

welcoming
friendly
exciting
happy
fun
customer-focused
innovative
digital
relaxing
growing
super
excitement
colorful
travel
educational
comfortable
bright
cheerful
indispensable
joy
caring
warm
creative
family-oriented
enticing
pizzazz
inspire
imagination

Gloucester County Library System



Gloucester
County Library
System

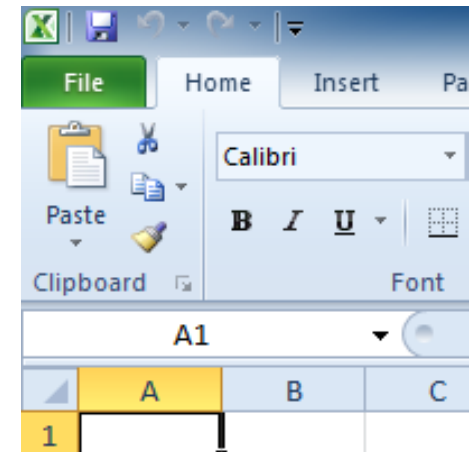
Excel 2010

Introduction

What is Excel?

Microsoft Excel is an electronic spreadsheet program. It is capable of performing many different types of calculations and can organize both numerical and textual data.

- The **File Button** is in the top left corner of the window and provides access to open, save, and print documents.
- Click on the **File Button** and then click on the desired option.



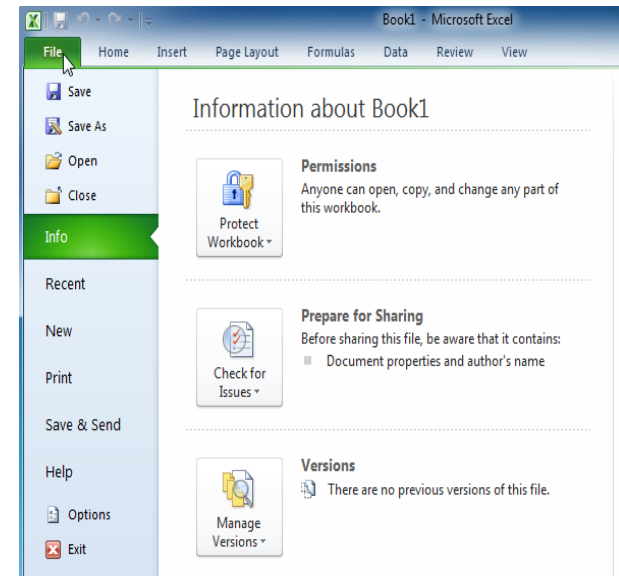
Class objective

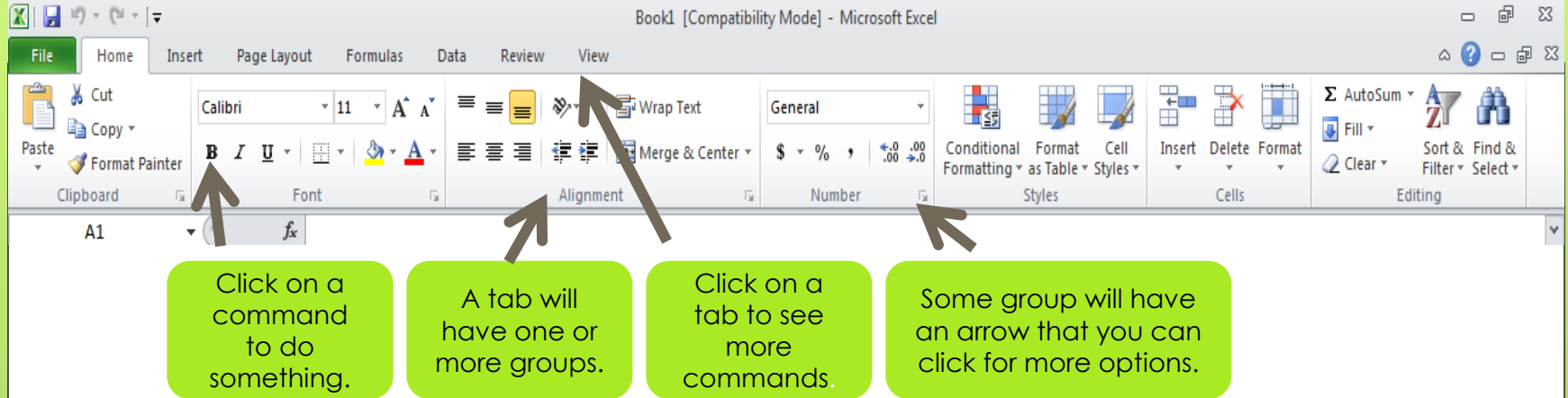


To be able to insert text and numbers into excel workbooks, and to be able to use it to calculate, analyze, and organize data. In this lesson, you will learn how to create a new workbook, insert and delete text, navigate a worksheet, and save an excel workbook.

Backstage View

Backstage view gives you various options for saving, opening a file, printing, or sharing your document. It is similar to the **Office Button menu** from Excel 2007 or the **File menu** from earlier versions of Excel. However, instead of just a menu, it is a full-page view.



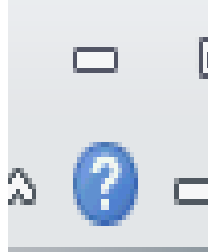


The **Ribbon** consists of 3 types of items.

- **Tabs** – This is the main level and includes Home, Insert, Page Layout, etc.
- **Groups** – Each tab has several groups that show related items together.
- **Commands** – A command is a button in a group, or an item in a list.

Some tabs are only available when a particular item is selected.
For example, the Picture Tools tab is only shown when a picture is selected.

Help



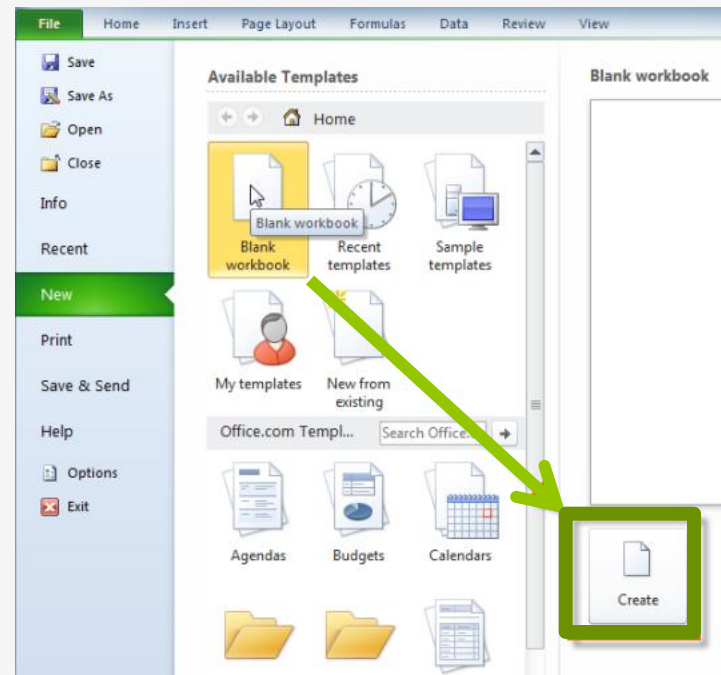
- Click on the Microsoft Office Excel Help button in the top right corner.
- Type the desired word in the search box, and then press the Enter key.
- Choose the desired topic from the ones displayed.
- To research another topic, enter the desired word in the search box and then press the Enter key.
- Note – An active Internet connection will find more results.

Create

To create a new, blank workbook

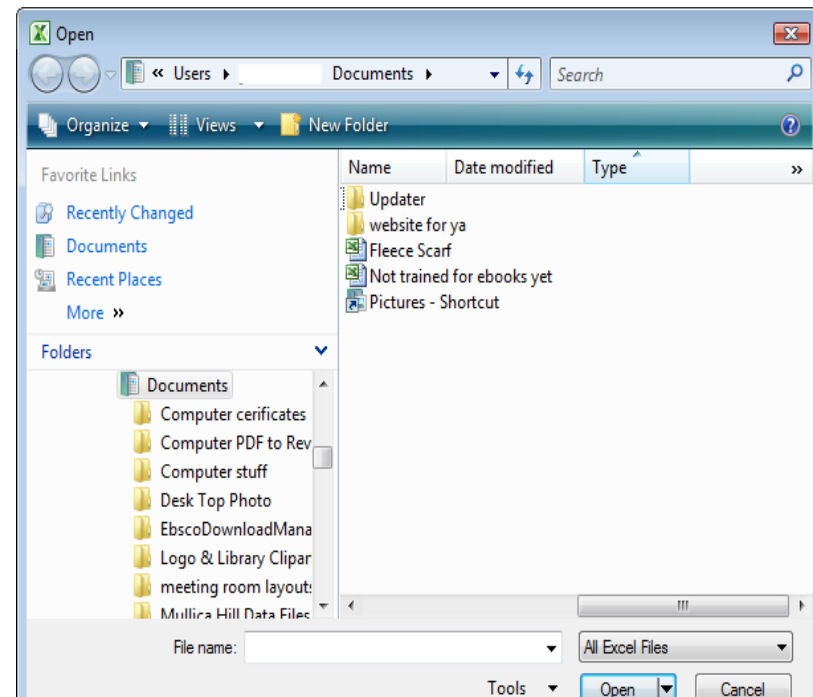
- Click the **File** tab.
This takes you to **Backstage** view.
- Select **New**.
- Select **Blank workbook**.
- Click **Create**. A new, blank workbook appears in the Excel window

Excel



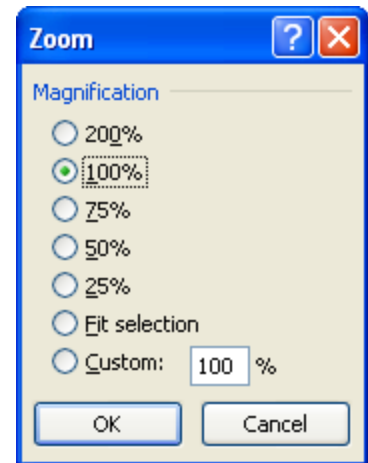
To Open an Existing Workbook:

- Click the **File** tab. This takes you to **Backstage view**.
- Select **Open**. The Open dialog box appears.
- Select your desired workbook and then click **Open**.



