to the previous cell width.

Task 3: Inserting Columns

- ❖ Open **cash.xls** spreadsheet.
- ❖ Move to cell B2 and click.
- ❖ Click **Insert** menu, click **Columns**. You will get the below screen.



- ❖ A blank column will be inserted before(to the left of column B)

Task 4: Deleting Column contents

- ❖ Open cash.xls spreadsheet.
- ❖ Move the mouse pointer to column E header and click to select column E

	C	D	E	F
1	Expenditure			
2	Jan	Feb	Mar	Apr
3	200	200	200	250
4	20	22	18	25
5	150	145	150	130
6	370	367	368	405
7				
8				

- ❖ Press **Delete** button. The column contents will be deleted.
- ❖ Click **Undo** button to revert to the previous screen.

Task 5: Removing columns, rows, and cells completely

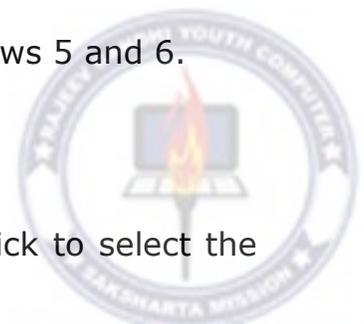
- ❖ Select individual columns or rows or cells.
- ❖ Click **Edit** menu and click **Delete**

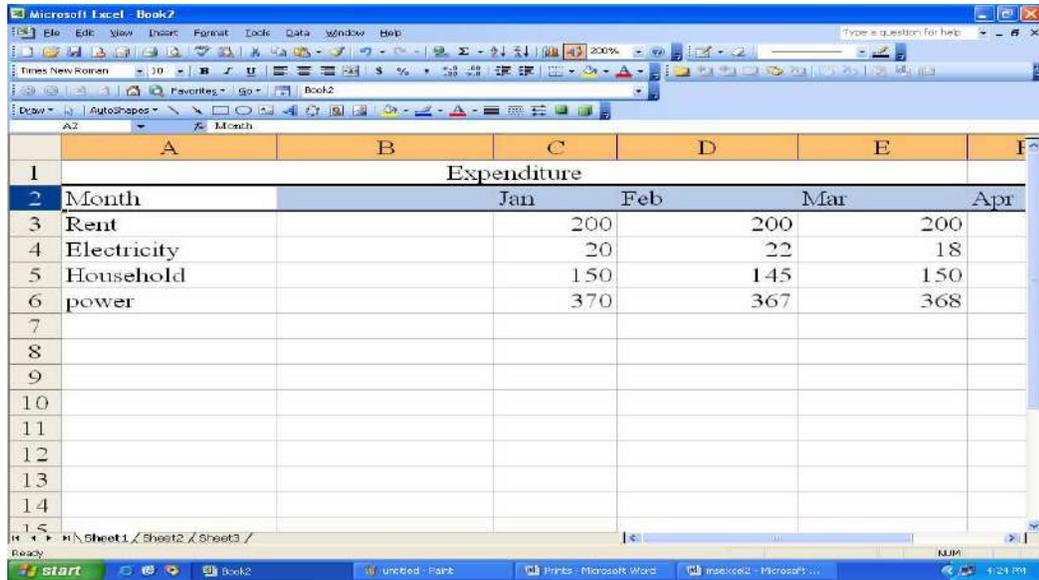
Task 6: Inserting a row

- ❖ When you insert a row, it is inserted above the current row, so if you want to insert a new row above row 6(between rows 5 and 6), place the cursor on a cell in row 6 and
- ❖ Click on the **Insert** menu.
- ❖ Click **Entire Rows** insert a blank row between rows 5 and 6.

Task 7: Deleting row contents

- ❖ Open **cash.xls** spreadsheet.
- ❖ Move the mouse pointer to row 2 header and click to select the row as shown below

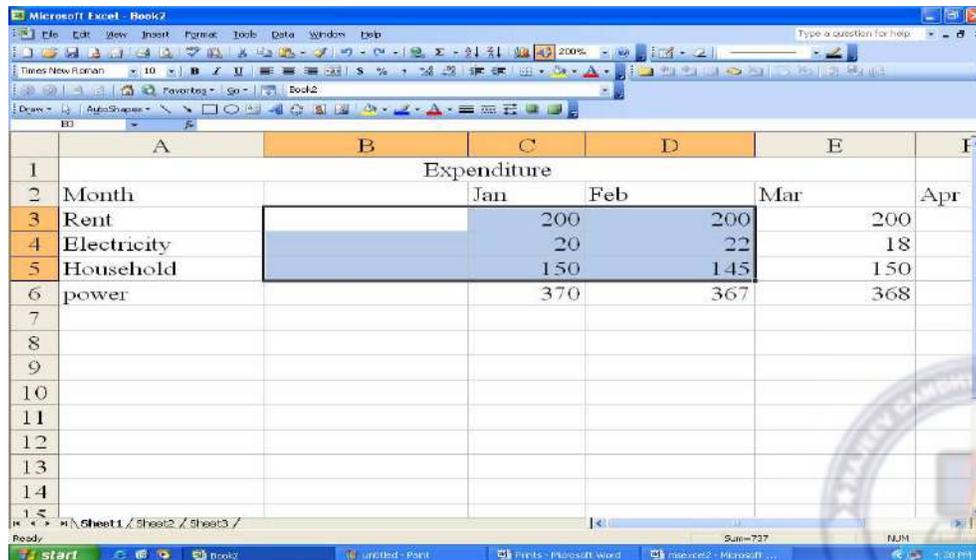




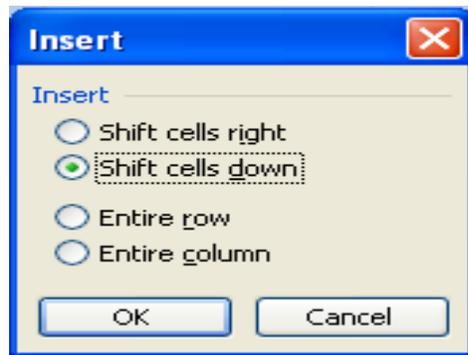
- ❖ Press **Delete** to remove the contents of row.
- ❖ Click the **Undo** button to cancel the delete operation.

Task 7: Inserting cells

- ❖ Open **cash.xls** spreadsheet.
- ❖ Select cells B2 to D4 by moving the mouse pointer to cell B2, holding down the left mouse button and dragging the mouse pointer to cell D4, then releasing the left button. The cells should be highlighted.



- ❖ Click **Insert** menu and click **Cells**. This dialog box appears.
- ❖ Click **OK** to shift the cell down.



Task 8: Changing data justification

- ❖ Open **cash.xls** spreadsheet.
- ❖ Select the cell B2 as shown below.
- ❖ Here the text "Jan" by default **left justified**. You can modify alignment as **right justified** or **center** by clicking right justify  or center the text  within the cell by clicking respectively.

Task 9: Merge and Center data

- ❖ Open **cash.xls** spreadsheet.
- ❖ Select the cells A1 to H1 as shown below

	A	B	C	D	E	F	G	H
1	Expenditure							
2	Month	Jan	Feb	Mar				
3	Rent	200	200	200				
4	Electricity	20	22	18				
5	Household	150	145	150				
6								

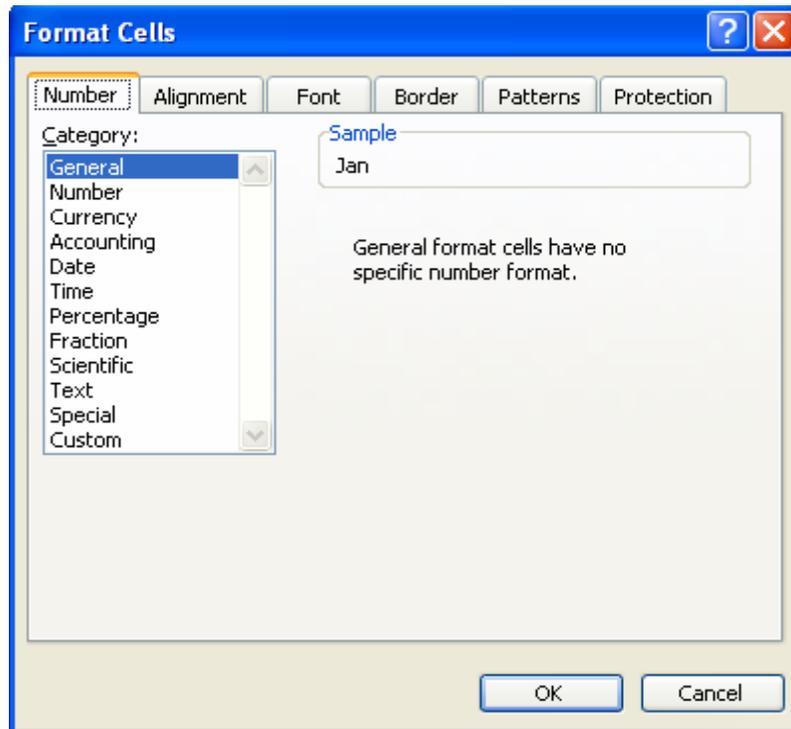
- ❖ Click **Merge and Center** button on the toolbar 
- ❖ You will get the below screen.

	A	B	C	D	E	F	G	H
1	Expenditure							
2	Month	Jan	Feb	Mar				
3	Rent	200	200	200				
4	Electricity	20	22	18				
5	Household	150	145	150				
6								

Task 10: Formatting cells

	A	B	C	D
1				
2		Marks		
3			200	66.66666667
4			440	22.22222222
5			640	213.3333333
6				
7				

- ❖ Create a new spreadsheet as shown below and save it as "**marks.xls**"
- ❖ Now you can format the cells in column C by selecting column C by clicking on the column heading

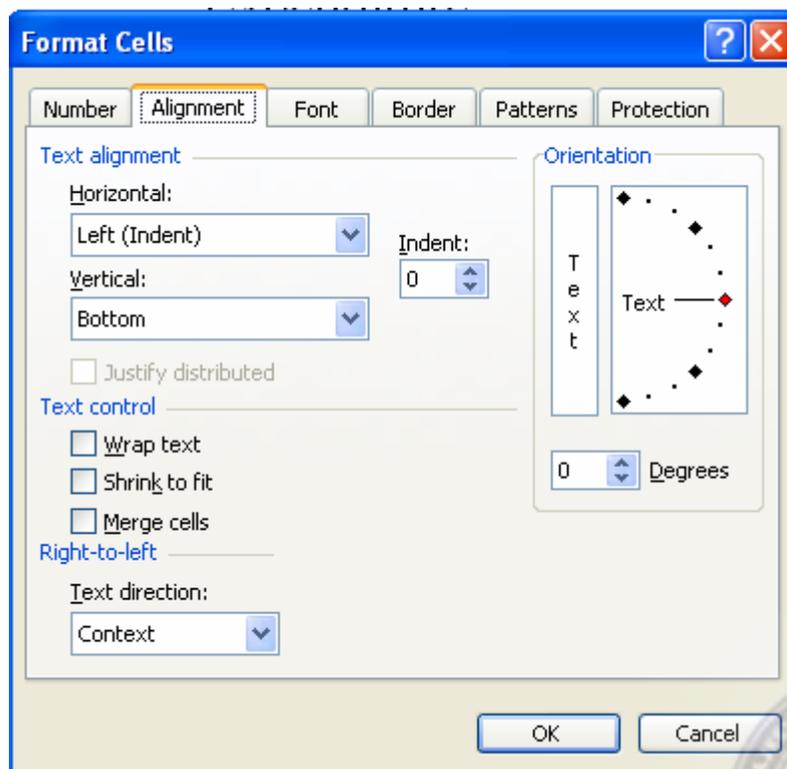


- ❖ Click **Format** menu and click on **Cells**. Click on **Number**.
- ❖ Use the **Down arrow** in the **Decimal Places** to set to **0**. Click **OK**.
- ❖ Now repeat the formatting but this time format the cells to two decimal places.

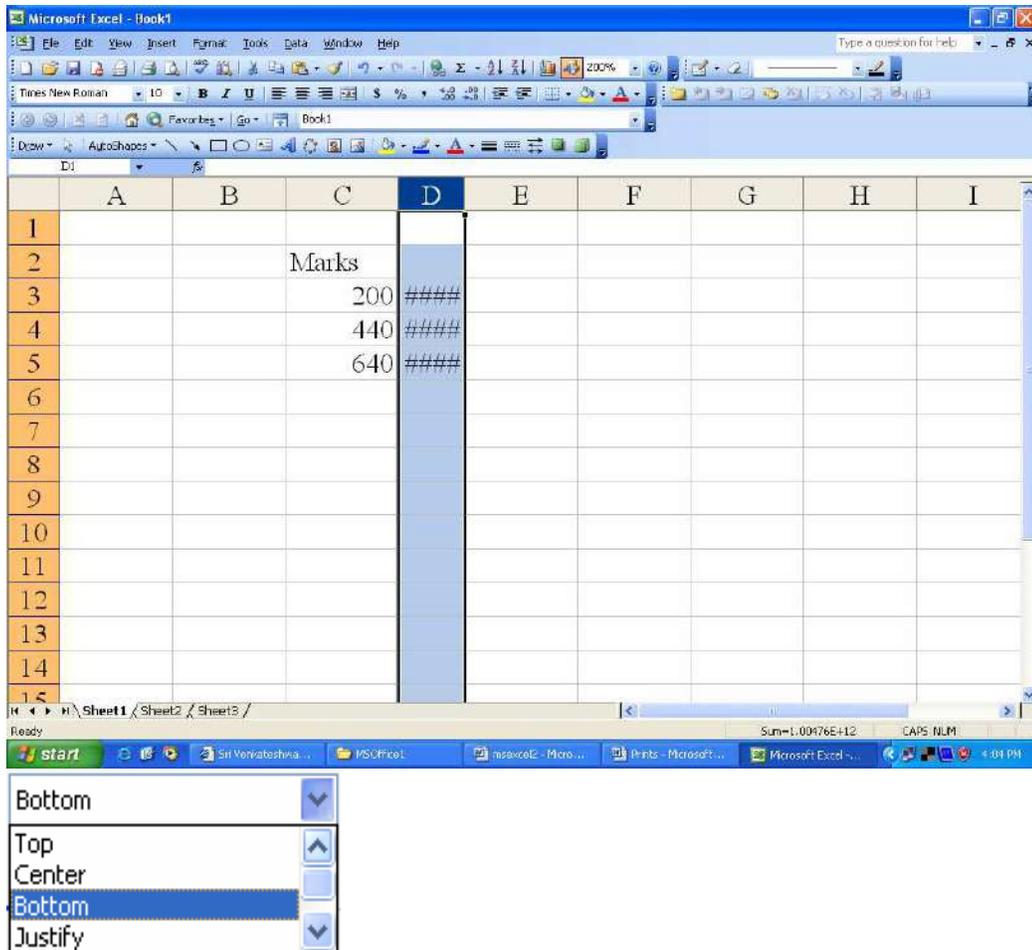
- ❖ Again, repeating the formatting operation, but this time to four decimal places.
- ❖ Finally, format the cells to eight decimal places. This screen will appear.
- ❖ The #### symbols indicate that the cell is too narrow to display the data in the chosen format. However, if you increase the cell width sufficiently, the data will be displayed to eight decimal places.
- ❖ Increase the width column C until the data is displayed.
- ❖ Now change the formatting back to two decimal places, and reduce the column width to a suitable width.

Changing the data Orientation (Vertical, Horizontal etc.)

- ❖ Excel offers three options that let you control the orientation of the text within a cell. These are *Text alignment*, *Text orientation*, and *Text control*.



Vertical text alignment can be any one of the following



To display text vertically in a cell:

- ◆ Choose **Cells** from the **Format** menu.
- ◆ Click the **Alignment** Tab.
- ◆ Specify the desired text orientation by selecting one of the orientation boxes.
- ◆ Select the **Wrap text** check box, if you want Excel to wrap the text
- ◆ Click **OK**

Here are some examples of the different alignment options



	A	B	C	D	E	F
1	Horizontal Text	Horizontal Text	Vertical Text	Vertical Text	Slant text	Vertical slant text

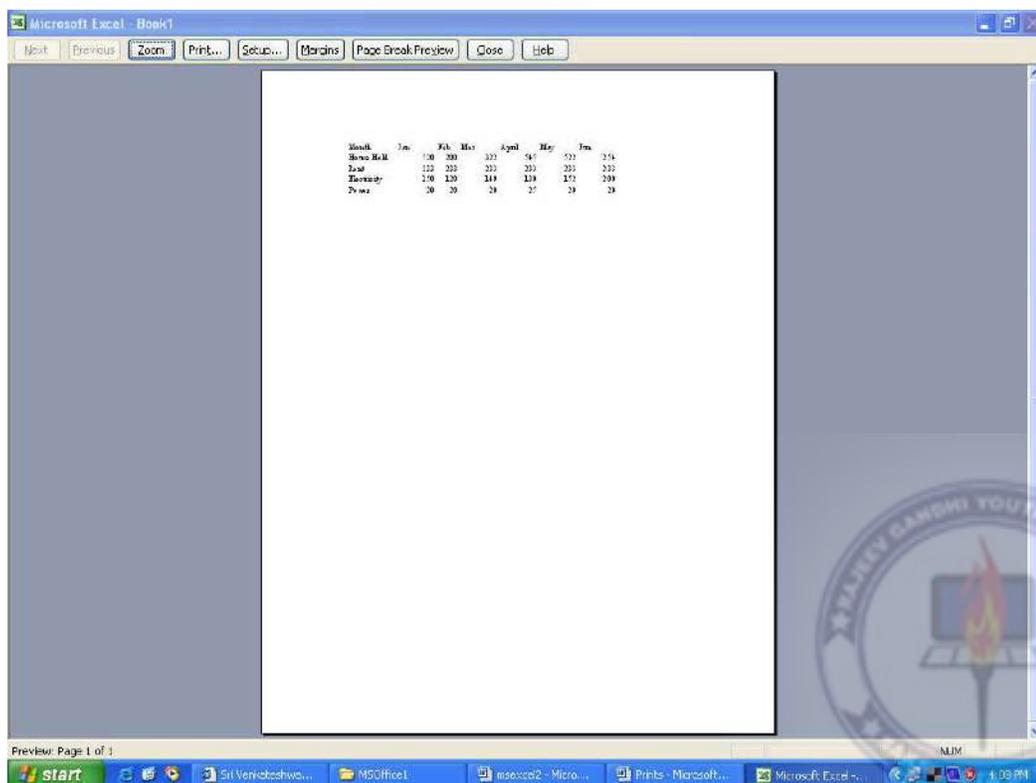
- ◆ Select **vertical** list box and select **top** to align the data at the top of the cell (Eg: cell A1)
- ◆ The below figure shows you different Text control options.

	A	B	C	D	E
1	Text control with Wrap text	Text control with Shrink to fit	Text control with merge cells		

Printing and layout

Task 1: Previewing a printout

- ❖ Open **cash.xls** spreadsheet.
- ❖ Click on the **File** menu and click on **Print Preview**. A screen similar to this should appear.



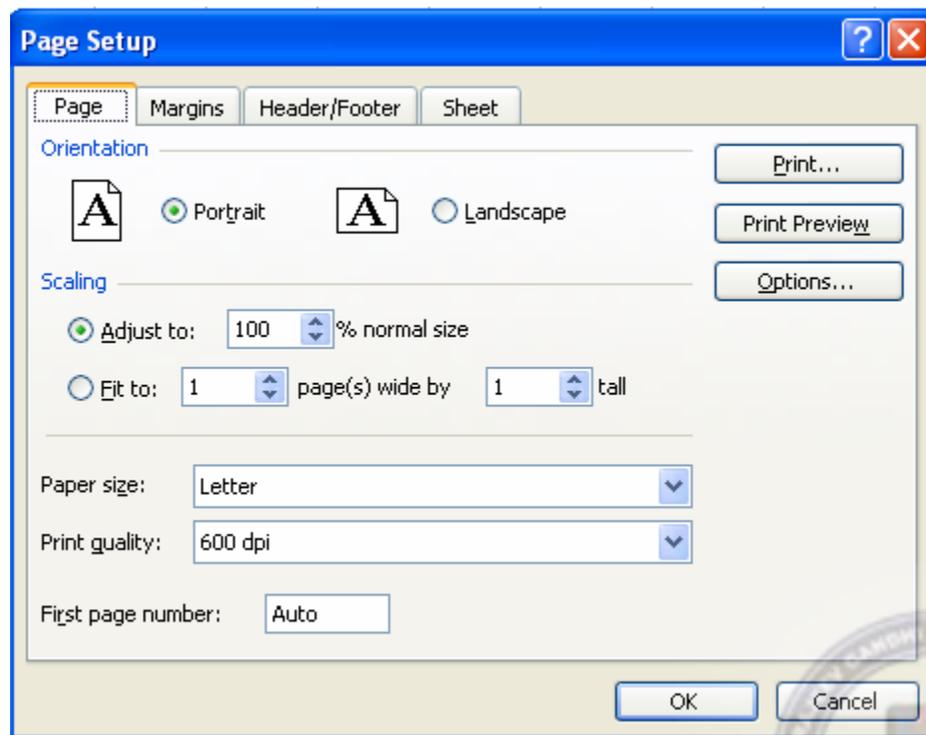
- ❖ Since the size of the text is very small, you can click on **Zoom** button, it magnifies the worksheet. Clicking on **Zoom** second time returns you to the original preview format.
- ❖ Press **PgDn** to move through your worksheet if it is more than one page long.
- ❖ Before printing make sure that your printer is switched on, is loaded with the appropriate paper, and is on-line.
- ❖ If you are happy with the layout of your document, click on the

Print...

Print button to obtain a printout. You should see a message on screen telling you that your file is being printed, and on which paper.

Task 2: Printing landscape

- ❖ To select **landscape** mode, click on the **File** menu, **Page Setup** this screen will appear.
- ❖ Click on the **Landscape** button.



Task 3: Fitting your worksheet to one page

- ❖ In the above screen click on the **Fit To:** box and type: *1 page wide by 1 page tall.*

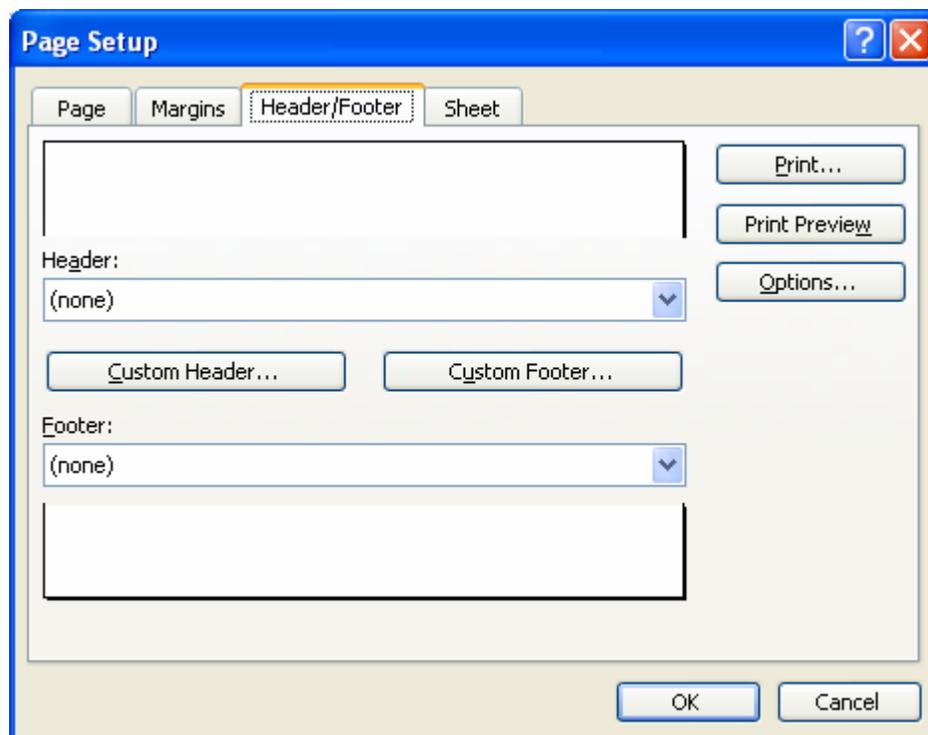
- ❖ If you need to make changes to your worksheet before printing, click on the **Close** button to return to your workbook.

Task 4: Adjusting margins

- ❖ In the **Page Setup** dialog box, click the **Margins** tab and enter the appropriate sizes (in *inches* or *centimeters*)

Task 5: Setting *Header/Footer* to your worksheet

- ❖ From the **Page Setup** dialog box, click on the **Header/Footer** tab to display the below screen.



- ❖ In the **Header** box either you select a title from the drop down menu or enter your own title. Similarly for **Footer** box also you can set your own title.
- ❖ Click on **OK**.

Task 6: Printing selected cells

- ❖ Open **cash.xls** spreadsheet.
- ❖ Click on the **row 2** button (or any other row containing data) to highlight the entire row.

- ❖ Click on **File, Print Area, Set Print Area**. The preview screen should only display the selected cells. (Row 2).
- ❖ If the preview is satisfactory, click the **Print** button to print out only row 2.
- ❖ Click on **File, Print Area, Clear Print Area** to reset the Print Area.

Creating charts and graphs

Task 1: Creating a Pie Chart

- ❖ Open **cash.xls** spreadsheet.
- ❖ Select the cells A1 to G5 as shown below

	A	B	C	D	E	F	G
1	Expenditure						
2	Month	Jan	Feb	Mar	Apr	May	Jun
3	Rent	200	200	200	250	300	250
4	Electricity	20	22	18	25	30	28
5	Household	150	145	150	130	150	140

- ❖ Click on **Insert** menu and click **Chart** option. This will start the Office Assistant, to guide you through creating chart.
- ❖ Follow the instructions in each step of the Wizard. The Assistant explains each step.
- ❖ At step 3, you can specify the **Chart title, X-axis title** and **Y-axis title** separately.
- ❖ At step 4, click **As object in** sheet 1, then click **Finish**.
- ❖ Your chart is now finished. Save as **cash4**. Your chart is saved with the spreadsheet. This type of chart is known as an *embedded chart* and is saved with its worksheet.

Task 2: Creating charts when the data range is not continuous

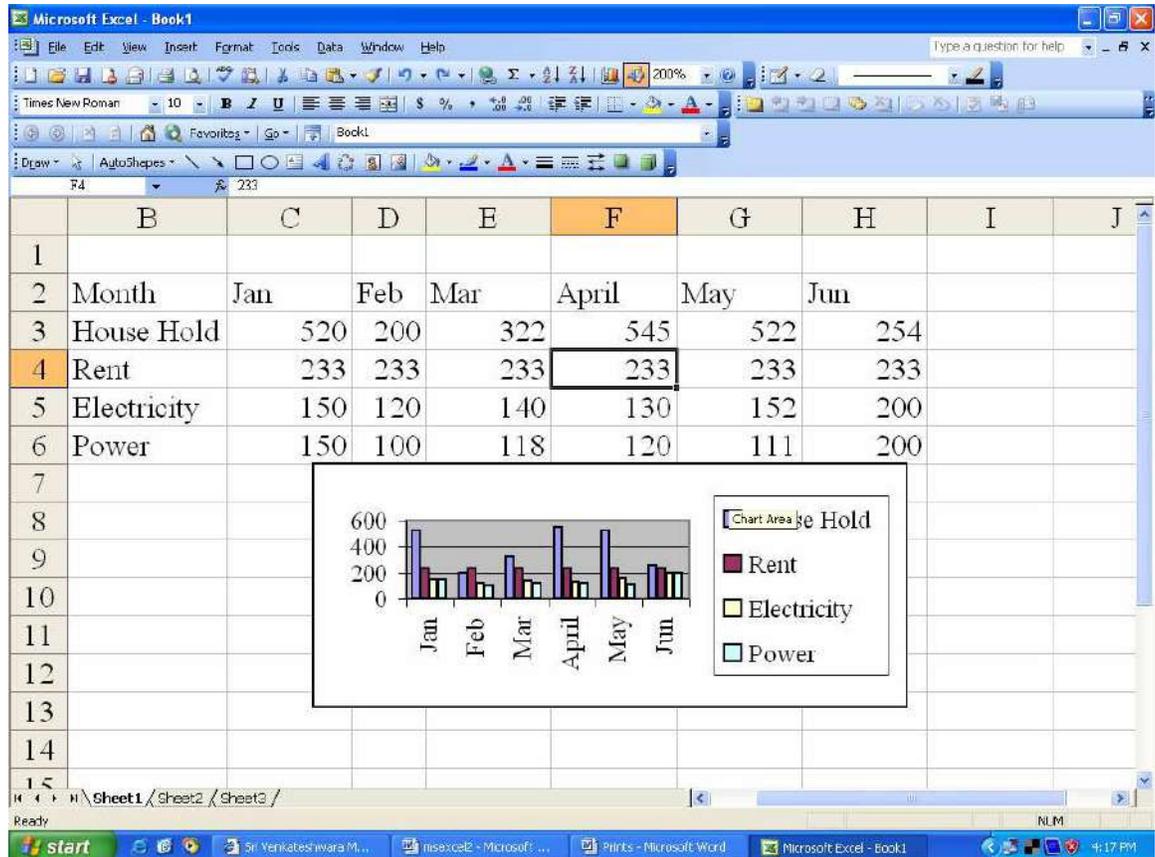
- ❖ Open **cash4.xls**
- ❖ If your requirement is create a chart to show expenditure for February, then first select cells A2 to A5.
- ❖ Hold down the **Ctrl** key and, while holding it down, select cells C2 to C5. Your screen should be similar to this one.
- ❖ Click on the **Chart Wizard** and create a **column chart**. Your screen should look similar to this.



- ❖ If your chart doesn't appear to show any data, you probably included some other cells, probably A1 and/or C1. If so, delete your chart and re-select the correct range.

Task 3: Sizing a chart

- ◆ Open the **cash3.xls** created earlier. A screen similar to this one should appear.



- ❖ The small black markers at each corner and mid-way along each side of the chart. These indicate that the chart is selected, and are called its selection squares.
- ❖ Click on the mid-point marker on the right-hand side, hold down the left mouse button and drag the mouse to the right about one inch(3cm), then release the mouse. The width of the chart will have increased.
- ❖ Now practice the same operation on the mid-point marker of each of the other sides of the chart.
- ❖ Now try the above, but this time on one of the four corner markers. Note that when you use these techniques, the whole chart changes in size, but it retains its original proportions.

- ❖ Now use the same technique to reduce the size of the chart.

Task 4: Deleting Charts

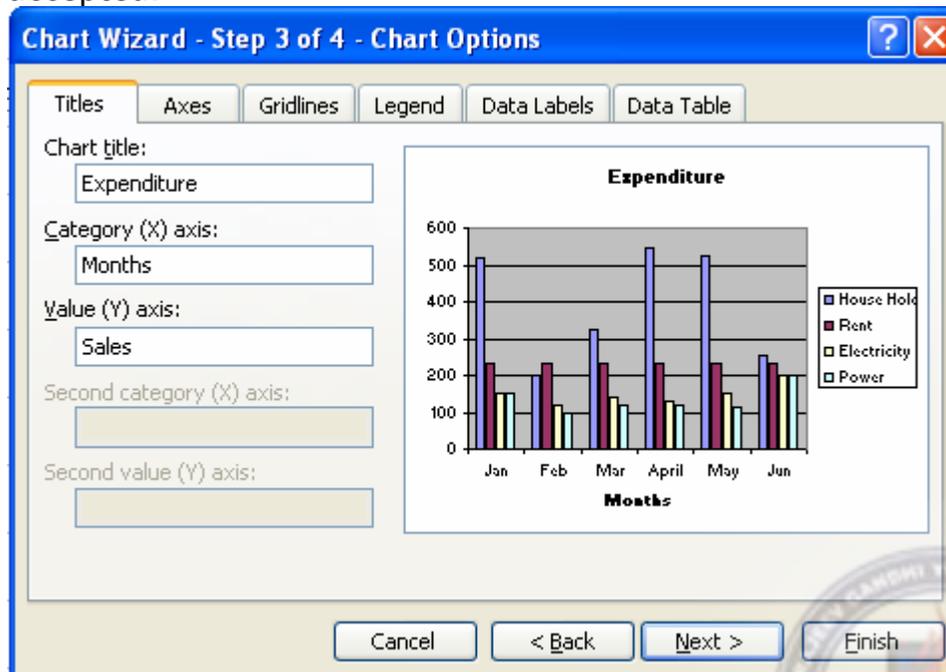
- ❖ Make sure the chart is selected (the small black markers are visible). If not, move the mouse pointer into the chart area and click and release the left mouse button once.
- ❖ Press **Delete** to delete the chart.

Task 5: Moving charts and graphs

- ❖ Make the chart active.
- ❖ Move the mouse pointer into the chart area.
- ❖ Hold down the left mouse button and drag the chart to the desired position.

Task 6: Chart headings and labels

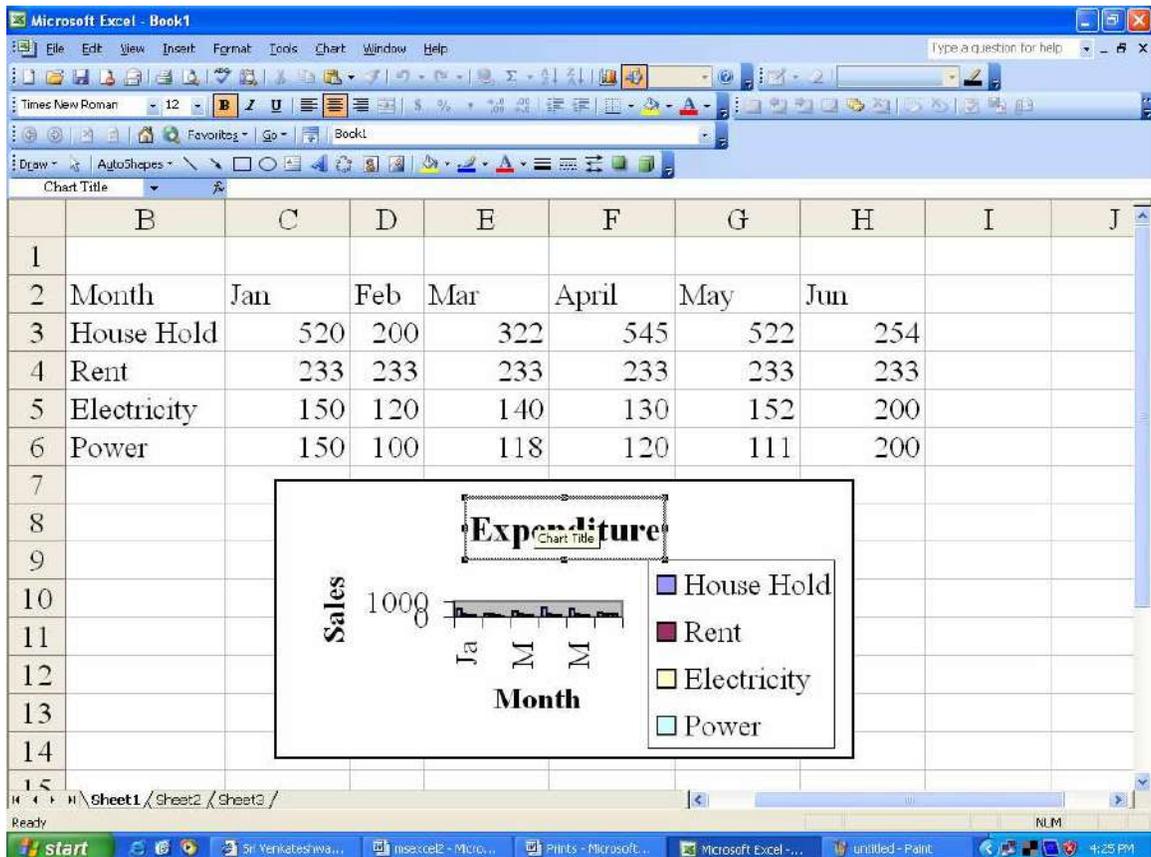
- ❖ While creating charts the step3 asks for **Chart heading, labels for X-axis and Y-axis**. You can define your own labels or click **Next** button so that the default values can be accepted.



