



Microsoft Excel Tutorial

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1. GETTING STARTED

Microsoft Excel is one of the most popular spreadsheet applications that helps you manage data, create visually persuasive charts, and thought-provoking graphs. Excel is supported by both Mac and PC platforms. Microsoft Excel can also be used to balance a checkbook, create an expense report, build formulas, and edit them.

2. CREATING A NEW DOCUMENT

Opening Microsoft Excel On A PC

To begin Microsoft Excel, Go to **Start > All Programs > Microsoft Office > Microsoft Excel 2010** (Figure 1). When opened a new spreadsheet will pop up on the screen, if this does not happen click on the **File tab > New**. From here a dialog box with various different templates will appear on the screen that you can choose from. Once a template is chosen, click **Create**.

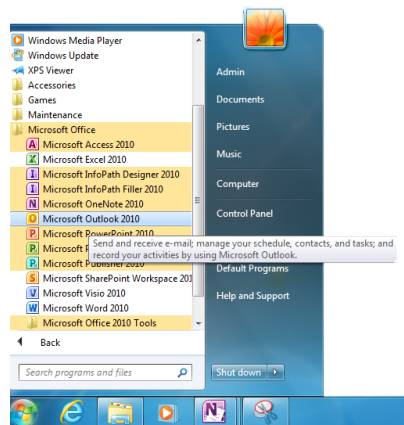


Figure 1. Navigation to Microsoft Excel on a PC.

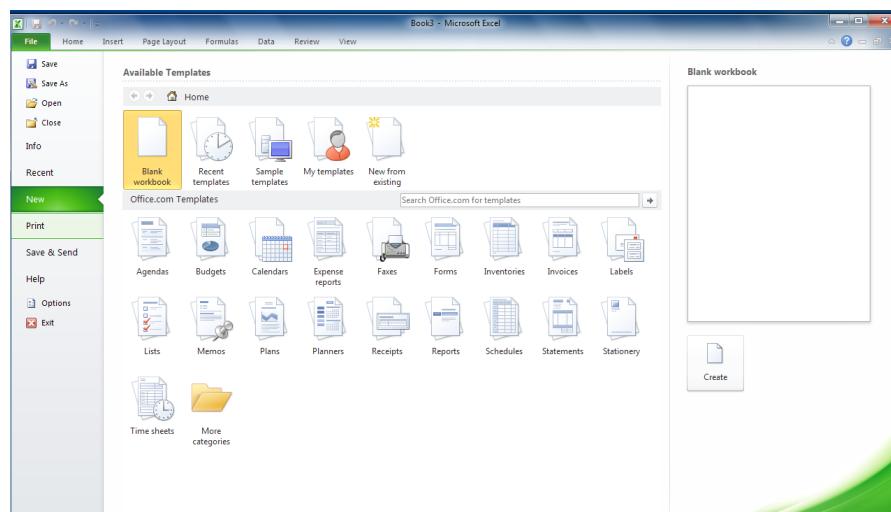



Figure 2. Opening a new workbook

3. SAVING YOUR DOCUMENT

Computers crash and documents are lost all the time, so it is best to save often.

Saving Initially

Before you begin you should save your document. To do this, click on the **File tab > Save** . Then Microsoft Excel will open a dialog box (Figure 3) where you can specify the new file's name, location of where you want it saved, and format of the document. Once you have specified a name, place, and format for your new file, press the Save button.

Note: Specifying your file format will allow you to open your document on a PC as well as a MAC. To do this you use the drop down menu next to the Format option. Also, when you are specifying a file extension (i.e. .doc) make sure you know what you need to use.