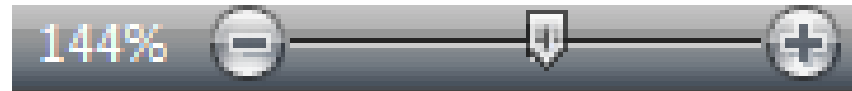
Views Zoom Box

- On the Ribbon, click on the **View** tab.
- In the **Zoom group**, click on the **Zoom** button.
- Choose a percentage
- OR click in the Custom box, and type the desired percentage.
- Click on OK.
- OR use the Zoom toolbar on the Status Bar at the bottom right corner of the window.

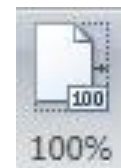
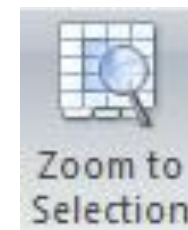


Views

Zoom to Selection



- Click and drag to highlight the area of the desired spreadsheet.
- On the Ribbon, click on the **View tab**.
- In the **Zoom group**, click on the Zoom to Selection button.
- *Zoom to 100%*
- On the Ribbon, click on the **View tab**.
- In the **Zoom group**, click on the 100% button



Undo/Redo



- To undo the last action, on the **Quick Access Toolbar**, click on the **Undo button**.
- To bring back the last undo, on the **Quick Access Toolbar**, click on the **Redo button**.
- To see the **undo history**, click on the down arrow next to the button.
- To perform multiple undo's, click on the Undo down arrow and click on the desired item in the list. The action clicked on and all others above it in the list will be undone.

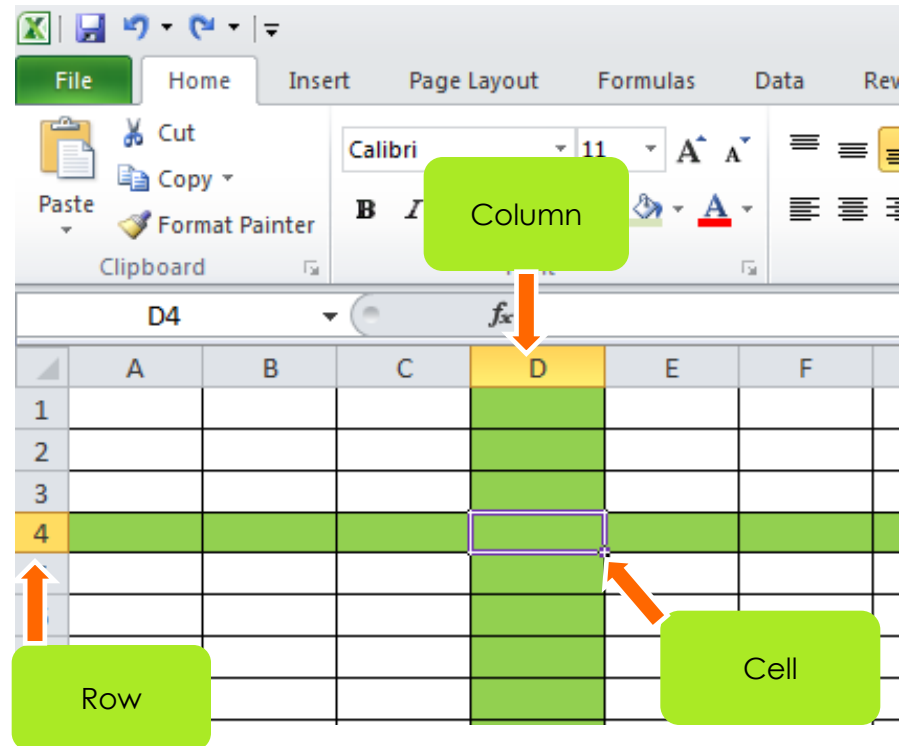
Parts of a spreadsheet

- **Cell** - The box where the numbers, the labels, or the formulas are entered.
- **Column** - The collection of cells in a line from top to bottom.
- **Row** - The collection of cells in a line from side to side.
- **Worksheet** - The single page of rows and columns that is on the screen.

Parts of a spreadsheet

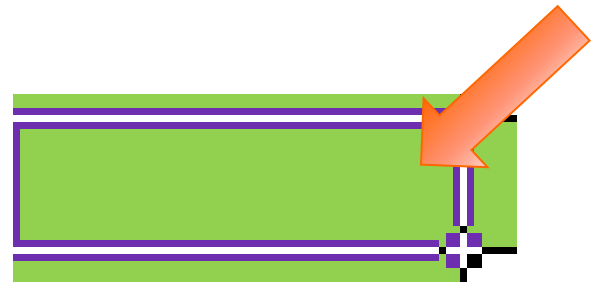
- **Workbook** - The collection of pages (worksheets) that make up one file.
- **Range** - A group of cells that are next to each other.
- **Mouse pointer** - The arrow or other marker that indicates where the mouse is pointing.
- **Formula** - A mathematical expression that gives instructions to the computer about what to do with the contents of specified cells.

- A **cell** is a single “box.”
- A **column** is a vertical “stack” of cells, with a letter at the top.
- A **row** is a horizontal line of numbers, with a different number for each row.



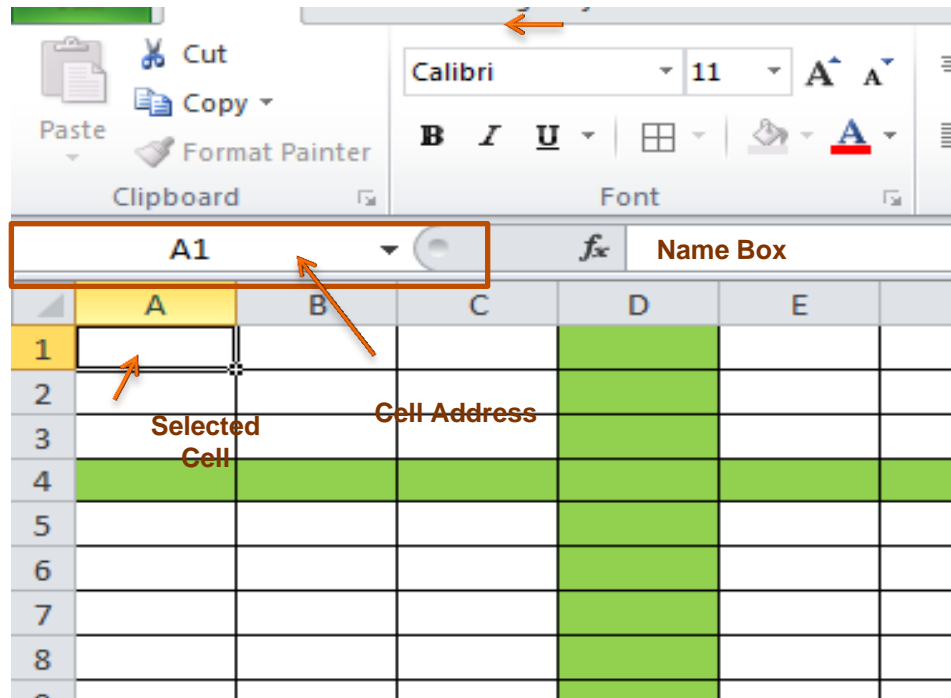
Working with Cells

- **Click on a cell** to select it.
When a cell is selected you will notice that the **borders** of the cell appear bold and the **column heading** and **row heading** of the cell are highlighted.
- Release your mouse. The cell will stay selected until you click on another cell in the worksheet.
- *To Changing Information in a Cell* Click in the cell to be changed.
- Type in the new information.



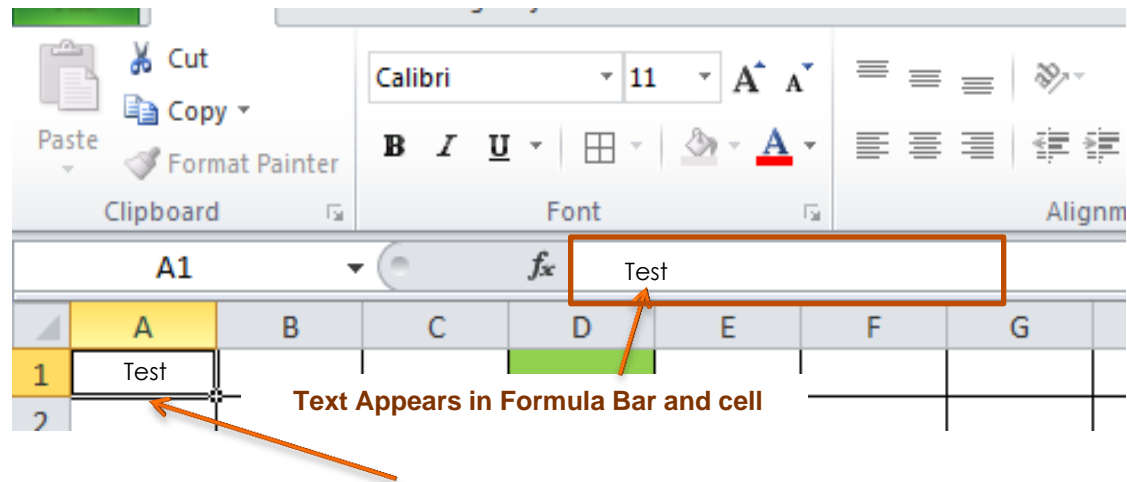
Workbook

Left-click a **cell** to select it. Each rectangle in the worksheet is called a cell. As you select a cell, the cell address appears in the Name Box.