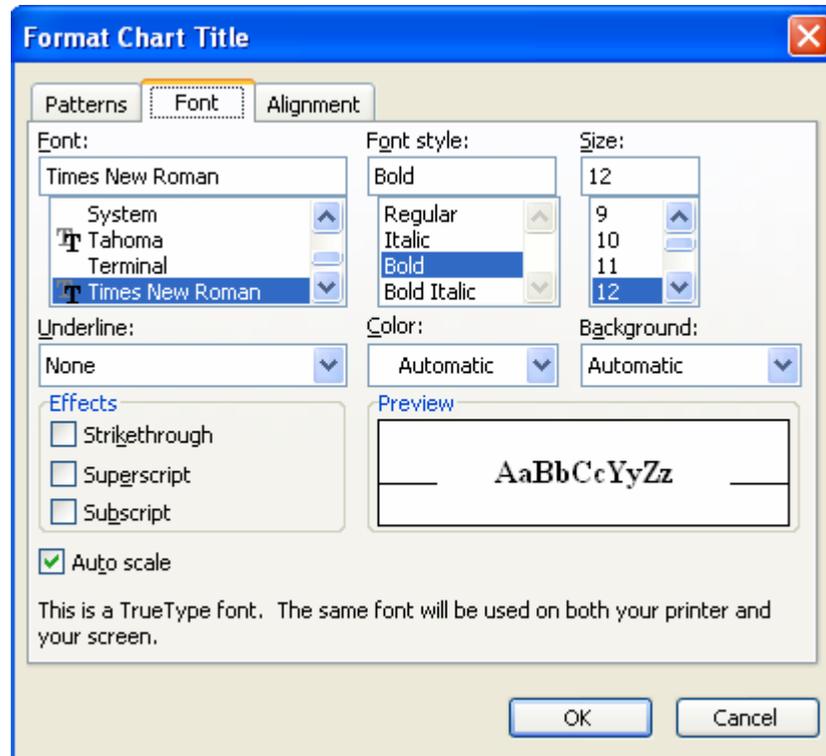
- ❖ For example **Chart title** is *Expenditure*, **X-axis label** is *months* and **Y-axis label** is *Sales*

Task 7: Editing chart items

- ❖ Create the chart as shown below and save it as **cash4.xls**.



- ❖ Click the chart title(Expenditure). Selection markers(small black squares) will appear around the selected item.
- ❖ You can move or size the title in the same way that you can move or size a chart. Click the title box and drag it up by about one inch (3 cm), then release the mouse.
- ❖ You can format the title by selecting it, then right clicking and then selecting "**Format Chart Title**" from the drop down menu. You will get the below screen.



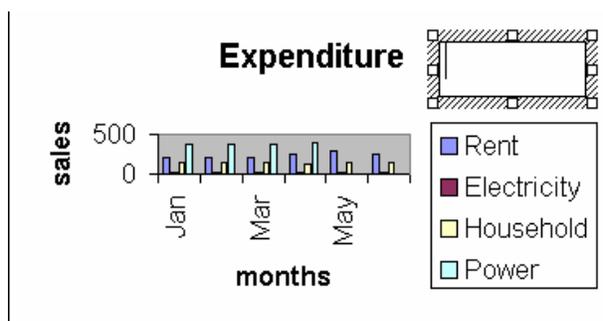
- ❖ You can select font type, font style and font size as shown above
- ❖ Click **OK**.

Task 8: Adding text to a chart

- ❖ Open **cash3.xls** worksheet.
- ❖ Click **View** menu, click **Toolbars, Drawing**.
- ❖ Click the **Text box** icon on the *Drawing toolbar*.



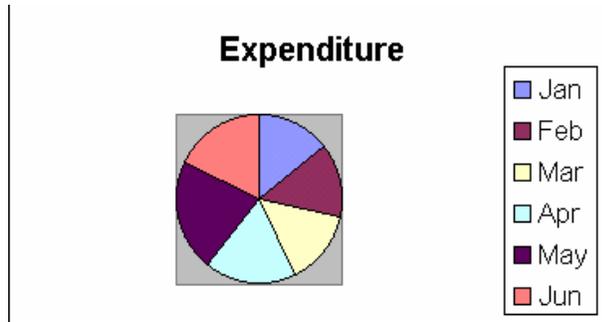
- ❖ Draw a **text box** inside the chart area as shown below



- ❖ Click inside the text box. A flashing text cursor will appear. Now type Household Expenditure
- ❖ You can use the same procedure for any other text that you want to appear in charts.

Task 9: Adding a legend to a chart

- ❖ Create a pie chart as shown below.



- ❖ Display the *Chart toolbar*, by dropping down the **view** menu and clicking **Toolbars, Chart**. In the above figure the legend is already added.
- ❖ Click inside the pie chart, then click once on the add or delete legend button on the Chart toolbar. The legend will be added if not already present and removed if it is currently present.

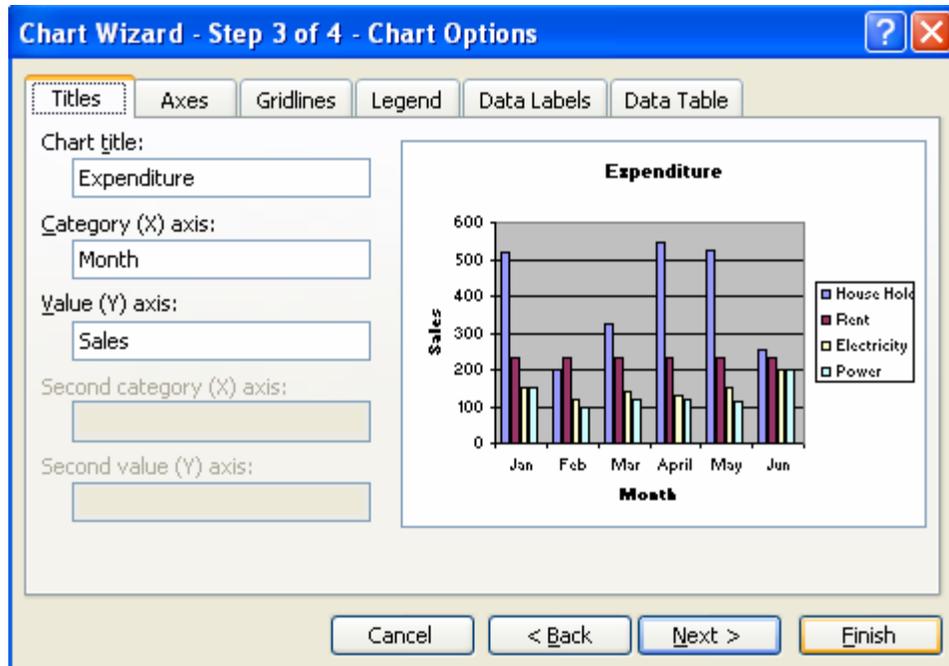


- ❖ You can also add or delete a legend from the **Chart, Chart options** menu

Task 10: Adding gridlines to a chart

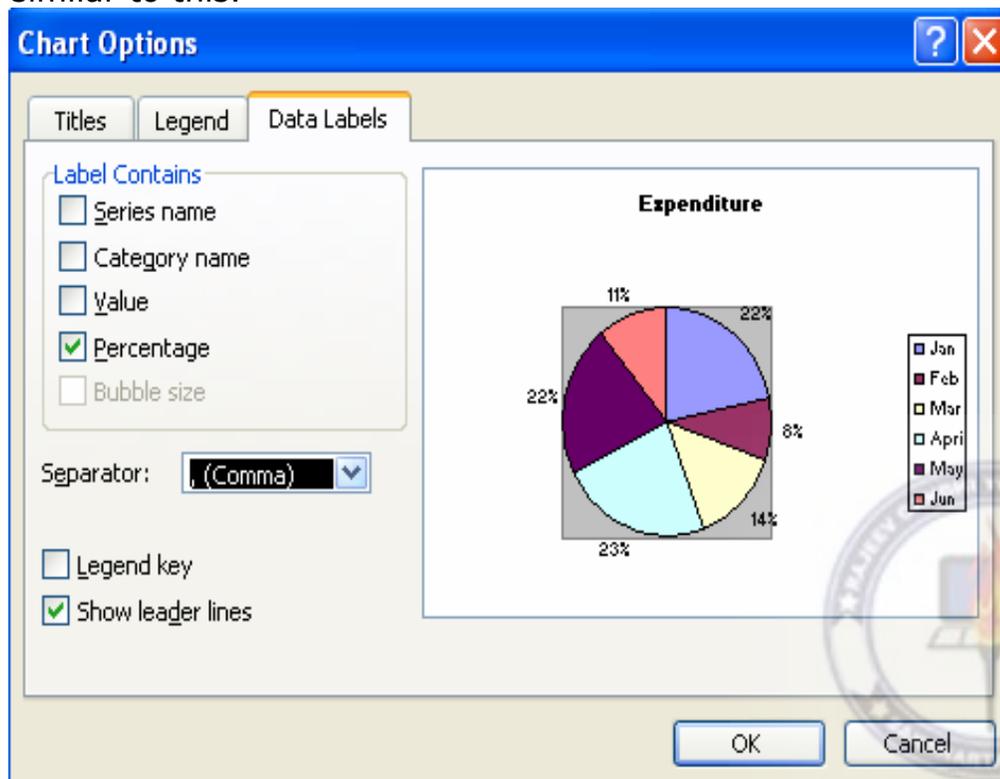
- ❖ Open **cash3.xls** worksheet and change chart type to *Column chart*.
- ❖ Click **Chart, Chart options** to display this box.
- ❖ Click the **Gridlines tab** and tick the gridlines boxes required.

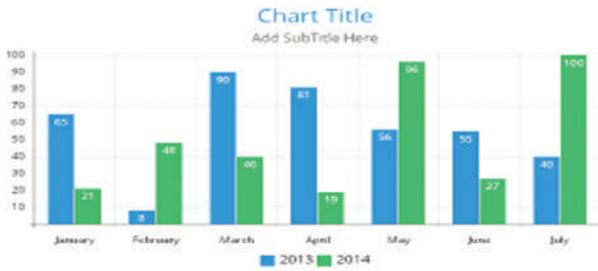




Task 11: Adding data labels to a chart

- ❖ Open **cash3** worksheet and change chart type to **pie chart**.
- ❖ Drop-down the **chart** menu and click **Chart options**.
- ❖ Click on the **Data Labels** tab.
- ❖ Click on **Show label and percent**. Your screen should look similar to this.





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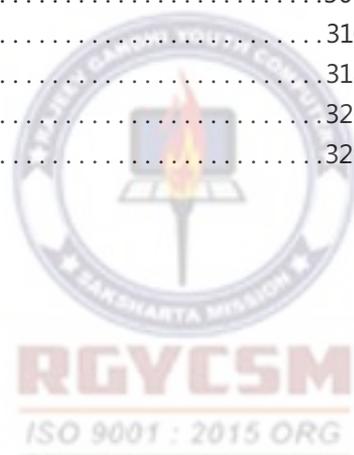
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Introducing Microsoft PowerPoint 2010

Microsoft PowerPoint 2010 is a full-featured presentation program that helps you quickly and efficiently develop dynamic, professional-looking presentations and then deliver them to an audience. You can use PowerPoint to:

- Introduce an idea, proposal, organization, product, or process with professionally designed, high-impact slides.
- Use themes, galleries of styles, and formatting options to achieve the right combination of colors, fonts, and effects.
- Bolster your arguments by easily adding pictures, shapes, and fancy display text.
- Convey numeric data in easy-to-grasp ways with styled tables or visually compelling charts.
- Use the SmartArt Graphics tool to create sophisticated diagrams that reflect processes, hierarchies, and other relationships.
- Create custom themes, designs, and layouts so that your presentations have a unique look and feel.
- Collaborate with colleagues, giving and receiving feedback to ensure the best possible presentation.

PowerPoint 2010 builds on previous versions to provide powerful tools for all your presentation needs. This introduction provides an overview of new features that we explore throughout the book.

New Features

If you're upgrading to PowerPoint 2010 from a previous version, you're probably most interested in the differences between the old and new versions and how they will affect you, as well as how to find out about them in the quickest possible way. The following sections list new features you will want to be aware of, depending on the version of PowerPoint you are upgrading from.



If You Are Upgrading from PowerPoint 2007

If you have been using PowerPoint 2007, you might be wondering how Microsoft could have improved on what seemed like a pretty comprehensive set of features and tools. The list of new features includes the following:

- **The Backstage view** Finally, all the tools you need to work with your files, as opposed to their content, really are accessible from one location. You display the Backstage view by clicking the File tab, which replaces the Microsoft Office Button at the left end of the ribbon.
- **Customizable ribbon** The logical next step in the evolution of the command center introduced with PowerPoint 2007: Create your own tabs and groups to suit the way you work.
- **A window for each presentation** You no longer display all presentations in the same window, so you can arrange open presentations for easy comparison or work on different presentations at the same time.
- **Reading view** This new way to preview presentations makes it easy to quickly check the effect of one or two changes.
- **Presentation videos** Now turning a presentation into a Windows Media Video is a simple matter of saving in that format.
- **Paste preview** No more trial and error when moving items to new locations. Preview what an item will look like in each of the available formats, and then pick the one you want.
- **Animation Painter** If you spend time developing a complex animation for one object, you can now copy the animation settings to another object with a few mouse clicks.
- **New themes and transitions** Adding pizzazz to your presentations is just a matter of applying a professional-looking theme or a snazzy dynamic-content transition.
- **Graphics editing** Found the perfect picture, but its colors or style aren't quite right for your presentation? Now after inserting a picture, you can edit it in new ways. In addition to changing color, brightness, and contrast, you can remove the background and, most exciting of all, apply artistic effects that make it appear like a watercolor, pencil drawing, or pastel sketch.



- **Improved cropping** Not only can you drag crop handles to manually crop a picture but you can also apply a built-in cropping ratio and then move the cropping "window" around over the picture until you get precisely the part you want.
- **Text effects** WordArt has had a makeover. You can still use WordArt to create distinctive headlines, but now you can use its effects on any selected text.
- **Screenshots** You no longer need to go outside of PowerPoint when you want to insert a screenshot into a slide. This capability is now built into Word.
- **Improved SmartArt Graphics tool** A whole new category has been added to SmartArt so that you can include pictures as well as text in your diagrams.
- **Video tools** Found a perfect video, but it is too long to include in a presentation? Now you can insert the video and then use the video editing tools built into PowerPoint to trim and format it. You can also insert a link to a video on a Web site into a slide.
- **Version merging** You can merge two versions of the same presentation and accept or reject changes.
- **Team collaboration** Team members can now work simultaneously on a presentation stored on a Microsoft SharePoint 2010 server or in Windows Live SkyDrive.
- **Broadcasting** You can review a presentation with colleagues via the Web by working through a free broadcasting service. Your colleagues can view the presentation in their Web browsers and give feedback via a conference call.
- **Language support** If you need to conduct business internationally across language lines, you can easily tailor the language of your working environment. You can also use new translation tools to collaborate with team members in other countries.
- **Unsaved file recovery** How many times have you responded No without thinking to the "save changes" message when closing files, only to find that you have discarded work you wanted to keep? PowerPoint now preserves your unsaved files for a period of time, allowing you to recover them if you need them.



If You Are Upgrading from PowerPoint 2003

In addition to the features listed in the previous section, if you're upgrading from PowerPoint 2003, you'll want to take note of the new features that were introduced in PowerPoint 2007. The 2007 upgrade provided a more efficient working environment and included a long list of new and improved features, including the following:

- **The Microsoft Office Fluent Ribbon** No more hunting through menus, submenus, and dialog boxes. This new interface organizes all the commands most people use most often, making them quickly accessible from tabs at the top of the program window.
- **Live Preview** See the effect of a style, theme, or other option before you apply it.
- **Custom layouts** Easily create your own layouts with placeholders for specific objects, and then save them for use in other presentations.
- **SmartArt Graphics tool** Use this awesome new diagramming tool to create sophisticated diagrams with 3-D shapes, transparency, drop shadows, and other effects.
- **Improved charting** Enter data in a linked Microsoft Excel worksheet and watch as your data is instantly plotted in the chart type of your choosing.
- **Slide libraries** Share slide content with team members in a special SharePoint library for presentations and slides.
- **Presentation cleanup** Have PowerPoint check for and remove comments, hidden text, and personal information stored as properties before you declare a presentation final.
- **New file format** The new Microsoft Office Open XML Formats reduce file size and help avoid loss of data.

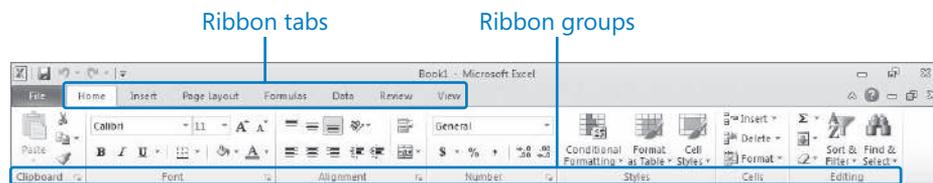
Let's Get Started!

We've been working with PowerPoint since its debut, and each version has offered something that made daily presentation creation a little easier. Microsoft PowerPoint 2010 is no exception, and we look forward to showing you around.



Modifying the Display of the Ribbon

The goal of the Microsoft Office 2010 working environment is to make working with Office files—including Microsoft Word documents, Excel workbooks, PowerPoint presentations, Outlook e-mail messages, and Access databases—as intuitive as possible. You work with an Office file and its contents by giving commands to the program in which the document is open. All Office 2010 programs organize commands on a horizontal bar called the *ribbon*, which appears across the top of each program window whether or not there is an active document.



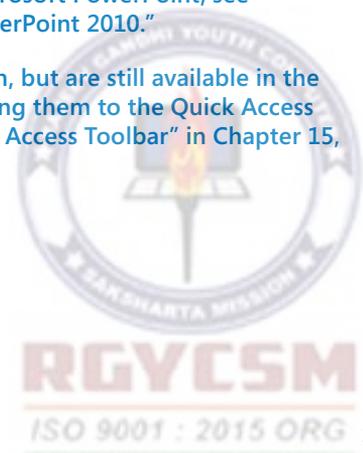
A typical program window ribbon.

Commands are organized on task-specific tabs of the ribbon, and in feature-specific groups on each tab. Commands generally take the form of buttons and lists. Some appear in galleries. Some groups have related dialog boxes or task panes that contain additional commands.

Throughout this book, we discuss the commands and ribbon elements associated with the program feature being discussed. In this topic, we discuss the general appearance of the ribbon, things that affect its appearance, and ways of locating commands that aren't visible on compact views of the ribbon.

See Also For detailed information about the ribbon in Microsoft PowerPoint, see [“Working in the User Interface” in Chapter 1, “Explore PowerPoint 2010.”](#)

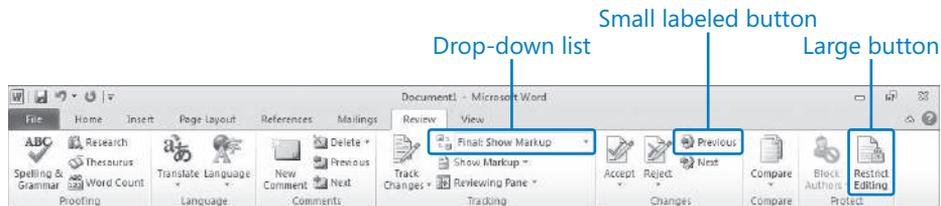
Tip Some older commands no longer appear on the ribbon, but are still available in the program. You can make these commands available by adding them to the Quick Access Toolbar. For more information, see [“Customizing the Quick Access Toolbar” in Chapter 15, “Customize PowerPoint.”](#)



Dynamic Ribbon Elements

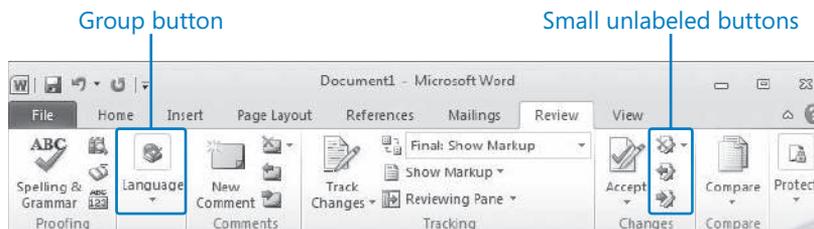
The ribbon is dynamic, meaning that the appearance of commands on the ribbon changes as the width of the ribbon changes. A command might be displayed on the ribbon in the form of a large button, a small button, a small labeled button, or a list entry. As the width of the ribbon decreases, the size, shape, and presence of buttons on the ribbon adapt to the available space.

For example, when sufficient horizontal space is available, the buttons on the Review tab of the Word program window are spread out and you're able to see more of the commands available in each group.



The Review tab of the Word program window at 1024 pixels wide.

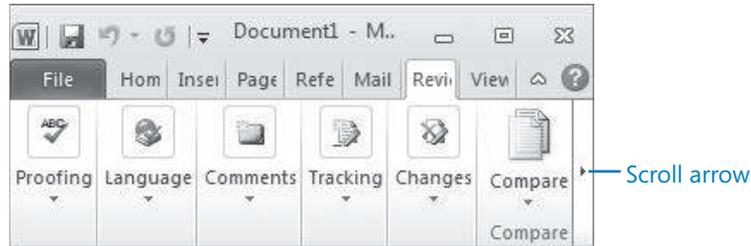
If you decrease the width of the ribbon, small button labels disappear and entire groups of buttons hide under one button that represents the group. Click the group button to display a list of the commands available in that group.



The Review tab of the Word program window at 675 pixels wide.

When the window becomes too narrow to display all the groups, a scroll arrow appears at its right end. Click the scroll arrow to display hidden groups.





The Review tab of the Word program window at 340 pixels wide.

Changing the Width of the Ribbon

The width of the ribbon is dependent on the horizontal space available to it, which depends on these three factors:

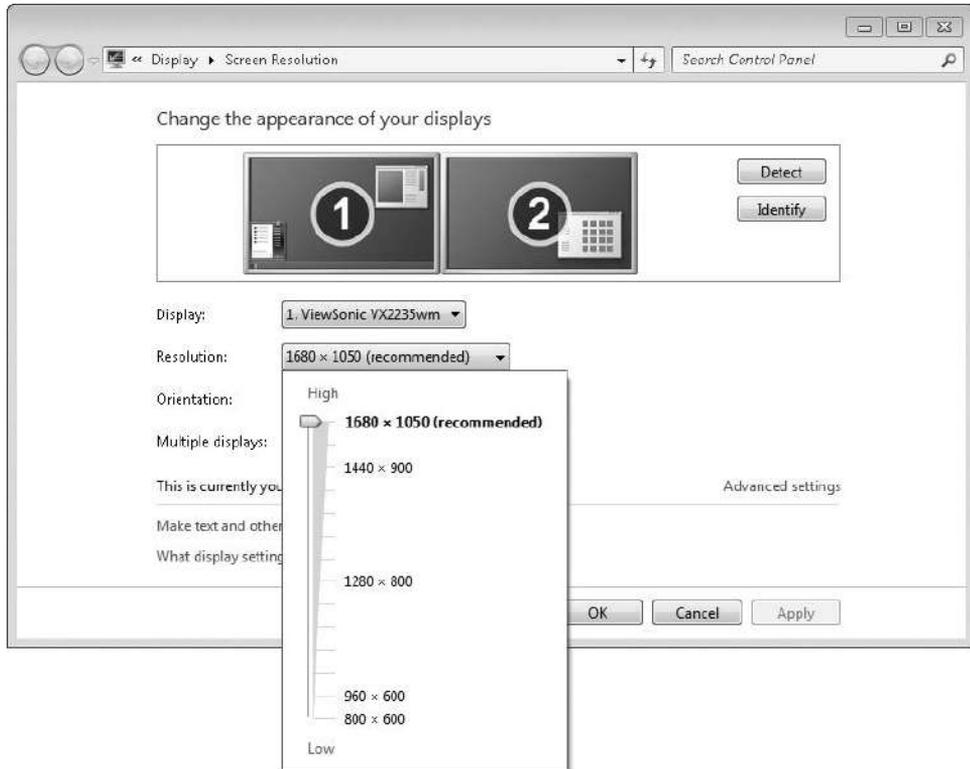
- The width of the program window Maximizing the program window provides the most space for ribbon elements. You can resize the program window by clicking the button in its upper-right corner or by dragging the border of a non-maximized window.

Tip On a computer running Windows 7, you can maximize the program window by dragging its title bar to the top of the screen.

- Your screen resolution Screen resolution is the size of your screen display expressed as pixels wide × pixels high. The greater the screen resolution, the greater the amount of information that will fit on one screen. Your screen resolution options are dependent on your monitor. At the time of writing, possible screen resolutions range from 800 × 600 to 2048 × 1152. In the case of the ribbon, the greater the number of pixels wide (the first number), the greater the number of buttons that can be shown on the ribbon, and the larger those buttons can be.

On a computer running Windows 7, you can change your screen resolution from the Screen Resolution window of Control Panel.



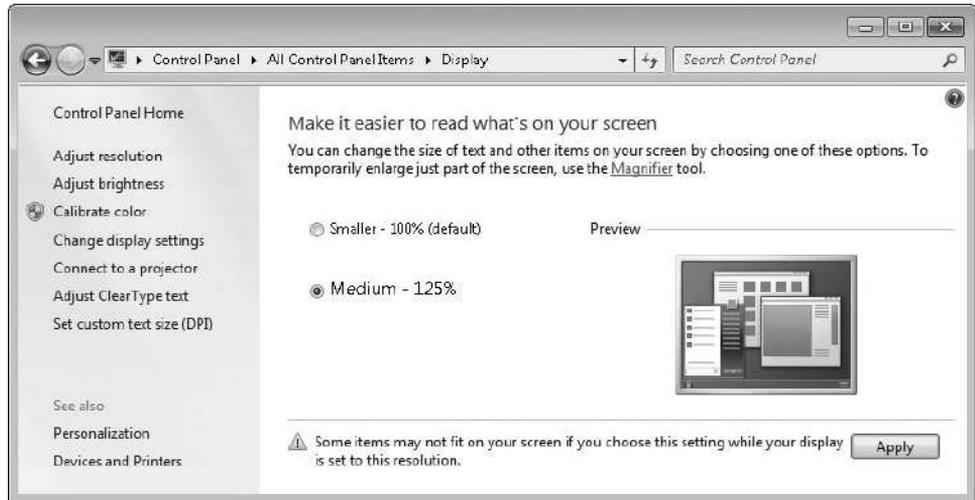


You set the resolution by dragging the pointer on the slider.

- The density of your screen display You might not be aware that you can change the magnification of everything that appears on your screen by changing the screen magnification setting in Windows. Setting your screen magnification to 125% makes text and user interface elements larger on screen. This increases the legibility of information, but means that less fits onto each screen.

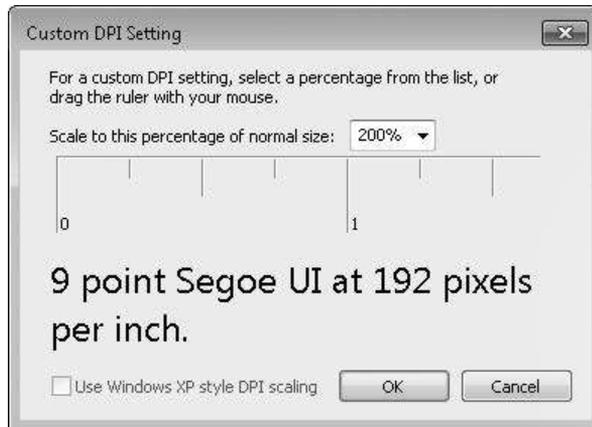
On a computer running Windows 7, you can change the screen magnification from the Display window of Control Panel.





You can choose one of the standard display magnification options, or create another by setting a custom text size.

The screen magnification is directly related to the density of the text elements on screen, which is expressed in dots per inch (dpi) or points per inch (ppi). (The terms are interchangeable, and in fact are both used in the Windows dialog box in which you change the setting.) The greater the dpi, the larger the text and user interface elements appear on screen. By default, Windows displays text and screen elements at 96 dpi. Choosing the Medium - 125% display setting changes the dpi of text and screen elements to 120 dpi. You can choose a custom setting of up to 500% magnification, or 480 dpi, in the Custom DPI Setting dialog box.



You can choose a magnification of up to 200% from the lists, or choose a greater magnification by dragging across the ruler from left to right.



See Also For more information about display settings, refer to *Windows 7 Step by Step* (Microsoft Press, 2009), *Windows Vista Step by Step* (Microsoft Press, 2006), or *Windows XP Step by Step* (Microsoft Press, 2002) by Joan Lambert Preppernau and Joyce Cox.

Adapting Exercise Steps

The screen images shown in the exercises in this book were captured at a screen resolution of 1024 x 768, at 100% magnification, and the default text size (96 dpi). If any of your settings are different, the ribbon on your screen might not look the same as the one shown in the book. For example, you might see more or fewer buttons in each of the groups, the buttons you see might be represented by larger or smaller icons than those shown, or the group might be represented by a button that you click to display the group's commands.

When we instruct you to give a command from the ribbon in an exercise, we do it in this format:

- On the **Insert** tab, in the **Illustrations** group, click the **Chart** button.

If the command is in a list, we give the instruction in this format:

- On the **Page Layout** tab, in the **Page Setup** group, click the **Breaks** button and then, in the list, click **Page**.

The first time we instruct you to click a specific button in each exercise, we display an image of the button in the page margin to the left of the exercise step.

If differences between your display settings and ours cause a button on your screen to look different from the one shown in the book, you can easily adapt the steps to locate the command. First, click the specified tab. Then locate the specified group. If a group has been collapsed into a group list or group button, click the list or button to display the group's commands. Finally, look for a button that features the same icon in a larger or smaller size than that shown in the book. If necessary, point to buttons in the group to display their names in ScreenTips.

If you prefer not to have to adapt the steps, set up your screen to match ours while you read and work through the exercises in the book.



Features and Conventions of This Book

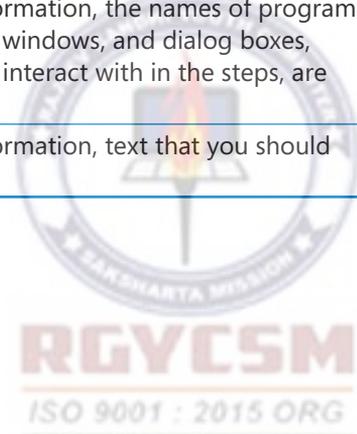
This book has been designed to lead you step by step through all the tasks you're most likely to want to perform in Microsoft PowerPoint 2010. If you start at the beginning and work your way through all the exercises, you will gain enough proficiency to be able to create and work with most types of PowerPoint presentations. However, each topic is self contained. If you have worked with a previous version of PowerPoint, or if you completed all the exercises and later need help remembering how to perform a procedure, the following features of this book will help you locate specific information:

- **Detailed table of contents** Search the listing of the topics and sidebars within each chapter.
- **Chapter thumb tabs** Easily locate the beginning of the chapter you want.
- **Topic-specific running heads** Within a chapter, quickly locate the topic you want by looking at the running heads at the top of odd-numbered pages.
- **Glossary** Look up the meaning of a word or the definition of a concept.
- **Keyboard Shortcuts** If you prefer to work from the keyboard rather than with a mouse, find all the shortcuts in one place.
- **Detailed index** Look up specific tasks and features in the index, which has been carefully crafted with the reader in mind.

You can save time when reading this book by understanding how the *Step by Step* series shows exercise instructions, keys to press, buttons to click, and other information.



Convention	Meaning
SET UP	This paragraph preceding a step-by-step exercise indicates the practice files that you will use when working through the exercise. It also indicates any requirements you should attend to or actions you should take before beginning the exercise.
CLEAN UP	This paragraph following a step-by-step exercise provides instructions for saving and closing open files or programs before moving on to another topic. It also suggests ways to reverse any changes you made to your computer while working through the exercise.
1	Blue numbered steps guide you through hands-on exercises in each topic.
2	
1	Black numbered steps guide you through procedures in sidebars and expository text.
2	
See Also	This paragraph directs you to more information about a topic in this book or elsewhere.
Troubleshooting	This paragraph alerts you to a common problem and provides guidance for fixing it.
Tip	This paragraph provides a helpful hint or shortcut that makes working through a task easier.
Important	This paragraph points out information that you need to know to complete a procedure.
Keyboard Shortcut	This paragraph provides information about an available keyboard shortcut for the preceding task.
Ctrl+B	A plus sign (+) between two keys means that you must press those keys at the same time. For example, "Press Ctrl+B" means that you should hold down the Ctrl key while you press the B key.
	Pictures of buttons appear in the margin the first time the button is used in a chapter.
Black bold	In exercises that begin with SET UP information, the names of program elements, such as buttons, commands, windows, and dialog boxes, as well as files, folders, or text that you interact with in the steps, are shown in black, bold type.
Blue bold	In exercises that begin with SET UP information, text that you should type is shown in blue bold type.



Using the Practice Files

Before you can complete the exercises in this book, you need to copy the book's practice files to your computer. These practice files, and other information, can be downloaded from the book's detail page, located at:

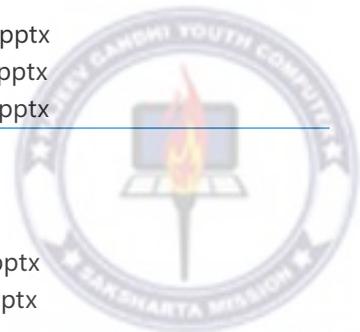
<http://go.microsoft.com/fwlink/?Linkid=192149>

Display the detail page in your Web browser and follow the instructions for downloading the files.

Important The Microsoft PowerPoint 2010 program is not available from this Web site. You should purchase and install that program before using this book.

The following table lists the practice files for this book.

Chapter	File
Chapter 1: Explore PowerPoint 2010	BuyingTrip_start.pptx
	DesigningColor_start.pptx
	MayMeeting_start.pptx
	SalesMeetingMay_start.pptx
Chapter 2: Work with Slides	Projects.pptx
	ServiceA_start.pptx
	ServiceB_start.pptx
	ServiceC_start.pptx
	ServiceD_start.pptx
ServiceOrientation.docx	
Chapter 3: Work with Slide Text	BuyingTripsB_start.pptx
	BuyingTripsC_start.pptx
	CommunityServiceA_start.pptx
	CommunityServiceB_start.pptx
CommunityServiceC_start.pptx	
Chapter 4: Format Slides	BusinessTravelA_start.pptx
	BusinessTravelB_start.pptx
	ColorDesign_start.pptx
	CompanyMeetingA_start.pptx
	CompanyMeetingB_start.pptx
Landscaping_start.pptx	



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Chapter	File
Chapter 5: Add Simple Visual Enhancements	Agastache.jpg JournalingA_start.pptx JournalingB_start.pptx Penstemon.jpg WaterConsumption.xlsx WaterSavingA_start.pptx WaterSavingB_start.pptx WaterSavingC_start.pptx
Chapter 6: Review and Deliver Presentations	Harmony_start.pptx Meeting_start.pptx SavingWater_start.pptx ServiceOrientationA_start.pptx ServiceOrientationB_start.pptx YinYang.png
Chapter 7: Add Tables	FinancialMeeting_start.pptx NewEquipment.xlsx Temperature_start.pptx TemperatureFormatted_start.pptx
Chapter 8: Fine-Tune Visual Elements	GardenResidents_start.pptx LandscapingChart_start.pptx NativePlant1.jpg through NativePlant8.jpg PhotoAlbumTitleSlide.pptx ReorganizationMeeting_start.pptx
Chapter 9: Add Other Enhancements	DesertPlants_start.pptx MeetingAction_start.pptx Organization_start.pptx OrganizationLinks_start.pptx Procedures.docx TemperatureCelsius_start.pptx
Chapter 10: Add Animation	NaturalGardeningA_start.pptx NaturalGardeningB_start.pptx



Chapter	File
Chapter 11: Add Sound and Movies	AGKCottage_start.pptx Amanda.wma Bird.jpg Butterfly.wmv HealthyEcosystemsA_start.pptx HealthyEcosystemsB_start.pptx Wildlife.wmv
Chapter 12: Share and Review Presentations	CottageShow_start.pptx HarmonyReview_start.pptx MeetingCompareA_start.pptx MeetingCompareB_start.pptx MeetingThemeA_start.pptx MeetingThemeB.pptx MeetingThemeC.pptx ServiceProjects_start.pptx WaterUse_start.pptx
Chapter 13: Create Custom Presentation Elements	NativePlant1.jpg through NativePlant3.jpg NaturalLayout_start.pptx NaturalMaster_start.pptx NaturalTemplate_start.pptx
Chapter 14: Prepare for Delivery	CottageVideo_start.pptx JournalingTimings_start.pptx OrganizationCD_start.pptx Procedures.docx ServiceShows_start.pptx
Chapter 15: Customize PowerPoint	BuyersSeminar_start.pptx ColorNew_start.pptx



Your Companion eBook

The eBook edition of this book allows you to:

- Search the full text
- Print
- Copy and paste

To download your eBook, please see the instruction page at the back of this book.



Getting Help

Every effort has been made to ensure the accuracy of this book. If you do run into problems, please contact the sources listed in the following sections.