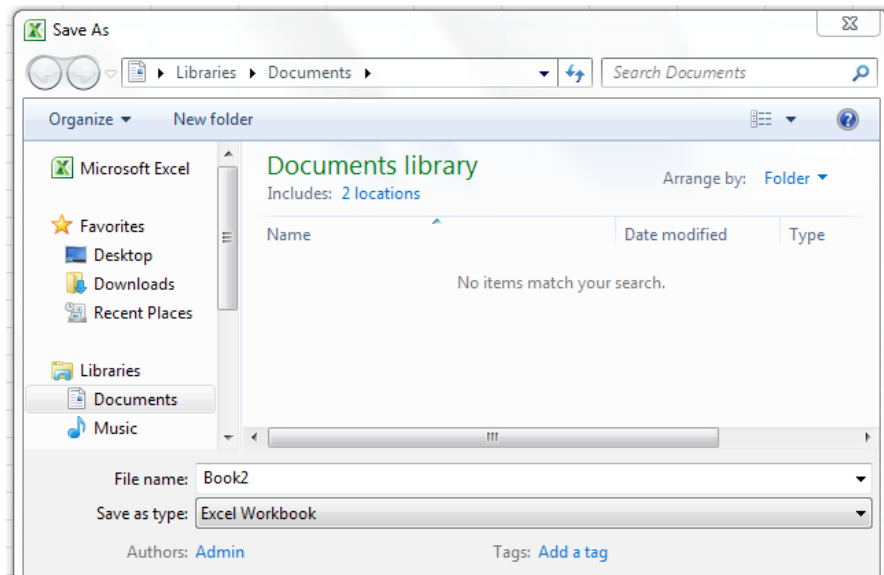


Figure 3. Saving dialog box.

Saving Later

After you have initially saved your blank document under a new name, you can begin your project. However, you will still want to periodically save your work as insurance against a computer freeze or a power outage. To save, just click on the floppy disk, or for a shortcut press CTRL + S.

4. TOOLBARS

In Microsoft Excel 2010 for a PC, the toolbars are automatically placed as tabs at the top of the screen. Within these tabs you will find all of your options to change text, data, page layout, and more. To be able access all of the certain toolbars you need to click on a certain tab that is located towards the top of the screen.

4. TOOLBARS CONT.

Three Commonly Used Tabs

The **Home** Tab: (Figure 4). This is one of the most common tabs used in Excel. You are able to format the text in your document, cut, copy, and paste information. Change the alignment of your data, insert, delete, and format cells. The **Home Tab** also allows you to change the number of your data (i.e. currency, time, date).

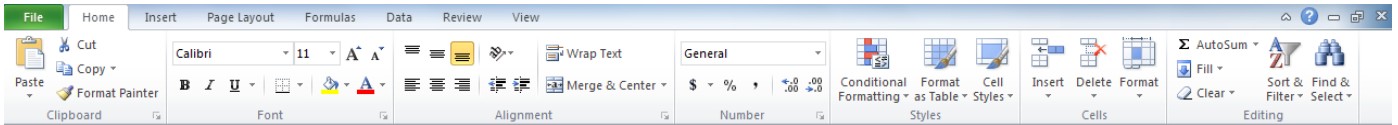


Figure 4. Home Tab.

The **Insert** Tab: (Figure 5). This tab is mainly used for inserting visuals and graphics into your document. There are various different things that can be inserted from this tab such as pictures, clip art, charts, links, headers and footers, and word art.

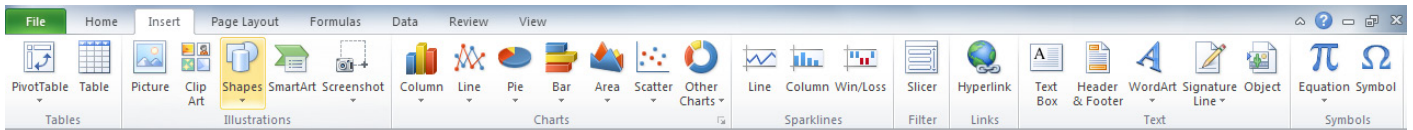


Figure 5. Insert Tab.

The **Page Layout** Tab: (Figure 6). Here you are able to add margins, themes to your document, change the orientation, page breaks, and titles. The scale fit of your document is also included as a feature within this tab, if needed.