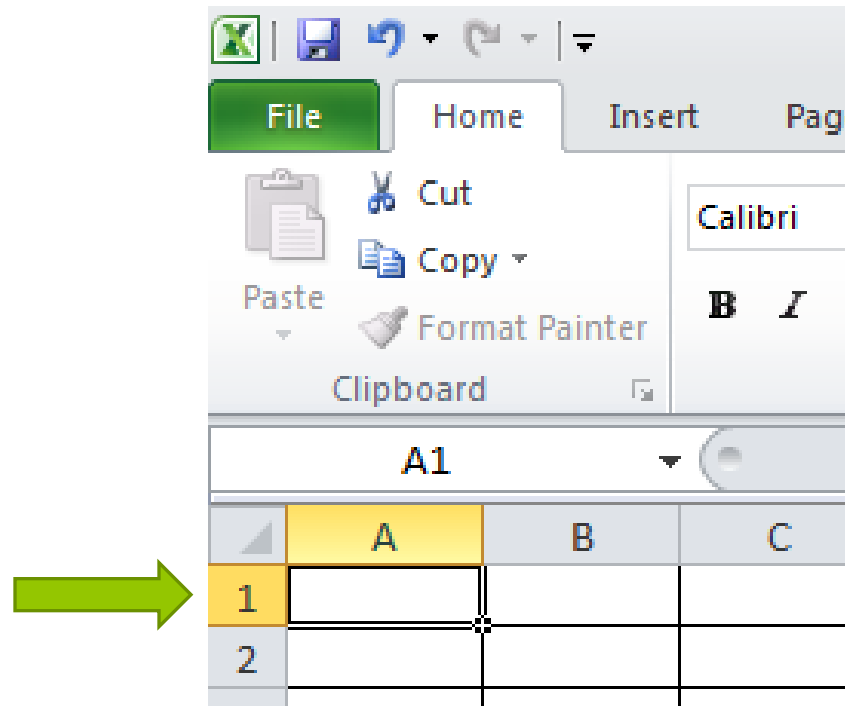
Workbook

Enter text into the **cell** using your keyboard.
The text appears in the cell and in the **formula bar**.



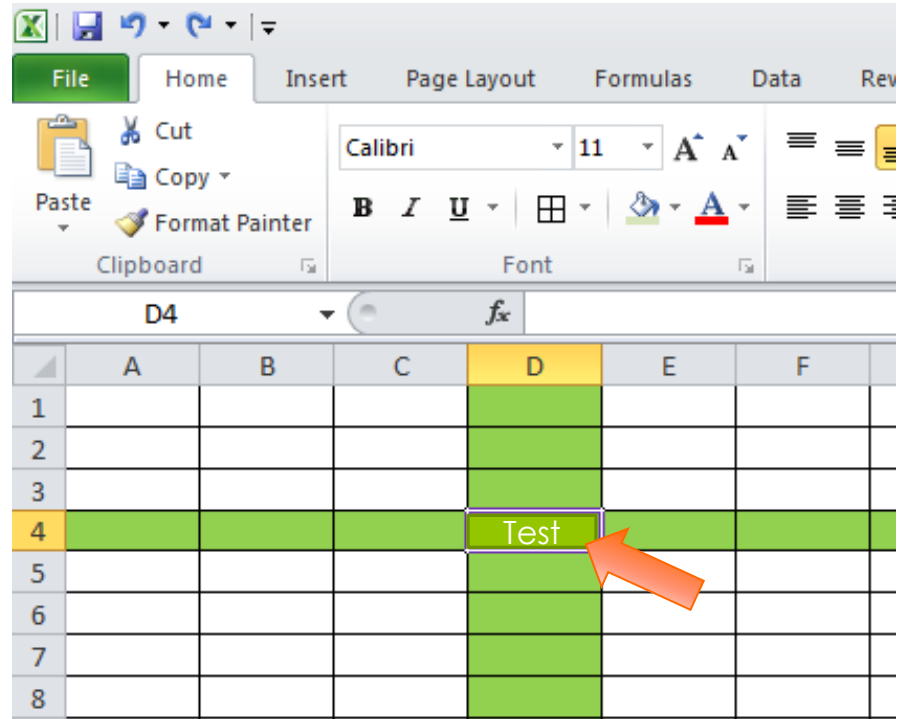
Workbook

Each **cell** has a name, or a cell address based on the column and row it is in. For example, this cell is **A1** since it is where **column A** and **row 1** intersect.



Challenge!

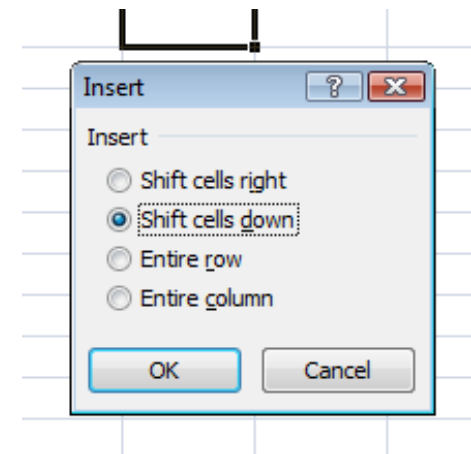
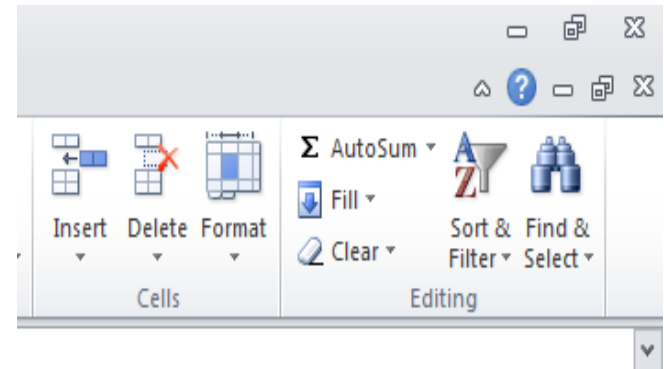
- Open Excel workbook.
- Enter text into cells.



Rows and Columns

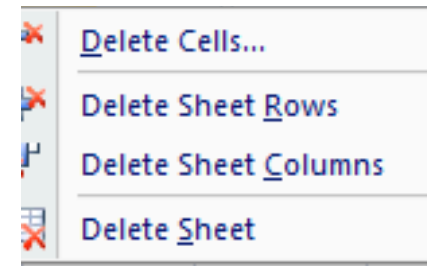
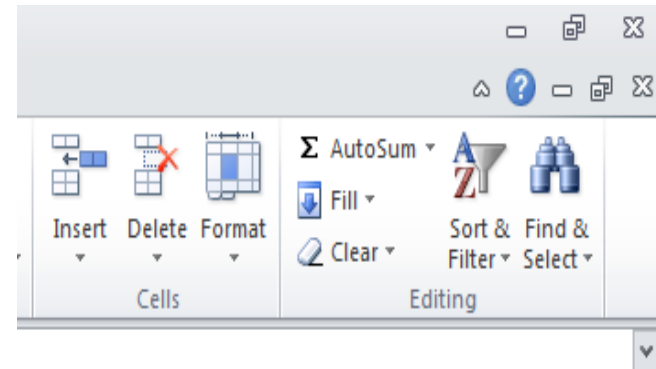
Inserting a Row

- Click in the row where the new row is to be placed.
- On the Ribbon, click on the **Home** tab.
- In the **Cells** group, click on the Insert button down arrow and choose
- Insert **Sheet Rows**.



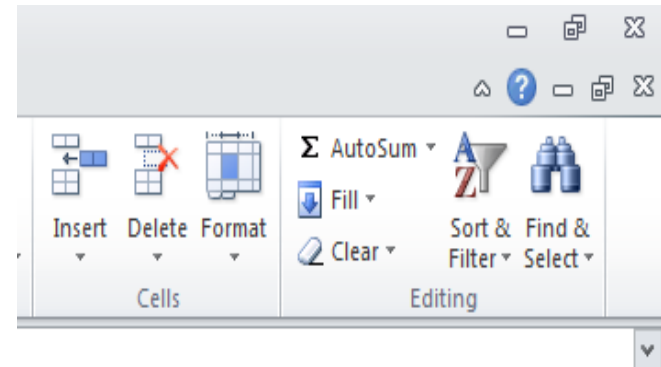
Deleting a Row

- Click in the row to be deleted.
- On the Ribbon, click on the **Home** tab.
- In the **Cells group**, click on the Delete button down arrow and choose Delete Sheet Rows.