Getting Help with This Book

If your question or issue concerns the content of this book or its practice files, please first consult the book's errata page, which can be accessed at:

<http://go.microsoft.com/fwlink/?Linkid=192149>

This page provides information about known errors and corrections to the book. If you do not find your answer on the errata page, send your question or comment to Microsoft Press Technical Support at:

mspinput@microsoft.com

Getting Help with PowerPoint 2010

If your question is about Microsoft PowerPoint 2010, and not about the content of this book, your first recourse is the PowerPoint Help system. This system is a combination of tools and files stored on your computer when you installed PowerPoint and, if your computer is connected to the Internet, information available from Office.com. You can find general or specific Help information in the following ways:

- To find out about an item on the screen, you can display a ScreenTip. For example, to display a ScreenTip for a button, point to the button without clicking it. The ScreenTip gives the button's name, the associated keyboard shortcut if there is one, and unless you specify otherwise, a description of what the button does when you click it.
- In the PowerPoint program window, you can click the Microsoft PowerPoint Help button (a question mark in a blue circle) at the right end of the ribbon to display the PowerPoint Help window.
- After opening a dialog box, you can click the Help button (also a question mark) at the right end of the dialog box title bar to display the PowerPoint Help window. Sometimes, topics related to the functions of that dialog box are already identified in the window.

To practice getting help, you can work through the following exercise.



SET UP You don't need any practice files to complete this exercise. Start PowerPoint, and then follow the steps.



1. At the right end of the ribbon, click the **Microsoft PowerPoint Help** button. The PowerPoint Help window opens.



Your Help window might look different from this one because the material on the Office.com Web site is constantly being updated.

Tip You can maximize the window or adjust its size by dragging the handle in the lower-right corner. You can change the size of the font by clicking the Change Font Size button on the toolbar.



2. Below the bulleted list under **Browse PowerPoint 2010 support**, click **see all**.

The window changes to display a list of help topics.

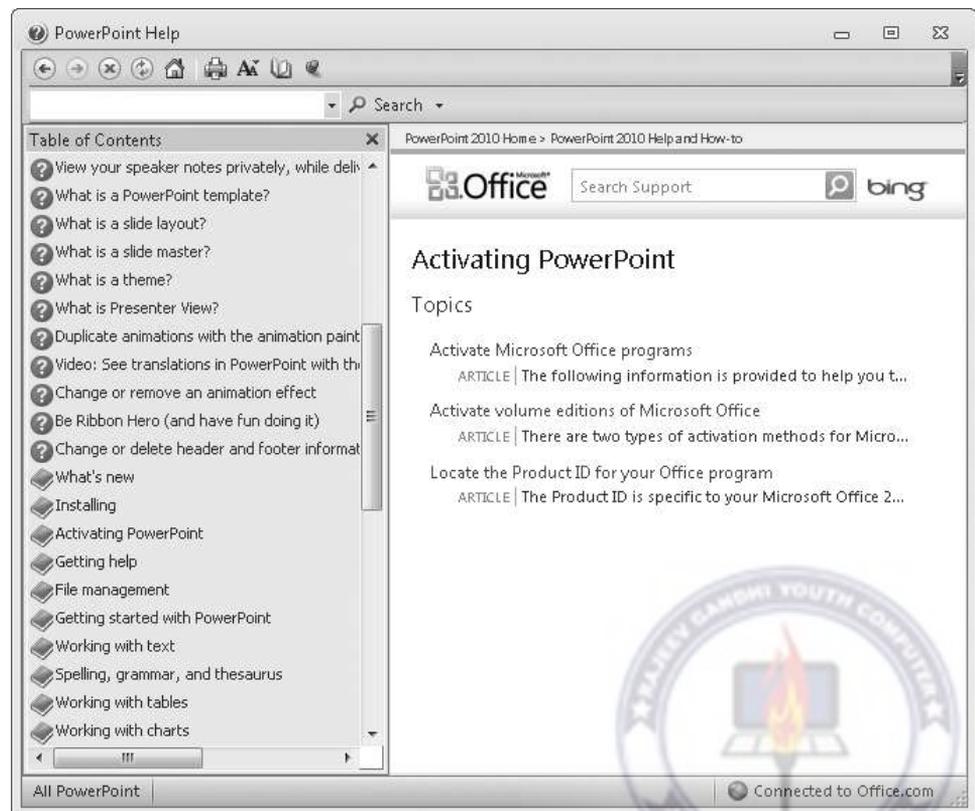
3. In the list of topics, click **Activating PowerPoint**.

PowerPoint Help displays a list of topics related to activating Microsoft Office programs. You can click any topic to display the corresponding information.



4. On the toolbar, click the **Show Table of Contents** button, and then scroll down the pane that appears on the left.

Like the table of contents in a book, the Help table of contents is organized in sections. If you're connected to the Internet, PowerPoint displays sections, topics, and training available from the Office Online Web site as well as those stored on your computer.



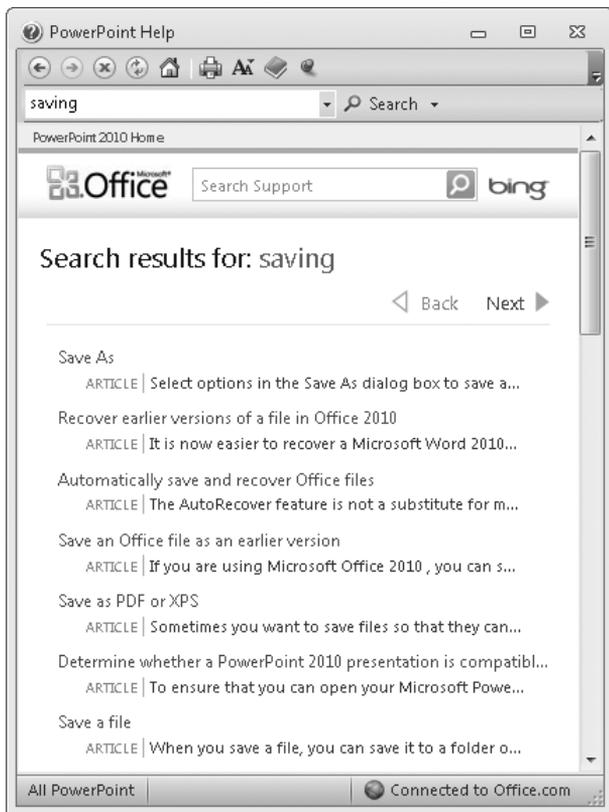
Clicking any section (represented by a book icon) displays that section's topics (represented by help icons).





5. In the **Table of Contents** pane, click a few sections and topics. Then click the **Back** and **Forward** buttons to move among the topics you have already viewed.
6. At the right end of the **Table of Contents** title bar, click the **Close** button.
7. At the top of the **PowerPoint Help** window, click the **Search** box, type **saving**, and then press the Enter key.

The PowerPoint Help window displays topics related to the word you typed.



Next and Back buttons appear to make it easier to search for the topic you want.

Tip If you enter a term in the Search box and then click the adjacent Search arrow, you specify the type of help you are looking for or where you want to look for it.



8. In the results list, click the **Recover earlier versions of a file in Office 2010** topic. The selected topic appears in the PowerPoint Help window.

9. Below the title at the top of the topic, click **Show All**.

PowerPoint displays any hidden auxiliary information available in the topic and changes the Show All button to Hide All. You can jump to related information by clicking hyperlinks identified by blue text.

Tip You can click the Print button on the toolbar to print a topic. Only the displayed information is printed.

 **CLEAN UP** Click the Close button in the upper-right corner of the PowerPoint Help window.

More Information

If your question is about Microsoft PowerPoint 2010 or another Microsoft software product and you cannot find the answer in the product's Help system, please search the appropriate product solution center or the Microsoft Knowledge Base at:

support.microsoft.com

In the United States, Microsoft software product support issues not covered by the Microsoft Knowledge Base are addressed by Microsoft Product Support Services. Location-specific software support options are available from:

support.microsoft.com/gp/selfoverview/





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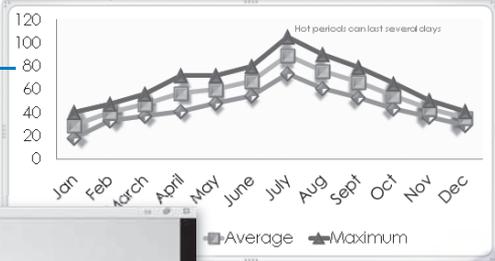
Chapter at a Glance



Edit pictures,
page 196



Customize diagrams,
page 203



Format charts,
page 207



Arrange graphics,
page 214



8 Fine-Tune Visual Elements

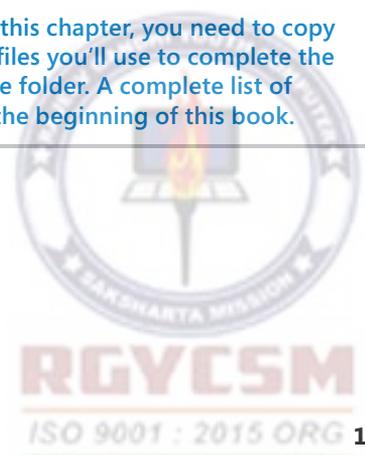
In this chapter, you will learn how to

- ✓ Edit pictures.
 - ✓ Customize diagrams.
 - ✓ Format charts.
 - ✓ Arrange graphics.
-

In Chapter 5, “Add Simple Visual Enhancements,” you were introduced to the primary ways you can use graphic elements to convey information or dress up your slides. You inserted pictures and clip art images, created a diagram, plotted data in a chart, drew shapes, and eased the transition from one slide to another with a graphic effect. These simple techniques might be all you need to enhance your presentations. But if you need to manipulate graphic elements to produce more dramatic effects, you can push the Microsoft Office PowerPoint 2010 capabilities further to get just the result you are looking for.

In this chapter, you’ll create a photo album and insert and manipulate photographs. Next, you’ll manipulate shapes to customize an organization chart. Then you’ll format a chart and save it as a template. Finally, you’ll use various techniques to arrange graphics.

Practice Files Before you can complete the exercises in this chapter, you need to copy the book’s practice files to your computer. The practice files you’ll use to complete the exercises in this chapter are in the Chapter08 practice file folder. A complete list of practice files is provided in “Using the Practice Files” at the beginning of this book.



Editing Pictures

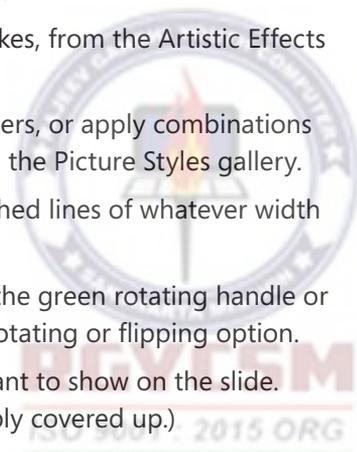
From time to time in this book, we have alluded to the modern trend away from slides with bullet points and toward presentations that include more graphics. Successful presenters have learned that most people can't listen to a presentation while they are reading slides. So these presenters make sure most of their slides display graphics that represent the point they are making, giving the audience something to look at while they focus on what is being said.

PowerPoint 2010 gives you the tools you need to create graphic-intensive rather than text-intensive presentations. When you want to display a dynamic array of pictures in a presentation, you can use a photo album template to do the initial layout and then customize the album by adding frames of different shapes, as well as captions.

Tip To integrate the slide layouts from a photo album template into a more traditional presentation, create the photo album and then import its slides into the other presentation by clicking **Reuse Slides** at the bottom of the **New Slide** gallery. For information about reusing slides, see "Adding Slides with Ready-Made Content" in Chapter 2, "Work with Slides."

After you insert any picture into a presentation, you can modify it by using the buttons on the **Format** tab that is displayed on the ribbon only when the graphic is selected. For example, you can do the following:

- Remove the background by clicking the **Remove Background** button and then designating either the areas you want to keep or those you want to remove.
- Sharpen or soften the picture, or change its brightness or contrast, by choosing the effect you want from the **Corrections** gallery.
- Enhance the picture's color by making a selection from the **Color** gallery.
- Make one of the picture's colors transparent by clicking **Set Transparent Color** at the bottom of the gallery and then selecting the color.
- Choose an effect, such as **Pencil Sketch** or **Paint Strokes**, from the **Artistic Effects** gallery.
- Apply effects such as shadows, reflections, and borders, or apply combinations of these effects by choosing a predefined style from the **Picture Styles** gallery.
- Add a border consisting of one or more solid or dashed lines of whatever width and color you choose.
- Rotate the picture to any angle, either by dragging the green rotating handle or by clicking the **Rotate** button and then choosing a rotating or flipping option.
- Crop away the parts of the picture that you don't want to show on the slide. (The picture itself is not altered—parts of it are simply covered up.)



- Minimize the presentation's file size by clicking the Compress Pictures button and then choosing where or how the presentation will be viewed—for example, on the Web or printed—to determine the optimum resolution. You can also delete cropped areas of a picture to reduce file size.

In this exercise, you'll create a photo album displaying pictures of native plants. You'll crop, resize, remove the background, apply an artistic effect, and add captions. You'll also reuse a slide from another photo album, and apply a theme.



SET UP You need the **NativePlant1** through **NativePlant8** photographs and the **PhotoAlbumTitleSlide** presentation located in your **Chapter08** practice file folder to complete this exercise. Open a blank presentation, and then follow the steps.



1. On the **Insert** tab, in the **Images** group, click the **Photo Album** button.

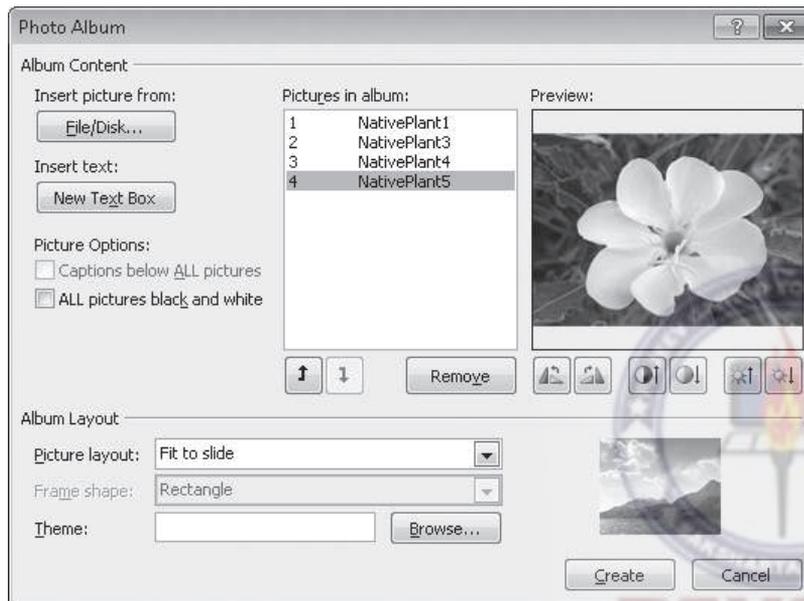
The Photo Album dialog box opens.

2. Under **Insert picture from**, click **File/Disk**.

The Insert New Pictures dialog box opens.

3. Navigate to your **Chapter08** practice file folder, click **NativePlant1**, hold down the Ctrl key, and click **NativePlant3** through **NativePlant5**. Then click **Insert**.

The Photo Album dialog box now has four graphics files listed in the Pictures In Album list.



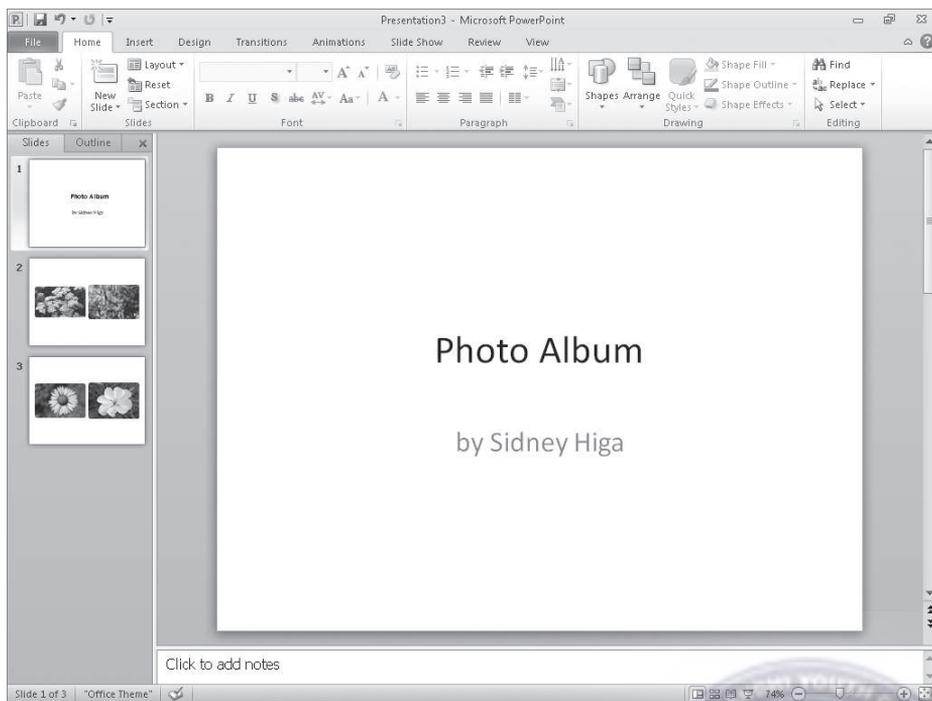
You can click each picture in turn to view it in the Preview box.

4. In the **Pictures in album** list, click **NativePlant4**, and then click the **Move Up** button to make it the second picture in the list.
5. Preview the pictures in turn, and then click the **Contrast** and **Brightness** buttons as necessary to give the four photographs a more even tone.

You could also adjust the rotation of a picture, but in this case, that is not necessary.

6. In the **Album Layout** area, display the **Picture layout** list, and click **2 pictures**.
7. Display the **Frame shape** list, click **Rounded Rectangle**. Then click **Create**.

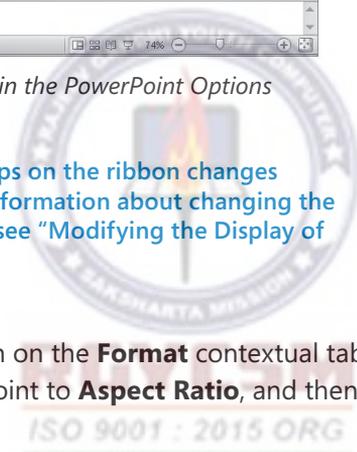
PowerPoint creates a presentation called *Photo Album* that contains a title slide and two slides each containing two pictures.



On the title slide, PowerPoint inserts the user name stored in the PowerPoint Options dialog box.

Troubleshooting The appearance of buttons and groups on the ribbon changes depending on the width of the program window. For information about changing the appearance of the ribbon to match our screen images, see “Modifying the Display of the Ribbon” at the beginning of this book.

8. Save the presentation as **My Photo Album**.
9. Display **Slide 2**, and click the photo on the left. Then on the **Format** contextual tab, in the **Size** group, click the **Crop** arrow. In the list, point to **Aspect Ratio**, and then under **Portrait**, click **2:3**.



PowerPoint crops away parts of the picture, leaving a centered “window” over the photo, sized to the proportions you specified.



Cropping handles surround the active area so that if you want, you can adjust the cropped areas.

10. Click the photo on the right, and then repeat the cropping process in step 9.
11. In turn, select each photo, and drag the upper-left and bottom-right corner handles until the photos occupy the majority of the space on the slide.

Tip When sizing the photo on the right, release the mouse button when the dotted guide appears, letting you know that the photo is aligned with the photo on the left.

12. Display slide 3, and crop the photo on the left to **Square, 1:1**. Then point inside the crop window, and drag to the left until the cropping window is centered on the flower.

PowerPoint maintains the size of the crop window but moves the photo under the window to the left.



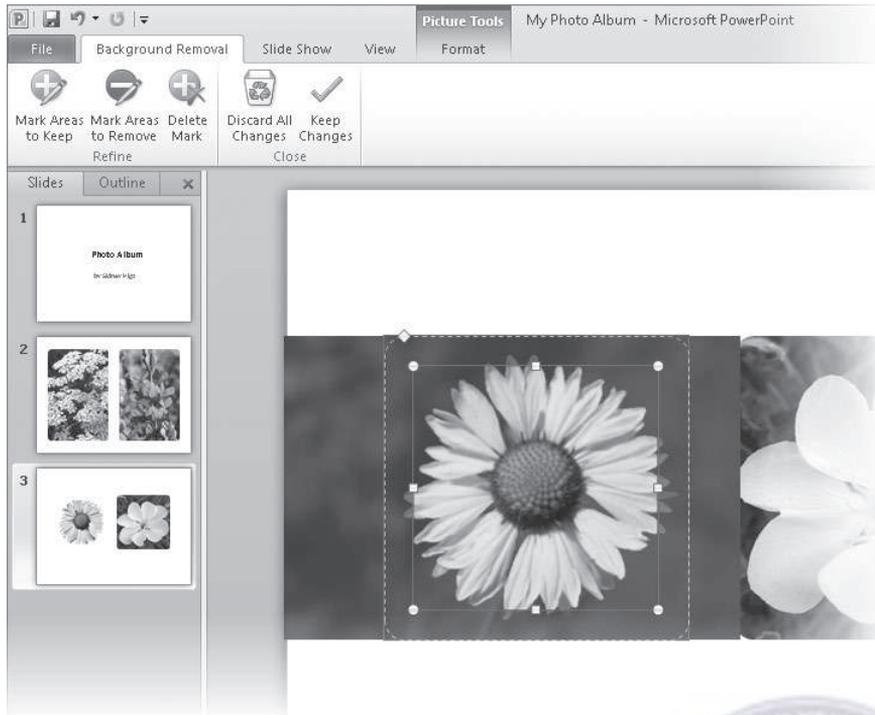
The image of the flower is centered in the crop window.



13. Click the photo on the right, and in the **Size** group, use the down arrow to reduce the height to **3"**. Then crop the photo to **Square, 1:1**, adjusting the crop window so that all of the flower is showing.
14. Enlarge and align the photos so that they occupy the entire width of the slide.
15. Click the left photo, and in the **Adjust** group, click the **Remove Background** button.



The Background Removal contextual tab appears, and PowerPoint marks the areas of the photo that will be removed.



The thumbnail on the Slides tab shows what the flower will look like after its background is removed.

16. Drag the handles on the frame surrounding the flower until the entire flower is visible within the frame. Then in the **Close** group, click the **Keep Changes** button.
17. Repeat steps 15 and 16 to remove the background of the photo on the right. Then click a blank area of the slide.



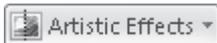
The background is removed from both flower photos.



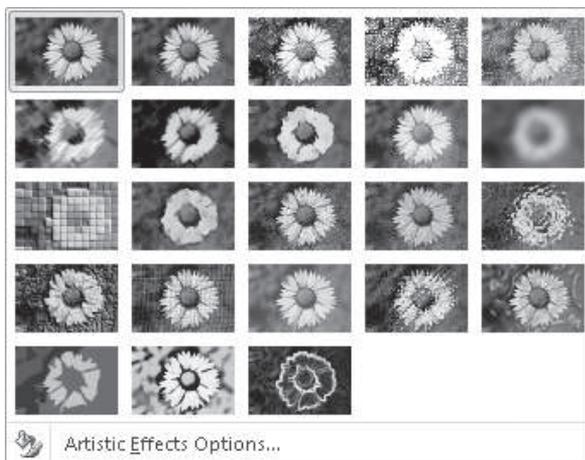


The flowers stand out vividly against the plain slide background.

18. Click the photo on the left, and then on the **Format** tab, in the **Adjust** group, click the **Artistic Effects** button.



The Artistic Effects gallery appears.



You can choose from a wide variety of effects in this gallery.



19. Point to each thumbnail in turn to see a live preview of the photo with the effect applied. Then click the third thumbnail in the second row (**Paint Brush**).

20. Repeat steps 18 and 19 for the photo on the right.

The two photos now resemble paintings.



21. On the **Insert** tab, in the **Images** group, click the **Photo Album** arrow, and then click **Edit Photo Album**.

The Edit Photo Album dialog box opens. This dialog box is the same as the Photo Album dialog box. With it, you can make changes to an existing photo album.

22. In the dialog box, under **Picture Options**, select the **Captions below ALL pictures** check box, and then click **Update**.

23. Replace the file names below each photograph with the following captions:

NativePlant1 **Achillea**

NativePlant4 **Hedysarum**

NativePlant3 **Gaillardia**

NativePlant5 **Oenothera**



24. Click slide **1**, and on the **Home** tab, in the **Slides** group, click the **New Slide** arrow, and at the bottom of the gallery, click **Reuse Slides**.

The Reuse Slides task pane opens.

25. In the **Reuse Slides** task pane, click **Browse**, and click **Browse File**. Then browse to your **Chapter08** practice file folder, and double-click the **PhotoAlbumTitleSlide** presentation.

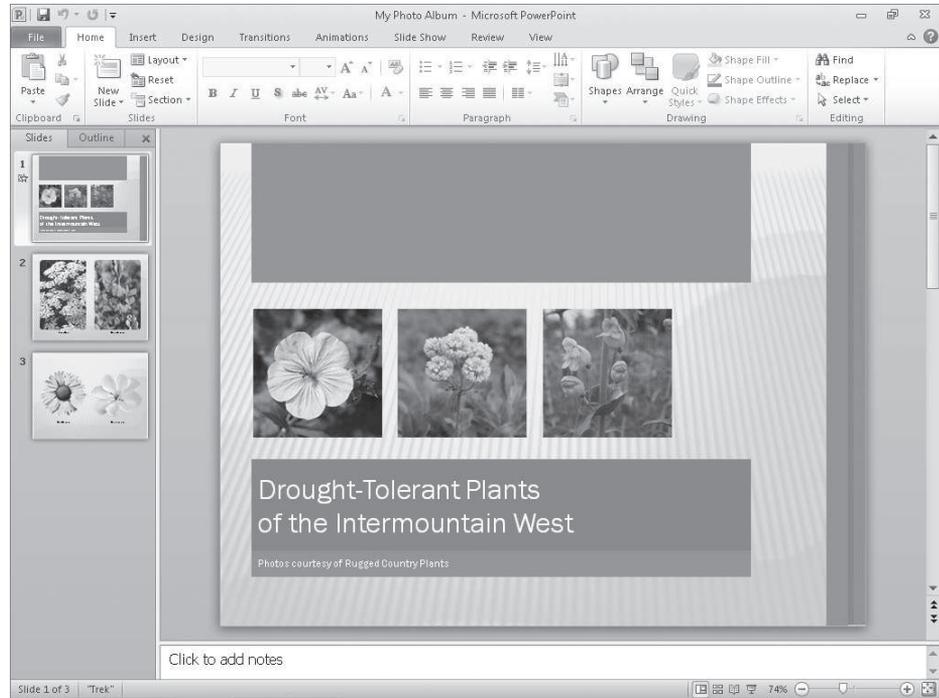
This presentation contains one slide that was based on a slide in the Contemporary Photo Album template available under the Sample Templates on the New page of the Backstage view.

26. In the **Reuse Slides** task pane, click **Slide 1** to insert it after the title slide of the My Photo Album presentation. Then close the task pane.

27. Delete the blank title slide. Then on the **Design** tab, in the **Themes** group, display the **Themes** gallery, and select a theme that showcases the photos.

We chose the Trek theme.





Careful theme selection can pull an entire presentation together.

✘ CLEAN UP Save the My Photo Album presentation, and then close it.

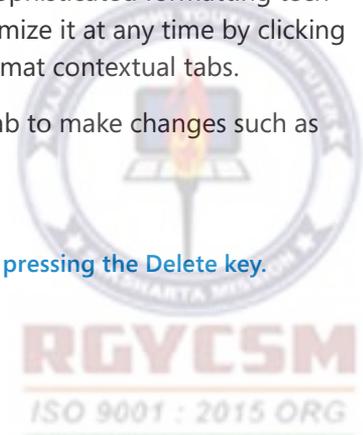
Customizing Diagrams

We've already told you how to use SmartArt to create a diagram, and we've shown you how to move and size it and apply simple formatting. But many diagrams involve different levels of information and benefit from more sophisticated formatting techniques. After you create a basic diagram, you can customize it at any time by clicking it and then using the commands on the Design and Format contextual tabs.

You can use the commands on the Design contextual tab to make changes such as the following:

- Add and change the hierarchy of shapes.

Tip You can remove a shape by selecting it and then pressing the Delete key. You can also rearrange shapes by dragging them.



- Switch to a different layout of the same type or a different type.

Tip If some of the text in the original diagram doesn't fit in the new layout, that text is not shown, but it is retained so that you don't have to retype it if you change the layout again.

You can use the buttons on the Format contextual tab to customize individual shapes in the following ways:

- Change an individual shape—for example, change a square to a star to make it stand out.
- Apply a built-in Shape Style.
- Change the color, outline, or effect of a selected shape.

Tip If you customize a diagram and then decide you preferred the original version, you can revert to the original by clicking the Reset Graphic button in the Reset group on the Design contextual tab.

In this exercise, you'll customize an organization chart by adding subordinate shapes. You'll change the layout of the chart as a whole and then change the color, size, and text of individual shapes.



SET UP You need the *ReorganizationMeeting_start* presentation located in your *Chapter08* practice file folder to complete this exercise. Open the *ReorganizationMeeting_start* presentation, and save it as *ReorganizationMeeting*. Then follow the steps.

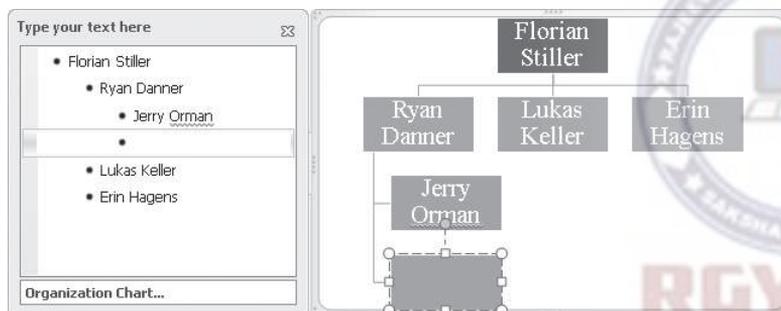
1. Display slide **5**, click the diagram to activate it, and then select the **Ryan Danner** shape for manipulation.
2. On the **Design** contextual tab, in the **Create Graphic** group, click the **Add Shape** arrow, and then click **Add Shape Below**.



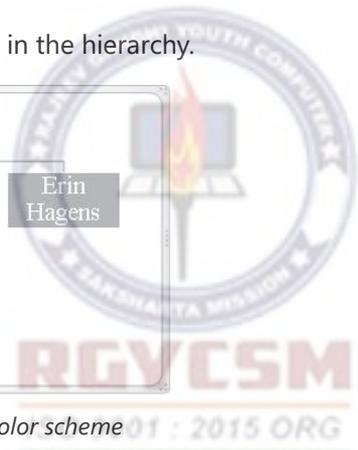
PowerPoint adds a shape to the organization chart.

3. Open the **Text** pane, click to the right of the bullet symbol, type **Jerry Orman**, and press Enter.

PowerPoint adds a duplicate shape at the same level in the hierarchy.



The colors of the shapes in the diagram reflect the theme color scheme



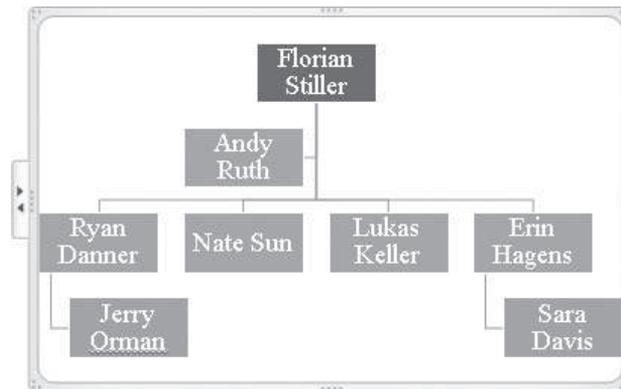
Troubleshooting Our instructions assume you are entering text in the Text pane. Typing and pressing Enter in a diagram shape enters a new paragraph in the same shape instead of creating a new shape.

4. Type **Nate Sun**.
5. In the **Text** pane, click to the right of **Erin Hagens**, press Enter, press Tab, and then type **Sarah Davis**.

The new shape is a subordinate of Erin Hagens.

6. In the diagram, select the **Florian Stiller** shape for manipulation, click the **Add Shape** arrow in the **Create Graphic** group, and then click **Add Assistant**.
7. In the **Text** pane, click to the right of the arrow bullet symbol, and type **Andy Ruth**. Then close the **Text** pane.
8. In the diagram, select the **Nate Sun** shape for manipulation, and then in the **Create Graphic** group, click the **Promote** button.

The selected shape moves up one level in the hierarchy.



Nate Sun is now a peer of his former manager.

Troubleshooting Don't worry if your chart still shows the box and handles in the former location of the Nate Sun shape. It will disappear when you work on a different shape.

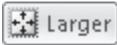
9. Drag the handles around the frame of the diagram until it fills the available space on the slide.
10. On the **Design** contextual tab, display the **Layouts** gallery, and point to each thumbnail in turn to see a live preview of the various layout options for an organization chart. Then click the second thumbnail in the second row (**Hierarchy**).

Tip Some of the new PowerPoint 2010 layouts allow you to insert pictures of people as well as their names.

11. Display the **SmartArt Styles** gallery, and after previewing the available styles, under **3-D**, click the last thumbnail in the first row (**Cartoon**).



12. Andy Ruth is an assistant, not a manager, so select his background shape, and on the **Format** tab, in the **Shape Styles** group, click the **Shape Fill** arrow. Then under **Theme Colors** in the palette that appears, click the tan box (**Tan, Text 2**).



13. Click the **Florian Stiller** shape (not the text), and then in the **Shapes** group, click the **Larger** button three times.

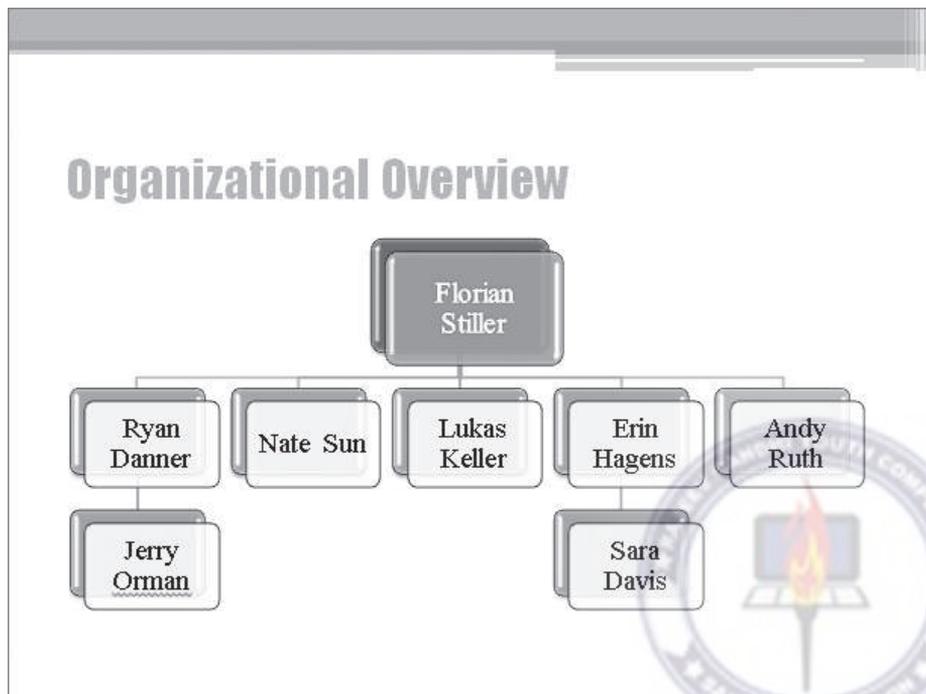
Troubleshooting Be sure to click the border of the shape. Otherwise, you will select the text for editing instead of the shape itself.

The background shape grows with the selected shape.

14. In the **Shape Styles** group, click the **Shape Fill** arrow, and then in the palette, click the third box in the fifth column (**Gray-50%, Accent 1, Lighter 40%**)
15. Display the **WordArt Styles** gallery, explore the options, and then click the third thumbnail in the first row (**Fill – White, Drop Shadow**).

The text in the shape is now a contrasting color.

16. Click outside the diagram frame.
You can now see the final result.



The number of employees that you want to include in an organization chart often determines which layout you choose.



CLEAN UP Save the ReorganizationMeeting presentation, and then close it.

Formatting Charts

You already know how to plot data in simple charts and how to edit that data in the associated Microsoft Excel worksheet. Often, you will need nothing more than these basic techniques to be able to convey your numeric data in a visual format. However, for those times when you need more than a basic chart, PowerPoint provides formatting capabilities that enable you to produce just the effect you want.

If you decide that the type of chart you selected doesn't adequately depict the most important characteristics of your data, you can change the type at any time. There are 11 chart types, each with two-dimensional and three-dimensional variations, and you can customize each aspect of each variation. Common chart types include the following:

- **Column charts** Used to show how values change over time.
- **Bar charts** Used to show the values of several items at one point in time.
- **Line graphs** Used to show erratic changes in values over time.
- **Pie charts** Used to show how parts relate to the whole.