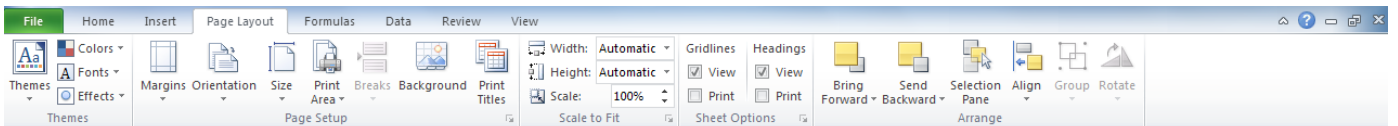


Figure 6. Page Layout Tab.

5. FORMATTING

Working With Cells

Cells are an important part of any project being used in **Microsoft Excel**. Cells hold all of the data that is being used to create the spreadsheet or workbook. To enter data into a cell you simply click once inside of the desired cell, a black border will appear around the cell (Figure 7). This border indicates that it is a selected cell. You may then begin typing in the data for that cell.

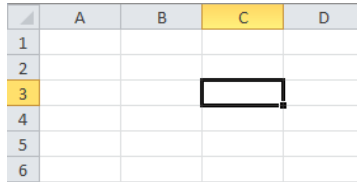


Figure 7. Entering Data.

Changing An Entry Within A Cell

You may change an entry within a cell two different ways:

1. Click the cell one time and begin typing. The new information will replace any information that was previously entered.
2. Double click the cell and a cursor will appear inside. This allows you to edit certain pieces of information within the cells instead of replacing all of the data.

Cut, Copy, and Paste

You can use the **Cut**, **Copy** and **Paste** features of Excel to change the data within your spreadsheet, to move data from other spreadsheets into new spreadsheets, and to save yourself the time of re-entering information in a spreadsheet. **Cut** will actually remove the selection from the original location and allow it to be placed somewhere else. **Copy** allows you to leave the original selection where it is and insert a copy elsewhere. **Paste** is used to insert data that has been cut or copied.

To **Cut** or **Copy**:

Highlight the data or text by selecting the cells that they are held within.
Go to the **Home Tab > Copy** (CTRL + C) or **Home Tab > Cut** (CTRL + X).
Click the location where the information should be placed.
Go to **Home Tab > Paste** (CTRL + V) to be able to paste your information.

Formatting Cells

There are various different options that can be changed to format the spreadsheets cells differently. When changing the format within cells you must select the cells that you wish to format.

To get to the **Format Cells** dialog box select the cells you wish to change then go to **Home Tab > Format > Format Cells**. A box will appear on the screen with six different tab options (Figure 8). Explanations of the basic options in the format dialog box are bulleted below.

5. FORMATTING CONT.

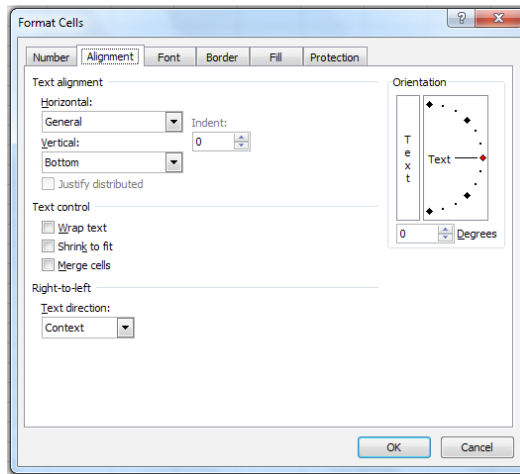


Figure 8. Formatting Cells

Number: Allows you to change the measurement in which your data is used. (If your data is concerned with money the number that you would use is currency)

Alignment: This allows you to change the horizontal and vertical alignment of your text within each cell. You can also change the orientation of the text within the cells and the control of the text within the cells as well.

Font: Gives the option to change the size, style, color, and effects.