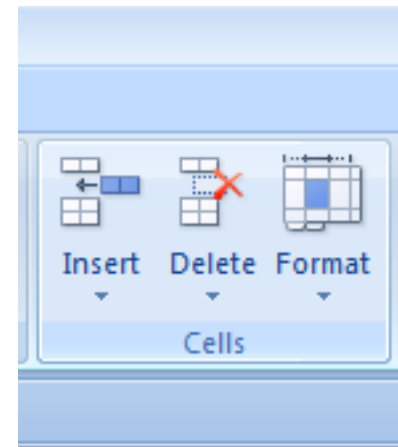
Inserting a Column

- Click in the column where the new column is to be placed.
- On the Ribbon, click on the **Home tab**.
- In the **Cells group**, click on the Insert button down arrow and choose
- Insert Sheet Columns.



Deleting a Column

- Click in the column to be deleted.
- On the Ribbon, click on the **Home** tab.
- In the **Cells** group,
- Click on the Delete button down arrow
- Delete Sheet Columns.



Challenge!

- Open workbook.
- Insert a column.
- Insert a row.
- Delete a column.
- Change the width of a column.
- Change the height of a row.
- Close and save the file.

- # Challenge!
- Open workbook.
 - Insert a column.
 - Insert a row.
 - Delete a column.
 - Change the width of a column.
 - Change the height of a row.
 - Close and save the file.

Weekly time sheet with break1 [Compatibility Mode] - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Century Gothic 22 A Wrap Text General Conditional Formatting as Table Cell Styles

B U Font Merge & Center Alignment Number Styles

C2 [Company Name]

Weekly Time Sheet With Breaks

[Company Name]

[Sheet Address] Employee name: _____ Week starting: 5/29/2005

[Sheet Address Z] Manager name: _____ Week ending: 6/4/2005

[City, ST ZIP Code]

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	5/29/2005	5/30/2005	5/31/2005	6/1/2005	6/2/2005	6/3/2005	6/4/2005
Time In	Total	Total	Total	Total	Total	Total	Total
Time Out	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meal Break							
Time In	Total	Total	Total	Total	Total	Total	Total
Time Out	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total Hours Scheduled

Fill

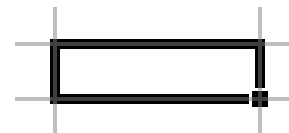
Getting the Months or Days of the Week in Quickly

- Click in the first cell.
- Type in the first month or day desired.
- Place the cursor over the **Fill Handle**.
- Click** and **drag** over the cells where the rest of the months or days of the week are to be filled in.

Filling in Text

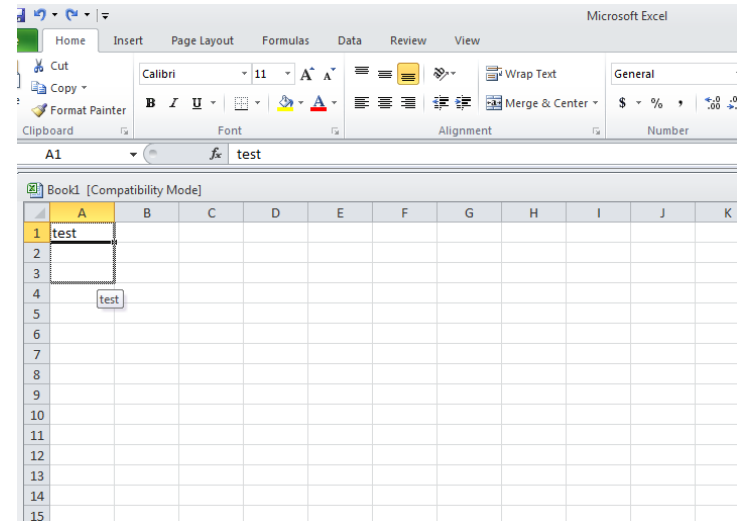
- Click in the cell with the text.
- Click on the **Fill Handle** and drag the cursor over the cells to be filled.
- The text is copied into the cells.

The **Fill Handle** is the little black square at the bottom right of a group of highlighted cells.



Filling in Formulas

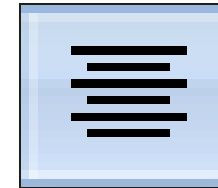
- Click in the cell with the formula.
- Click on the **Fill Handle** and drag over the cells.
- The formula is copied into the cells.



Filling with a Number Pattern

- Enter the first two or three numbers in the cells. i.e. 1, 2, 3.
- Highlight the cells with the numbers.
- Click on the **Fill Handle** and drag over the cells where the pattern is to be continued.
- Drag down or to the right to increase the number sequence.
- Drag up or to the left to decrease the number sequence

Merging and Centering the Title



- Click and drag to highlight the title and the cells it should cover.
- On the Ribbon, click on the **Home tab**.
- In the **Alignment group**, click on the Merge and Center button.
- Note – To undo merging and centering, repeat the steps above

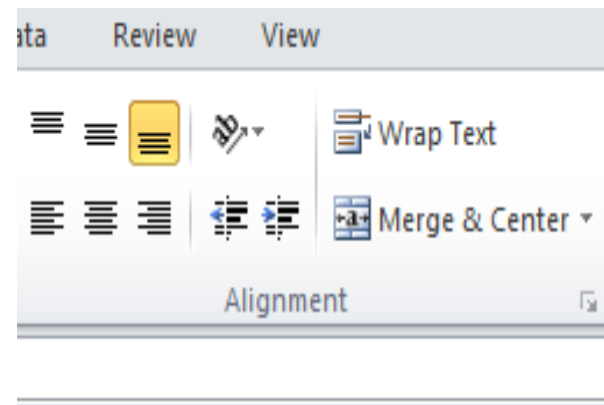
Centering the Heading of a Column

- Click in the cell.
- On the Ribbon, click on the **Home tab**.
- In the **Alignment group**, click on the Center button.

Formatting Text

Highlight the cells to be formatted

- On the Ribbon, click on the **Home** tab.
- The **Alignment group** contains buttons for **justifying** the text to the **left**, **center**, or **right**.
- The **Font group** contains buttons for choosing the font, font size, increasing the font size, decreasing the font size, changing the font color, etc.
- Click on the desired button.



Mini toolbar

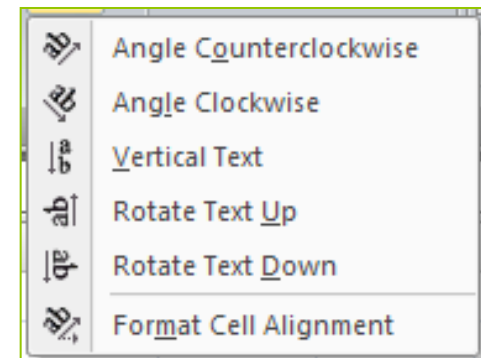


- The **Mini toolbar** is a semi-transparent toolbar which appears when text is selected.
- Highlight text to be formatted.
- Use the buttons on the **Mini toolbar** to make the desired changes to the text.
- If the Mini toolbar has disappeared, right click on the highlighted text to bring up the Mini toolbar.

Rotate the Text



- Highlight the cells.
- On the Ribbon, click on the **Home tab**.
- In the **Alignment group**, and click on the **Orientation** button.
- Choose the desired rotation from the list.



Column Width and Row Height

Fixing Column Width

On the **Column Indicator**, double click on the line to the right of the column letter to be adjusted.

OR click and drag the line to the right of the column letter to the desired width

Fixing Row Height

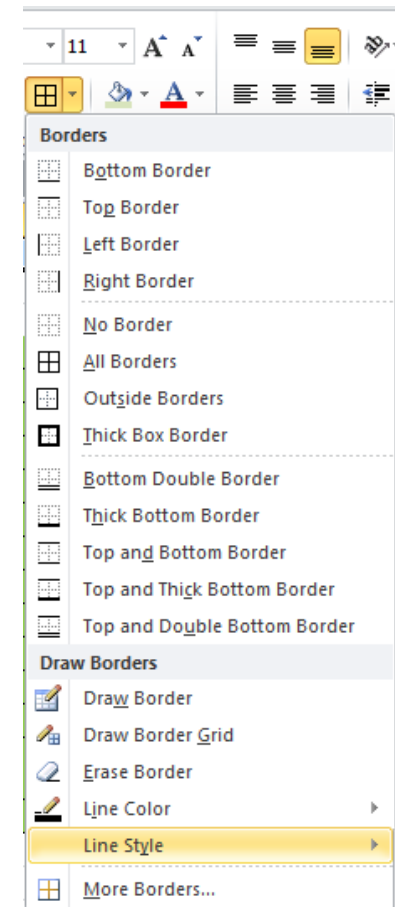
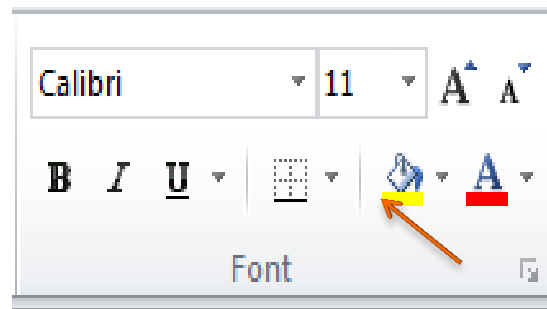
On the **Row Indicator**, double click on the line below the row number to be adjusted.

OR click and drag the line under the row number to the desired height.

Adding Borders to a Block of Cells

Highlight the block of cells to be formatted.