If you don't want to spend a lot of time on a chart, you can apply the predefined combinations of formatting from the Chart Layouts and Chart Styles groups on the Design contextual tab to create sophisticated charts with a minimum of effort. However, if you want more control over the appearance of your chart, you can use the options on the Layout and Format contextual tabs. It is worth exploring these options so that you know how to do the following:

- Add shapes and pictures.
- Format individual elements such as titles, axes, data labels, and gridlines.
- Add trend lines, bars, and other lines.
- Customize the walls and floor or otherwise manipulate a three-dimensional chart.
- Customize the look of shapes.
- Add and format fancy text (WordArt).
- Arrange objects precisely.
- Precisely control the overall size of the chart.

You can double-click almost any chart object to change its attributes. For example, you can double-click an axis to display the Format Axis dialog box, where you can change the scale, tick marks, label position, line style, and other aspects of the axis. If you have trouble double-clicking some of the smaller chart elements, you can select the element you want to format from the Chart Elements list in the Current Selection group on the



Format tab, and then click the Format Selection button in the same group to display the Format dialog box for the selection.

If you make extensive modifications, you might want to save the customized chart as a template so that you can use it for plotting similar data in the future without having to repeat all the changes.

In this exercise, you'll modify the appearance of a chart by changing its chart type and style. You'll change the color of the plot area and the color of two data series. You'll then hide gridlines and change the layout to display titles and a datasheet. After adding an annotation in a text box, you'll save the chart as a template.



SET UP You need the **LandscapingChart_start** presentation located in your **Chapter08 practice file folder** to complete this exercise. Open the **LandscapingChart_start** presentation, and save it as **LandscapingChart**. Then follow the steps.

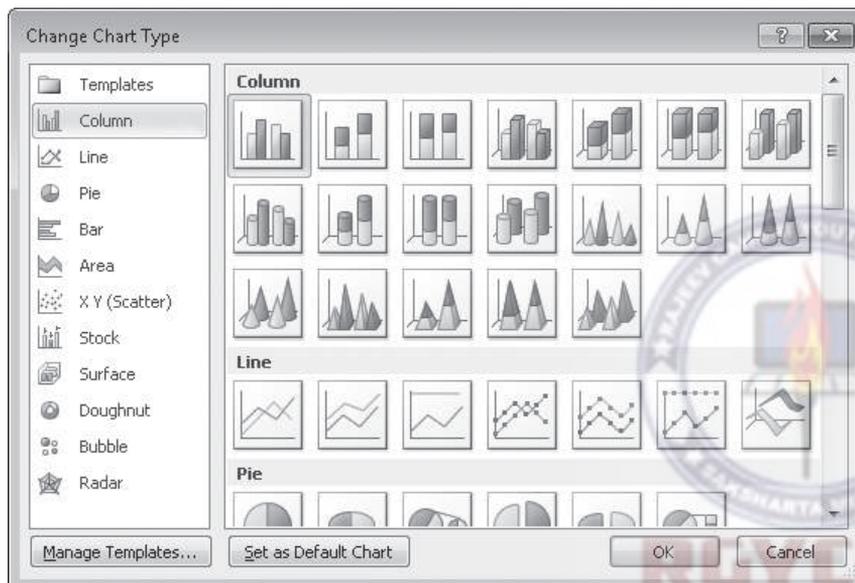
1. Display slide **14**, and click the blank area above the chart legend to activate the chart without selecting any of its elements.

Troubleshooting Be sure to click a blank area inside the chart frame. Clicking any of its elements will activate that element, not the chart as a whole.

PowerPoint displays the Design, Layout, and Format contextual tabs.

2. On the **Design** contextual tab, in the **Type** group, click the **Change Chart Type** button.

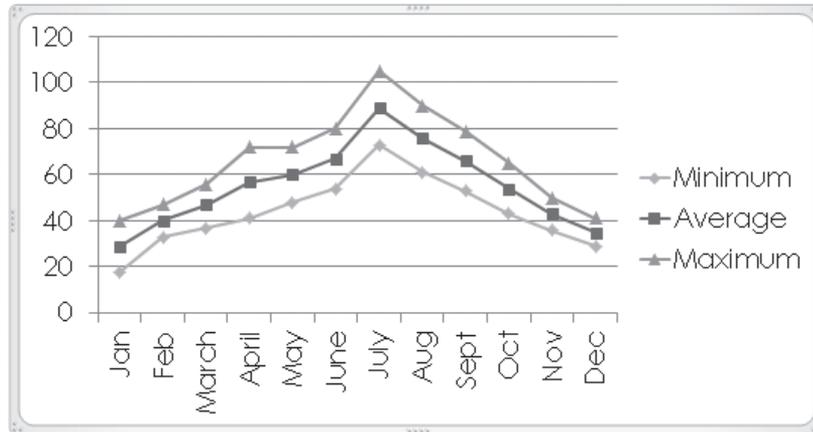
The Change Chart Type dialog box opens.



Each chart category provides several different design options. ISO 9001 : 2015 ORG

- In the gallery on the right, under **Line**, double-click the fourth thumbnail (**Line with Markers**).

The column chart changes to a line chart, which depicts data by using colored lines instead of columns.

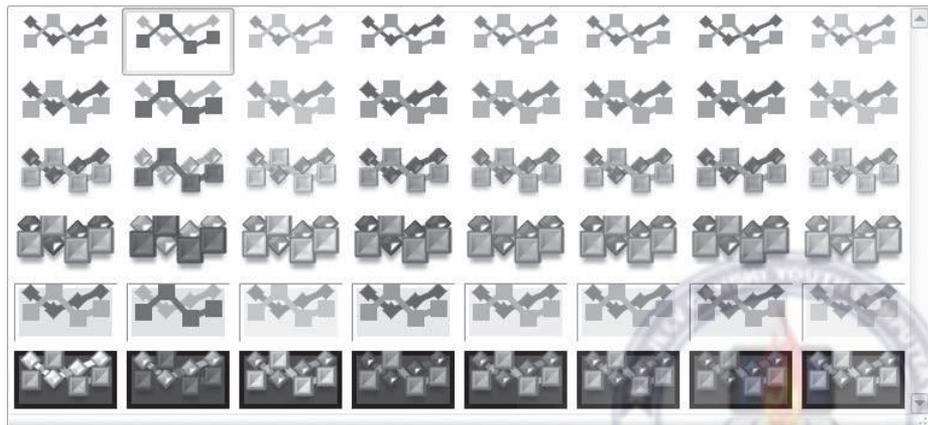


The temperature data plotted as a line chart.



- In the **Chart Styles** group, click the **More** button.

The Chart Styles gallery appears.



You can quickly switch to a different color scheme or data marker style.

- In the gallery, click the last thumbnail in the fourth row (**Style 32**).

The lines are now thicker, and the data markers are three-dimensional.

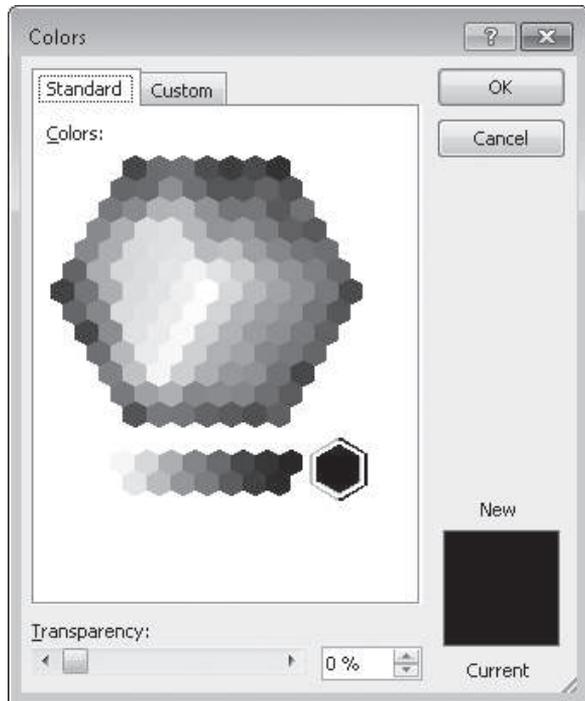
6. Move the pointer over the chart, and when a ScreenTip indicates you are pointing to the plot area, click to select it.

The plot area is the area between the axes that contains the data markers.



7. On the **Format** contextual tab, in the **Shape Styles** group, click the **Shape Fill** arrow, and then in the list, click **More Fill Colors**.

The Colors dialog box opens.

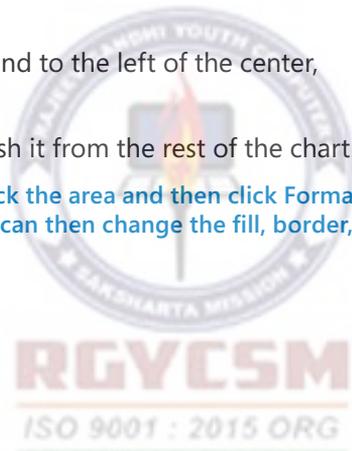


When none of the theme or standard colors meets your needs, you can pick a color in the Colors dialog box.

8. On the **Standard** page, click the pale yellow below and to the left of the center, and then click **OK**.

The plot area is now a pale yellow shade to distinguish it from the rest of the chart.

Tip To change several aspects of the plot area, right-click the area and then click **Format Plot Area** to open the **Format Plot Area** dialog box. You can then change the fill, border, shadow, and 3-D format in one location.



- At the top of the **Current Selection** group, click the **Chart Elements** arrow, and then in the list, click **Series "Maximum"**.

Tip If you have trouble selecting an element of the chart by clicking it, you can choose it from the **Chart Elements** list.

An outline appears around the data points of the selected series.

- In the **Current Selection** group, click the **Format Selection** button.

The **Format Data Series** dialog box opens.



You can change several aspects of the selected data series in this dialog box.

- In the left pane, click **Marker Fill**, and on the **Marker Fill** page, click **Solid Fill**. In the **Fill Color** area, click the **Color** button, and under **Standard Colors**, click the first box (**Dark Red**).
- In the left pane, click **Line Color**. Then on the **Line Color** page, click **Solid line**, and change the color to the same dark red.



13. Repeat step 12 for the marker line color, and then click **Close**.

The Maximum data series is now represented by the dark red color.



14. On the **Layout** tab, in the **Axes** group, click the **Gridlines** button, point to **Primary Horizontal Gridlines**, and then click **None** to remove the horizontal gridlines from the chart.

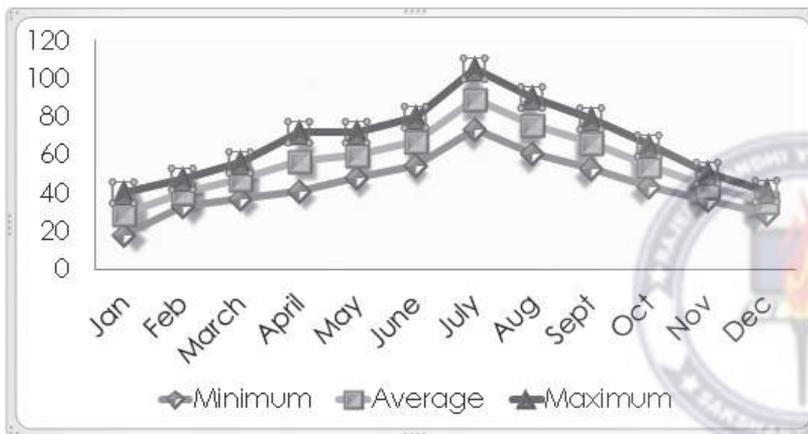
15. On the **Design** contextual tab, in the **Chart Layouts** group, click the **More** button. The Chart Layouts gallery appears.



You can quickly change the layout of the chart by selecting one of the predefined options.

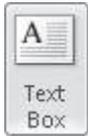
16. In the gallery, click the first thumbnail in the second row (**Layout 4**).

The legend now appears below the chart.



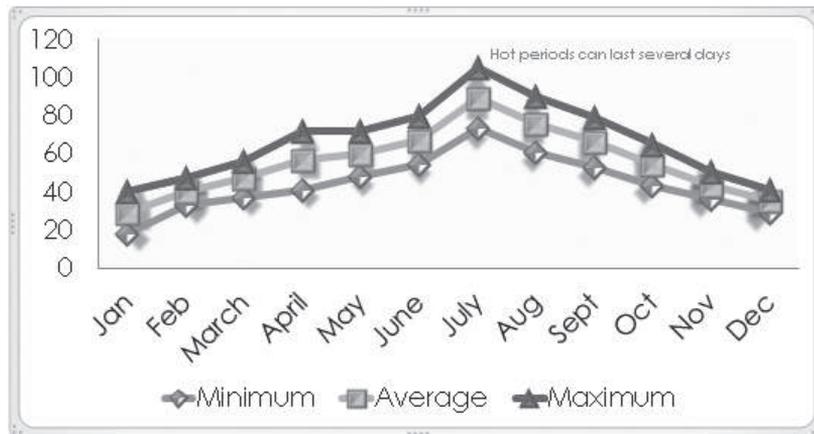
The plot area has expanded to occupy the area vacated by the legend.

Tip When you don't have a lot of data, choosing a layout that includes a datasheet—a table with all the values plotted in the chart—can clarify without adding clutter. In this case, we have too much data to add a datasheet.



17. On the **Layout** contextual tab, in the **Insert** group, click the **Text Box** button.
18. Point below the chart title and above the July maximum temperature, and then drag diagonally down and to the right until the text box stretches as far as the December data.
19. Type **Hot periods can last several days**. Then select the text, and on the **Home** tab, in the **Font** group, change the size to **10** points and the color to **Red**.
20. Click a blank area within the chart frame to release the text box selection.

You can now see the results.



The annotated chart.

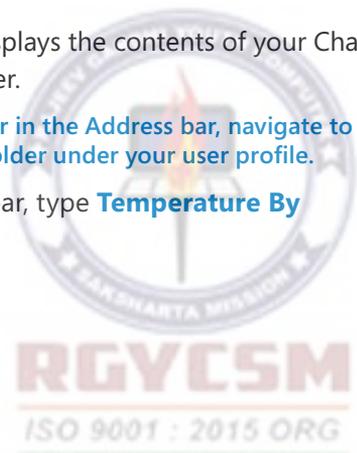


21. On the **Design** contextual tab, in the **Type** group, click the **Save As Template** button.

The Save Chart Template dialog box opens and displays the contents of your Charts folder, which is a subfolder of your Templates folder.

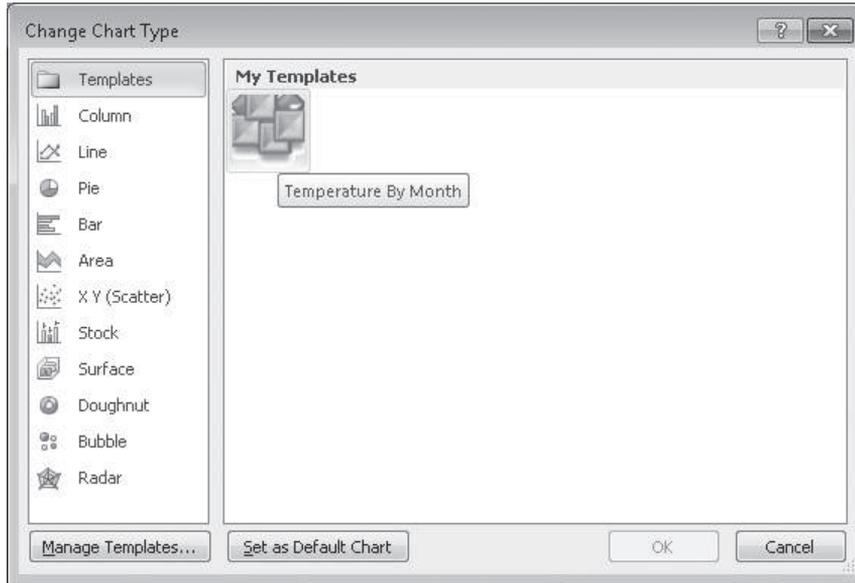
Troubleshooting If the *Charts* folder does not appear in the Address bar, navigate to the `AppData\Roaming\Microsoft\Templates\Charts` folder under your user profile.

22. With the **Charts** folder displayed in the **Address** bar, type **Temperature By Month** in the **File name** box, and then click **Save**.



23. In the **Type** group, click the **Change Chart Type** button, and then in the left pane of the **Change Chart Type** dialog box, click **Templates**. Then point to the icon under **My Templates** in the left pane.

A ScreenTip identifies this template as the one you just created.



In the future, you can click the custom template to create a chart with the same layout and formatting.

Tip To delete a custom chart template, click **Manage Templates** in the lower-left corner of the **Change Chart Type** dialog box, and then when **Windows Explorer** opens with your **Charts** folder displayed, right-click the template and click **Delete**. Confirm that you want to delete the template by clicking **Yes**, close **Windows Explorer**, and then close the **Change Chart Type** dialog box.

24. Click **Cancel** to close the dialog box.

✘ CLEAN UP If you don't want to keep the chart template, delete it by following the directions in the preceding tip. Then save and close the **LandscapingChart** presentation.

Arranging Graphics

After inserting pictures or drawing shapes in the approximate locations you want them on a slide, you can align them and change their stacking order by clicking the buttons in the **Arrange** group on the **Format** contextual tab.



Clicking the Align button gives you access to commands for aligning individual or multiple graphics in several ways. For example, you can:

- Align graphics vertically by the left or right edges or centerline, or horizontally by the top or bottom edges or centerline.
- Distribute graphics evenly within their current space, either horizontally or vertically.
- Align graphics relative to the slide that contains them or to other selected objects.
- Align graphics relative to a position on the slide.
- Align graphics against gridlines and adjustable horizontal and vertical guides.

Tip If you added pictures to a slide by clicking the Picture button in the Images group on the Insert tab, you can group them and then align and position them as a group the same way you would group shapes. However, if you have added them by clicking the Insert Picture From File button in a content placeholder, you cannot group them. For information about grouping shapes, see “Drawing Shapes” in Chapter 5, “Add Simple Visual Enhancements.”

When graphics overlap each other, they are stacked. The stacking order is determined by the order in which you inserted the graphic. You can change the stacking order by selecting a graphic and then clicking the Bring Forward or Send Backward button to move the graphic to the top or bottom of the stack. To move the selected graphic forward in the stack one graphic at a time, click the Bring Forward arrow and then click Bring To Front in the list; to move it backward, click Send To Back in the Send Backward list.

Tip If you can't select a graphic because it is covered by others in the stack, click the Selection Pane button to display the Selection And Visibility task pane, and then select the graphic you want from the Shapes On This Slide list.

In this exercise, you'll align graphics in various ways, change their stacking order, and position them with the help of a grid and guidelines.



SET UP You need the GardenResidents_start presentation located in your Chapter08 practice file folder to complete this exercise. Open the GardenResidents_start presentation, and save it as *GardenResidents*. Then follow the steps.

1. On slide **1**, select the three pictures.
2. On the **Format** contextual tab, in the **Arrange** group, click the **Align** button, and then in the list, click **Distribute Vertically**.

The middle picture moves down so that it is the same distance below the left picture as it is above the right picture.



3. In the **Arrange** group, click the **Align** button, and then click **Align Center**.
The pictures are now stacked on top of each other.



Sometimes graphics are completely hidden when they are stacked.

4. Click away from the stack, and then click the top picture.
5. In the **Arrange** group, click the **Bring Forward** arrow, and then click **Bring to Front**.



The top picture moves forward in the stack, obscuring the middle picture.

6. In the **Arrange** group, click the **Selection Pane** button.



The Selection And Visibility task pane opens.





The top and middle pictures are designated as content placeholders because they were inserted into placeholders.

7. In the task pane, under **Shapes on this Slide**, click **Content Placeholder 10**.
On the slide, the selection rectangle indicates that the middle picture is selected.

8. Close the **Selection and Visibility** task pane.

9. In the **Arrange** group, click the **Bring Forward** button.



The middle picture moves forward in the stacking order.

10. In the **Arrange** group, click the **Align** button, and then click **View Gridlines**.
A faint dotted grid appears on the slide.
11. Drag the selected cat picture to the right and down, so that its right and bottom borders align with the first gridlines from the right and bottom edges of the slide.
12. Drag the crow picture so that its right and bottom borders align with the second gridlines from the right and bottom edges of the slide.



13. Drag the frog picture so that its right and bottom borders align with the third gridline from the right and bottom edges of the slide.

The pictures are now evenly stacked and spaced.



Gridlines make it easier to precisely align multiple graphics.

14. In the **Arrange** group, click the **Align** button, and then click **Grid Settings**.

The Grid And Guides dialog box opens.



In this dialog box, you specify the size of the grid and other options.



15. In the **Grid settings** area, clear the **Display grid on screen** check box.
16. In the **Guide settings** area, select the **Display drawing guides on screen** check box, and then click **OK**.
The grid disappears, and vertical and horizontal guides span the slide.
17. Point to the vertical guide away from any text or objects, and drag it to the left, releasing it when the accompanying ScreenTip reads **3.50**. Then drag the horizontal guide down until its ScreenTip reads **0.50**.

Troubleshooting If you move an object on the slide instead of a guide, click the **Undo** button, and then point outside the margins of the slide to drag the guide.

The ScreenTips show in inches how far each guide is from the 0 mark in the center of the slide. As you drag, numbers are skipped because the Snap Objects To Grid check box is selected in the Grid And Guides dialog box.

Tip The Snap Objects To Grid option snaps guides and graphics to an invisible grid. You can turn off this option, and you can set the spacing of the grid in the Grid And Guides dialog box.

18. Point to the selected frog picture, and drag it to the left until its left and bottom borders align with the guides.
19. Select all the pictures. Then on the **Format** tab, in the **Arrange** group, click the **Align** button, and in the list, click **Distribute Horizontally**.
20. Repeat step 19 to distribute the pictures vertically.
21. In the **Arrange** group, click the **Align** button, click **Grid Settings**, and in the **Grid and Guides** dialog box, clear the **Display drawing guides on screen** check box. Then click **OK**.
22. Click the shape behind the pictures, and drag the green rotating handle clockwise until the shape stretches diagonally across the slide. Then drag the shape's middle sizing handles until it is almost as wide as the pictures.
23. With the shape still selected, in the **Arrange** group, click the **Send Backward** arrow, and click **Send to Back**.
The shape now sits behind the slide title as well as the pictures.
24. On the **View Shortcuts** toolbar in the lower-right corner of the program window, click the **Reading View** button.



You can now see what the slide will look like during presentation delivery.





The finished slide in Reading view.

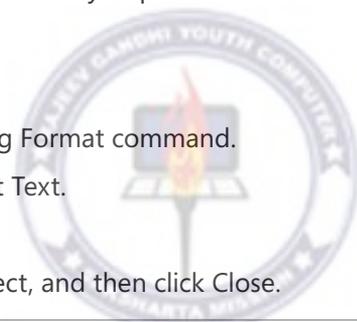
✘ CLEAN UP Save the GardenResidents presentation, and then close it.

Alt Text

Alt (alternate) text is a title and description associated with a graphic object that enables people with vision or other impairments to determine what the object is. You can add alt text to your objects to improve the accessibility of presentations that will be viewed on the screen without a presenter.

To associate alt text with an object:

1. Right-click the object, and click the corresponding Format command.
2. In the left pane of the Format dialog box, click Alt Text.
The Alt Text page is displayed.
3. Enter a title and a description for the graphic object, and then click Close.



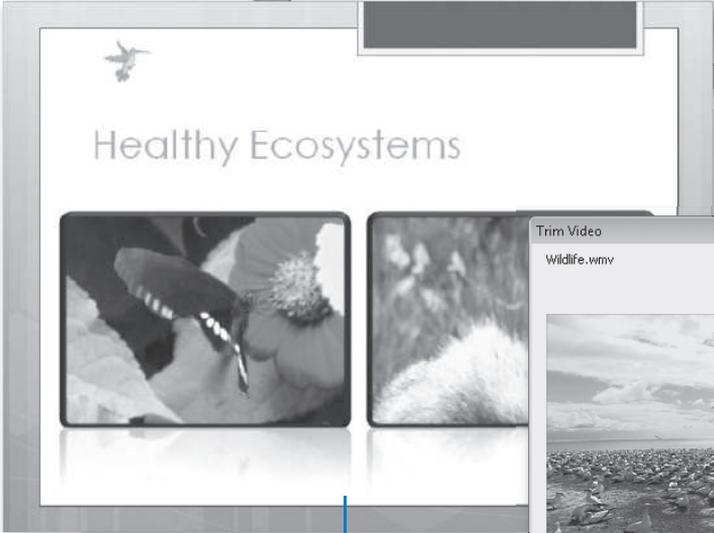
Key Points

- A growing trend among presenters is to create graphic-intensive rather than text-intensive presentations.
- If you want to move beyond simple diagrams, you need to know how to manipulate levels of text in shapes and how to format individual shapes as well as the diagram as a whole.
- With all the sophisticated chart formatting tools PowerPoint provides, it is important to remember that to be effective, charts need to be simple enough for people to grasp key trends at a glance.
- Knowing how to manipulate graphics on a slide will help you position, align, and stack them to get the effect you want.



Chapter at a Glance

Insert and play sounds,
page 263



Insert and play videos,
page 268



11 Add Sound and Movies

In this chapter, you will learn how to

- ✓ Insert and play sounds.
 - ✓ Insert and play videos.
-

A Microsoft PowerPoint presentation is usually created to convey a lot of information in a short time. That information can be in the form of text, graphics, charts, and tables, but it might also consist of audio content. And sometimes the best way to ensure that your audience understands your message is to show a video. For example, if your company has developed a short advertising video, it makes more sense to include the video in a presentation about marketing plans than to try and describe it with bullet points or even pictures.

In this chapter, you'll insert a sound clip and a sound file and make various adjustments to their settings. You'll also insert two video files, edit one of them, and format them both.

Practice Files Before you can complete the exercises in this chapter, you need to copy the book's practice files to your computer. The practice files you'll use to complete the exercises in this chapter are in the Chapter11 practice file folder. A complete list of practice files is provided in "Using the Practice Files" at the beginning of this book.

Inserting and Playing Sounds

In "Adding Transitions" in Chapter 5, "Add Simple Visual Enhancements," you added sound to a slide transition. You can also insert the following types of sounds:

- **Audio files** You can insert an audio file—for example, a speech or interview—by clicking the Audio button in the Media group on the Insert tab, and then selecting the file.

- **Sound clips** You can insert a sound clip by clicking the Audio arrow in the Media group on the Insert tab, and then clicking Clip Art Audio to display the Clip Art task pane, where you can search for and select the sound you want. Clicking Find More At Office.com at the bottom of the task pane takes you to the Office.com Web site, where you can search for additional sounds.

See Also For information about using the Clip Art task pane, see “Inserting Pictures and Clip Art Images” in Chapter 5, “Add Simple Visual Enhancements.”

- **Recorded sounds** You can record a sound or narration and attach it to a slide, all from within PowerPoint.

See Also For information about recording sounds, see the sidebar “Recording Presentations” in Chapter 14, “Prepare for Delivery.”

After you add a sound object, it appears on the slide represented by an icon. When the sound object is selected, a play bar appears below its icon with controls for playing the sound, and PowerPoint adds Format and Playback contextual tabs to the ribbon. You can change the icon as follows:

- Drag the object to locate it anywhere on the slide.
- Drag its sizing handles to make it larger or smaller.
- Use commands on the Format tab to change its appearance, in much the same way that you would format a picture.
- Click the Change Picture button to replace the default icon with a picture.

You can modify the sound itself on the Playback tab, as follows:

- Click the Trim Audio button in the Editing group to edit the sound so that only part of it plays.
- Specify Fade In and Fade Out settings to have the sound gradually increase and decrease in volume.
- Click the Volume button to adjust the volume to Low, Medium, or High, or to mute the sound.
- Specify whether the sound plays:
 - Automatically when the slide appears.
 - Only if you click its icon.
 - Throughout the presentation.



- Select the Hide During Show check box to make the sound object invisible while the presentation is displayed in Reading view or Slide Show view.
- Select the Loop Until Stopped check box to have the sound play continuously until you stop it.
- Select the Rewind After Playing check box to ensure that the sound starts from the beginning each time it is played.

To play a sound, you must have a sound card and speakers installed. In Normal view, you can test the sound associated with a slide by clicking its icon and then either clicking the Play/Pause button on its play bar or clicking the Play button in the Preview group on the Playback contextual tab.

In this exercise, you'll insert a sound clip into a slide, adjust the position of the sound object, change its picture, and make various other adjustments to its settings. Then you'll insert an audio file into another slide and make the file play continuously throughout a presentation.



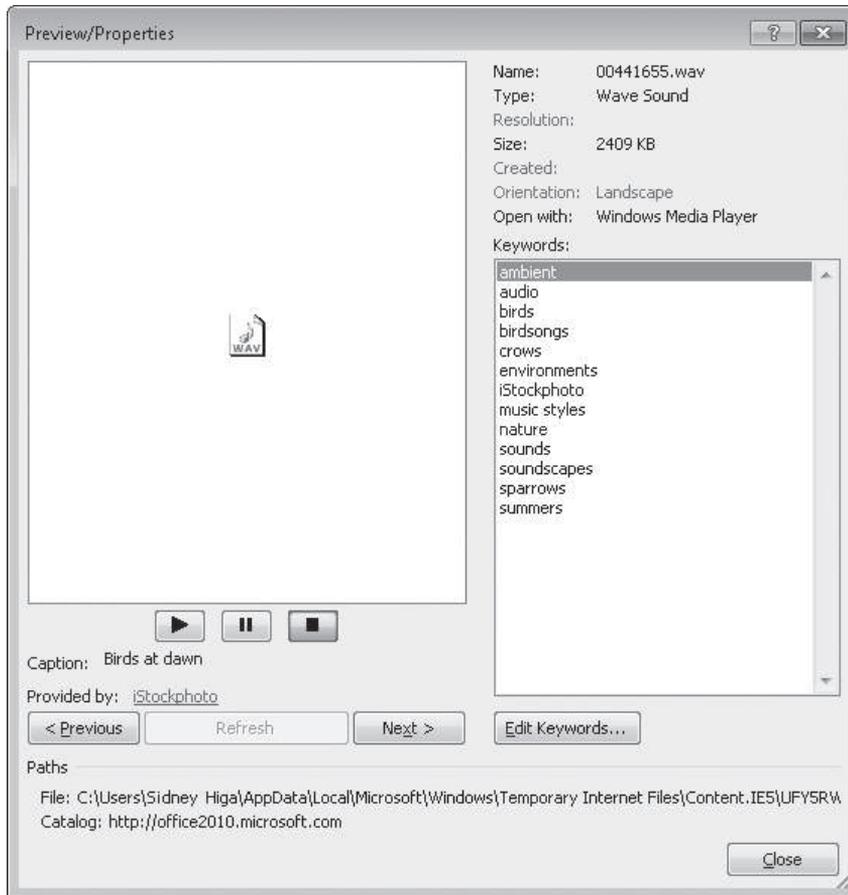
SET UP You need the *HealthyEcosystemsA_start* and *AGKCottage_start* presentations, the *Bird* picture, and the *Amanda* audio file located in your *Chapter11* practice file folder. Open the *AGKCottage_start* presentation, and save it as *AGKCottage*. Then open the *HealthyEcosystemsA_start* presentation, and save it as *HealthyEcosystemsA*. Be sure to turn on your computer's speakers for this exercise. (If you do not have a sound card and speakers, you can still follow the steps, but you won't be able to hear the sound.) With *HealthyEcosystemsA* displayed on your screen, follow the steps.



1. On the **Insert** tab, in the **Media** group, click the **Audio** arrow, and then click **Clip Art Audio**.
The Clip Art task pane opens, displaying thumbnails of common sound clips.
2. In the **Search for** box, type **birds**, and then click **Go**.
The task pane now displays thumbnails of bird calls.
3. Click any thumbnail, click the arrow that appears, and then click **Preview/Properties**.



The Preview/Properties dialog box for the sound clip you selected opens.



When you display this dialog box, PowerPoint downloads and plays the sound clip.

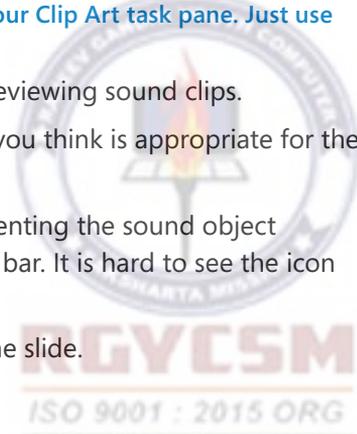
Troubleshooting The sound clips available from Office.com change frequently, so don't worry if you don't see the Birds At Dawn clip in your Clip Art task pane. Just use a different clip.

4. Click **Close** to close the dialog box, and continue previewing sound clips.
5. When you are ready, double-click a sound clip that you think is appropriate for the slide, and then close the **Clip Art** task pane.

We chose Birds Singing. A small speaker icon representing the sound object appears in the middle of the slide, along with a play bar. It is hard to see the icon because it is on top of the picture.

6. Drag the sound object to the upper-left corner of the slide.

The play bar moves with the sound object.





The handles around the sound object indicate that you can resize it, just like any other object.



7. On the play bar, click the **Play/Pause** button to hear the sound.

The sound plays. Now let's change the picture associated with the object.



8. With the sound object selected, on the **Format** contextual tab, in the **Adjust** group, click the **Change Picture** button. Then in the **Insert Picture** dialog box, double-click the **Bird** picture in your **Chapter11** practice file folder.

9. On the **Playback** contextual tab, in the **Audio Options** group, display the **Start** list, and click **Automatically**. Then select the **Loop until Stopped** check box.



10. On the **View Shortcuts** toolbar, click the **Reading View** button.

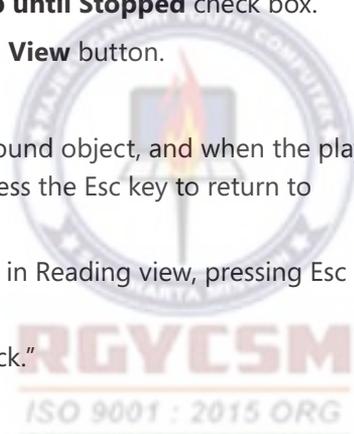
PowerPoint plays the sound clip.



11. Move the pointer over the bird representing the sound object, and when the play bar appears, click the **Play/Pause** button. Then press the Esc key to return to Normal view.

12. Display the **AGKCottage** presentation, and view it in Reading view, pressing Esc after a few slides.

This presentation would benefit from a "sound track."





13. With slide **1** displayed, on the **Insert** tab, in the **Media** group, click the **Audio** button. Then in the **Insert Audio** dialog box, double-click the **Amanda** file in your **Chapter11** practice file folder.
14. On the **Playback** tab, In the **Audio Options** group, display the **Start** list, and then click **Play across slides**. Then select the **Hide During Show** and **Loop until Stopped** check boxes.
15. Switch to Reading view.
The audio file plays while PowerPoint moves from slide to slide.
16. Press Esc to stop the presentation and return to Normal view.



CLEAN UP Save and close the **HealthyEcosystemsA** and **AGKCottage** presentations.

Inserting and Playing Videos

In keeping with the trend toward more visual presentations, PowerPoint 2010 has new video capabilities that broaden the range of videos you can use and what you can do with them. You can insert the following types of movies in slides:

- **Video files** You can insert a digital video that has been saved as a file in one of two ways: If a slide's layout includes a content placeholder, you can click the Insert Movie Clip button in the placeholder. You can also click the Video button in the Media group on the Insert tab. Either way, the Insert Video dialog box opens so that you can select the file.
- **Videos from Web sites** For information, see the sidebar "Inserting Videos from Web Sites" later in this chapter.
- **Clip art videos** Clip art videos are animated graphics, rather than real videos. Clicking the Video arrow in the Media group on the Insert tab and then clicking Clip Art Video displays the Clip Art task pane, where you can search for and select the clip you want. Clicking Find More At Office.com at the bottom of the task pane takes you to the Microsoft Office Online Web site, where you can search for additional clips. When you insert a clip art video, it appears as a picture on the slide, and PowerPoint adds a Format contextual tab to the ribbon so that you can adjust the way the picture looks. The clip moves only when you display the slide in Reading view or Slide Show view, and you cannot adjust its action.

See Also For information about using the Clip Art task pane, see "Inserting Pictures and Clip Art Images" in Chapter 5, "Add Simple Visual Enhancements."

Both video files and videos from Web sites appear on the slide as video objects that you can size and move to meet your needs. When you select a video object, PowerPoint adds Format and Playback contextual tabs to the ribbon. You can change the way the object appears on the slide as follows:

- Drag the object to locate it anywhere on the slide.
- Drag its sizing handles to make it larger or smaller.
- Use commands on the Format tab to change its appearance, in much the same way that you would format a picture.

