EXCEL FOR BEGINNERS

Topics to be covered:

- Why would I ever want to use Excel?
- What is a spreadsheet and how does it work?
- How to enter data into a spreadsheet and sort it
- How to print a spreadsheet
- Mathematical functions
- Using multiple worksheets

1. Why would I ever want to use Excel?

Excel is a computer program meant to replace paper ledgers. It is an extremely powerful tool for entering, tracking, sorting and calculating data. Excel is great for making timesheets and budgets, for tracking hours or supplies, and for sorting long lists.

2. What is a spreadsheet and how does it work?

a) Each spreadsheet document is called a *workbook*. Each workbook is made up of *sheets*. Sheets are not the same as pages. Each sheet can be multiple pages. Sheets are more like subsections of the same document. They allow you to organize many different sections of data under one title and within one document.

b) Each sheet is made up of columns, rows and cells. Cells are the individual spaces. All data is entered in cells. Columns are identified with letters and rows are identified with numbers. A cell is identified by the letter of the column it is in and the number of the row it is in. For example, a cell that sits where Column D and Row 8 meet, is referred to as "D8". To enter data into a cell, or to format it, simply click on it. A black box will surround the active cell. Any formatting you do will affect the cell or cells within the black box.

c) You can delete a column, row or cell by selecting the column, row or cell and right-clicking the mouse. Select "Delete" from the menu that appears. If you select a column, row or cell and hit the "Delete" key on the keyboard, the data you entered will be erased, but the column, row or cell will remain.

3. Using the Excel 2010 Ribbon

Instead of the dropdown menus from older versions of Excel, there is now a bar across the top that is called "The Ribbon". The Ribbon is divided into several tabs: Home, Insert, Page Layout, Formulas, Data, Review, View. The tabs describe the toolbar options houses on that portion of the Ribbon. Here are the commonly used tools for each tab:
When you hold your mouse over a toolbar button without clicking, a little window will pop up explaining what that button does. Use this method to familiarize yourself with what all the buttons do.

Home – formatting, adding and removing columns and rows, sorting, auto-sum
Insert – insert charts, pivot tables, and symbols
Page Layout – printing gridlines, change to landscape, margins
Formulas – insert formulae into cells
Data – sorting and filtering
Review – spell-check
View – page break preview, freeze panes

3. How to enter data into a sheet:

a) Click on the cell you wish to enter data into. The cell will become active, with the black box around it. Type the data and then hit "Enter". If you wish to edit data once it's in a cell, click on the cell. The data will appear in the long white box at the top of the spreadsheet. You can edit the data in that box and any changes will appear in the cell once you hit "Enter".

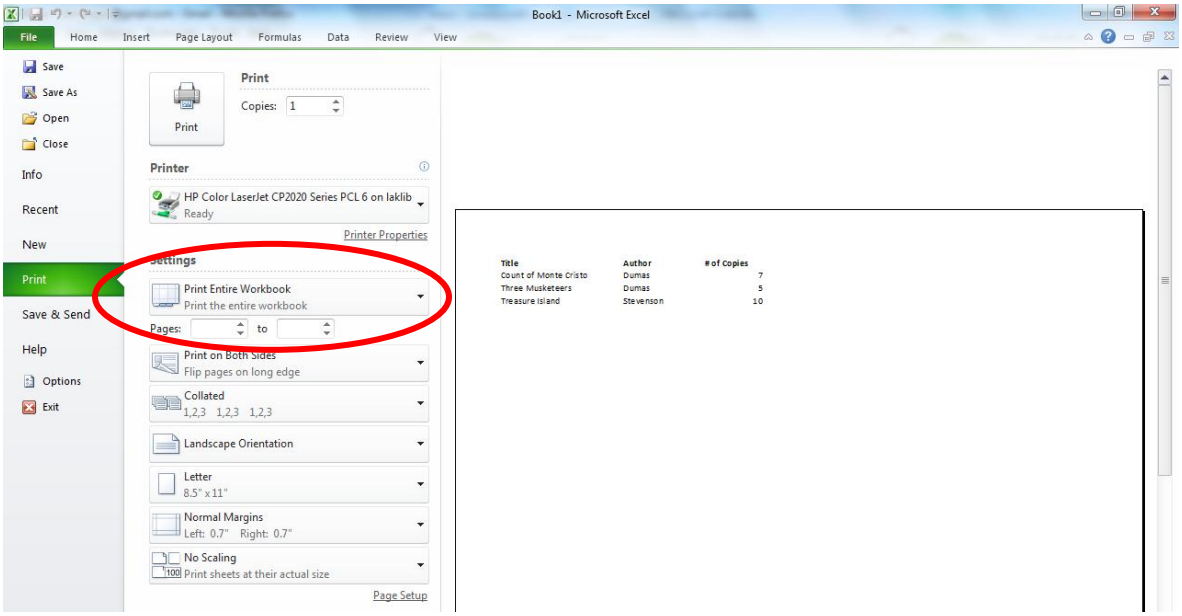
b) How a cell is formatted will determine how it is displayed on the sheet. Each cell can be formatted to accept a specific type of data. For example, a cell can be formatted to display the data entered into as a dollar value, or a percentage, or date. Cells can be formatted to accept text instead of numbers. Once a cell is formatted to display a certain way, it will always do that regardless of what data you enter.

i) To change formatting, click on the cell you wish to format. Click on the "Home" tab, which contains options for formatting the font, font size and color, the alignment of the text in the cell, as well as for formatting a number. Cilck on the drop-down menu of the Number section of the tab, and chose from the options. You can also quick format a cell to contain US currency by clicking on the button with the "$" on it.

ii) Excel is not smart enough to resize columns and rows to fit the data entered. You must resize the columns and rows manually to ensure the data is seen. (If you see a row of # signs instead of your data (######) simply widen the column. If the #s are still there, check to see how the cell is formatted. Make sure the formatting matches the type of date you are entering.)