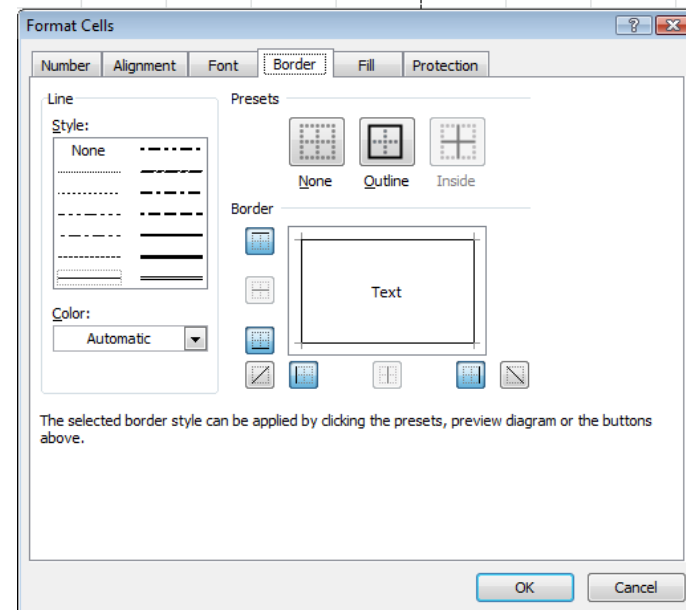
- On the Ribbon, click on the **Home** tab.
- In the **Font group**, click on the down arrow next to the border button and choose the desired border.



Customized Borders

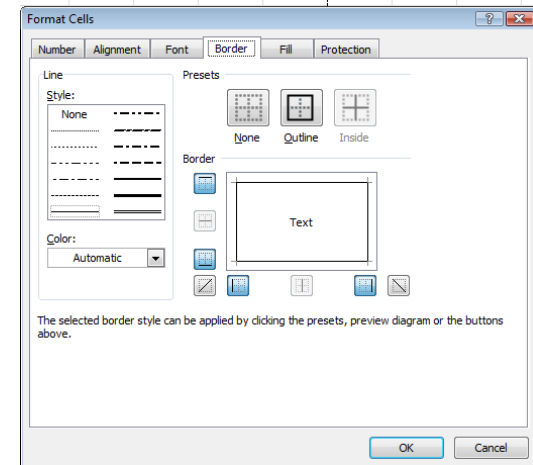
Highlight the block of cells to be formatted

- On the Ribbon, click on the **Home tab**.
- In the **Cells group**, click on the Format button and choose Format Cells....
- Click on the **Border tab**.



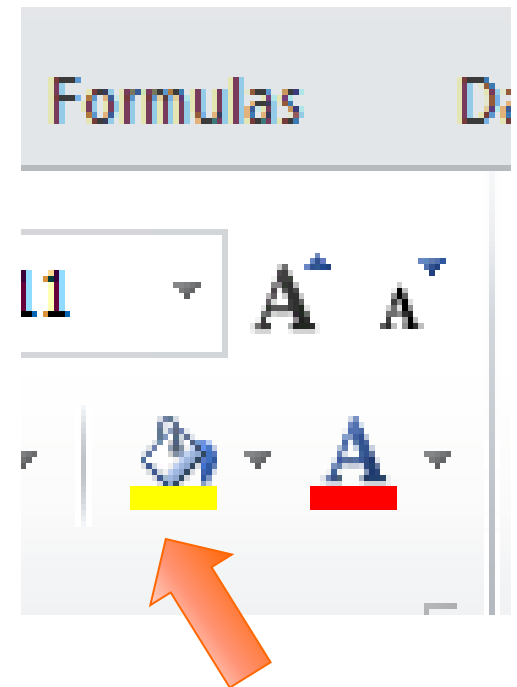
Customized Borders

- In the **Line section**, click on the desired line style.
- In the Line section, click on the down arrow of the Color box and choose the desired color.
- Click on the Border buttons to place the border around the cells.
- Click on **OK**.



Shading a Block of Cells

- Highlight the block of cells.
 - On the Ribbon, click on the **Home** tab.
 - In the **Font group**, click on the down arrow next to the **Fill Color** button.
 - Click on the desired color.
- * Note Rest the cursor over a color and a preview of the color in the block of cells is displayed.



Pictures & Clip Art

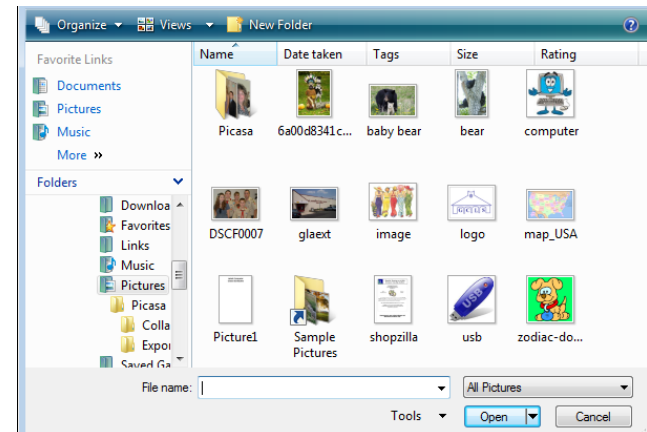
- Click in the document where the picture should be placed.
- On the Ribbon, click on the **Insert tab**.
- In the **Illustrations group**, click on **Clip Art**.
- In the **Clip Art pane**, type a word in the Search text: box and click on the Go button.

If a message appears asking if pictures should be included from the Microsoft site, click on the Yes button.

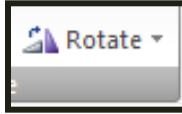
- Scroll through the collection and find the desired picture. Click on the desired picture.

Inserting a Picture from Files

- Click in the document where the picture is to be placed.
- On the Ribbon, click on the **Insert tab**.
- In the **Illustrations group**, click on Picture.
- Navigate to the location of the picture.
- Click on the desired picture.
- Click on the Insert button.



Rotating the Picture



Double click on the picture.

The Format tab of Picture Tools comes up on the Ribbon..

In the Arrange group, click on the Rotate button and choose the desired rotation.

or click on the green dot above the picture and drag the picture to the desired angle.

Resizing a Picture



Click on the picture.

Move the cursor over a corner.
(The cursor changes to a two-headed arrow.)

Click and drag to the desired size.

Deleting a Picture

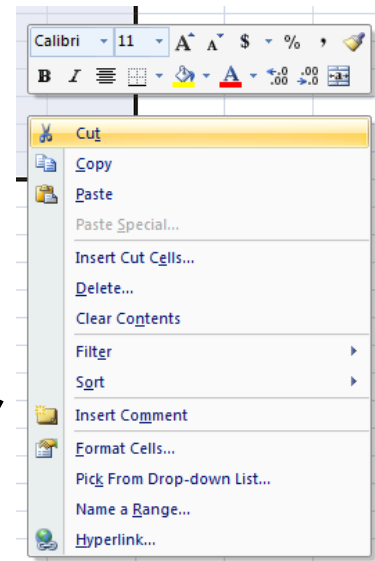
Click on the picture.

Press the Delete key on the keyboard.

Cut and Paste

Highlight the cell or cells to be moved.

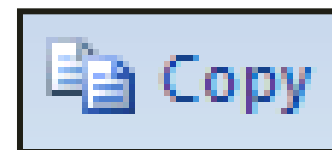
- Press **Ctrl-X** on the keyboard, or on the Ribbon, click on the **Home tab**. In the **Clipboard group**, click on the Cut button.



Click in the cell where the information is to be moved.

- Press **Ctrl-V** on the keyboard, or on the Ribbon click on the **Home tab**. In the **Clipboard group**, click on the Paste button.

Copy and Paste

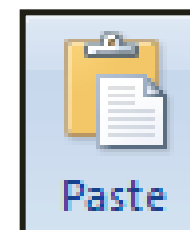


Highlight the cell or cells to be moved.

- Press **Ctrl-C** on the keyboard, or on the Ribbon, click on the **Home tab**. In the **Clipboard group**, click on the Copy button.

Click in the cell where the information is to be copied.

- Press **Ctrl-V** on the keyboard, or on the Ribbon, click on **the Home tab**. In the **Clipboard group**, click on the Paste button.



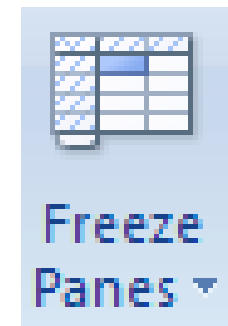
Freeze Pane

Freeze Pane

- Click in the cell just under and to the right of the information that shouldn't scroll off the screen.
- On the Ribbon, click on the **View tab**.
- In the **Windows group**, click on the Freeze Panes button and choose Freeze Panes.

Unfreeze Panes

- On the Ribbon, click on the **View tab**.
- In the **Windows group**, click on the Freeze Panes button and choose Unfreeze Panes.



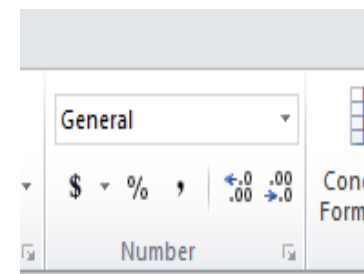
Number Formats

- **General** - Cells have no specific number format.
- **Number** - Use for general display of numbers.
- **Currency** - Use for general monetary values.
- **Accounting** - Lines up currency symbols and decimal places in a column.
- **Short Date** - Displays the date in number format.
- **Long Date** - Displays the date written out with the day of the week, month, date, and year
- **Time** - Displays the time in the selected format.
- **Percentage** - Multiplies the cell value by 100 and displays with a percent symbol.
- **Fraction** - Displays as a fraction with rounding to halves, quarters, eighths, sixteenths, or tenths.
- **Scientific** - Displays in scientific notation.
- **Text** - Sets to text format (label).