You can modify the video itself on the Playback tab, as follows:

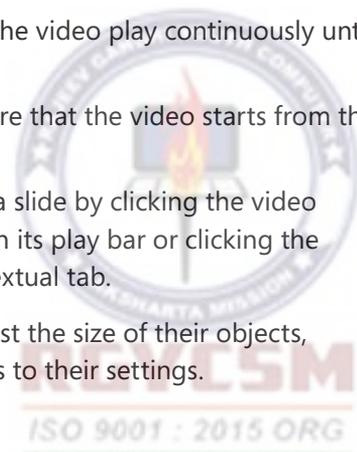
- Click the Trim Video button in the Editing group to edit the video so that only part of it plays.

Tip You can find out the total playing time of a video by displaying the Trim Video dialog box.

- Specify Fade In and Fade Out settings to have the video gradually appear and disappear.
- Click the Volume button to adjust the volume to Low, Medium, or High, or to mute the sound.
- Specify whether the video plays:
 - Automatically when the slide appears.
 - Only if you click the object.
- Select the Play Full Screen check box to have the video occupy the entire slide space while playing.
- Select the Hide While Not Playing check box to make the video object invisible while the presentation is displayed in Reading view or Slide Show view.
- Select the Loop Until Stopped check box to have the video play continuously until you stop it.
- Select the Rewind After Playing check box to ensure that the video starts from the beginning each time it is played.

In Normal view, you can test the video associated with a slide by clicking the video object and then either clicking the Play/Pause button on its play bar or clicking the Play button in the Preview group on the Playback contextual tab.

In this exercise, you'll insert two videos into a slide, adjust the size of their objects, format the objects, and make various other adjustments to their settings.



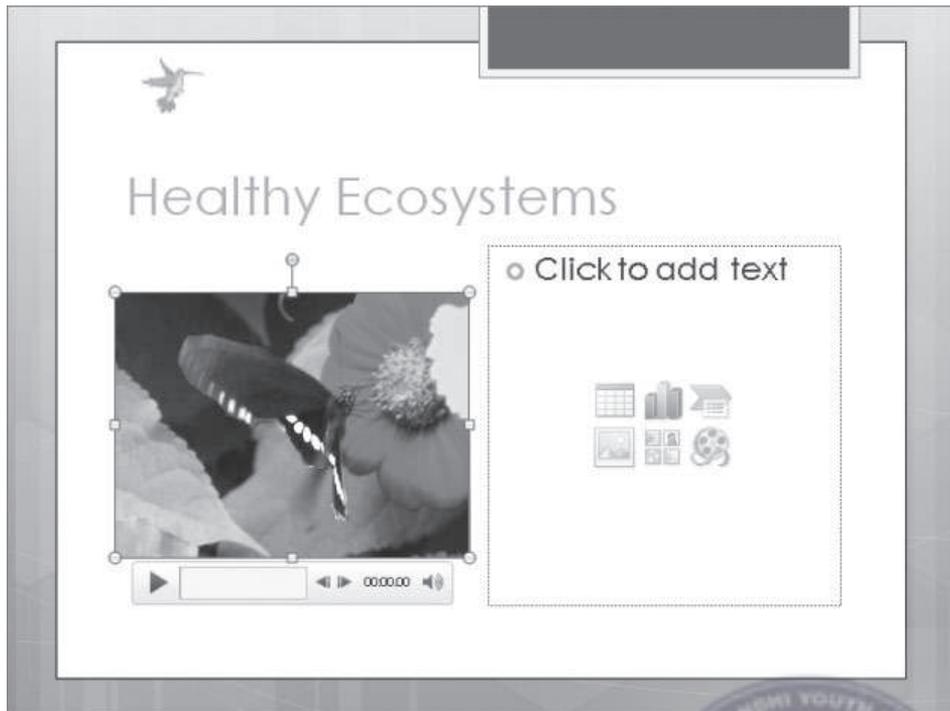


SET UP You need the *HealthyEcosystemsB_start* presentation and the *Butterfly and Wildlife* video files located in your **Chapter11** practice file folder. Open the *HealthyEcosystemsB_start* presentation, and save it as *HealthyEcosystemsB*. Then follow the steps.



1. In the **Slide** pane, in the left content placeholder, click the **Insert Media Clip** button.
2. In the **Insert Video** dialog box, double-click the **Butterfly** file in your **Chapter11** practice file folder.

The video is inserted as an object in the content placeholder with a play bar below it.



The play bar is similar to the one for a sound object.



3. On the play bar, click the **Play/Pause** button to watch the video.



- Repeat steps 1 through 3 to insert the **Wildlife** video in the right content placeholder, and then play the video.

Let's trim this video so that it shows only the animal that looks like a big ground squirrel.

- With the **Wildlife** video selected, on the **Playback** contextual tab, in the **Editing** group, click the **Trim Video** button.

The Trim Video dialog box opens.



You can advance through the video frame by frame to identify the start and end times.

- Drag the green start marker to the right until it sits at about the **00:17.020** mark. Then click the **Next Frame** button, pausing after each click, until the first ground squirrel frame comes into view at the **00:17.288** mark.

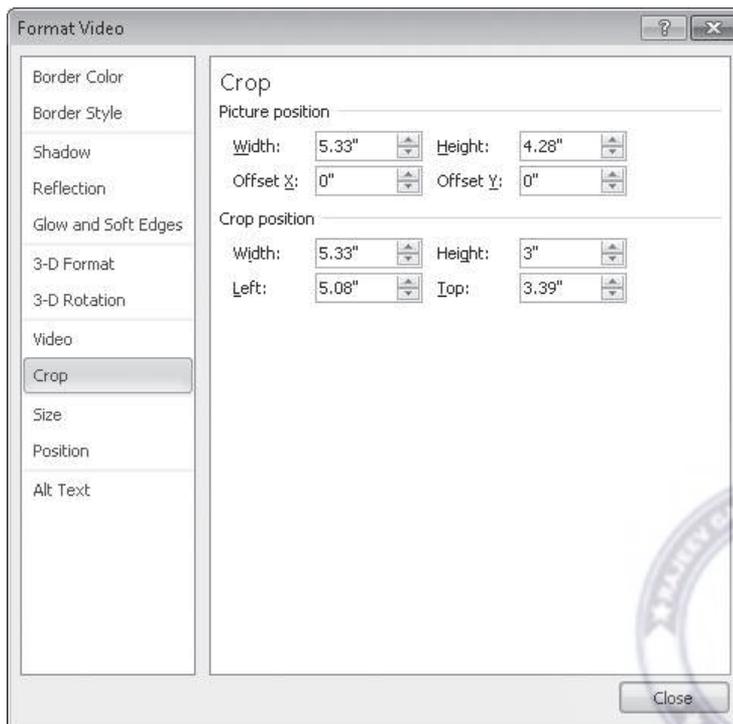


7. Drag the red stop marker to the left until it sits at about the **00:20.900** mark. Then click the **Next Frame** button, pausing after each click, until the last ground squirrel frame comes into view at the **00:20.799** mark.
8. Click **OK**. Then play the trimmed video.
9. Click the **Butterfly** video object, and on the **Format** tab, in the **Size** group, click the **Height** arrow until the object is **3** inches tall.

The width of the object increases proportionally. Let's make the Wildlife object the same size.

10. Click the **Wildlife** object, and in the **Size** group, change its **Height** to **3**.
Because this video object is now too wide, we need to crop it from the left.
11. Right-click the object, and click **Format Video**. Then in the **Format Video** dialog box, click the **Crop** tab.

The settings on this page take the trial-and-error out of any cropping task.

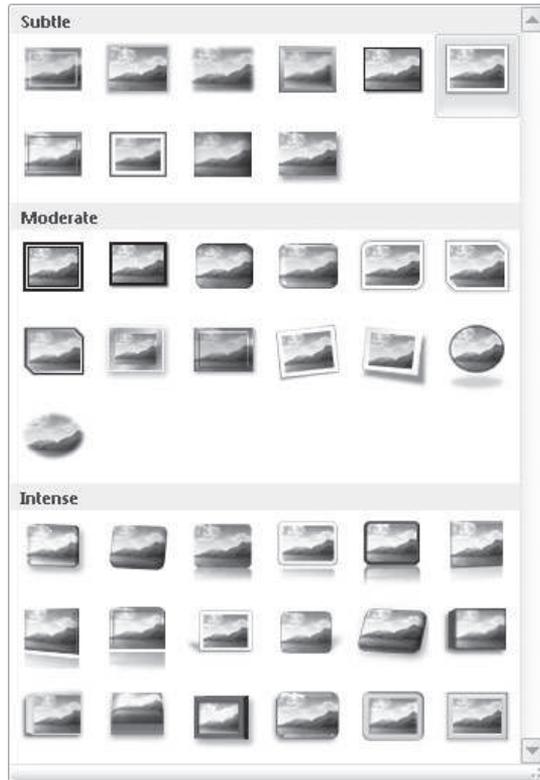


The Crop page of the Format Video dialog box.

12. In the **Crop position** area, change the **Width** setting to **4**". Then click **Close**.



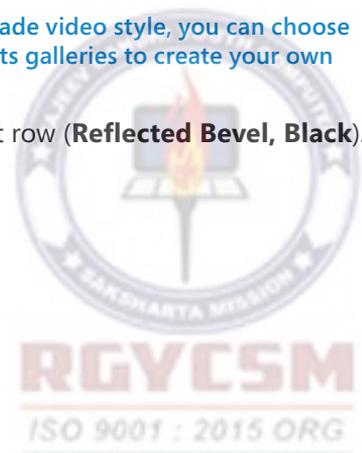
13. Drag the objects until they are evenly spaced on the slide, using the **Align** commands in the **Arrange** group as necessary to line them up.
14. With both objects selected, click the **More** button in the **Video Styles** group. The Video Styles gallery appears.



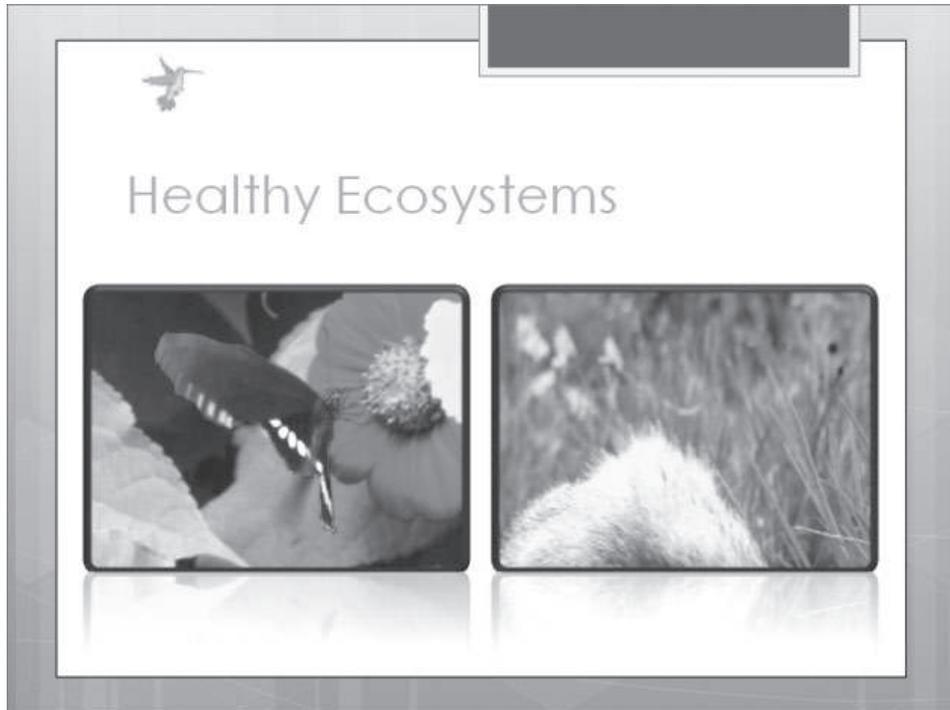
You can select a frame for the video from this gallery.

Tip In addition to formatting a video with a ready-made video style, you can choose from the Video Shape, Video Border, and Video Effects galleries to create your own combinations. Just be careful not to overdo it.

15. Under **Intense**, click the fifth thumbnail in the first row (**Reflected Bevel, Black**). Then click away from the objects.



You can now see the results.



The two video objects have rounded frames and reflections.



16. Click the **Butterfly** object, and on the **Playback** contextual tab, in the **Video Options** group, click the **Volume** button, and then click **Mute**.
17. In the **Video Options** group, display the **Start** list, and click **Automatically**. Then select the **Loop until Stopped** check box.
18. Click the **Wildlife** object, set **Volume** to **Mute**, leave **Start** set to **On Click**, and select the **Loop until Stopped** check box.
19. Switch to Reading view, and preview and pause the **Butterfly** video. Then preview and pause the **Wildlife** video.
20. Press Esc twice to return to Normal view.

✘ CLEAN UP Close the **HealthyEcosystemsB** presentation without saving your changes.



Inserting Videos from Web Sites

If you find a video on a public Web site that you want to use to illustrate a point in a presentation, you might be able to insert a link to the video into a slide. The format of the video must be supported by Windows Media Player, and the owner of the video must have made it available to the public. You can tell which videos are publicly available by right-clicking the video and looking for a Copy Embed HTML command. If you do not see this command, the owner has secured the video, and you cannot play it from anywhere but the site on which it is published.

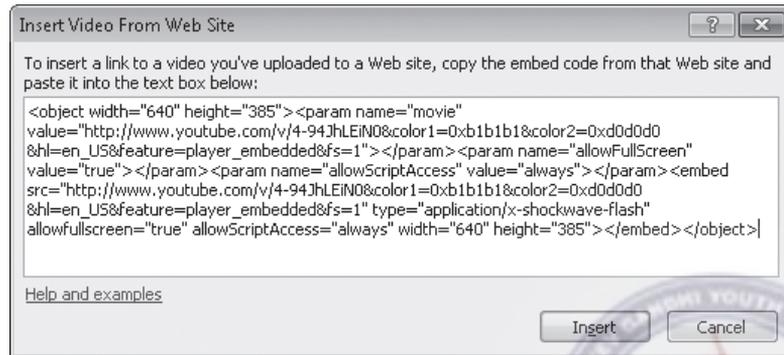
To insert a link to a video on a Web site:

1. Display the video, right-click it, and then click Copy Embed HTML.
2. Display the slide into which you want to insert the video.
3. On the Insert tab, in the Media group, click the Video arrow, and then click Video From Web Site.

The Insert Video From Web Site dialog box opens.

4. In the dialog box, click in the text box, and then press Ctrl+V (the keyboard shortcut for the Paste command).

The copied embed code is inserted at the cursor.



A link to a video available from YouTube.

5. Click OK.

To view the video, switch to Reading view or Slide Show view, and then click the Play/Pause button. PowerPoint then uses the embed code to locate and play the video. Provided the video remains available in its original location, and provided you have an active Internet connection, you will be able to access and play the video from the slide at any time.



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Introducing Microsoft Access 2010

Microsoft Access 2010 is a powerful relational database program that includes hundreds of tools you can use to quickly start tracking, sharing, and reporting information, even if you are new to database development. Users have access to a large library of professionally designed templates; wizards that automatically create tables, forms, queries, and reports; and extensive local and online help resources.

Access supports sharing data with other sources, including other Microsoft Office 2010 programs, Microsoft SQL Server, Windows SharePoint Services, and documents in XML, HTML, XPS, and PDF formats. Advanced features allow you to create sophisticated executable database applications that your employees and customers can use to gather and view data without needing to know anything at all about database design or development.

This book gives you straightforward instructions for using Access to create databases. It takes you from knowing little or nothing about Access—or, for that matter, about databases—to a level of expertise that will enable you to create complex databases for use by one person or by many people.

New Features

If you're upgrading to Access 2010 from a previous version, you're probably more interested in the differences between the old and new versions and how they will affect you than you are in the basic functionality of Access. To help you identify the entire scope of changes from the version of Access you're familiar with, we've listed here the new features introduced in Access 2010, as well as in Access 2007.



If You Are Upgrading from Access 2007

If you have been using Access 2007, you might be wondering how Microsoft could have improved on what seemed like a pretty comprehensive set of features and tools. In addition to enhancing many of the new features introduced with Access 2007, Access 2010 includes the following new features:

- **The Backstage view** Finally, all the tools you need to work with your files, as opposed to their content, really are accessible from one location. You display the Backstage view by clicking the File tab, which replaces the Microsoft Office Button at the left end of the ribbon.
- **Customizable ribbon** The logical next step in the evolution of the command center introduced with Access 2007: Create your own tabs and groups to suit the way you work.
- **Unifying themes** Adding pizzazz to database objects such as forms and reports is just a matter of applying a professional-looking theme from a gallery of options.
- **Web capabilities** Companies that have employees and clients in different geographic locations can publish databases to Access Services, thereby making those databases accessible over the Internet in a Web browser.
- **Navigation forms** Offering the sophisticated browsing techniques people are accustomed to using on Web sites, these new forms provide an essential navigation tool for Web databases, and can also increase the usability of non-Web databases.
- **New database templates** Getting started with the creation of common types of databases has never been easier. The databases that come with Access are supplemented by those made available by a community of database developers through Microsoft Office Online.
- **Application parts** You can now add predefined database objects to an existing database. In addition to 10 types of forms, several Quick Start parts are available. For example, adding the Contacts part adds one table and associated queries, forms, and reports.
- **Enhanced Layout view and layout controls** It is now easier to make design changes in Layout view while actively viewing the underlying data.
- **Enhanced Expression Builder** The layout of the Expression Builder dialog box has been refined to make building an expression more intuitive. In addition, a feature called *IntelliSense* has been incorporated to display options based on what you type and to provide syntax guidance.



- **Improved conditional formatting** You can now use data bars to add at-a-glance insight into the data in Number fields.
- **Ability to export to PDF and XPS files** When you want to make a report or other database object available to people but don't want them to be able to manipulate it, you can export the object in either PDF or XPS format. You can optimize the file size for printing or publishing online.

If You Are Upgrading from Access 2003

Access 2010 builds on Access 2007, which introduced a long list of new and improved features that made it easier than ever to create databases to track, share, manage, and audit information, including the following:

- **The ribbon** The new user interface organizes the most common commands for any database object into tabs and groups so that the appropriate commands are immediately accessible for the current object.
- **Quick Access Toolbar** Customize a portion of the toolbar to include commands you regularly use, regardless of which object is currently active.
- **Navigation pane** The customizable Navigation pane replaces the Database window from Access 2003. You can display or hide all tables, queries, forms, reports, macros, and modules, or create a custom group that displays only the objects you want to work with at the moment. You can even hide the Navigation pane to make more room on the screen for your database object.
- **View Shortcuts toolbar** This context-sensitive toolbar at the lower-right corner of the program window provides single-click switching among the supported views of the current database object. Quickly switch between Datasheet view, Design view, PivotTable view, PivotChart view, Form view, Layout view, Report view, and other views appropriate to the current object.
- **Tabbed documents** Open multiple database objects and switch between them quickly by clicking tabs on a tab bar.
- **Template library** Quickly locate and download professionally designed templates for common database projects.
- **Improved sorting and filtering** Easily sort all records in a table based on one or more fields, or filter a table or form to display or hide records matching multiple criteria.



- **Layout view** Redesign a form or report while viewing it.
- **Stacked and Tabular layouts** Group controls in a form or report layout so you can easily manipulate the entire group as one unit.
- **Automatic calendar** The Date/Time data type includes an optional calendar control. Click the calendar, and select the date you want.
- **Rich Text** Memo fields now support most common formatting options, including fonts, color, and character formatting. The formatting is stored with the database.
- **Create tab** Quickly create a new table, form, query, report, macro, SharePoint list, or other Access object.
- **Totals function** Add a totals row to a query, and select from a list of formulas to automatically calculate aggregate values for forms and reports.
- **Field List** Drag and drop fields from one or more related or unrelated tables onto your active table.
- **Attachment data type** Attach photos and other files to a database record.
- **Embedded macros** Macros embedded in a form or report offer a higher level of security in database applications.
- **Microsoft Access Help** Easily search end-user and developer help content from within Access.
- **Improved information sharing** Easily import and export data between Access and other Office applications or XML, HTML, PDF, and dBase files; collect information through e-mail surveys in Microsoft Office Outlook and automatically update your database with the responses; create or link a database with a SharePoint list; or publish your database to a SharePoint library and allow users to update and extract information.
- **Improved report design** Quickly create a professional-looking report, complete with logo, header, and footer; and use Report view, combined with filters, to browse only selected records in the report.
- **Group, Sort, and Total pane** This feature makes it much easier to group and sort data in reports, and add totals from a drop-down list.
- **Enhanced security** Adding password protection to a database now causes Access to automatically encrypt the database when it closes, and decrypt it when it opens.



Let's Get Started!

There are so many new and improved features to this already feature-rich program that there are bound to be some exciting discoveries for even the most advanced users. If you are new to Access, you will find many automated features that let you painlessly create databases and add queries, forms, and professional-looking reports to track and share your data. We look forward to showing you around Microsoft Access 2010.



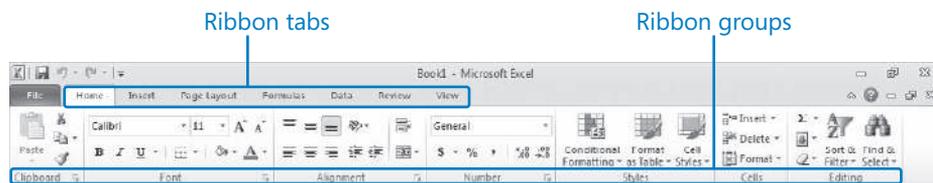


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Modifying the Display of the Ribbon

The goal of the Microsoft Office 2010 working environment is to make working with Office files—including Microsoft Word documents, Excel workbooks, PowerPoint presentations, Outlook e-mail messages, and Access databases—as intuitive as possible. You work with an Office file and its contents by giving commands to the program in which the document is open. All Office 2010 programs organize commands on a horizontal bar called the *ribbon*, which appears across the top of each program window whether or not there is an active document.



A typical program window ribbon.

Commands are organized on task-specific tabs of the ribbon, and in feature-specific groups on each tab. Commands generally take the form of buttons and lists. Some appear in galleries in which you can choose from among multiple options. Some groups have related dialog boxes or task panes that contain additional commands.

Throughout this book, we discuss the commands and ribbon elements associated with the program feature being discussed. In this section, we discuss the general appearance of the ribbon, things that affect its appearance, and ways of locating commands that aren't visible on compact views of the ribbon.

See Also For detailed information about the ribbon in Microsoft Access, see “Working in Access 2010” in Chapter 1, “Explore an Access 2010 Database.”

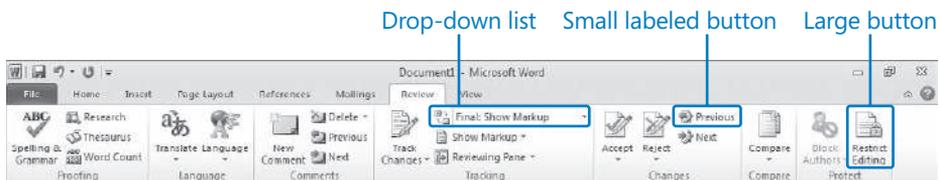
Tip Some older commands no longer appear on the ribbon, but are still available in the program. You can make these commands available by adding them to the Quick Access Toolbar. For more information, see “Customizing the Quick Access Toolbar” in Chapter 13, “Customize Access.”



Dynamic Ribbon Elements

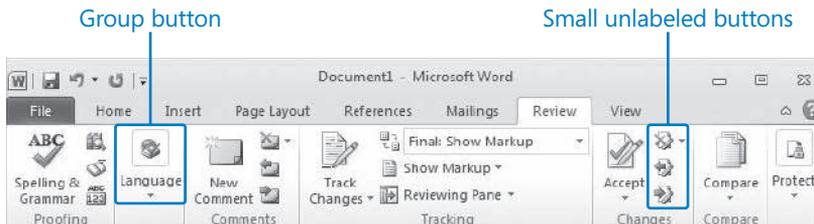
The ribbon is dynamic, meaning that the appearance of commands on the ribbon changes as the width of the ribbon changes. A command might be displayed on the ribbon in the form of a large button, a small button, a small labeled button, or a list entry. As the width of the ribbon decreases, the size, shape, and presence of buttons on the ribbon adapt to the available space.

For example, when sufficient horizontal space is available, the buttons on the Review tab of the Word program window are spread out and you're able to see more of the commands available in each group.



The Review tab of the Word program window at 1024 pixels wide.

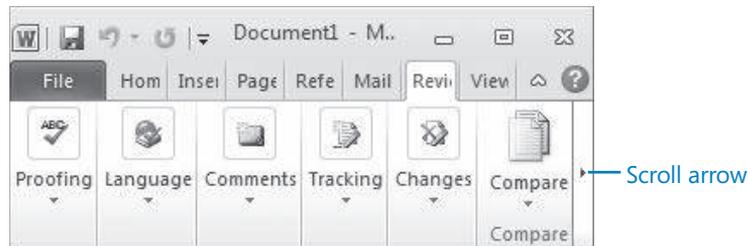
If you decrease the width of the ribbon, small button labels disappear and entire groups of buttons are hidden under one button that represents the group. Click the group button to display a list of the commands available in that group.



The Review tab of the Word program window at 675 pixels wide.



When the window becomes too narrow to display all the groups, a scroll arrow appears at its right end. Click the scroll arrow to display hidden groups.



The Review tab of the Word program window at 340 pixels wide.

Changing the Width of the Ribbon

The width of the ribbon is dependent on the horizontal space available to it, which depends on these three factors:

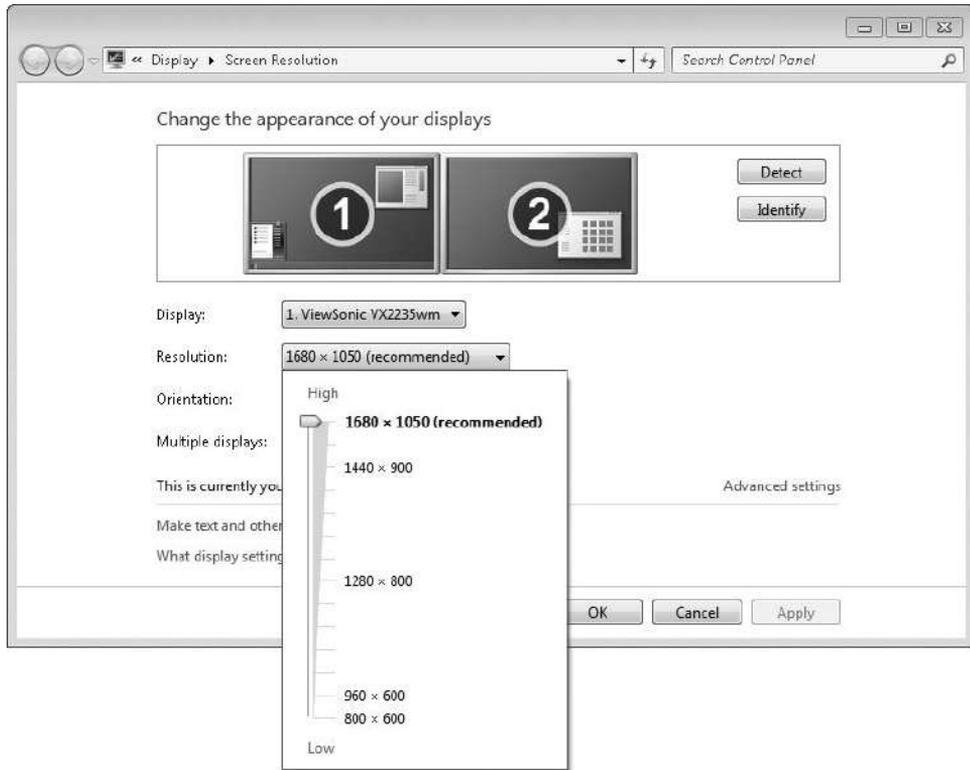
- **The width of the program window** Maximizing the program window provides the most space for ribbon elements. You can resize the program window by clicking the button in its upper-right corner or by dragging the border of a non-maximized window.

On a computer running Windows 7, you can maximize the program window by dragging its title bar to the top of the screen.

- **Your screen resolution** Screen resolution is the amount of information your screen displays, expressed as *pixels wide by pixels high*. The greater the screen resolution, the greater the amount of information that will fit on one screen. Your screen resolution options are dependent on your monitor. At the time of writing, possible screen resolutions range from 800 × 600 to 2048 × 1152. In the case of the ribbon, the greater the number of pixels wide (the first number), the greater the number of buttons that can be shown on the ribbon, and the larger those buttons can be.



On a computer running Windows 7, you can change your screen resolution from the Screen Resolution window of Control Panel.

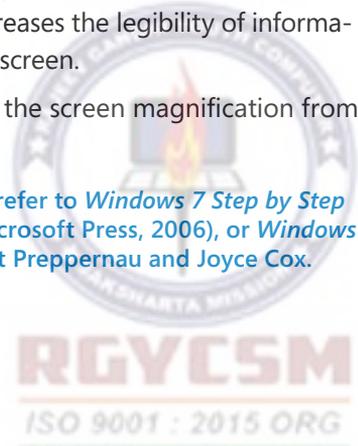


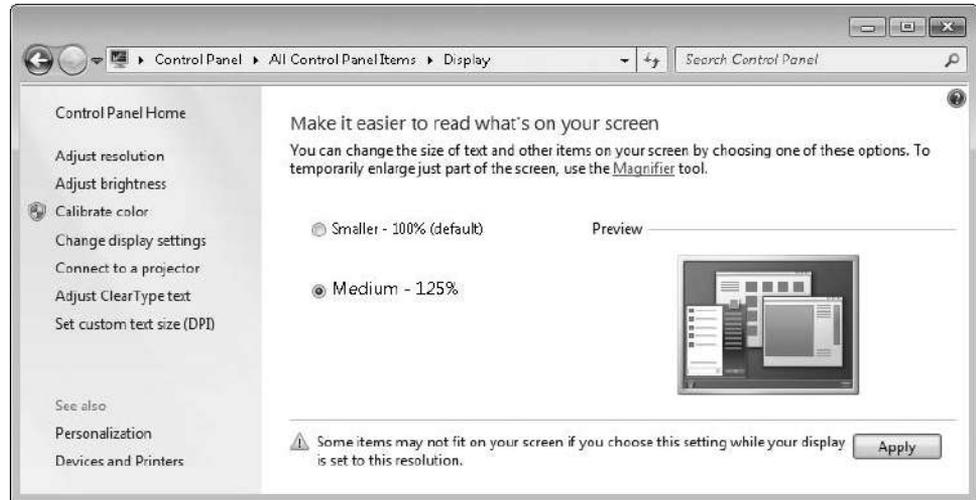
You set the resolution by dragging the pointer on the slider.

- **The density of your screen display** You might not be aware that you can change the magnification of everything that appears on your screen by changing the screen magnification setting in Windows. Setting your screen magnification to 125% makes text and user interface elements larger on screen. This increases the legibility of information, but it means that less information fits onto each screen.

On a computer running Windows 7, you can change the screen magnification from the Display window of Control Panel.

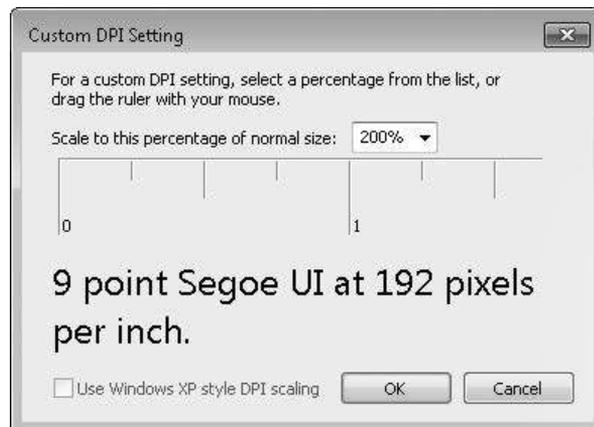
See Also For more information about display settings, refer to *Windows 7 Step by Step* (Microsoft Press, 2009), *Windows Vista Step by Step* (Microsoft Press, 2006), or *Windows XP Step by Step* (Microsoft Press, 2002) by Joan Lambert Preppernau and Joyce Cox.





You can choose one of the standard display magnification options or create another by setting a custom text size.

The screen magnification is directly related to the density of the text elements on screen, which is expressed in dots per inch (dpi) or points per inch (ppi). (The terms are interchangeable, and in fact are both used in the Windows dialog box in which you change the setting.) The greater the dpi, the larger the text and user interface elements appear on screen. By default, Windows displays text and screen elements at 96 dpi. Choosing the Medium - 125% display setting changes the dpi of text and screen elements to 120 dpi. You can choose a custom setting of up to 500 percent magnification, or 480 dpi, in the Custom DPI Setting dialog box.



You can choose a magnification of up to 200 percent from the lists, or choose a greater magnification by dragging the ruler from left to right.



Adapting Exercise Steps

The screen images shown in the exercises in this book were captured at a screen resolution of 1024 × 768, at 100% magnification, and with the default text size (96 dpi). If any of your settings are different, the ribbon on your screen might not look the same as the one shown in the book. For example, you might see more or fewer buttons in each of the groups, the buttons you see might be represented by larger or smaller icons than those shown, or the group might be represented by a button that you click to display the group's commands.

When we instruct you to give a command from the ribbon in an exercise, we do it in this format:

- On the **Insert** tab, in the **Illustrations** group, click the **Chart** button.

If the command is in a list, we give the instruction in this format:

- On the **Page Layout** tab, in the **Page Setup** group, click the **Breaks** button and then, in the list, click **Page**.

The first time we instruct you to click a specific button in each exercise, we display an image of the button in the page margin to the left of the exercise step.

If differences between your display settings and ours cause a button on your screen to not appear as shown in the book, you can easily adapt the steps to locate the command. First, click the specified tab. Then locate the specified group. If a group has been collapsed into a group list or group button, click the list or button to display the group's commands. Finally, look for a button that features the same icon in a larger or smaller size than that shown in the book. If necessary, point to buttons in the group to display their names in ScreenTips.

If you prefer not to have to adapt the steps, set up your screen to match ours while you read and work through the exercises in the book.



Features and Conventions of This Book

This book has been designed to lead you step by step through all the tasks you're most likely to want to perform in Microsoft Access 2010. If you start at the beginning and work your way through all the exercises, you will gain enough proficiency to be able to manage complex databases through Access. However, each topic is self contained. If you have worked with a previous version of Access, or if you completed all the exercises and later need help remembering how to perform a procedure, the following features of this book will help you locate specific information:

- **Detailed table of contents** Scan the listing of the topics and sidebars within each chapter.
- **Chapter thumb tabs** Easily locate the beginning of each chapter by looking at the colored blocks on the odd-numbered pages.
- **Topic-specific running heads** Within a chapter, quickly locate a topic by looking at the running heads at the top of odd-numbered pages.
- **Glossary** Look up the meaning of a word or the definition of a concept.
- **Keyboard Shortcuts** If you prefer to work from the keyboard rather than with a mouse, find all the shortcuts in one place.
- **Detailed index** Look up specific tasks and features in the index, which has been carefully crafted with the reader in mind.



You can save time when reading this book by understanding how the Step by Step series shows exercise instructions, keys to press, buttons to click, and other information. These conventions are listed in the following table.

Convention	Meaning
SET UP	This paragraph preceding a step-by-step exercise indicates the practice files that you will use when working through the exercise. It also indicates any requirements you should attend to or actions you should take before beginning the exercise.
CLEAN UP	This paragraph following a step-by-step exercise provides instructions for saving and closing open files or programs before moving on to another topic. It also suggests ways to reverse any changes you made to your computer while working through the exercise.
1 2	Numbered steps guide you through hands-on exercises in each topic, as well as procedures in sidebars and expository text.
See Also	This paragraph directs you to more information about a topic in this book or elsewhere.
Troubleshooting	This paragraph alerts you to a common problem and provides guidance for fixing it.
Tip	This paragraph provides a helpful hint or shortcut that makes working through a task easier.
Important	This paragraph points out information that you need to know to complete a procedure.
Keyboard Shortcut	This paragraph provides information about an available keyboard shortcut for the preceding task.
Ctrl+B	A plus sign (+) between two keys means that you must press those keys at the same time. For example, "Press Ctrl+B" means that you should hold down the Ctrl key while you press the B key.
	Pictures of buttons appear in the margin the first time the button is used in an exercise.
Bold	In exercises that begin with SET UP information, bold type displays text that you should type; the names of program elements, such as buttons, commands, windows, and dialog boxes; and files, folders, or text that you interact with in the steps.

Using the Practice Files

Before you can complete the exercises in this book, you need to copy the book's practice files to your computer. These practice files, and other information, can be downloaded from the book's detail page, located at:

<http://go.microsoft.com/fwlink/?Linkid=192153>

Display the detail page in your Web browser and follow the instructions for downloading the files.