Border: Gives the option to change the design of the border around or through the cells.

Formatting Rows and Columns

When formatting rows and columns you can change the height, choose for your information to autofit to the cells, hide information within a row or column, un-hide the information. To format a row or column go to **Home Tab > Row Height** (or **Column Height**), then choose which height you are going to use (Figure 9). The cell or cells that are going to be formatted need to be selected before doing this. When changing the row or column visibility (hidden, un-hidden) or autofit, you will go to the **Home Tab** and click **Format**. The drop down menu will show these options.

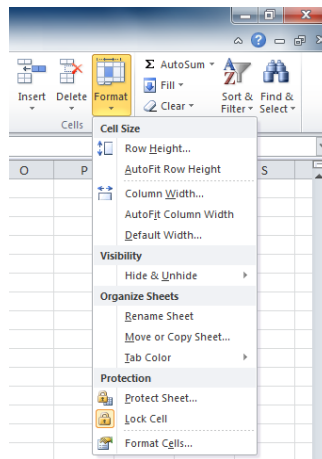


Figure 9. Formatting Rows and Columns Height

5. FORMATTING CONT.

Adding Rows and Columns

When adding a row or column you are inserting a blank row or column next to your already entered data. Before you can add a **Row** you are going to have to select the row that you wish for your new row to be placed. (Rows are on the left hand side of the spreadsheet) once the row is selected it is going to highlight the entire row that you chose. To insert the row you have to go to **Home Tab > Insert > Insert Sheet Rows** (Figure 10). The row will automatically be placed on the spreadsheet and any data that was selected in the original row will be moved down below the new row.

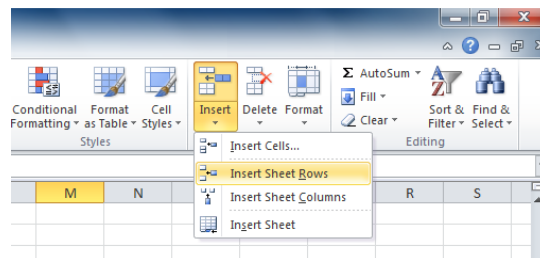


Figure 10. Inserting Rows

Before you can add a **Column** you are going to have to select a column on the spreadsheet that is located in the area that you want to enter the new column. (Columns are on the top part of the spreadsheet.) Once the column is selected it is going to highlight the entire row that you chose. To insert a column you have to go to **Home Tab > Insert > Insert Sheet Column** (Figure 11). The column will automatically be placed on the spreadsheet and any data to the right of the new column will be moved more to the right.

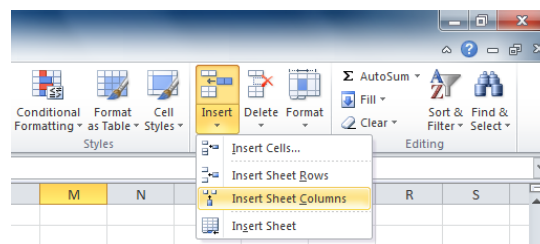


Figure 11. Inserting Columns

Working With Charts

Charts are an important part of being able to create a visual for spreadsheet data. In order to create a chart within Excel the data that is going to be used for it needs to be entered already into the spreadsheet document. Once the data is entered, the cells that are going to be used for the chart need to be highlighted so that the software knows what to include. Next, click on the **Insert Tab** that is located at the top of the screen. (Figure 12).

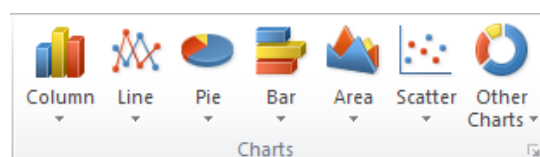


Figure 12. Charts Tab

5. FORMATTING CONT.

You may choose the chart that is desired by clicking the category of the chart you will use. Once the category is chosen the charts will appear as small graphics within a drop down menu. To choose a particular chart just click on its icon and it will be placed within the spreadsheet you are working on. To move the chart to a page of its own, select the border of the chart and **Right Click**. This will bring up a drop down menu, navigate to the option that says **Move Chart**. This will bring up a dialog box that says **Chart Location**. From here you will need to select the circle next to **As A New Sheet** and name the sheet that will hold your chart. The chart will pop up larger in a separate sheet (Figure 13), but in the same workbook as your entered data.