Formatting Numbers

Highlight the cells to be formatted.

- On the Ribbon, click on the **Home** tab.
- In the **Number group**, click on the **Number Format** button and choose the desired format.



\$ for Currency % for Percentage

- To add a comma separating periods (hundreds, thousands, millions, etc.)
- To increase the number of decimals.
- To decrease the number of decimals.



Formulas

Click in the desired cell.

- On the Ribbon, click on the **Formulas tab**.
- In the Function Library group, click on the down arrow to the right of the **Auto Sum** button.

Choose the appropriate function.

Sum - Add the list of numbers.

Average - Find the mean of the list of numbers.

Count Numbers - Count the number of cells with numbers.

Max - Find the maximum (largest) number in the list.

Min - Find the minimum (smallest) number in the list.

Writing a Formula

Click in the desired cell.

Type an equals sign (=).

Select the cell, then type the operation, and repeat as needed.

The operations could include:

Addition (+)

Subtraction (-)

Multiplication (*)

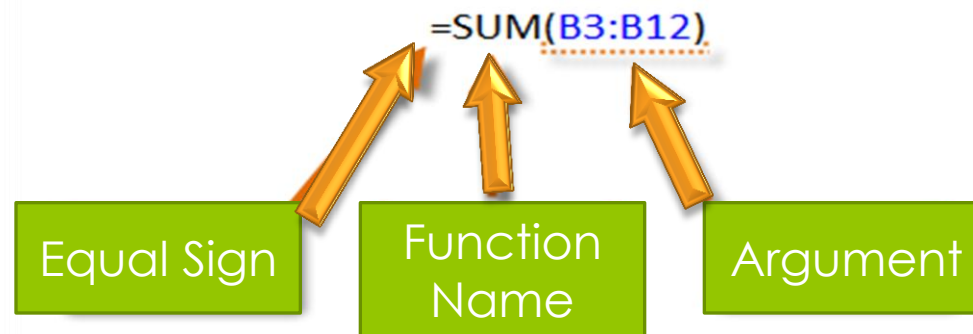
Division (/)

Exponentiation (^)

Press the Enter key to finish

Function and Formulas

A **function** is a **predefined formula** that performs calculations using specific values in a particular order. One of the key benefits of functions is that they can save you time since you do not have to write the formula yourself. Excel has hundreds of different functions to assist with your calculations.



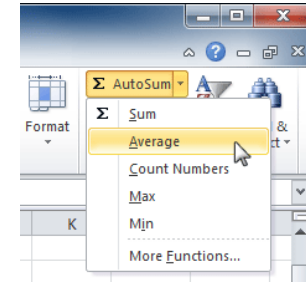
- **Colons** create a reference to a range of cells.

For example, **=AVG(E19:E23)** would calculate the **average** of the cell range E19 through E23.

- **Commas** separate individual values, cell references, and cell ranges in the parentheses. If there is more than one argument, you must separate each argument by a comma.

For example, **=COUNT(C6:C14,C19:C23,C28)** will **count** all the cells in the three arguments that are included in parentheses.

Using AutoSum



- The **AutoSum** command allows you to automatically return the results for a range of cells for common functions like SUM and AVG.
- Select the cell where the answer will appear.
- Click on the **Home** tab.
- In the **Editing** group, click on the **AutoSum** drop-down arrow and select the function you desire (Average, for example).

Worksheets

Naming a Worksheet

- Double click on the **tab** of the sheet.
- Enter a name for the sheet.
- Press the Enter key.

Copying a Worksheet

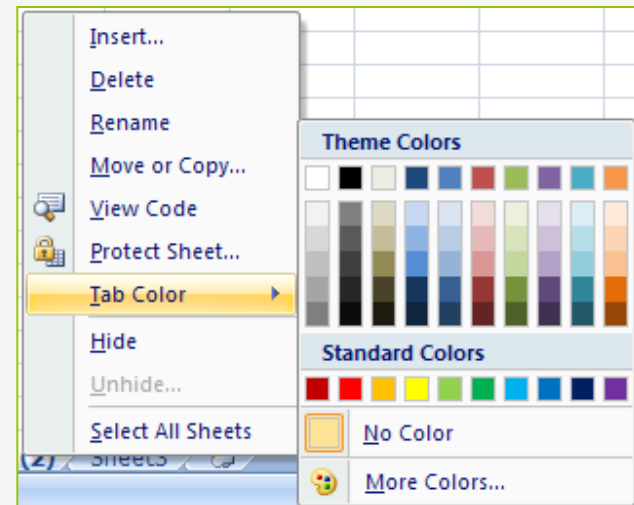
- Hold down the **Control key**.
- Click on the tab of the sheet and drag it to the right.
- Notice the black arrow indicating where the sheet will be placed.
- Let go of the mouse at the desired location.
- Let go of the Control key.

Coloring the Worksheet Tab

Right click on the **tab** of the sheet.

Place the cursor over Tab Color and click on the desired color.

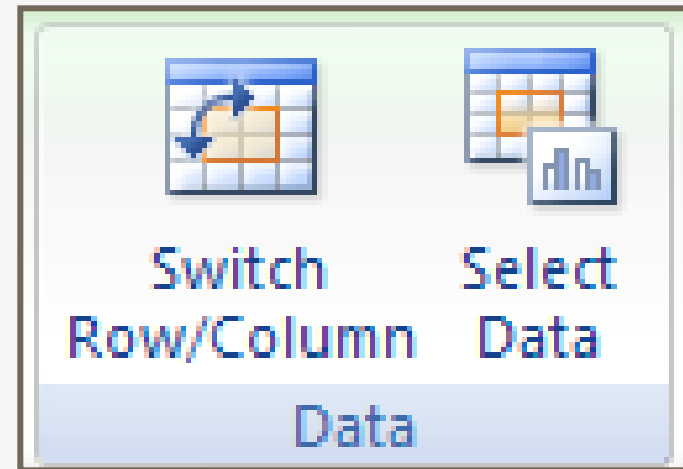
Note * When the tab is selected, the color shows at the bottom. When the tab is not selected, the entire tab shows the color.



Switching rows and columns

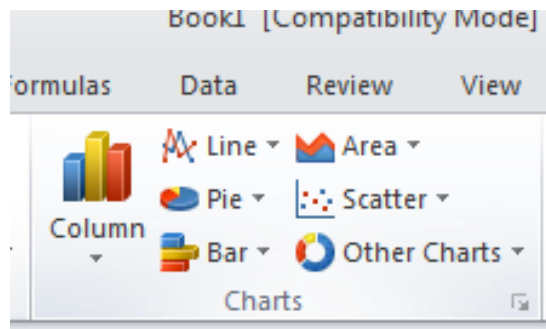
- Changes the way the Data is represented on the chart.
- Click on the chart to select it.
- Click on the Design tab of Chart Tools.

- In the Data group, click on the Switch Row/Column button.



Introduction: Charts

A chart is a tool you can use in Excel to communicate your data graphically. Charts allow your audience to more easily see the meaning behind the numbers in the spreadsheet, and make showing comparisons and trends a lot easier. In this lesson, you will learn how to insert and modify Excel charts and see how they can be an effective tool for communicating information.



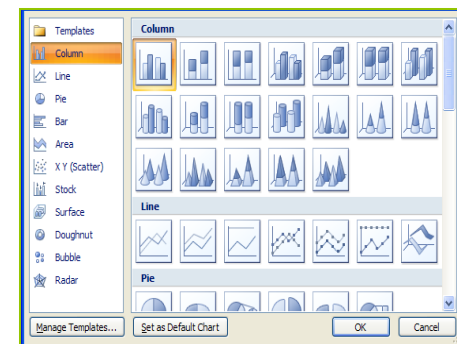
Types of Charts

Name	Description
Column	Use to compare totals over time and to show a trend.
Line	Use to show change over time, emphasizing the rate of change.
Pie	Use to show relationships and portions of the whole.
Bar	Use to compare totals over time and to show a trend.
Area	Use to show change over time, emphasizing the amount of change.
Scatter	Use to compare trends over uneven intervals of time.
Other	These include Stock, Surface, Doughnut, Bubble, and Radar.

Creating a Chart

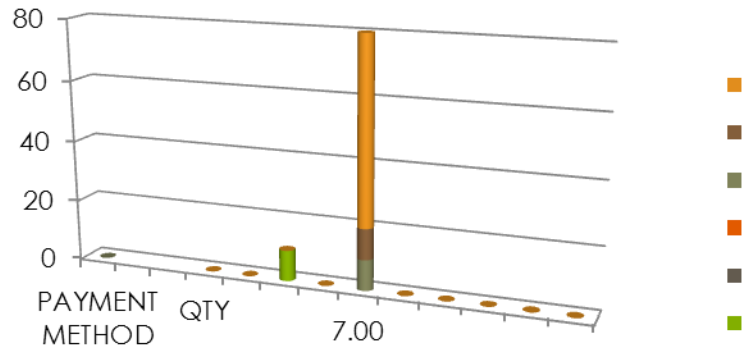


- Select the data for the chart.
- On the Ribbon, click on the **Insert** tab.
- In the **Charts group**, click on the desired type of chart and choose the desired chart format.