Important The Microsoft Access 2010 program is not available from this Web site. You should purchase and install that program before using this book.

The following table lists the practice files for this book.

Chapter	File
Chapter 1: Explore an Access 2010 Database	GardenCompany01_start.accdb
Chapter 2: Create Databases and Simple Tables	None
Chapter 3: Create Simple Forms	GardenCompany03_start.accdb Logo.png
Chapter 4: Display Data	GardenCompany04_start.accdb
Chapter 5: Create Simple Reports	GardenCompany05_start.accdb
Chapter 6: Maintain Data Integrity	GardenCompany06_start.accdb
Chapter 7: Create Custom Forms	GardenCompany07_start.accdb Hydrangeas.jpg
Chapter 8: Create Queries	GardenCompany08_start.accdb
Chapter 9: Create Custom Reports	GardenCompany09_start.accdb

(continued)

Chapter	File
Chapter 10: Import and Export Data	Customers.xlsx Employees.txt GardenCompany10_start.accdb ProductsAndSuppliers.accdb Shippers.xlsx
Chapter 11: Make Databases User Friendly	GardenCompany11_start.accdb Icon.ico Logo.png
Chapter 12: Protect Databases	GardenCompany12_start.accdb
Chapter 13: Customize Access	GardenCompany13_start.accdb

Your Companion eBook

The eBook edition of this book allows you to:

- Search the full text
- Print
- Copy and paste

To download your eBook, please see the instruction page at the back of this book.



Getting Help

Every effort has been made to ensure the accuracy of this book. If you do run into problems, please contact the sources listed in the following sections.

Getting Help with This Book

If your question or issue concerns the content of this book or its practice files, please first consult the book's errata page, which can be accessed at:

<http://go.microsoft.com/fwlink/?Linkid=192153>

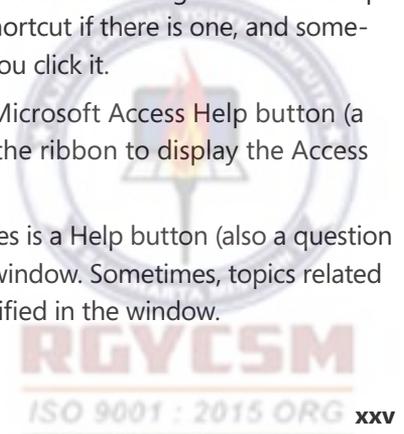
This page provides information about known errors and corrections to the book. If you do not find your answer on the errata page, send your question or comment to Microsoft Press Technical Support at:

msspinput@microsoft.com

Getting Help with Access 2010

If your question is about Microsoft Access 2010, and not about the content of this book, your first recourse is the Access Help system. This system is a combination of tools and files stored on your computer when you installed Access and, if your computer is connected to the Internet, information available from the Microsoft Office Online Web site. You can find general or specific Help information in the following ways:

- To find out about an item on the screen, you can display a ScreenTip. For example, to display a ScreenTip for a button, point to the button without clicking it. The ScreenTip gives the button's name, the associated keyboard shortcut if there is one, and sometimes a description of what the button does when you click it.
- In the Access program window, you can click the Microsoft Access Help button (a question mark in a blue circle) at the right end of the ribbon to display the Access Help window.
- At the right end of the title bars of some dialog boxes is a Help button (also a question mark) that you can click to display the Access Help window. Sometimes, topics related to the functions of that dialog box are already identified in the window.



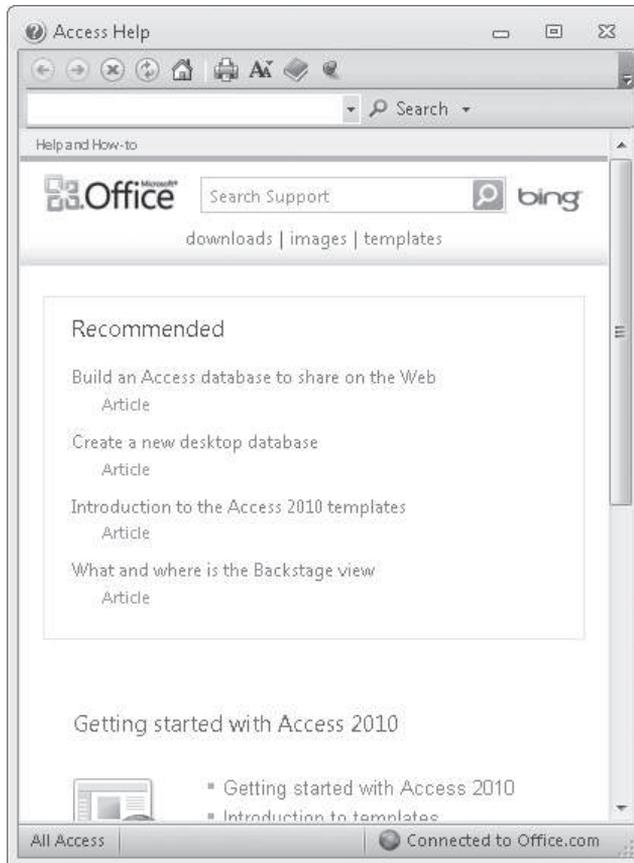
To practice getting help, you can work through the following exercise.



SET UP You don't need any practice files to complete this exercise. Start Access, and then follow the steps.



1. At the right end of the ribbon, click the **Microsoft Access Help** button.
The Access Help window opens.



Your Help window might look different from this one because the material on the Office Online Web site is constantly being updated.

Tip You can maximize the window or adjust its size by dragging the handle in the lower-right corner. You can change the size of the font by clicking the Change Font Size button on the toolbar.

2. Toward the bottom of the window, below the bulleted list under **Browse Access 2010 support**, click **see all**.



Troubleshooting The See All link is available only if the Search option is set to one of the Content From Office.com choices. If your Search option is set to one of the Content From This Computer choices, the complete list is already displayed. To switch among the available Search options, click the Search arrow and then click your choice in the list.

The window changes to display a list of help topics.

3. In the list of topics, click **Activating Access**.

Access Help displays a list of topics related to activating Microsoft Office programs. You can click any topic to display the corresponding information.

4. On the toolbar, click the **Show Table of Contents** button, and then scroll down the pane that appears on the left.

Like the table of contents in a book, the Help table of contents is organized in sections. If you're connected to the Internet and the Search option is set to one of the Content From Office.com choices, Access displays sections, topics, and training available from the Office Online Web site as well as the Help information stored on your computer.

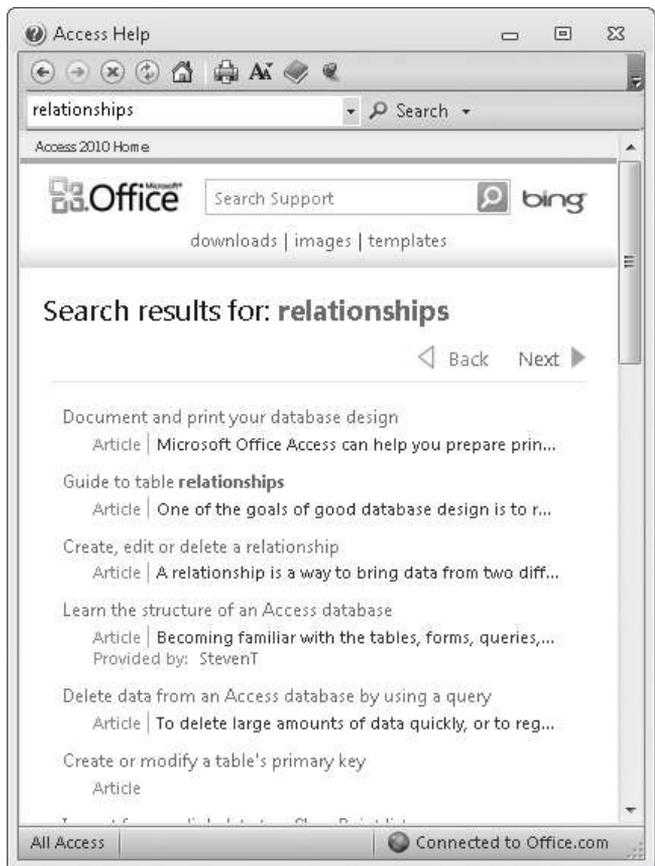


Clicking any section (represented by a book icon) displays that section's topics (represented by help icons).



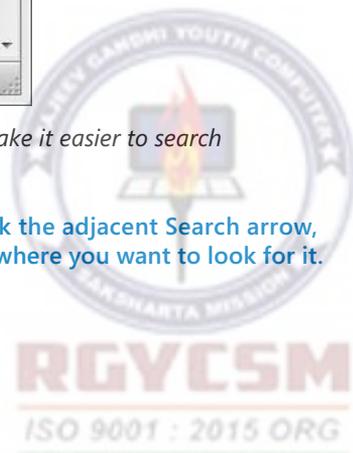
5. In the **Table of Contents** pane, click a few sections and topics. Then click the **Back** and **Forward** buttons to move among the topics you have already viewed.
6. At the right end of the **Table of Contents** title bar, click the **Close** button.
7. At the top of the **Access Help** window, click the **Search** box, type **relationships**, and then press the Enter key.

The Access Help window displays topics related to the word you typed.



Next and Back buttons appear below the search term to make it easier to search for the topic you want.

Tip If you enter a term in the Search box and then click the adjacent Search arrow, you can specify the type of help you are looking for or where you want to look for it.



8. In the results list, click the **Guide to table relationships** topic.

The selected topic appears in the Access Help window.

9. Below the first paragraph of the topic, click **Database design basics**.

Access jumps to the related topic about database design. This type of hyperlink is identified by blue text. You might also see a Show All button that displays hidden auxiliary information available in the topic. (The button changes to Hide All when the hidden information is displayed.)

Tip You can click the **Print** button on the toolbar to print a topic. Only the displayed information is printed.

✘ CLEAN UP Click the **Close** button in the upper-right corner of the Access Help window.

More Information

If your question is about Access 2010 or another Microsoft software product and you cannot find the answer in the product's Help system, please search the appropriate product solution center or the Microsoft Knowledge Base at:

support.microsoft.com

In the United States, Microsoft software product support issues not covered by the Microsoft Knowledge Base are addressed by Microsoft Product Support Services. Location-specific software support options are available from:

support.microsoft.com/gp/selfoverview/





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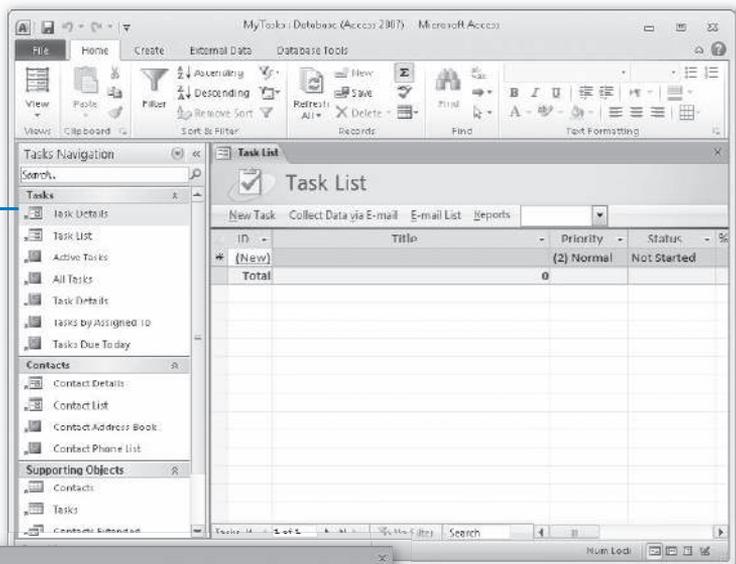
Chapter at a Glance

Create databases from templates, page 46

Create databases and tables manually, page 52

Refine table structure, page 64

Create relationships between tables, page 68



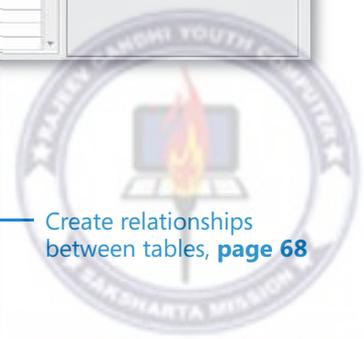
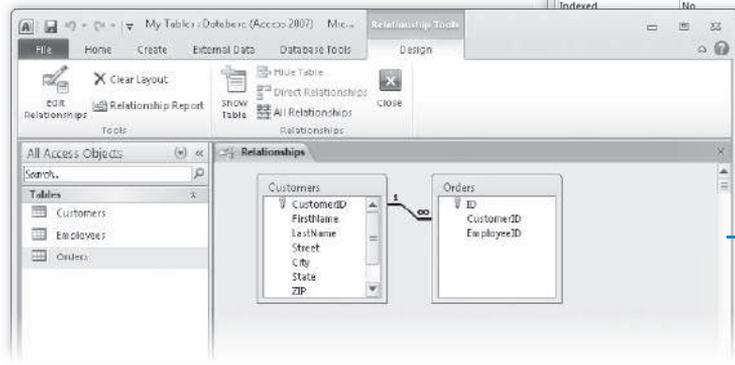
CustomerID	FirstName	LastName	Street	City	State	ZIP	Country	Phone
1	Scott	Gode	012 E. 2nd	Pocatello	ID	73204	USA	208.555-0161
(New)								

Field Name	Data Type	Description
City	Text	
State	Text	
PostalCode	Text	
Phone	Text	
Birthdate	Date/Time	

Field Properties

Property	Value
Field Size	20
Format	
Input Mask	
Caption	State or Region
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No

The label for the field when used on a form. If you don't enter a caption, the field name is used as the label. Press F1 for help on captions.



2 Create Databases and Simple Tables

In this chapter, you will learn how to

- ✓ Create databases from templates.
 - ✓ Create databases and tables manually.
 - ✓ Manipulate table columns and rows.
 - ✓ Refine table structure.
 - ✓ Create relationships between tables.
-

Creating the container for a database is easy. But an empty database is no more useful than an empty document or worksheet. It is only when you fill a database with data in tables (known as populating a database) that it starts to serve a purpose. As you add forms, queries, and reports, it becomes a useful tool. If you customize it by adding a startup page and organizing the various objects into categories and groups, it moves into the realm of being a database application.

Not every database has to be refined to the point that it can be classified as an application. Databases that only you or a few experienced database users will work with can remain fairly simple. But if you expect someone without database knowledge to enter data or generate their own reports, spending a little extra time in the beginning to create a solid foundation will save a lot of work later. Otherwise, you'll find yourself continually repairing damaged files or walking people through seemingly easy tasks.

Microsoft Access 2010 takes a lot of the difficult and mundane work out of creating and customizing a database by providing database applications in the form of templates that you modify and populate with your own information. Access 2010 also provides templates for common elements that you might want to plug into a database. These application parts consist of sets of objects—a table and related forms, queries, or reports—that together provide a complete, functioning part of a database. All you have to do is fill in your data. If none of the templates meet your needs, you can create tables manually.

In this chapter, you'll create a database from a template and create a table manually. Then you'll adjust the display of a data table to fit your needs. By the end of this chapter, you'll have a database containing a few tables and you'll understand a bit about how the tables in the databases you will use for the exercises in the remaining chapters of the book were created.

Practice Files You don't need any practice files to complete the exercises in this chapter. For more information about practice file requirements, see "Using the Practice Files" at the beginning of this book.

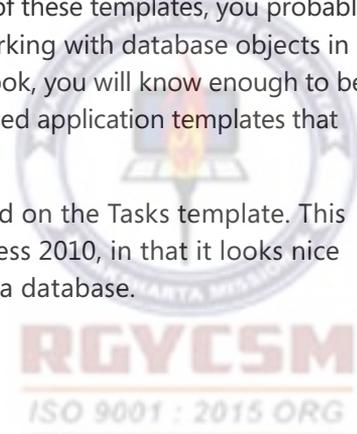
Creating Databases from Templates

A few years ago (the distant past, in computer time), creating a database structure involved first analyzing your needs and then laying out the database design on paper. You would decide what information you needed to track and how to store it in the database. Creating the database structure could be a lot of work, and after you created it and entered data, making changes could be difficult. Templates have changed this process, and committing yourself to a particular database structure is no longer the big decision it once was.

A template is a pattern that you use to create a specific type of database. Access 2010 comes with templates for several databases typically used in business and education, and when you are connected to the Internet, many more are available from the Microsoft Office Online Web site at office.microsoft.com. By using pre-packaged templates, you can create a database application in far less time than it used to take to sketch the design on paper, because someone has already done the design work for you.

Using an Access template might not produce exactly the database application you want, but it can quickly create something that you can customize to fit your needs. However, you can customize a database only if you know how to manipulate its basic building blocks: tables, forms, queries, and reports. Due to the complexity of these templates, you probably shouldn't try to modify them until you're comfortable working with database objects in Design view and Layout view. By the time you finish this book, you will know enough to be able to confidently work with the sophisticated pre-packaged application templates that come with Access.

In this exercise, you'll create a database application based on the Tasks template. This template is typical of those provided with Microsoft Access 2010, in that it looks nice and demonstrates a lot of the neat things you can do in a database.



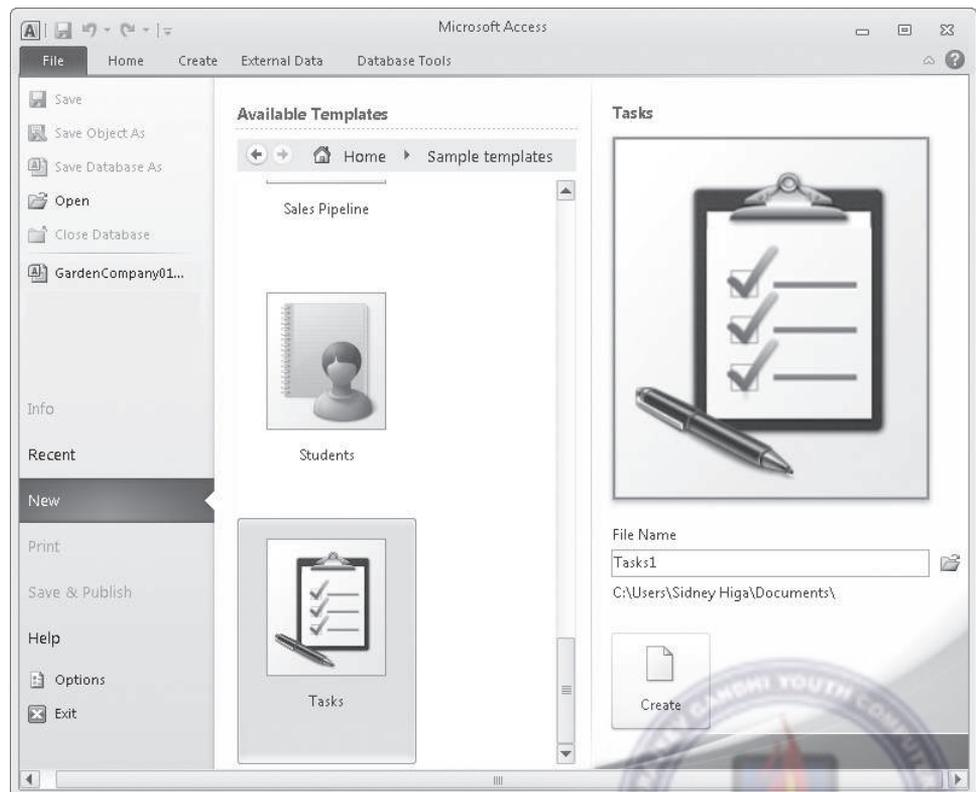
SET UP You don't need any practice files to complete this exercise. Close any open databases, and then with the New page of the Backstage view displayed, follow the steps.

1. In the **Available Templates** area, click **Sample Templates**.

Access displays a list of the templates that shipped with the program and are installed on your computer.

2. Click the **Tasks** template icon.

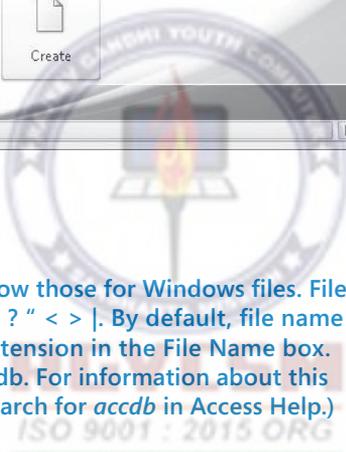
In the right pane, you can assign a name to the database and browse to the location where you want to store the database.



The Tasks template is supplied with Access.

3. In the **File Name** box, type **MyTasks**.

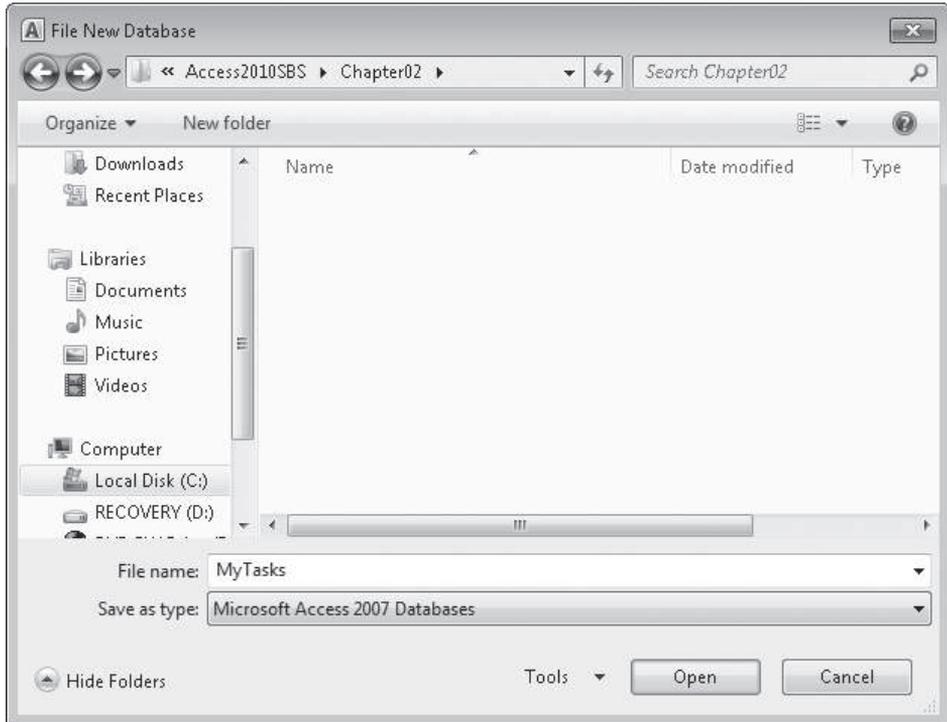
Tip Naming conventions for Access database files follow those for Windows files. File names cannot contain the following characters: \ / : * ? " < > |. By default, file name extensions are hidden, and you shouldn't type the extension in the File Name box. (The extension for an Access 2010 database file is .accdb. For information about this file format, which was introduced with Access 2007, search for *accdb* in Access Help.)





- Click the adjacent **Browse** button, and then in the **File New Database** dialog box, navigate to your **Chapter02** practice file folder.

You use the same navigational techniques in this dialog box that you would use in any Open or Save dialog box.



The File New Database dialog box.

- With **Microsoft Access 2007 Databases** selected in the **Save as type** box, click **OK**.

The path to the specified folder is displayed below the File Name box.

Tip By default, Access creates new databases in your Documents folder. You can change the location when you create each database, as you did here, or you can change the default save folder. To specify a different default folder, click the File tab to display the Backstage view, click Options, and then on the General page of the Access Options dialog box, under Creating Databases, click the Browse button to the right of Default Database Folder. In the Default Database Path dialog box, browse to the folder you want to be the default, and then click OK in each of the open dialog boxes.

6. Click the **Create** button.

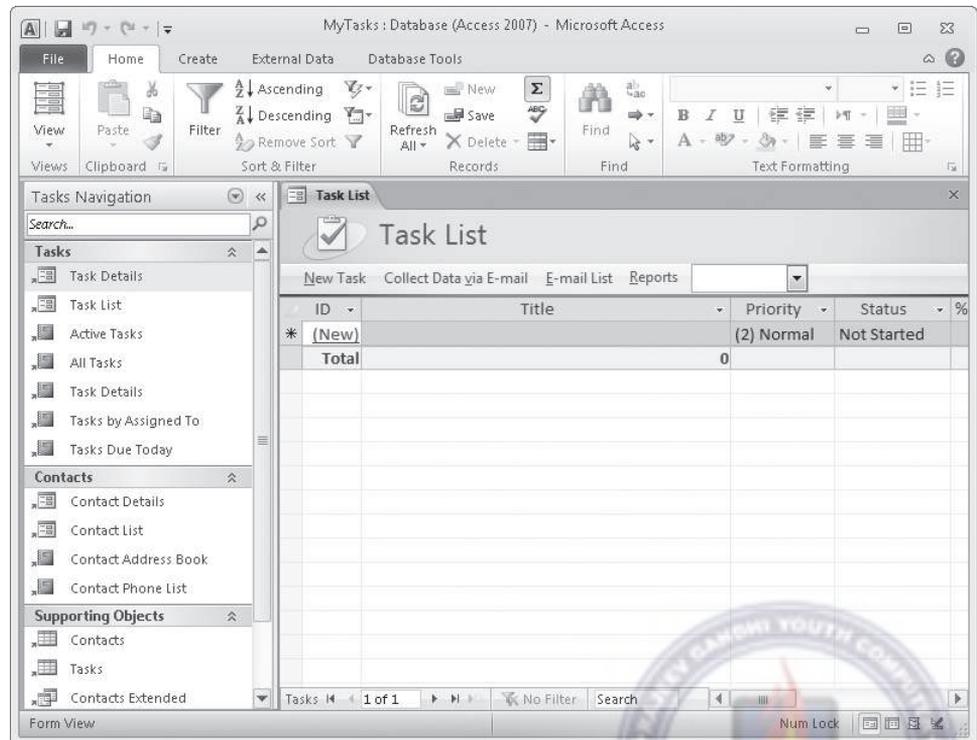
Access briefly displays a progress bar, and then the new database opens, with the Task List form displayed in Layout view.

Tip Below the form name is a toolbar with commands created by embedded macros. These commands are an example of what makes this a database application rather than a simple database. The topic of macros is beyond the scope of this book. For information, search for *macros* in Access Help.



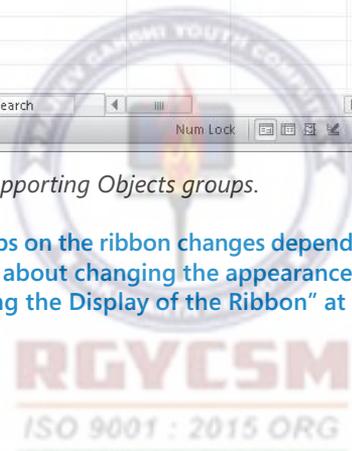
7. If the **Navigation** pane is closed, click the **Shutter Bar Open** button at the right end of its title bar to open it. Then if any of the groups are collapsed, click their chevrons to open them.

The Navigation pane displays a custom Tasks Navigation category.



The custom category has custom Tasks, Contacts, and Supporting Objects groups.

Troubleshooting The appearance of buttons and groups on the ribbon changes depending on the width of the program window. For information about changing the appearance of the ribbon to match our screen images, see “Modifying the Display of the Ribbon” at the beginning of this book.



8. In the **Navigation** pane, click the **Tasks Navigation** title bar, and then in the category and group list, click **Object Type** to list all the objects in this database.

9. In the **Tables** group, double-click **Contacts**.

The empty Contacts table is displayed. You could now start entering data in this table.

10. Right-click the **Contacts** tab, and click **Close All**.

11. On the **Create** tab of the ribbon, in the **Templates** group, click the **Application Parts** button.

The Application Parts gallery appears.



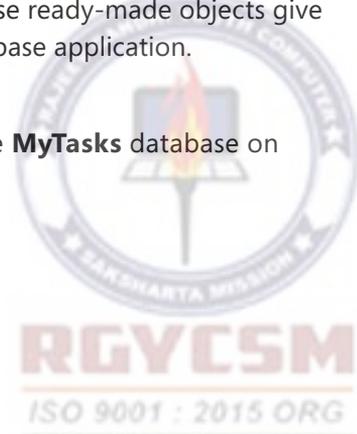
The Application Parts gallery.

You can add various types of forms and several sets of related tables and other database objects to this or any other database. These ready-made objects give you a jump start on creating a fully functional database application.

12. Click away from the gallery to close it.

13. Continue exploring the objects that are part of the **MyTasks** database on your own.

✘ CLEAN UP Close the MyTasks database.



Web Databases

Several of the templates in the Sample Templates gallery and many of the templates available from the Microsoft Office Online Web site are designated as Web databases. A Web database is one that is compatible with the new Web publishing capabilities of Access 2010.

If Access Services are installed on your organization's Microsoft SharePoint server, you can now publish a database to Access Services. Publishing converts tables to SharePoint lists stored on the server and makes it possible to work with the database either in Access or in a Web browser.

You can create a Web database based on a Web template or build a new one from scratch by choosing Blank Web Database on the New page of the Backstage view. You can also publish a regular database as a Web database, although the tables in the database must conform to Web database requirements for publication to be successful. Because of these requirements, if you work for an organization where future deployment of Access Services is a possibility, you might want to consider creating a Web database to ensure that your database can be published to Access Services in the future.

In a Web database, you can create two kinds of objects:

- **Web objects** These can be created and viewed in either a Web browser or Access.
- **Non-Web objects** These can be created and viewed only in Access.

When you are working with a Web database from a browser, you are working with the database on the server. When you are working with it from Access, you are working with a local copy of the database that is synchronized with the database on the server. For both types of objects, you can make design changes only in Access and only when connected to the server.

These days, more and more companies have employees and clients in different geographic locations, and more and more people are working away from company offices. Web databases make it possible for people to access company databases from wherever they are and from any computer, whether or not it has Access installed.



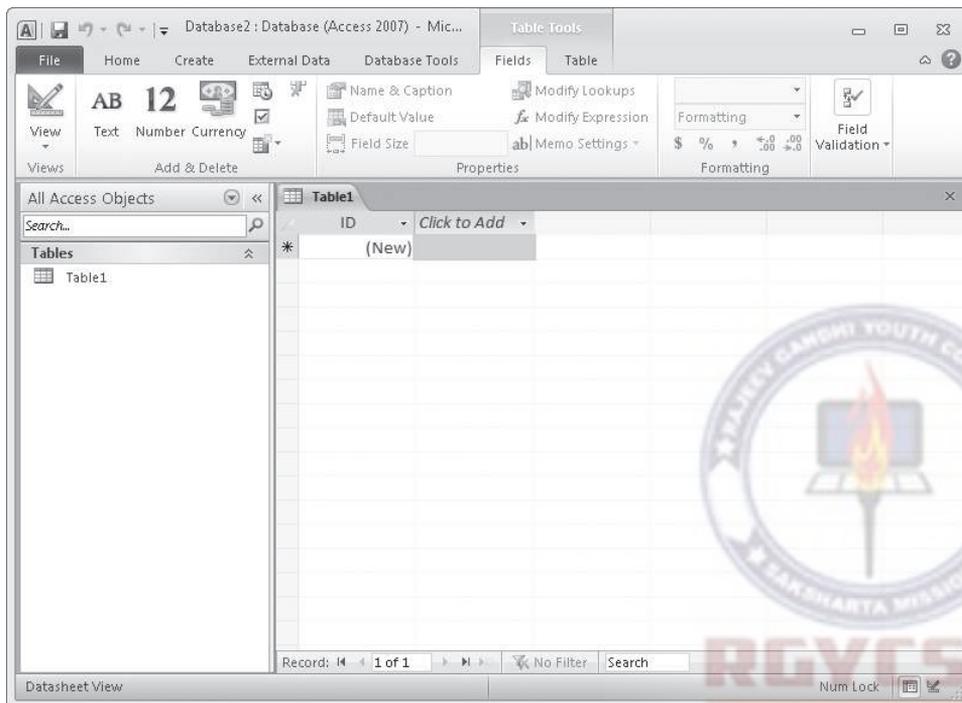
Creating Databases and Tables Manually

Suppose you need to store different types of information for different types of people. For example, you might want to maintain information about employees, customers, and suppliers. In addition to the standard information—such as names, addresses, and phone numbers—you might want to track these other kinds of information:

- Employee identification numbers, hire dates, marital status, deductions, and pay rates
- Customer orders and account status
- Supplier contacts, current order status, and discounts

You could start with a template, add fields for all the different items of information to a single Contacts table, and then fill in only the relevant fields for each type of contact. However, cramming all this information into one table would soon get pretty messy. It's better to create a new database based on the Blank Database template and then manually create separate tables for each type of contact: employee, customer, and supplier.

When you create a new blank database or insert a new table into an existing database, the table is displayed on a tabbed page in Datasheet view with one empty row that is ready to receive data. Because the active object is a table, Access adds the Table Tools contextual tabs to the ribbon so that you can work with the table.

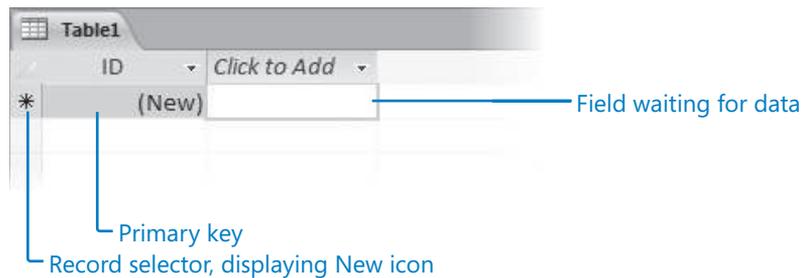


A new table in a new database.

If you close the table at this point, it will disappear, because it contains no data and it has no structure. The simplest way to make the table part of the database is to create at least one record by entering data, which simultaneously defines the table's structure.

Tip You can also define the structure of the table without entering data. For information about table structure, see "Refining Table Structure" later in this chapter. For information about adding new blank fields to a table, see "Restricting the Type of Data" in Chapter 6, "Maintain Data Integrity."

Obviously, to create a record, you need to know how to enter information in Datasheet view.



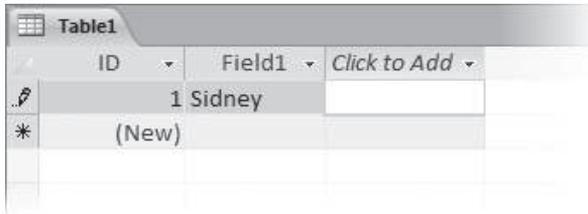
The first record in a new table, before data is entered.

Every table has an empty row that is ready to receive a new record, as indicated by the New icon (the asterisk) in the record selector at the left end of the row. By default, the first field in each new table is an ID field designed to contain an entry that will uniquely identify the record. Also by default, this field is designated as the table's *primary key*. No two records in this table can have the same value in this primary key field. Behind the scenes, the data type of this field is set to AutoNumber, so Access will enter a sequential number in this field for you.

Tip As you'll see in a later exercise, the primary key field does not have to be the default AutoNumber type. If you need to you create your own primary key field, then anything meaningful and unique will work.

See Also For information about data types, see "Refining Table Structure" later in this chapter.

The first field you need to be concerned about is the active field labeled *Click To Add*. You enter the first item of information for the new record in the first cell in this field, and then press the Tab or Enter key to move to the first cell in the field to the right. Access then assigns the value 1 to the ID field, assigns the name Field1 to the second field, and moves the Click To Add label to the third field. The icon in the record selector at the left end of the record changes to two dots and a pencil to indicate that this record has not yet been saved, and the New icon moves to the record selector of the next row.



ID	Field1	Click to Add
1	Sidney	
*	(New)	

The first record in a new table, after data has been entered in the first field.

When creating a new table in Datasheet view, you need to save the first record after entering the first item of data. If you don't, Access increments the ID value for each field you add to that record. For example, if you add seven fields, Access assigns the value 7 to the ID field of the first record. To avoid this problem, you simply click the icon in the record selector after you enter your first value in the first record. This saves the record with the value 1 assigned to the ID field, and subsequent records will be numbered sequentially.

Having entered the first item of data and saved the record, you continue entering items of information in consecutive cells and pressing Tab or Enter. When you finish entering the last item for the first record, you click anywhere in the row below to tell Access that the record is complete.

After you complete the first record of a new table, you will probably want to change the default field names to something more meaningful. To rename a field, you simply double-click its field name and then type the name you want.

At any time while you are entering data in a new table, you can save the table by clicking the Save button on the Quick Access Toolbar and naming the table. If you try to close the table without explicitly saving it, Access prompts you to save the table. If you click No, Access discards the table and any data you have entered.

After you have saved the table for the first time, Access automatically saves each record when you move away from it. You don't have to worry about losing your changes, but you do have to remember that most data entries can be undone only by editing the record.