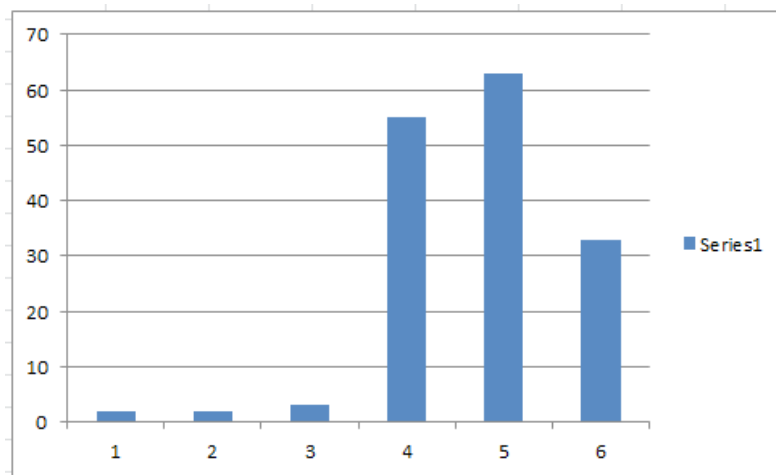


Figure 13. Chart in new sheet

Chart Design

There are various different features that you can change to make your chart more appealing. To be able to make these changes you will need to have the chart selected or be viewing the chart page that is within your workbook. Once you have done that the **Design Tab** will appear highlighted with various different options to format your graphic (Figure 14).

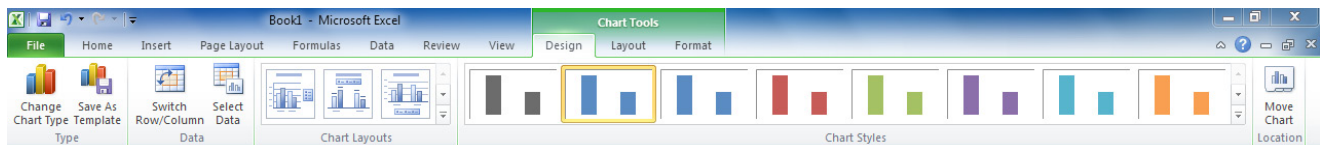


Figure 14. Design Tab for chart design.

5. FORMATTING CONT.

Chart Options

Titles: To add titles to a chart of graphic you have to click on the Insert Tab. Once you have done this, click on the Text Box Icon. This will insert a text box that you can type the title and place anywhere you wish on the chart.

Change Chart Type: You can change your chart easily by selecting this icon and navigating to a more desirable chart. This feature is very convenient for someone who chose the wrong chart and doesn't wish to reselect all their data and go through the process a second time.

Format Chart Area: This allows for changes to be made to the charts border, style, fill, shadows, and more. To get this option you will need to right click on the charts border and navigate to the **Format Chart Area** option. Once this is clicked a dialog box will appear.

Chart Style

Here you are able to change the color of the bars that are within your chart.

6. INSERTING SMART ART GRAPHICS

Pictures

To insert **Pictures:**

Go to the **Insert Tab > Picture**, a dialog box will appear and then you can select the desired picture from the location that it is stored (Figure 15). The picture will be inserted directly onto your document, where you can change the size of it as desired.