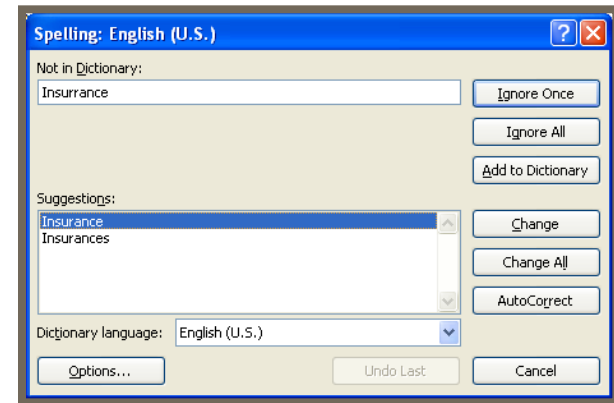


Challenge!

- Use worksheet data to create a chart
- Change the chart layout.
- Apply a chart style
- Move the chart to a separate worksheet



Spelling

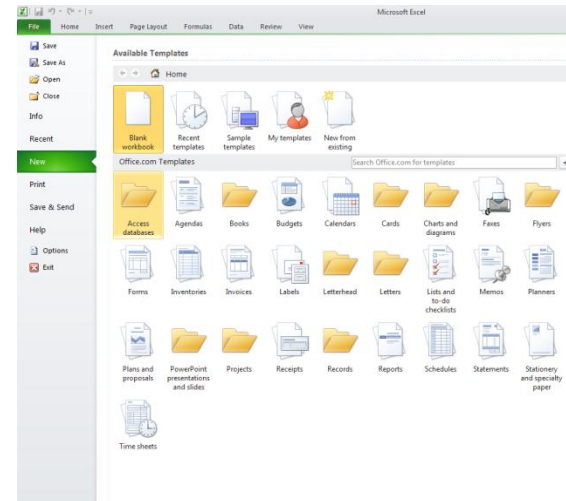


- On the Ribbon, click on the **Review tab**.
- In the **Proofing tab**, click on the **Spelling button**.
- Check each word that comes up.
- Click on Ignore or Ignore All button to make no changes.
- Click on the correct spelling and then click on the Change button.

Templates

Templates provide the basic format of a document.

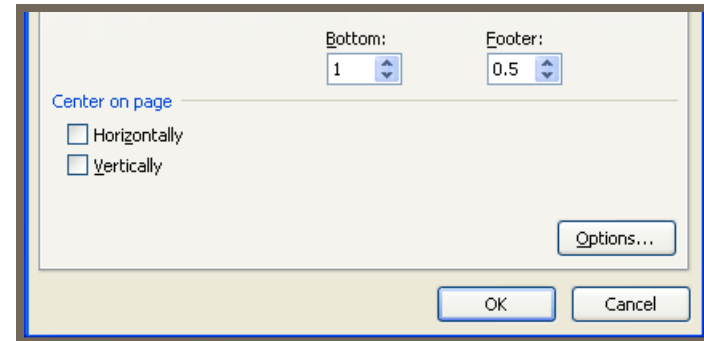
- Click on the **Microsoft Office Button** and then click on **New button**.
- The Templates section displays templates available on the computer. Choose the category of template desired.
- Click on the desired template. Click on the **Create button**.



Page Setup

Margins

- Click on the **Margins tab**.
- In the Center on page section, choose to center the information Horizontally and/or Vertically on the page.



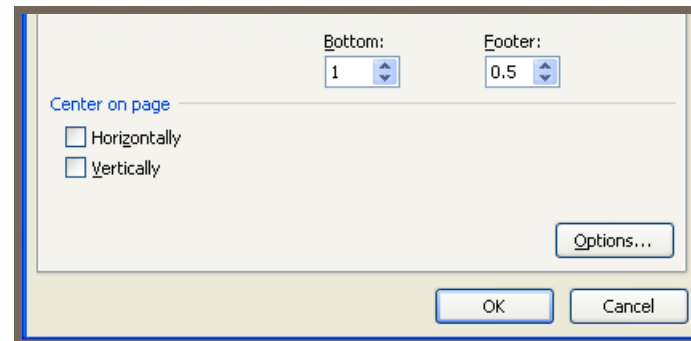
Header/Footer

- Click on the **Header/Footer tab**, and choose from the list by clicking on the down arrow.
- OR click on the Custom buttons and enter your own.

Page Setup

Sheet

- Click on the **Sheet tab**, and choose to print or not print the gridlines.
- Choose the order that the pages will be printed.
- Click on OK.

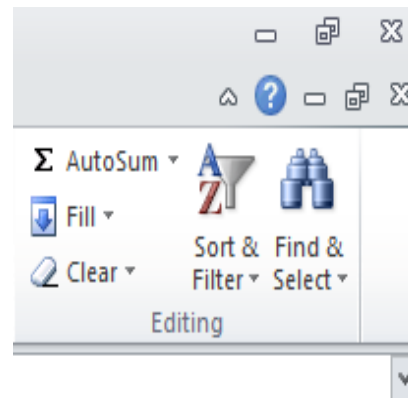


Sorting

Sorting is a common task that allows you to change or customize the order of your spreadsheet data. For example, you could organize an office birthday list by employee, birthdate, or department, making it easier to find what you're looking for. Custom sorting takes it a step further, giving you the ability to sort multiple levels (such as department first, then birthdate, to group birthdates by department), and more.

Sorting

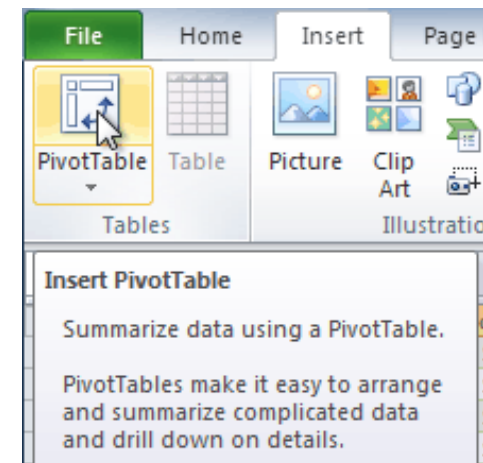
- Select a cell in the column you want to sort by.
- Select the **Data** tab, and locate the **Sort and Filter** group.
- Click the ascending command to **Sort A to Z**, or the descending command to **Sort Z to A**.



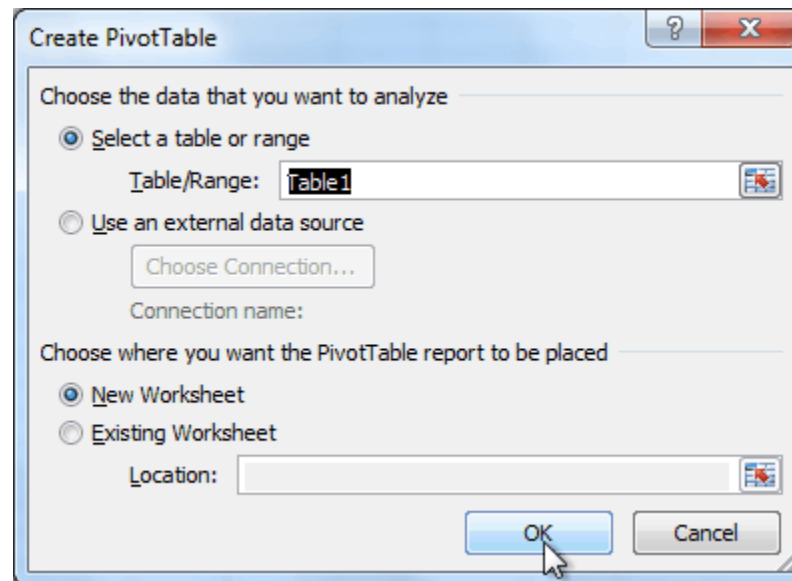
PivotTables

When you have a lot of data, it can sometimes be difficult to analyze all of it. A PivotTable **summarizes** the data, making it easier to manage. Best of all, you can quickly and easily change the PivotTable to see the data in a different way, making this an extremely powerful tool.

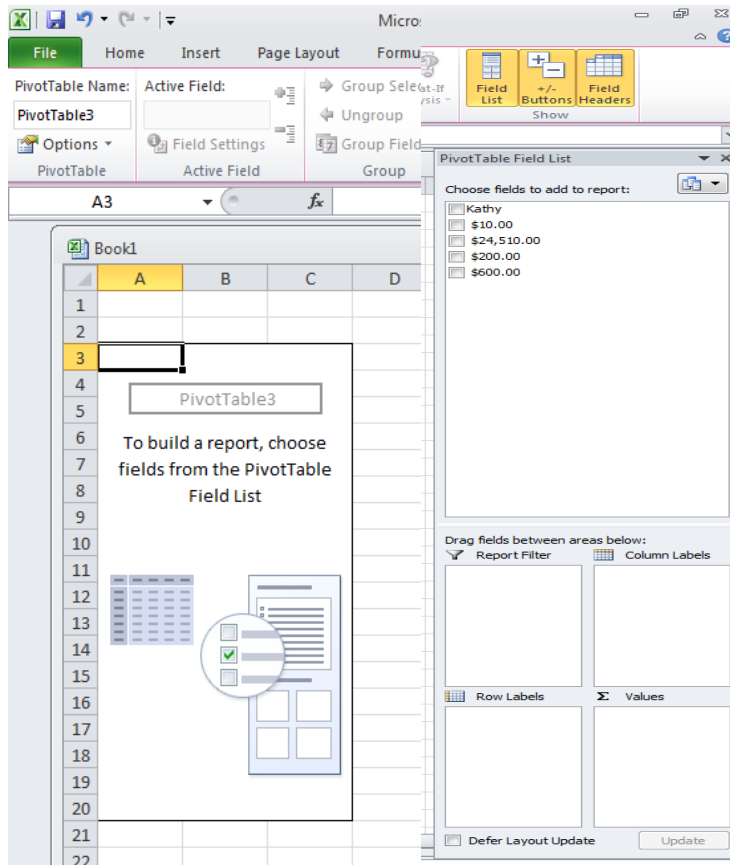
- Select the **table** or **cells** (including column headers) containing the data you want to use.
- From the **Insert** tab, click the **PivotTable** command.