Databases almost always contain more than one table. You can create additional empty tables by clicking the Table button in the Tables group on the Create tab of the ribbon. If you need to create a table that is similar in structure to an existing one, you can copy and paste the existing table to create a new one. When you paste the table, Access gives you the option of naming the table and of specifying whether you want the new table to have the existing table's structure or both its structure and its data.

For some kinds of tables, Access provides Quick Start fields that you can use to add common sets of fields or kinds of fields to a table. The Quick Start options take the work out of defining these fields and can be very useful when you know exactly what type of field you need.

In this exercise, you'll create a blank database, enter information into the first record of its default table, assign field names, add another record, and save and close the table. Then you'll copy that table to create a second one. Finally, you'll create a new table and experiment with Quick Start fields.



SET UP You don't need any practice files to complete this exercise. Close any open databases, and then with the **New** page of the Backstage view displayed, follow the steps.

1. In the center pane of the **New** page, in the **Available Templates** area, click **Blank Database**.
2. In the right pane, click the **File Name** box, and type **MyTables**. Then click the **Browse** button, navigate to your **Chapter02** practice file folder, and click **OK**.



Tip You can't create a blank database without saving it. If you don't provide a file name and location, Access saves the file with the name *Database* followed by a sequential number in the default location (your Documents folder, unless you have changed it).

3. In the right pane, click the **Create** button.

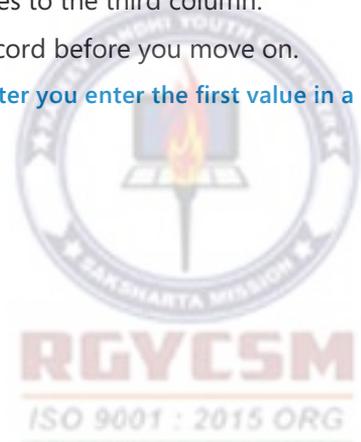
Access creates the blank database in the specified location, opens the database, and displays a new blank table named *Table1*.

4. With the empty field below **Click to Add** selected, type **Scott**, and then press Tab to move to the next field.

The icon in the record selector changes to indicate that this record has not yet been saved. The value 1 appears in the ID field, the name of the second column changes to *Field1*, and the Click To Add label moves to the third column.

5. Click the icon in the record selector to save the record before you move on.

Tip Clicking the record selector is necessary only after you enter the first value in a new table. This action sets the ID field value to 1.



6. Click the cell under **Click to Add**, and type the following information into the next seven cells, pressing Tab after each entry:

Gode

612 E. 2nd

Pocatello

ID

73204

USA

208 555-0161

As the cursor moves to the next cell, the name of the field in which you just entered data changes to *Field* followed by a sequential number.

ID	Field1	Field2	Field3	Field4	Field5	Field6	Field7	Field8
1	Scott	Gode	612 E. 2nd	Pocatello	ID	73204	USA	208 555-0161
*	(New)							

The first complete record.

Tip Don't be concerned if your screen does not look exactly like ours. In this graphic, we've scrolled the page and adjusted the widths of the columns so that you can see all the fields. For information about adjusting columns, see "Manipulating Table Columns and Rows" later in this chapter.

7. Double-click the **ID** field name (not the ID value in Field5), and then type **CustomerID** to rename it.

Tip Field names can include spaces, but the spaces can affect how queries have to be constructed, so it is best not to include them. For readability, capitalize each word and then remove the spaces, or use underscores instead of spaces.

8. Repeat step 7 for the other fields, changing the field names to the following:

Field1 **FirstName** **Field4** **City** **Field7** **Country**

Field2 **LastName** **Field5** **State** **Field8** **Phone**

Field3 **Street** **Field6** **ZIP**

The table now has intuitive field names.



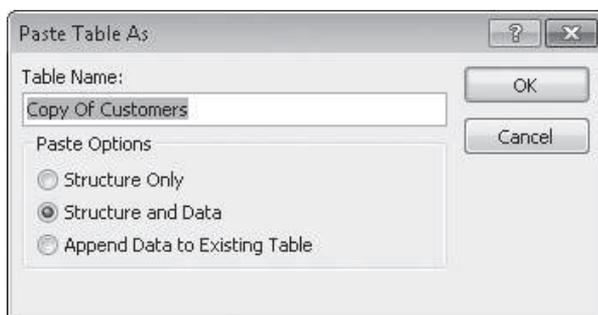
Tip You can rename a table by right-clicking it in the Navigation pane and then clicking **Rename**. You can delete a table by right-clicking it, clicking **Delete**, and then confirming the deletion in the message box that appears. (You can also delete a table by selecting it in the Navigation bar and then clicking the **Delete** button in the Records group on the Home tab or pressing the **Delete** key.)

13. In the **Navigation** pane, click the **Customers** table to select it.
14. On the **Home** tab, in the **Clipboard** group, click the **Copy** button. Then click the **Paste** button.

Keyboard Shortcut Press **Ctrl+C** to copy data. Press **Ctrl+V** to paste data.

See Also For more information about keyboard shortcuts, see “Keyboard Shortcuts” at the end of this book.

The Paste Table As dialog box opens.



If you need to create a table that is similar to an existing table, it is sometimes easier to customize a copy than to create it from scratch.

15. In the **Table Name** box, type **Employees**. In the **Paste Options** area, click **Structure Only** to capture the fields from the **Customers** table but none of the customer information. Then click **OK**.

The new Employees table appears in the Navigation pane.

Tip You can also use the **Copy** and **Paste** commands to append the information in the selected table to another existing table. In that case, in the Paste Table As dialog box, type the name of the destination table in the Table Name box, click **Append Data To Existing Table**, and then click **OK**.

16. Double-click **Employees** to open it in Datasheet view so that you can view its fields. Then close the table again.





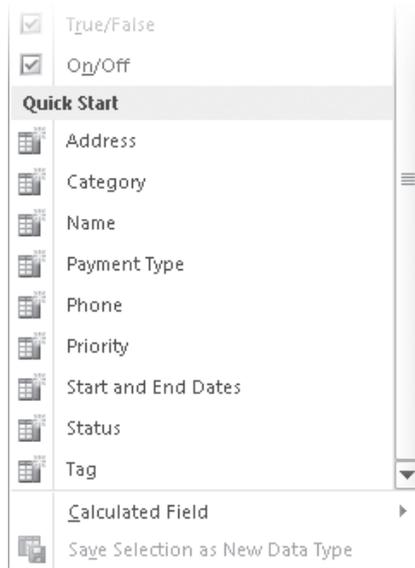
17. On the **Create** tab, in the **Tables** group, click the **Table** button.

Access creates a new table containing an ID field and a Click To Add field placeholder.



18. With the **Click to Add** field active, on the **Fields** contextual tab, in the **Add & Delete** group, click the **More Fields** button.

The More Fields gallery appears.



The Quick Start fields are at the bottom of the More Fields gallery.

19. If necessary scroll to the bottom of the gallery, and then under **Quick Start**, click **Name**.

Access inserts ready-made LastName and FirstName fields.

20. Repeat steps 18 and 19 to add the **Address** fields from the **Quick Start** list.

Access inserts ready-made Address, City, State Province, ZIP Postal, and Country Region fields.

21. Close the table, saving it with the name **Shippers** when prompted.

✘ CLEAN UP Retain the MyTables database for use in later exercises.



Database Design

In a well-designed database, each item of data is stored only once. If you're capturing the same information in multiple places, that is a sure sign that you need to analyze the data and figure out a way to put the duplicated information in a separate table.

For example, an Orders table should not include information about the customer placing each order, for two significant reasons. First, if the same customer orders more than once, all his or her information has to be repeated for each order, which inflates the size of the table and the database. Second, if the customer moves, his or her address will need to be updated in the record for every order placed.

The way to avoid this type of problem is to put customer information in a Customers table and assign each customer a unique identifier, such as a sequential number or unique string of letters, in the primary key field. Then in the Orders table, you can identify the customer by the unique ID. If you need to know the name and address of the customer who placed a particular order, you can have Access use the unique ID to look up that information in the Customers table.

The process of ensuring that a set of information is stored in only one place is called *normalization*. This process tests a database for compliance with a set of normalization rules that ask questions such as "If I know the information in the primary key field of a record, can I retrieve information from one and only one record?" For example, knowing that a customer's ID is 1002 means you can pull the customer's name and address from the Customers table, whereas knowing that a customer's last name is Jones does not mean that you can pull the customer's name and address from the table, because more than one customer might have the last name Jones.

The topic of normalization is beyond the scope of this book. If you need to design a database that will contain several tables, you should search for *Database design basics* in Access Help to learn more about the normalization process.



Manipulating Table Columns and Rows

In Chapter 1, “Explore an Access 2010 Database,” we showed you how to quickly adjust the width of table columns to efficiently display their data. In addition to adjusting column width, sometimes you might want to rearrange a table’s fields to get a better view of the data. For example, if you want to look up a phone number but the names and phone numbers are several fields apart, you will have to scroll the page to get the information you need. You might want to rearrange or hide a few fields to be able to simultaneously see the ones you are interested in.

You can manipulate the columns and rows of an Access table without affecting the underlying data in any way. You can size rows and size, hide, move, and freeze columns. You can save your table formatting so that the table will look the same the next time you open it, or you can discard your changes without saving them.

In this exercise, you’ll open a table and manipulate its columns and rows.



SET UP You need the **MyTables** database you worked with in the preceding exercise to complete this exercise. Open the **MyTables** database, and then follow the steps.

1. In the **Navigation** pane, double-click the **Customers** table to open it in Datasheet view.
2. In the field name row, point to the right border of the **Street** field name, and when the pointer changes to a double-headed arrow, drag to the right until you can see all of the street addresses.
3. Double-click the right border of any column that seems too wide or too narrow to adjust the column to fit its contents.

This technique is particularly useful in a large table where you can’t easily determine the length of a field’s longest entry.

4. Point to the border between any two record selectors, and drag downward.

When you release the mouse button, Access increases the height of all rows in the table.



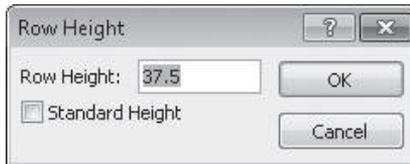
CustomerID	FirstName	LastName	Street	City	State	ZIP	Country	Phone
1	Scott	Gode	612 E. 2nd	Pocatello	ID	73204	USA	208 555-0161
2	John	Frederickson	43 rue St. Laurent	Montreal	Quebec		Canada	514 555-0167
*	(New)							

You cannot adjust the height of a single row.



- On the **Home** tab, in the **Records** group, click the **More** button, and then click **Row Height**.

The Row Height dialog box opens.



You can set the rows to the precise height you want.

- In the **Row Height** dialog box, select the **Standard Height** check box, and then click **OK**.

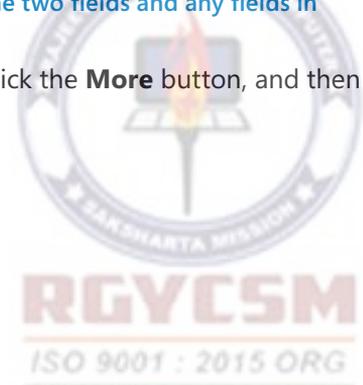
Access resets the height of the rows to the default setting.

- Click anywhere in the **FirstName** field. Then in the **Records** group, click the **More** button, and click **Hide Fields**.

The FirstName field disappears, and the fields to its right shift to the left.

Tip If you select several fields before clicking **Hide Fields**, they all disappear. You can select adjacent fields by clicking the field name of the first one, holding down the Shift key, and then clicking the field name of the last one. The two fields and any fields in between are selected.

- To restore the hidden field, in the **Records** group, click the **More** button, and then click **Unhide Fields**.



The Unhide Columns dialog box opens.



You can select and clear check boxes to control which fields are visible.

Tip If you want to hide several columns that are not adjacent, you can display the **Unhide Columns** dialog box and clear their checkboxes.

9. In the **Unhide Columns** dialog box, select the **FirstName** check box, and then click **Close**.

Access redispays the FirstName field.

10. If you can see all of the fields in the table, for the purposes of this exercise, adjust the size of the program window until some of the fields are no longer visible.
11. Point to the **CustomerID** field name, hold down the mouse button, and drag through the **FirstName** and **LastName** field names. With the three columns selected, click the **More** button in the **Records** group, and then click **Freeze Fields**.
12. Scroll the page to the right until the **Phone** field is adjacent to the **LastName** field. The first three columns remain in view as you scroll.
13. In the **Records** group, click **More**, and then click **Unfreeze All Fields** to restore the fields to their normal condition.

Tip The commands to hide, unhide, freeze, and unfreeze columns are also available from the shortcut menu that appears when you right-click a field name.



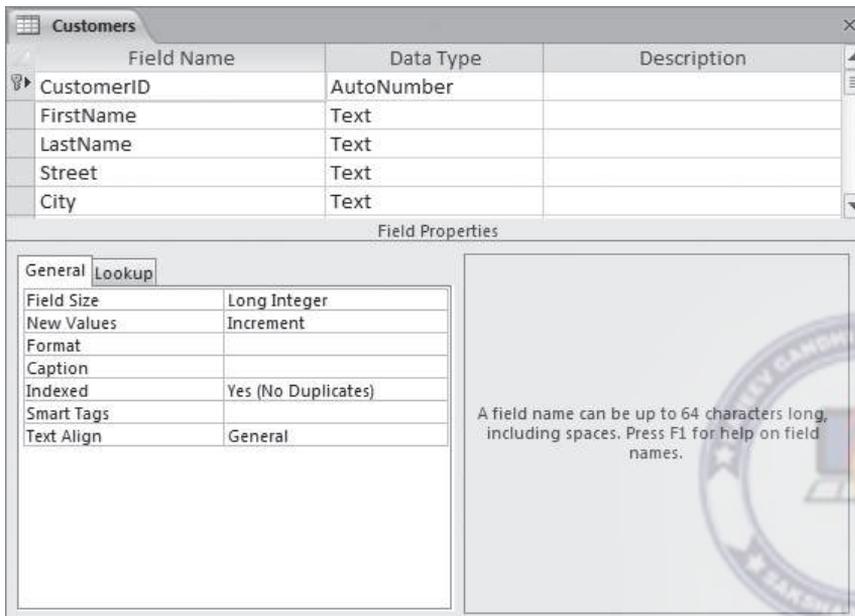
14. Click the **Phone** field name to select that field. Then drag the field to the left, releasing the mouse button when the thick black line appears to the right of the **LastName** field.
15. Close the **Customers** table, clicking **Yes** to save the changes you have made to the column widths and order. If you see a warning that this action will clear the Clipboard, click **Yes**.

✘ CLEAN UP Retain the MyTables database for use in later exercises.

Refining Table Structure

Although you can create the structure of a database in Datasheet view, some structural refinements can be carried out only in Design view. When you are familiar with tables, you might even want to create your tables from scratch in Design view, where you have more control over the fields. You can open a new table in Design view by clicking the Table Design button in the Tables group on the Create tab.

When you open an existing table in Design view, the tabbed page shows the underlying structure of the table.



The table design page.

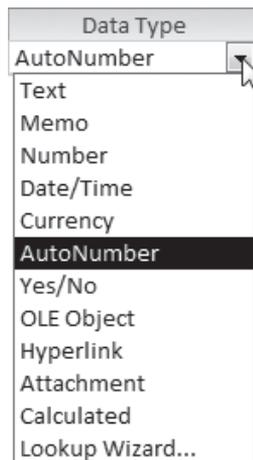
This page has two parts. The top part consists of the following:

- **Selector** You can click the shaded box at the left end of a row to select the entire field. You can then insert a row above the selected one, delete the row (thereby deleting the field), or drag the row up or down to reposition its field in the table.

The selector also identifies the primary key field of the table by displaying the Primary Key icon (a key with a right-pointing arrow).

Tip If you don't want a table to have a primary key (for example, if none of the fields will contain a unique value for every record), select the field designated as the primary key, and on the Design contextual tab, in the Tools group, click the Primary Key button to toggle it off. If you want to designate a different field as the primary key, select the new field, and click the Primary Key button to toggle it on. (You don't have to remove the primary key from the current field first; it will happen automatically.)

- **Field Name column** This column contains the names you specified when you created the table. You can edit the names by using regular text-editing techniques. You can add a new field by typing its name in the first empty cell in this column.
- **Data Type column** This column specifies the type of data that the field can contain. By default, the ID field in a new table is assigned the AutoNumber data type, and all other fields are assigned the Text data type. With the exception of fields with the OLE Object and Attachment data types, you can change the type of any field by clicking its Data Type entry, clicking the arrow that appears, and clicking a new data type in the list.



The list of data types.

See also For more information about data types, see “Restricting the Type of Data” in Chapter 6, “Maintain Data Integrity.”

- **Description column** This column contains an optional description of the field.



The Field Properties area at the bottom of the design page displays the properties of the field selected in the top part. Different properties are associated with different data types. They can determine such things as the number of characters allowed in a field, the value inserted if the user doesn't type an entry, and whether an entry is required. Properties can also assess whether an entry is valid and can force the user to select from a list of values rather than typing them (with the risk of errors).

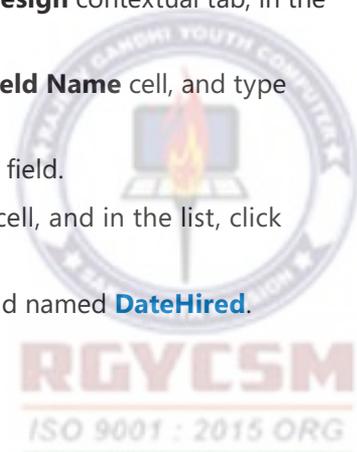
All fields, no matter what their data type, can be assigned a Caption property that will appear in the place of the field name in tables or in other database objects. For example, you might want to use captions to display the names of fields with spaces, such as First Name for the FirstName field.

See Also For information about using properties to control the accuracy of data entry, see Chapter 6, "Maintain Data Integrity." For a comprehensive list of data types and properties, search on *data types* in Access Help.

In this exercise, you'll open a table in Design view, add and delete fields, change a data type, set field sizes, and add a caption.

 **SET UP** You need the MyTables database you worked with in the preceding exercise to complete this exercise. Open the MyTables database, and then follow the steps.

1. In the **Navigation** pane, right-click the **Employees** table, and then click **Design View**.
Access opens the table with its structure displayed. Because you created this table by copying the Customers table, you need to make some structural changes.
2. With **CustomerID** highlighted in the **Field Name** column, type **EmployeeID**, and then press the Tab key twice.
3. In the **Description** column, type **Unique identifying number**.
4. Click the **Country** field's selector, and then on the **Design** contextual tab, in the **Tools** group, click the **Delete Rows** button.
5. In the empty row below the **Phone** field, click the **Field Name** cell, and type **Birthdate**. Then click the **Data Type** cell.
Access assigns the default Text data type to the new field.
6. Click the arrow at the right end of the **Data Type** cell, and in the list, click **Date/Time**.
7. Repeat steps 5 and 6 to add another **Date/Time** field named **DateHired**.



8. Select the **ZIP** field name, change it to **PostalCode**, and then change its data type to **Text**.

Tip If you use only five-digit ZIP codes, the Number data type is fine. But setting it to Text allows you to enter ZIP+4 codes or the letter-number postal codes used in Canada and other countries.

The properties in the Field Properties area at the bottom of the design page change to those that are appropriate for this type of field.

Field Name	Data Type	Description
State	Text	
PostalCode	Text	
Phone	Text	
Birthdate	Date/Time	
DateHired	Date/Time	

Field Properties	
General	
Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	No
IME Mode	No Control
IME Sentence Mode	None
Smart Tags	

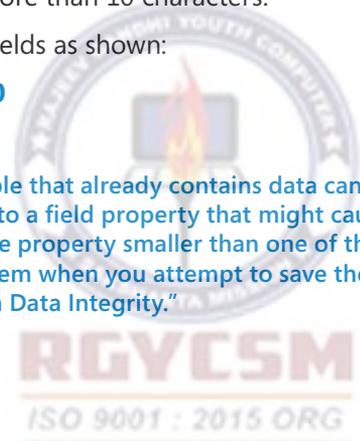
The data type determines the kind of values that users can store in the field. Press F1 for help on data types.

The properties for the Text data type.

9. In the box to the right of **Field Size**, double-click **255**, and type **10**.
You are specifying that this field can contain no more than 10 characters.
10. Change the **Field Size** property of the following fields as shown:

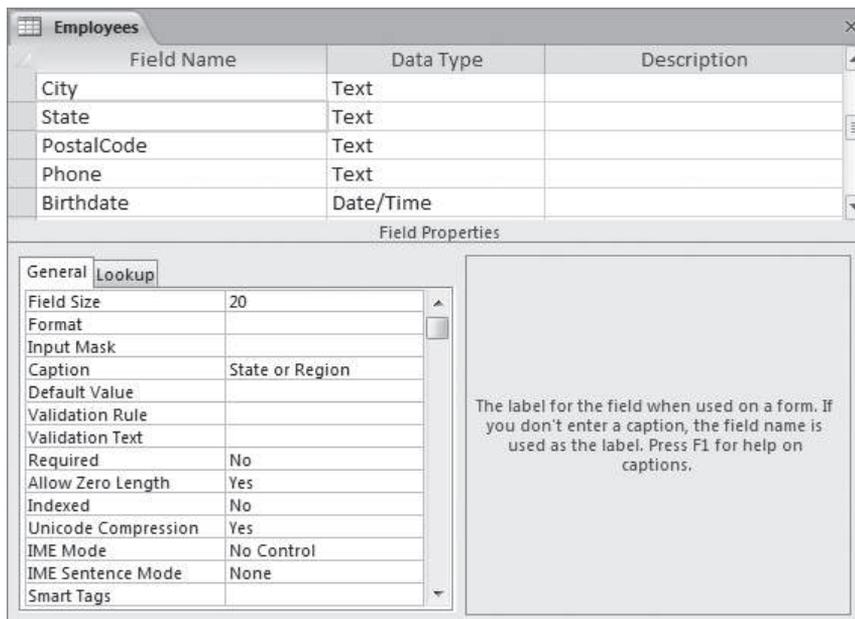
FirstName **50** **City** **50** **Phone** **30**
LastName **50** **State** **20**

Tip Sometimes changing the field properties of a table that already contains data can produce unanticipated results. If you make a change to a field property that might cause data to be lost (for example, if you make the Field Size property smaller than one of the field's existing values), Access warns you of this problem when you attempt to save the table. For more information, see Chapter 6, "Maintain Data Integrity."

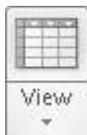


11. Click the **State** field. Then in the **Field Properties** area, click the **Caption** box, and type **State or Region**.

The Field Name remains State, but in Datasheet view, the column heading will be *State or Region*.



You have changed the Field Size and Caption properties of the State field.



12. On the **Design** tab, in the **Views** group, click the **View** button to switch to Datasheet view.

Access tells you that you must save the table before leaving Design view.

13. In the message box, click **Yes** to save the table.

Access saves the table and displays it in Datasheet view.

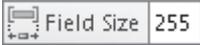
14. With the table displayed in Datasheet view, click the **LastName** field name. Then on the **Fields** contextual tab, in the **Add & Delete** group, click the **Text** button.

A new field called *Field1* that has the Text data type is inserted to the right of the LastName field.

Tip You can also create a new field with a specific data type by clicking the **Click To Add label to the right of the last field in the field name row**. Then in the list that appears, you can click the data type you want.



15. With **Field1** selected, type **Title**, and press Enter.
16. Click the **Title** field name. Then in the **Properties** group, in the **Field Size** box, click **255** to select it, type **50**, and press Enter.
17. Type the following information in the first record:



FirstName **Karen**
LastName **Berg**
Title **Owner**

The Employees table is now ready for you to start entering data.

EmployeeID	FirstName	LastName	Title	Street	City	State
1	Karen	Berg	Owner			
*	(New)					

The first record of the Employees table.

✖ CLEAN UP Close the Employees table. Retain the MyTables database for use in the last exercise.

Creating Relationships Between Tables

In Access, a relationship is an association between common fields in two tables. You can use this association to link the primary key field in one table to a field that contains the same information in another table. The field in the other table is called the *foreign key*. For example, if customer accounts are assigned to specific sales employees, you can establish a relationship by linking the primary key EmployeeID field in the Employees table with the foreign key EmployeeID field in the Customers table. Each customer account is assigned to only one employee, but each employee can manage many customer accounts, so this type of relationship—the most common—is known as a *one-to-many relationship*.

Similarly, if every order is associated with a customer, you can establish a relationship by linking the primary key CustomerID field in the Customers table and foreign key CustomerID field in the Orders table. Each order is placed by only one customer, but each customer can place many orders. So again, this is a one-to-many relationship.



Less common relationships include:

- **One-to-one** In this type of relationship, each record in one table can have one and only one related record in the other table. This type of relationship isn't commonly used because it is easier to put all the fields in one table. However, you might use two related tables instead of one to break up a table with many fields, or to track information that applies to only some of the records in the first table.
- **Many-to-many** This type of relationship is really two one-to-many relationships tied together through a third table. You might see this relationship in a database that contains Products, Orders, and Order Details tables. The Products table has one record for each product, and each product has a unique ProductID. The Orders table has one record for each order placed, and each record in it has a unique OrderID. However, the Orders table doesn't specify which products were included in each order; that information is in the Order Details table—the table in the middle that ties the other two tables together. Products and Orders each have a one-to-many relationship with Order Details. Products and Orders therefore have a many-to-many relationship with each other. In plain language, this means that every product can appear in many orders, and every order can include many products.

The most common way of creating a relationship between two tables is to add the tables to the Relationships page displayed when you click the Relationships button in the Relationships group on the Database Tools tab. You then drag a field in one table to the common field in the other table and complete the relationship definition in the Edit Relationships dialog box. In this dialog box, you are given the opportunity to impose a restriction called *referential integrity* on the data, which means that an entry will not be allowed in one table unless it already exists in the other table.

After you have created a relationship, you can delete it by deleting the line connecting the tables on the Relationships page. You can clear all the boxes from the page by clicking the Clear Layout button in the Tools group on the Relationship Tools Design contextual tab.



Tip The coverage of relationships in this topic is deliberately simple. However, relationships are what make relational databases tick, and Access provides a number of fairly complex mechanisms to ensure the integrity of the data on either end of the relationship. Some of these mechanisms are covered in Chapter 6, “Maintain Data Integrity.” For a good overview, search for *Guide to table relationships* in Access Help.

In this exercise, you’ll create relationships between one table and two other tables. Then you’ll test the referential integrity of one of the relationships.



SET UP You need the MyTables database you worked with in the preceding exercise to complete this exercise. Open the MyTables database, and then follow the steps.



1. On the **Create** tab, in the **Tables** group, click the **Table** button to create a new table.
Before we add fields to this table, let’s save it.
2. On the Quick Access Toolbar, click the **Save** button, name the table **Orders**, and click **OK**.
3. To the right of **Click to Add**, click the arrow, and in the data type list, click **Number**. Repeat this step to create a second field with the **Number** data type.
4. Double-click **Field1**, and type **CustomerID**. Then double-click **Field2**, and type **EmployeeID**.

Each order in the Orders table will be placed by one customer and will be handled by one employee. Let’s create relationships between the Orders table and the Customers and Employees tables so that we don’t create records for orders from customers who don’t exist or that seem to have been handled by employees who don’t exist.

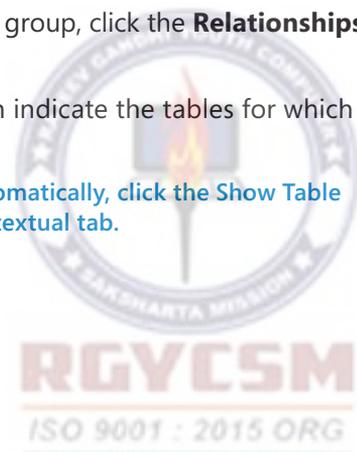
5. Close the **Orders** table.

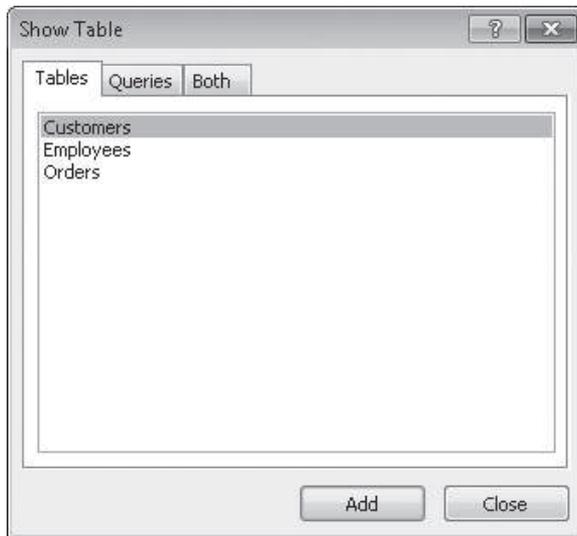
Tip You cannot create a relationship for an open table.

6. On the **Database Tools** tab, in the **Relationships** group, click the **Relationships** button.

The Show Table dialog box opens so that you can indicate the tables for which you want to create a relationship.

Troubleshooting If the dialog box doesn’t open automatically, click the **Show Table** button in the **Relationships** group on the **Design** contextual tab.

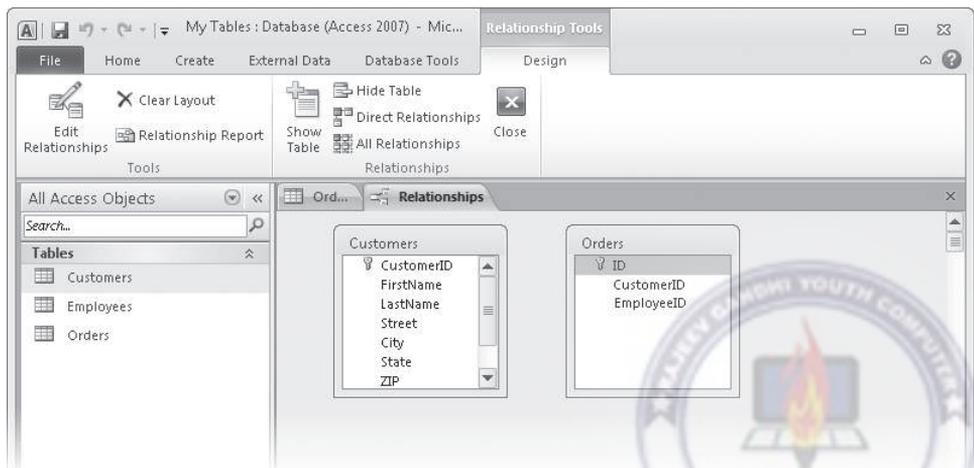




The Tables page of the Show Table dialog box.

7. With **Customers** selected on the **Tables** page, click **Add**. Then double-click **Orders**, and click **Close**.

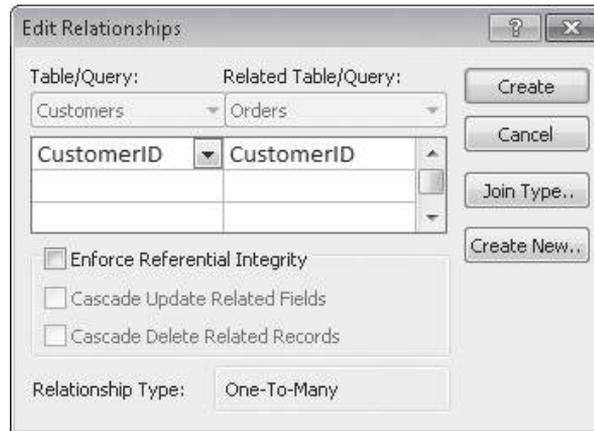
Access displays the Relationships page and adds a Relationship Tools contextual tab to the ribbon.



The two boxes list all the fields in their respective tables.

8. In the **Customers** field list, click **CustomerID**, and drag it down and over **CustomerID** in the **Orders** field list, releasing the mouse button when two little boxes, one containing a plus sign, appear below the pointer.

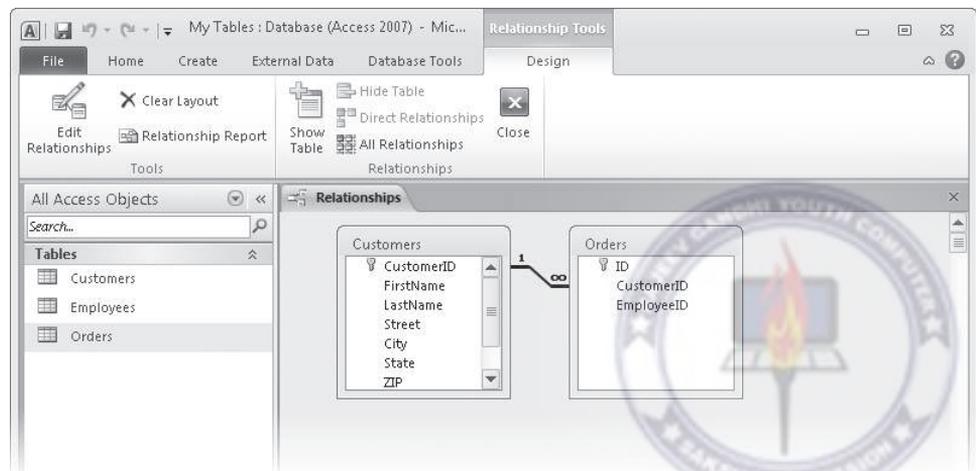
The Edit Relationships dialog box opens.



At the bottom of the dialog box, Access indicates that this will be a one-to-many relationship.

9. Select the **Enforce Referential Integrity** check box, and then click **Create**.

Access creates the link between the primary key in the Customers table and the foreign key in the Orders table, and a line now connects the two field lists on the Relationships page.



The symbols at each end of the line indicate that each Customer ID value appears only once in the Customers table but can appear many times in the Orders table.



10. On the **Design** contextual tab, in the **Relationships** group, click the **Show Table** button. Then in the **Show Table** dialog box, double-click the **Employees** table, and click **Close**.

Access adds a box listing all the fields in the Employees table to the Relationships page.

11. On the page, drag the title bars of the three field lists to arrange them so that they are side by side and equidistant.
12. In the **Employees** field list, click the **EmployeeID** field, and drag it down and over the **EmployeeID** field in the **Orders** field list. Then in the **Edit Relationships** dialog box, select the **Enforce Referential Integrity** check box, and click **Create**.
13. After Access draws the relationship line between the primary key and the foreign key, close the Relationships page, clicking **Yes** to save its layout.
14. Open the **Orders** table. Then in the **CustomerID** field of the first record, type **11**, and click below the record to complete it.

Access displays a message box telling you that you cannot add the new record to the table.



The value in the CustomerID field in the Orders table must match a value in the primary key CustomerID field in the Customer table.

15. Click **OK**. Then change the value to **1**, and click below the record to complete it.

This time, Access accepts the value because there is a record with the value 1 in the primary key CustomerID field of the Customers table.

✘ CLEAN UP Close the Orders table, and then close the My Tables database.



Key Points

- Access 2010 includes templates to help you create databases and application parts to help you add related tables and other database objects.
- Rather than storing all information in one table, you can create different tables for each type of information, such as customers, orders, and suppliers.
- You can create a simple table structure by entering data and naming fields in Datasheet view. You can also set the data type and certain properties.
- You can manipulate or hide columns and rows without affecting the data.
- In Design view, you can modify any table, whether you created it manually or as part of a template.
- Data types and properties determine what data can be entered in a field, and how the data will look on the screen. Caution: changing some properties might affect the data.
- You can create a relationship between the primary key field of one table and the foreign key field of another so that you can combine information from both tables.



Chapter at a Glance

Alphabetical List of Products

Product Name by Is: A

Product Name	Quantity Per Unit	Units In Stock
Ambrosia	6 - 2" pots	16
American Pitcher Plant	1 ea.	4
Anacharis	1 ea.	2
Anemone	One dozen	26
Animal repellent	1 qt.	3
Animal trap	1 ea.	

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Alphabetical List of Products

Product Name	Quantity Per Unit	Units In Stock
Ambrosia	6 - 2" pots	16
American Pitcher Plant	1 ea.	4
Anacharis	1 ea.	2
Anemone	One dozen	26
Animal repellent	1 qt.	3
Animal trap	1 ea.	2
Anise	6 - 2" pots	20
Austrian Copper	Per plant	7
Austrian Pine	One gal. container	10

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Alphabetical List of Products

Product Name	Quantity Per Unit	Units In Stock
Ambrosia	6 - 2" pots	16
American Pitcher Plant	1 ea.	4
Anacharis	1 ea.	2
Anemone	One dozen	26
Animal repellent	1 qt.	3
Animal trap	1 ea.	2
Anise	6 - 2" pots	20
Austrian Copper	Per plant	7
Austrian Pine	One gal. container	10
Autumn crocus	One dozen	37
Baby's Breath	1 ea.	23
Bell box	1 speaker	12
Boobybush	1 ea.	2
Boobybush	1 ea.	14
Broomrape	6 ea. box	12



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5 Create Simple Reports

In this chapter, you will learn how to

- ✓ Create reports by using a wizard.
 - ✓ Modify report design.
 - ✓ Preview and print reports.
-

Like forms, reports give people easy access to the information stored in a database. However, there are several differences between forms and reports, including the following:

- Forms are used to enter, view, and edit information. Reports are used only to view information.
- Forms are usually displayed on-screen. Reports can be previewed on the screen, but they are usually printed.
- Forms generally provide a detailed look at records and are usually for the people who actually work with the database. Reports are often used to group and summarize data, and are often for people who don't work with the database but who use the information stored in the database for other business tasks.