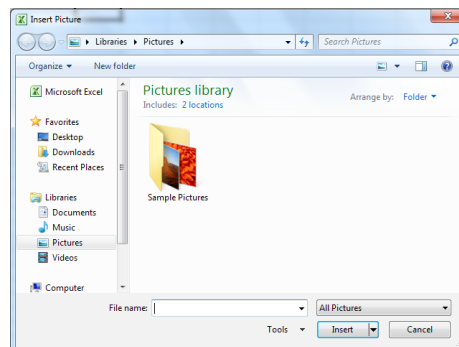


Figure 15. Inserting a picture

Inserting **Clipart:**

To insert **Clip Art** you will need to go to the **Insert Tab > Clip Art**. A navigation pane will appear on the left hand side of the screen where you can search for words that pertain to the picture you are looking for.

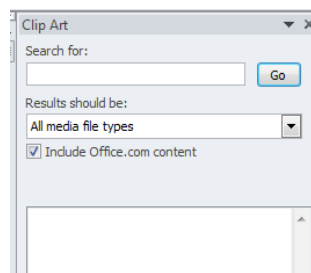


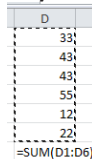
Figure 16. Clip Art

6. INSERTING SMART ART GRAPHICS CONT.

Creating Functions

When creating a function in Excel you must first have the data that you wish to perform the function with selected.

- Select the cell that you wish for the calculation to be entered in (i.e.: if I want to know the sum of B1:B5 I will highlight cell B6 for my sum to be entered into) (Figure 17).



D
33
43
43
55
12
22
=SUM(D1:D6)

Figure 17. Choosing calculation cell

- Once you have done this you will need to select the Formulas Tab located at the top of the screen.
- A list of Most Recently Used, Financial, Logical, Text, Date and Time, Math and Trig formulas will appear. To choose one of the formulas click the icon that holds the formula you are looking for.
- Once you have clicked your formula this will display a dialog box on your screen. (Figure 18)

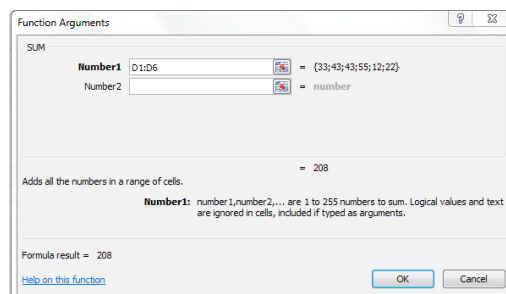


Figure 18. First calculation display

In this screen it lists the cells that are being calculated, the values within the cells, and the end result.

- To accept that calculation you can press OK and the result will show up in the selected cell.

7. PRINTING

It is important to always save your document before you print!

Printing

To print your document, go to **File Tab > Print**, select your desired settings, and then click **OK**. You can also do this by using the shortcut **CTRL + P**

To be able to change the orientation of your page for printing you can click on the **Portrait Orientation** button under the option under **Print** then click the change the layout(Figure 19).

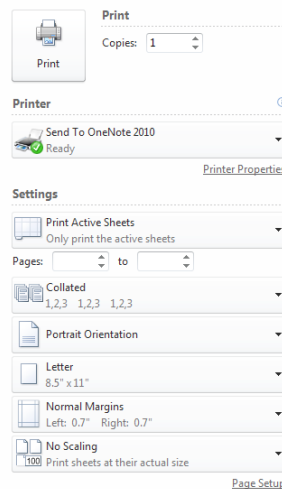


Figure 19. Page Setup button and printing

8. OTHER HELPFUL FUNCTIONS

Undo and Redo

In order to undo an action, you can click on the blue arrow icon that is pointing to the left at the top of the screen. To redo an action, you can click on the blue arrow icon pointing to the right. It is important to note that not all actions are undoable, thus it is important to save before you make any major changes in your document so you can revert back to your saved document.



Figure 20. Undo/Redo buttons

Quitting

Before you quit, it's a good idea to save your document one final time. You will need to choose the **Office Icon** and choose **Exit Excel**. This is better than just closing the window, as it insures your document quits correctly.