- The **Create PivotTable** dialog box will appear. Make sure the settings are correct, and then click **OK**



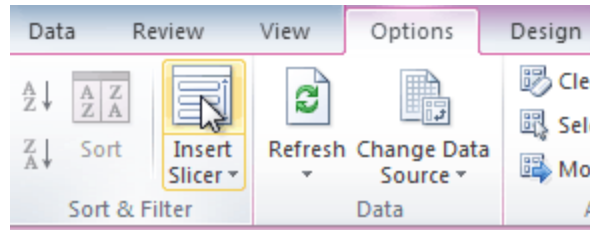
Excel 2010



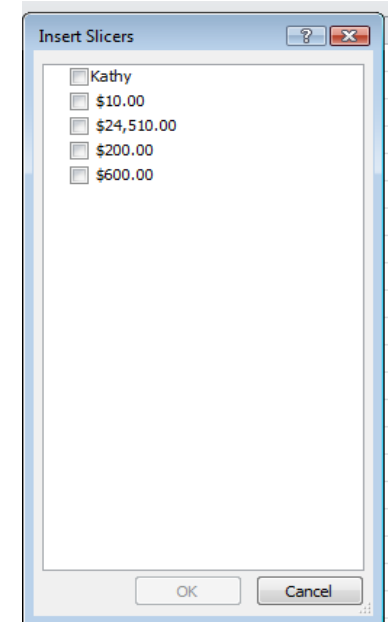
- In the **Field List**, place a checkmark next to each field you want to add.
- The selected fields will be added to one of the four **Areas** below the Field List.
- If a field is not in the desired area, you can drag it to a different one.

Slicer

Slicers were introduced in Excel 2010 to make filtering data **easier** and **more interactive**. They're basically just **report filters**, but they're more interactive and faster to use, as they let you quickly select items and **instantly see the result**. If you filter your PivotTables a lot, you might want to use slicers instead of report filters

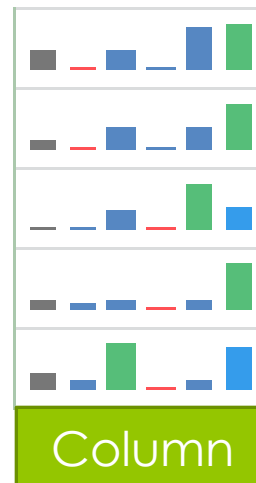
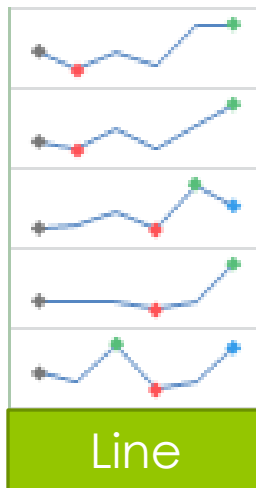


- Select any cell in your PivotTable. The **Options** tab will appear on the **Ribbon**.
- From the **Options** tab, click the **Insert Slicer** command. A dialog box will appear.
- Select the desired field
- The slicer will appear next to the PivotTable. Each item that is selected will be highlighted in **blue**.

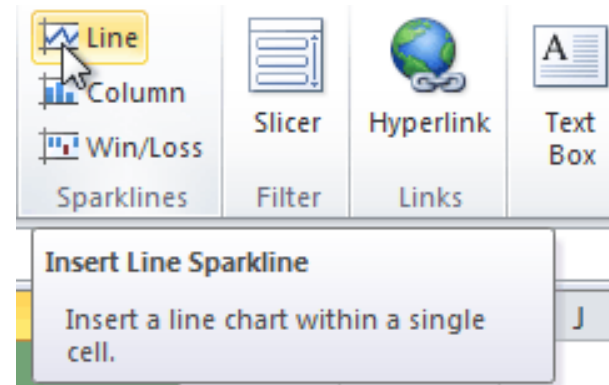


Sparklines

Sparklines were introduced in Excel 2010 to be a convenient alternative to charts. Unlike a traditional chart, a sparkline is placed **inside a cell**, allowing you to easily create a large number of sparklines (for example, one on each **row**).



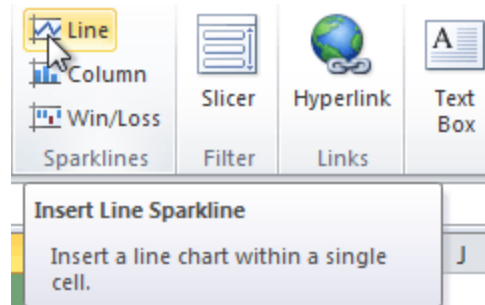
Sparklines



Generally, you will have one sparkline for each row, but you can create as many as you want in any location you want. Just like with **formulas** it's usually easiest to create a **single sparkline** and then use the **fill handle** to automatically create the sparklines for the remaining rows.

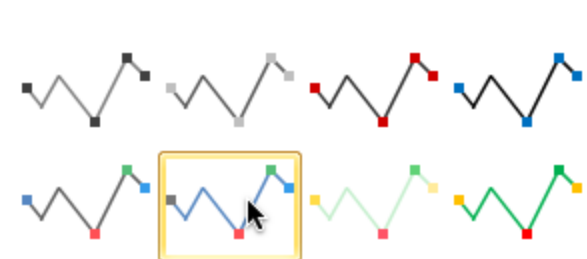
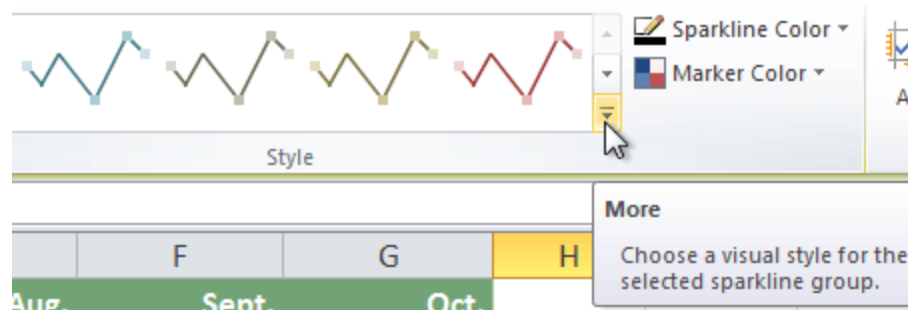
Sparklines

- Select the **cells** that you will need for the **first sparkline**.
- Click the **Insert** tab.
- In the **Sparklines** group, select **Line**. A dialog box will appear.
- Make sure the **insertion point** is next to **Location Range**.



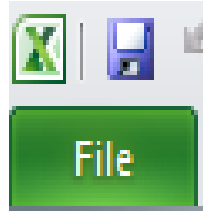
To Change Sparklines

- Select the **sparklines** that you want to change.
- Locate the **Style** group in the **Design** tab.
- Click the **More** drop-down arrow to show all of the available styles.
- Select the desired **style**.
- The sparklines will update to show the selected style.



Printing

Print Preview



- Click on the Microsoft **File Button** and choose **Print Print Preview**.
- Look carefully at the page to see what needs to be done.

Printing



- Make adjustments to the printout as noted above.
- Click on the **Print button**.

Saving a Workbook

Click on File Button and then click on Save As.

- Check the name of the document and make changes as needed.
- By default, Excel saves documents to the **My Documents folder**.
- Check to see where the document is being saved.
- If the spreadsheet is not to be saved in the current location, click on the down arrow of the Save In box and choose the desired location.
- Click on the **Save button**.

Saving the Worksheet to a Previous Version

- Click on the **File Button** and then Click on **Save As**.
- Give the spreadsheet a name.
- Click on the down arrow at the end of the Save as type: box.
- Choose the version of Excel to be used.
- Click on the Save button.

Converting Older Excel Documents

Microsoft Office 2010 can open documents created in all previous versions of Excel. Previous versions will be opened in compatibility mode. (You will know if a document has been opened in compatibility mode because it will say “compatibility mode” next to the name of the file on the title bar.)

Converting Older Excel Documents

Documents that have been opened in compatibility mode may not have the same features on the Ribbon as documents created in or converted to the Microsoft Office 2007 version, i.e. instead of SmartArt Graphics, it may be Design Gallery objects.

Converting Older Excel Documents

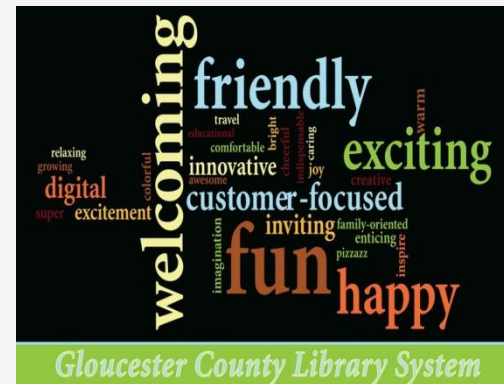
Documents created in previous versions of Microsoft Office can be converted to the Microsoft Office 2010 version. An advantage for converting documents to the newest version is that it will give you access to all the new features.

To convert an open document:

Click on the **Microsoft Office Button** and choose **Convert**.

Click on **OK**.

Thank You!
We hope this
Class was helpful!



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