Reports usually present summaries of larger bodies of information. For example, your database might hold detailed information about thousands of orders. If you want to edit those orders or enter new ones, you can do so directly in the table or through a form. If you want to summarize those orders to illustrate the rate of growth of the company's sales, you generate a report.

Like a book report or an annual report of a company's activities, a report created in Microsoft Access 2010 is typically used to summarize and organize information to express a particular point of view to a specific audience. When you are designing a report, it is important to consider the point you are trying to make, the intended audience, and the level of information they will need.



In this chapter, you'll create a report by using a wizard. After modifying the layout and content of the report, you'll see how it will look when printed.

Practice Files Before you can complete the exercises in this chapter, you need to copy the book's practice files to your computer. The practice file you'll use to complete the exercises in this chapter is in the Chapter05 practice file folder. A complete list of practice files is provided in "Using the Practice Files" at the beginning of this book.

Creating Reports by Using a Wizard

You can divide the content of an Access report into two general categories: information derived from records in one or more tables, and everything else. The *everything else* category includes the title, page headers and footers, introductory and explanatory text, and any logos and other graphics.

Just as you can create a form that includes all the fields in a table by using the Form tool, you can create a report that includes all the fields by using the Report tool, which is located in the Reports group on the Create tab. But such a report is merely a prettier version of the table, and it does not summarize the data in any meaningful way. You are more likely to want to create a report based on only some of the fields, and that is a job for the Report wizard.

Tip In addition to basing a report on a table, you can base it on the datasheet created when you run a query. For information about queries, see Chapter 8, "Create Queries."

The Report wizard leads you through a series of questions and then creates a report based on your answers. So the first step in creating a report is to consider the end result you want and what information you need to include in the report to achieve that result. After you provide that information, the wizard creates a simple report layout and adds a text box control and its associated label for each field you specify.

For example, you might want to use a Products table as the basis for a report that groups products by category. When you give the grouping instruction to the wizard, it first sorts the table based on the category, and then sorts the products in each category. In the space at the top of each group (called the group *header*), the wizard inserts the name of the category.

In this exercise, you'll use the Report wizard to create a simple report that displays an alphabetical list of products.



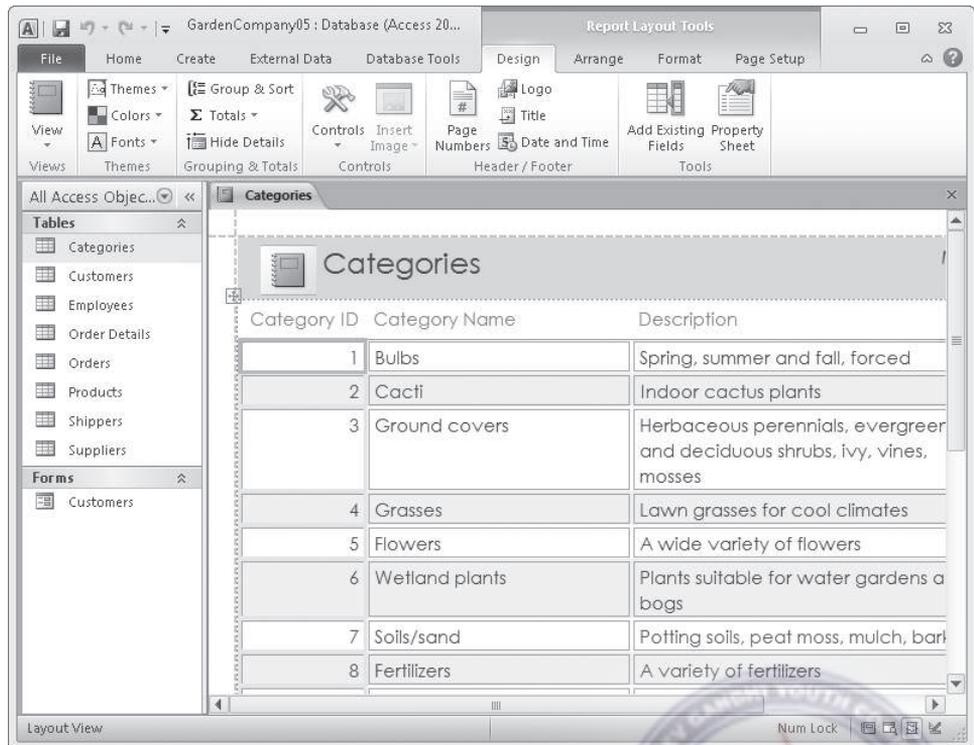


SET UP You need the *GardenCompany05_start* database located in your Chapter05 practice file folder to complete this exercise. Open the *GardenCompany05_start* database, and save it as *GardenCompany05*. Then follow the steps.

1. With **All Access Objects** displayed in the **Navigation** pane, under **Tables**, click (don't double-click) **Categories**.
2. On the **Create** tab, in the **Reports** group, click the **Report** button.



Access creates a report based on all the fields in the *Categories* table, displays the report in Layout view, and adds four Report Layout Tools contextual tabs to the ribbon.



The default report created by the Report tool.

Troubleshooting The appearance of buttons and groups on the ribbon changes depending on the width of the program window. For information about changing the appearance of the ribbon to match our screen images, see “Modifying the Display of the Ribbon” at the beginning of this book.



- This is not the report we want, so close the **Categories** report, clicking **No** when prompted to save it.



- On the **Create** tab, in the **Reports** group, click the **Report Wizard** button.

The Report wizard starts. Because the Categories table is still selected in the Navigation pane, that table is specified in the Tables/Queries box and its fields are listed in the Available Fields box.

- Display the **Tables/Queries** list, and then click **Table: Products**.

The Available Fields box now lists the fields in the Products table.

Report Wizard

Which fields do you want on your report?
You can choose from more than one table or query.

Tables/Queries
Table: Products

Available Fields:
ProductID
ProductName
LatinName
SupplierID
CategoryID
QuantityPerUnit
UnitPrice
UnitsInStock

Selected Fields:

Cancel < Back Next > Finish

The first page of the Report wizard with the correct table selected.

- In the **Available Fields** list, double-click **ProductName**, **QuantityPerUnit**, and **UnitsInStock** to move them to the **Selected Fields** box.

Tip Fields appear in a report in the order in which they appear in the Selected Fields list. You can save yourself the effort of rearranging the fields in the report by entering them in the desired order in the wizard.



7. At the bottom of the page, click **Next**.

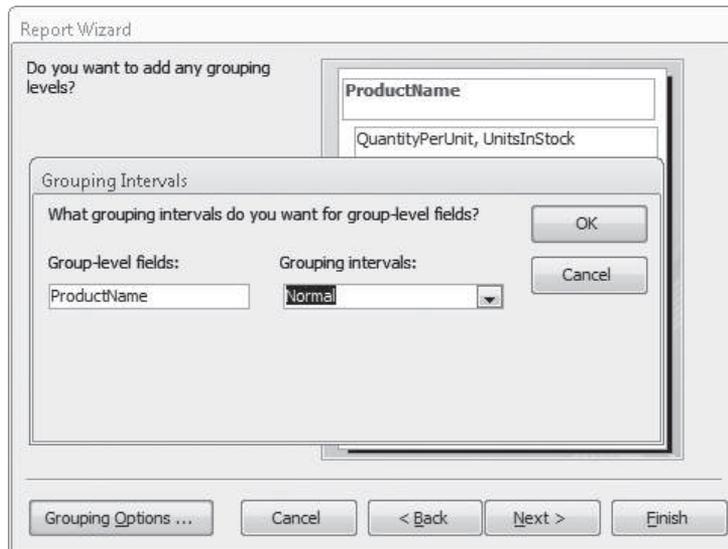
The wizard asks whether you want to group the records. When you group by a field, the report inserts a group header at the top of each group of records that have the same value in that field.

8. In the field list on the left, double-click **ProductName**.

In the preview pane on the right, the wizard moves ProductName into the group header area to show that records will be grouped by this field.

9. In the lower-left corner of the page, click **Grouping Options**.

The Grouping Intervals dialog box opens.



You can refine the grouping specification in this dialog box.

10. Display the **Grouping intervals** list, click **1st Letter**, and then click **OK**.

The group header now indicates the grouping interval you have assigned to the grouping field.

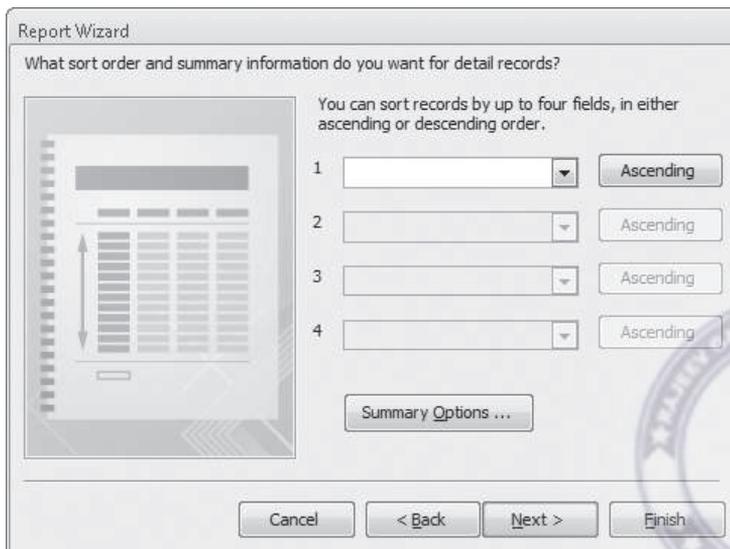




The types of grouping intervals available vary depending on the data type of the field by which you are grouping records.

11. Click Next.

The wizard asks how you want to sort and summarize the records.



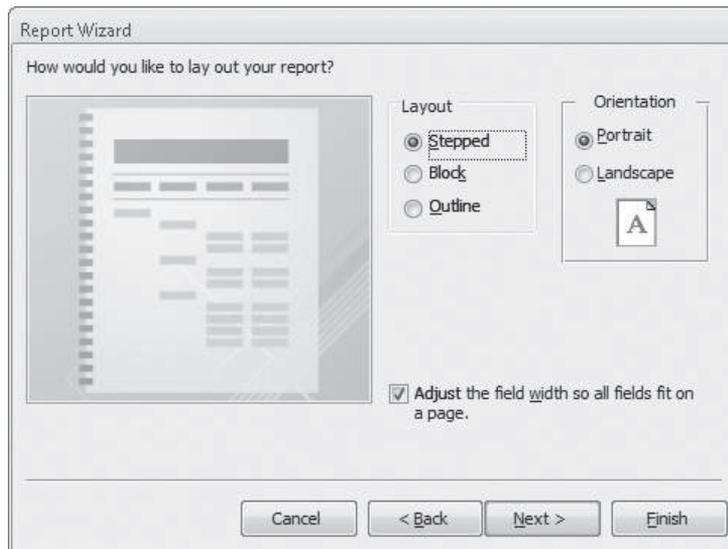
You can sort by up to four fields, each in ascending or descending order.



Tip For any field that contains numeric information, you can click **Summary Options** near the bottom of the wizard page to display the **Summary Options** dialog box, where you can instruct Access to insert a group footer in the report and to display the sum, average, minimum, or maximum value for the field. The only numeric field in this report is **UnitsInStock**, and it is not appropriate to summarize that field.

12. Click the arrow to the right of the **1** box to display a list of fields, and click **ProductName**. Then click **Next**.

The wizard asks which of three layouts and which orientation you want for this report.

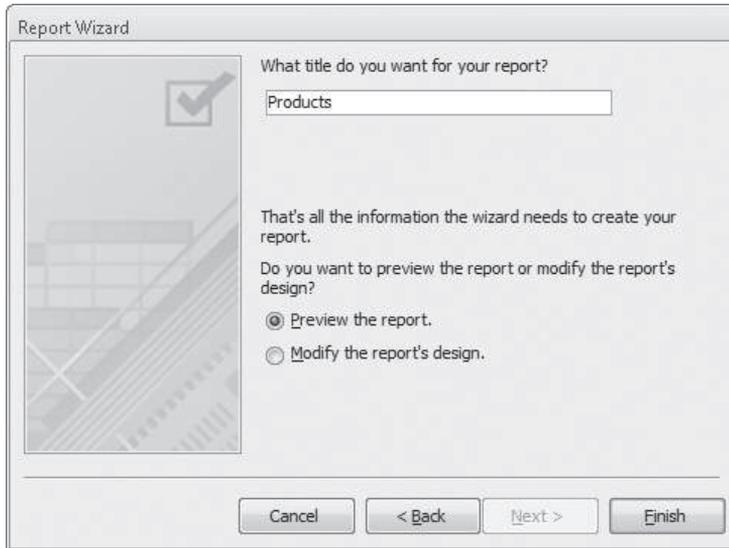


The preview on the left shows the effect of the options on the right.

13. In the **Layout** area, click each option in turn to see a preview in the report thumbnail to the left.
14. When you have finished exploring, click **Outline**.
15. With **Portrait** selected in the **Orientation** area and the **Adjust the field width so all fields fit on a page** check box selected, click **Next**.

The wizard prompts you to supply a title for the report.





For ease of use, you should make the title more specific.

16. In the title box, type **Alphabetical List of Products**, and then with **Preview the report** selected, click **Finish**.

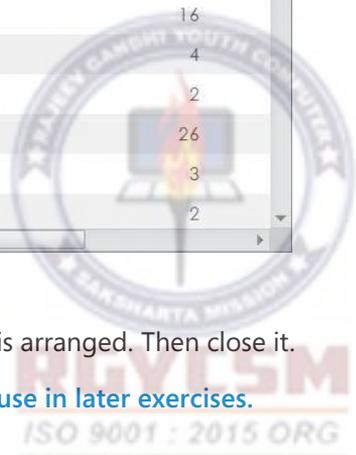
Access creates the report and displays it in Print Preview.



The new report in Print Preview.

17. Page through the nine-page report, noticing how it is arranged. Then close it.

CLEAN UP Retain the GardenCompany05 database for use in later exercises.



Modifying Report Design

You can use the Report wizard to get a quick start on a report, but you will frequently want to modify the report to get the result you need. As with forms, the report consists of text box controls that are bound to the corresponding fields in the underlying table and their associated labels. You can add labels, text boxes, images, and other controls, and you can format them, either by using commands on the ribbon or by setting their properties in the report's Property Sheet.

Tip Property Sheets for reports work the same way as those for forms. For information, see “Changing the Look of Forms” in Chapter 3, “Create Simple Forms.”

You can adjust the layout and content of reports in either Layout view or Design view. For simple adjustments, it is easier to work in Layout view, where you can see the layout with live data, making the process more intuitive.

See Also For information about creating and modifying reports in Design view, see Chapter 9, “Create Custom Reports.”

Tip Automatic error checking identifies common errors in forms and reports and gives you a chance to fix them. For example, Access informs you if a report is wider than the page it will be printed on. Error checking is turned on by default. If you want to turn it off, display the Backstage view, and click Options to open the Access Options dialog box. In the left pane, click Object Designers, clear the error-checking check boxes at the bottom of the page, and then click OK.

In this exercise, you'll modify the layout of a report. You'll then apply a theme, change some of the colors, and dress up the text with character formatting. You will also apply a simple rule that formats values differently if they meet a specific criterion.



SET UP You need the GardenCompany05 database you worked with in the preceding exercise to complete this exercise. Open the GardenCompany05 database, and then follow the steps.

1. In the **Navigation** pane, under **Reports**, right-click the **Alphabetical List of Products** report, and then click **Print Preview**.
2. Maximize the program window if it isn't already maximized, and then point to the previewed report page.

The pointer changes to a magnifying glass with a plus sign in it.



Alphabetical List of Products		
Product Name by 1s: A		
Product Name	Quantity Per Unit	Units In Stock
Ambrosia	6 - 2" pots	16
American Pitcher Plant	1 ea.	4
Anacharis	1 ea.	2
Anemone	One dozen	26
Animal repellent	1 qt.	3
Animal top	1 ea.	2
Anise	6 - 2" pots	20
Austrian Copper	Per plant	7
Austrian Pine	One gal. container	10
Autumn crocus	One dozen	37
Product Name by 1s: B		
Product Name	Quantity Per Unit	Units In Stock
Baby's Breath	1 ea.	23
Batbox	1 box per kit	12
Beautybush	1 ea.	2
Beebalm	1 ea.	14
Begonias	6 per pkg.	12
Beneficial nematodes	1 pt	4
Blackberries	8 starters per pkg	18
Bladderwort	1 ea.	6
Bladderwort	One 3" starter	5
Blood meal	3 lbs.	14
Bone meal	5 lbs.	12

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In Print Preview, the magnifying glass pointer indicates that you can zoom in on the page.

- Click the previewed page once to zoom in.

Tip You can also zoom in and out by dragging the Zoom slider in the lower-right corner of the program window. The current zoom level appears to the left of the slider.

Notice that the report has the following design problems:

- Extraneous text
- Spacey arrangement
- Uninviting formatting

To fix these problems, we need to switch to Layout view.

- On the **View Shortcuts** toolbar, click the **Layout View** button.

Access adds four Report Layout Tools contextual tabs to the ribbon. First let's work with the group header controls.



5. On the **Design** contextual tab, in the **Grouping & Totals** group, click the **Hide Details** button.

The controls that are bound to fields in the Products table are hidden so that you can concentrate on the group header controls.

6. Below the title, click **ProductName by 1s**, and press the Delete key.

The label is removed from all the group headers.

7. Click the control containing **A**, and drag it to the left edge of the header.

When you release the mouse button, all the corresponding controls move to the corresponding location in their own group headers.

Keyboard Shortcut Hold down the **Alt** key and press the **Arrow** keys to move the selected control in small increments. When the shadow box is positioned where you want it, click away from the control.

See Also For more information about keyboard shortcuts, see “Keyboard Shortcuts” at the end of this book.

8. Point to the right border of the selected **A** control, and when the pointer changes to a double-headed arrow, drag to the left until the control is just big enough to hold its contents.

Again, all the corresponding controls assume the new size.



It is easier to work with the controls in the group header when the report details are hidden.

9. With the **A** control still selected, hold down the Shift key, and in turn, click the **Product Name**, **Quantity Per Unit**, and **Units In Stock** label controls to add them to the selection.



10. On the **Design** tab, in the **Tools** group, click the **Property Sheet** button.

The Property Sheet opens.

 A screenshot of the Property Sheet dialog box. The title bar says "Property Sheet" and "Selection type: Multiple selection". Below the title bar is a dropdown menu. The dialog has four tabs: "Format", "Data", "Event", and "Other", with "Format" selected. The "Format" tab contains a list of properties and their values:

Visible	Yes
Width	
Height	
Top	
Left	
Back Style	
Back Color	Background 1
Border Style	Transparent
Border Width	Hairline
Border Color	
Special Effect	Flat
Font Name	Century Gothic I
Font Size	11
Text Align	
Font Weight	Normal
Font Underline	No
Font Italic	No
Fore Color	
Line Spacing	0"
Hyperlink Target	
Gridline Style Top	Transparent
Gridline Style Bottom	
Gridline Style Left	Transparent

Because more than one control is selected, the Selection Type of this Property Sheet is Multiple Selection.

11. On the **Format** page of the **Property Sheet**, in the **Top** property box, type **0.25"**, and press Enter. Then close the **Property Sheet**.

In the group header, the letter control and label controls are now aligned 0.25 inch from the top of the header, and the height of the header has decreased because less space is needed to accommodate the controls.

Now let's see how the group header looks with its data.

12. In the **Grouping & Totals** group, click the **Hide Details** button to turn it off and display the data from the table.

The numbers in the Units In Stock column are right-aligned. Let's center them.



13. Click the first text box control under the **Units In Stock** label, and on the **Format** contextual tab, in the **Font** group, click the **Center** button.

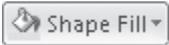
Now we'll add some color and format the text.



14. On the **Design** contextual tab, in the **Themes** group, click the **Themes** button, and in the gallery, click the **Austin** thumbnail.

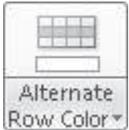
Although nothing much appears to change, the report takes on the color scheme and font scheme assigned to the selected theme.

15. Inside the shaded area of the report header, but away from the title, click a blank area. On the **Format** contextual tab, in the **Control Formatting** group, click the **Shape Fill** button. Then under **Theme Colors** in the palette, click the third box (**Light Green, Background 2**).



When you created this report, alternate group headers were shaded with the same color as alternate data rows. This coloring confuses rather than clarifies the report structure. Let's turn off this alternate group header color.

16. Click outside the dotted border to the left of the first group header. In the **Background** group, click the **Alternate Row Color** arrow, and at the bottom of the palette, click **No Color**.

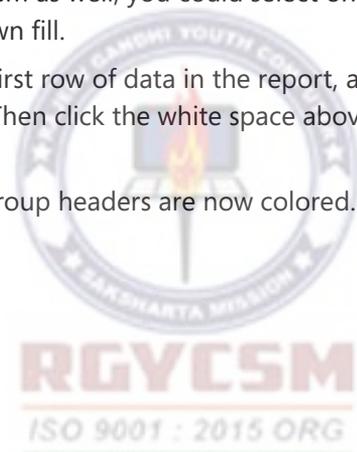


17. In the **Control Formatting** group, click the **Shape Fill** button, and in the palette, click a light brown color.

The entire group header is shaded except the alphabet controls (A, B, C, and so on) that you moved earlier. If you wanted to shade them as well, you could select one of them and repeat step 17 to apply the light brown fill.

18. Click outside the dotted border to the left of the first row of data in the report, and remove the alternate row color of the data rows. Then click the white space above the report header to see the result.

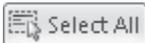
Only the backgrounds of the report header and group headers are now colored.



A	Product Name	Quantity Per Unit	Units In Stock
	Ambrosia	6 - 2" pots	16
	American Pitcher Plant	1 ea.	4
	Anacharis	1 ea.	2
	Anemone	One dozen	26
	Animal repellent	1 qt.	3
	Animal trap	1 ea.	2
	Anise	6 - 2" pots	20
	Austrian Copper	Per plant	7
	Austrian Pine	One gal. container	10
	Austrian Yucca	One dozen	2

Removing the alternate row color makes the structure of this report more obvious.

Tip Above the first object and below the last object of a report in Layout view are the only places you can click that don't select at least one object on the report.



19. Click any control, and then in the **Selection** group, click the **Select All** button.

Keyboard Shortcut Press **Ctrl+A** to select all the controls.

20. In the **Font** group, click the **Font Size** arrow, and then click **9**.

Tip It is usually most efficient to change the character formatting of all the controls and then adjust the ones you want to be different.

21. Click the report's title control, and then use the commands in the **Font** group to make the text 24 points, bold, and dark green.

22. Select the controls in the group header, and make them bold and dark green.

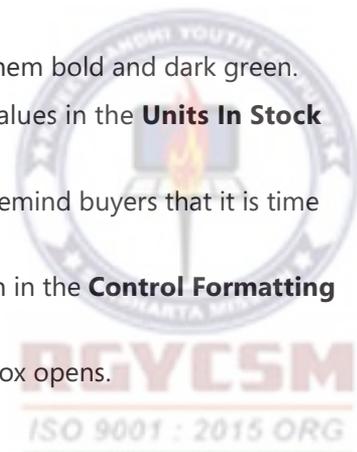
23. Scroll down the report, noticing that a few of the values in the **Units In Stock** column are 0.

We want these values to stand out in the report to remind buyers that it is time to order more of these products.

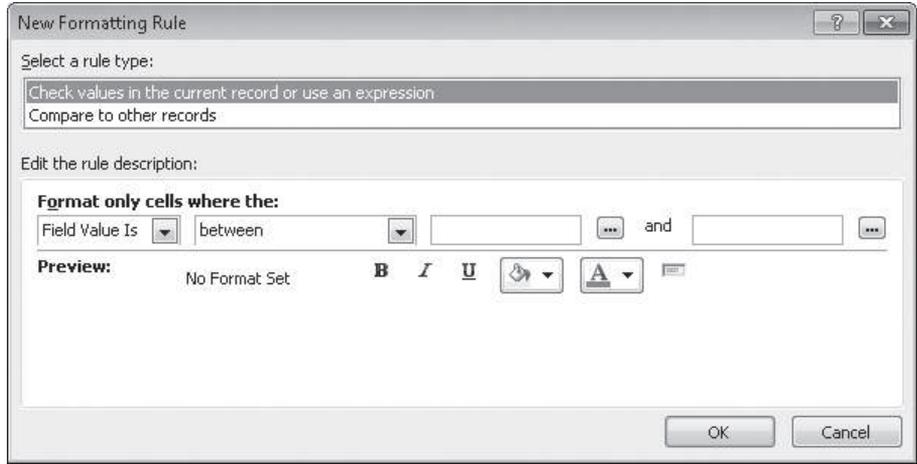
24. Click any control in the **Units In Stock** column. Then in the **Control Formatting** group, click the **Conditional Formatting** button.

The Conditional Formatting Rules Manager dialog box opens.

25. Click **New Rule**.



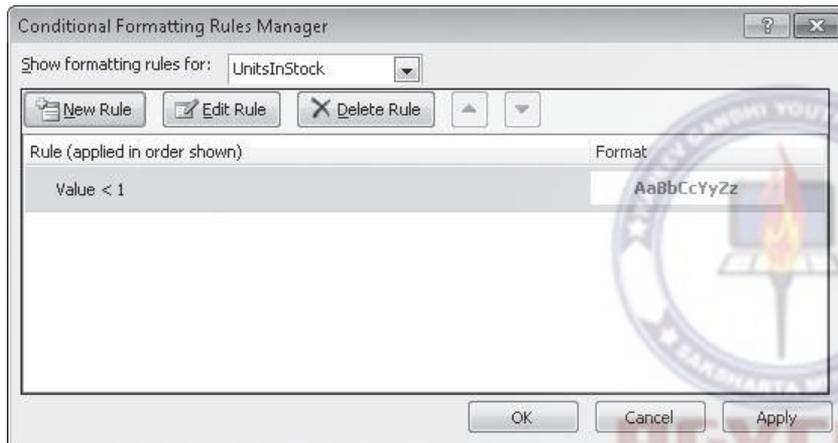
The New Formatting Rule dialog box opens.



You can create rules that compare the current field value to a specific value or to other values in the same field.

26. With **Check values in the current record or use an expression** selected as the rule type, in the **Format only cells where the** area, click the arrow for the second box, and click **less than**. Then in the third box, type **1**.
27. In the bottom area, click the **Bold** button, and change the **Font color** setting to red. Then click **OK**.

In the Conditional Formatting Rules Manager dialog box, the rule is listed in the Rule column with the formatting that will be applied to values that meet the rule's criteria in the Format column.



Values that are less than 1 will be bold and red.



28. Click **OK**. Then scroll down the report again, noticing that all the 0 values are now bold and red.

29. Close the report, clicking **Yes** to save your changes to its design.

✘ CLEAN UP Retain the GardenCompany05 database for use in the last exercise.

Previewing and Printing Reports

Using Print Preview to preview Access reports is very similar to using this view in other Microsoft Office 2010 programs. If you preview your reports carefully, you won't have any major surprises when you print them.

When previewing reports, you will want to pay special attention to how the pages break. In a grouped report, you can control whether group headings are allowed to appear at the bottom of a page with no data and whether groups are allowed to break across pages.

You can make changes to the setup of your report pages from the Page Setup contextual tab in Layout view or from the tab displayed when you switch to Print Preview. For example, you can specify the following:

- Paper size
- Margins
- Orientation
- Number of columns
- Whether Access should print the report's structural elements or only its data

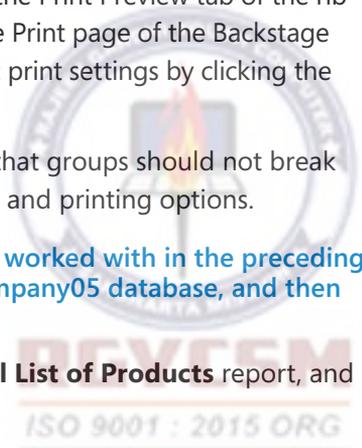
You can also click the Page Setup button to display the Page Setup dialog box, where you can change all these settings in one place, as well as make additional refinements.

When you are ready to print, you click the Print button on the Print Preview tab of the ribbon to display the Print dialog box. You can also display the Print page of the Backstage view and then print one copy of the report with the default print settings by clicking the Quick Print button.

In this exercise, you'll preview a report, and you'll specify that groups should not break across pages. Then you'll explore the available page setup and printing options.

➔ SET UP You need the GardenCompany05 database you worked with in the preceding exercise to complete this exercise. Open the GardenCompany05 database, and then follow the steps.

1. In the **Navigation** pane, right click the **Alphabetical List of Products** report, and then click **Print Preview**.



Only the Print Preview tab appears on the ribbon.



- On the page navigation bar at the bottom of the window, click the **Next Page** button repeatedly to view each page of this report.

Because of the changes you made to the report in the previous exercise, the report is now six pages. Several of the groups start on one page and continue on the next page. For readability, let's fix this layout problem.

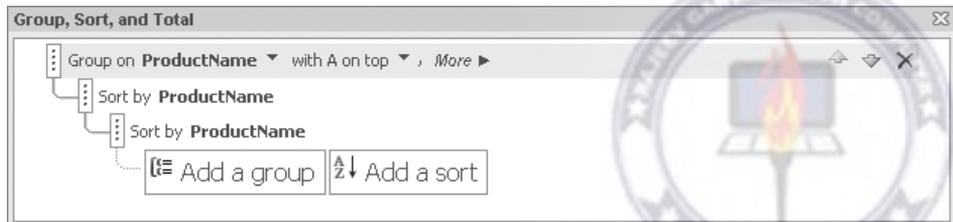
Lawn fertilizer	5 lbs.	15
Leaf blower	1 ea.	13
Leaf rake	1 ea.	6
Ulls	4 gal/ptg.	18
Uly-of-the-field	One dozen	34
Uly-of-the-Valley	3 gal/ptg.	4
Long-handled shovel	1 ea.	6
Low volume sprayer	1 ea.	6
M		
Product Name	Quantity Per Unit	Units In Stock
Magia Lily	One dozen	40
Magnificas Hardyazalea	1 ea.	6
Mahoe fern	1 ea.	0
Martin house	1 ea.	3
Matsc rosalom	1 gr.	4
Mawpiv Hardyazubite	1 ea.	1
Mutans of opanin	10 lb. bag	0
O		
Product Name	Quantity Per Unit	Units In Stock
Optional grass catcher	1 ea.	0
Organic compost	5 lbs.	7
Organic fertilizer	5 lbs.	35
Oxallating sprayer	1 ea.	10
Oyster shells	5 lb. bag	0
P		
Product Name	Quantity Per Unit	Units In Stock
Papirus	1 ea.	3
Pee gravel	Per yard	15
Peehurnul meal	5 lb. bag	0
Peehurnul	5 lb. bag	30
Peehurnul	1 ea./20 ea.	15
Peehurnul	1 ea./20 ea.	30

The group at the top of this page is a continuation of one that started on the previous page.



- Switch to Layout view, and then on the **Design** tab, in the **Grouping & Totals** group, click the **Group & Sort** button.

The Group, Sort, And Total pane opens at the bottom of the report page.

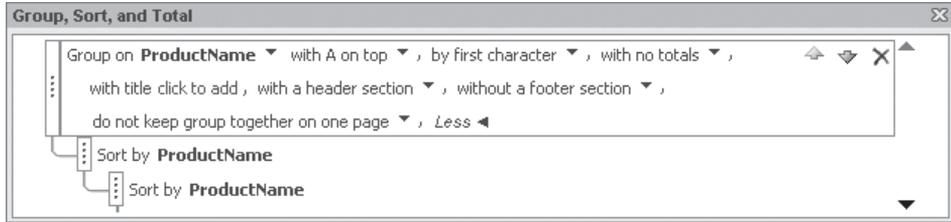


You can use this pane to quickly add grouping and sorting levels and set related properties.

- In the **Group, Sort, and Total** pane, in the **Group on ProductName** bar, click **More**.



Access displays additional options.

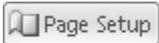


These are the current grouping settings.

5. Click the **do not keep group together on one page** arrow, and in the list, click **keep whole group together on one page**. Then close the **Group, Sort, and Total** pane by clicking the **Group & Sort** button again.

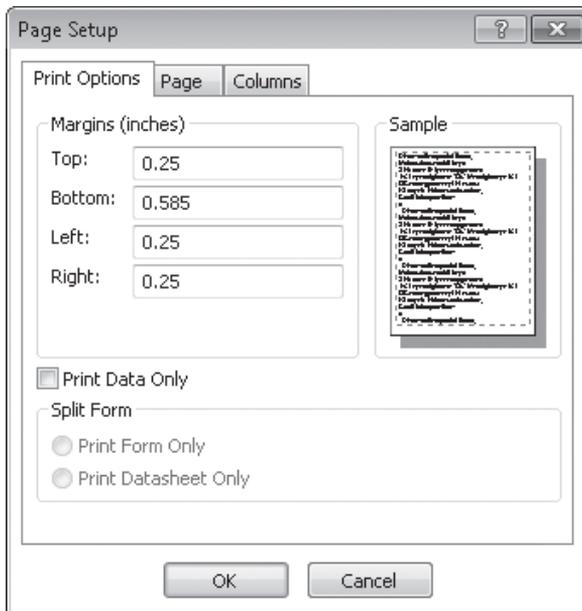
6. Switch to Print Preview, and page through the report.

Now none of the groups is broken across pages. However, the report would look better with wider top, left, and right margins.



7. On the **Print Preview** tab, in the **Page Layout** group, click the **Page Setup** button.

The Page Setup dialog box opens.



The Print Options page of the Page Setup dialog box.

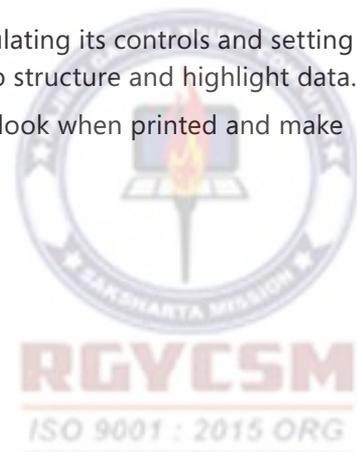


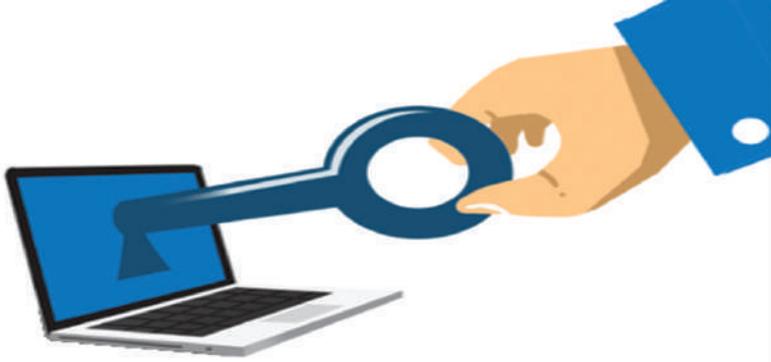
8. Click the **Page** tab, and verify that the paper size is **Letter**.
9. Return to the **Print Options** page, and change the **Top**, **Left**, and **Right** margins to **0.75**. Then click **OK**.
10. Scroll through the report to see the results.
Although all the data in the report fits on the page, the page number in the footer is set too far to the right and is producing extra pages.
11. Switch to Layout view, scroll down to the bottom of the report, and then scroll to the right until you can see the page number.
12. Click the page number control, and move and resize it so that it aligns approximately with the **Units In Stock** column heading.
13. Switch to Print Preview, and page through the report.
The report now fits neatly on seven pages.
14. If you want, print the report by using the same techniques you would use to print any database object.
15. Close the report, clicking **Yes** to save your changes.

✘ CLEAN UP Close the GardenCompany05 database.

Key Points

- When designing a report, consider the point you are trying to make, the intended audience, and the level of detail needed.
- You can create a report that displays only some of the fields in a table by using the Report wizard. The report can be sorted and grouped to summarize the data in a table in a meaningful way.
- You can refine a report in Layout view by manipulating its controls and setting its properties. You can also format the controls to structure and highlight data.
- In Print Preview, you can see how the report will look when printed and make adjustments before you print.





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