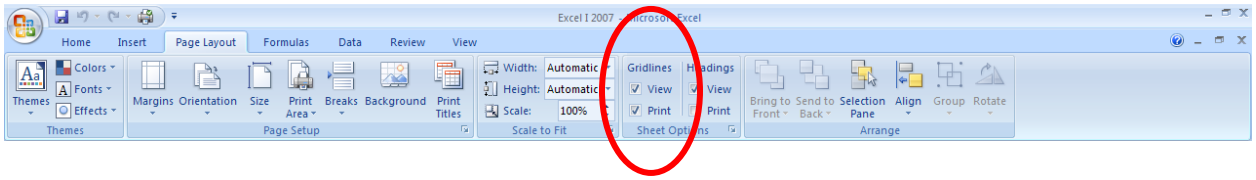
4. Printing

a) Click on File – Print to get the Print screen. Under the area for "Settings" select the first drop down menu to choose to print either the entire workbook, the current sheet, or the selection – meaning, a highlighted area.



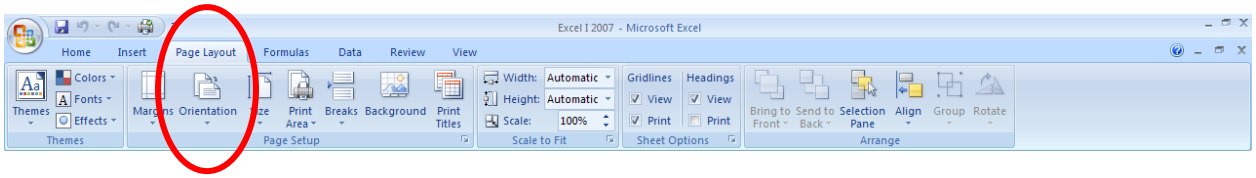
b) Excel does not default to printing out the gridlines of a spreadsheet. To ensure the grid will print:

i) Chose the Page Layout tab on the Ribbon
ii) Look at the "Sheet Options" area
iii) Check the box that says "Print" under "Gridlines"



c) To make sure everything will fit on the page:

i) Chose the Page Layout tab on the Ribbon
ii) Look at the "Page Setup" area
iii) Click the option for "Orientation" and choose "Landscape" from the dropdown menu

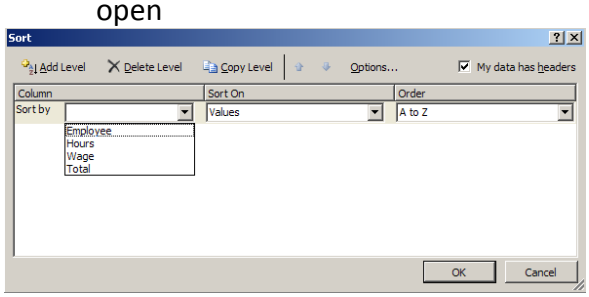


5. Sorting Data

One of the handiest features of Excel is that it will sort all of your data with a few clicks of a button. You can even sort several columns at a time.

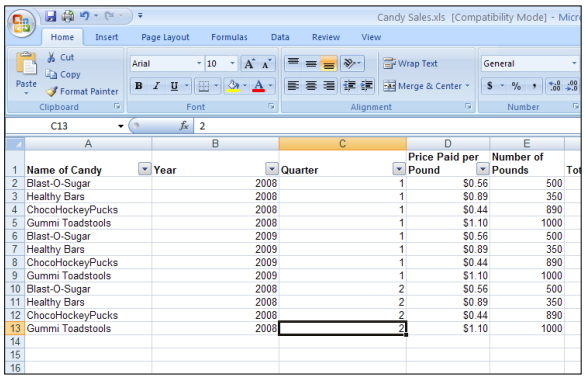
a) To sort one column:
- i) Chose the Home tab on the Ribbon
- ii) Look at the "Editing" area at the far left and click on "Sort & Filter"
- iii) Chose A-Z or Z-A from the drop-down list

b) To sort several columns:
- i) Chose the Home tab on the Ribbon
- ii) Look at the "Editing" area at the far left and click on "Sort & Filter"
- iii) Chose Custom Sort from the drop down menu; the custom sort dialog box will open

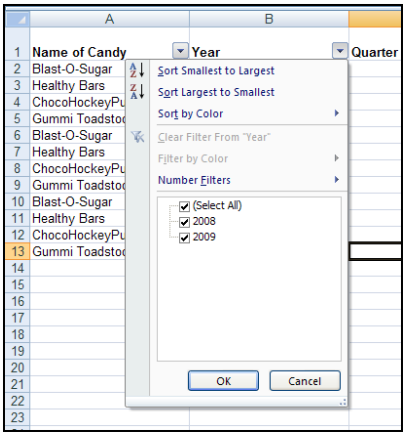


Select the column you wish to sort by. To sort the information by another column second, click "Add Level" and then select a column from the dropdown menu.

c) To filter data in columns:
- i) Chose the Home tab on the Ribbon
- ii) Highlight the columns you wish to filter
- iii) Click on "Sort and Filter"



Gray arrows will appear in the first cell in each column. Click on the arrow to see the options for filtering the column. After a filter is applies, only the data that matches the filtering criteria will be shown; everything else will be hidden.



In this example, check the box for 2008 to show only results on the spreadsheet from 2008.

You can click on the dropdown menu for "Number Filters" to choose filters such as "equal to" or "greater than".

6. Using Simple Formulas

Throw out that calculator! Toss out that long-division scrap paper! Excel is here to save the day! Excel can quickly add, subtract, multiply, divide, average, and… well, a whole boatload of other things that I'm not good enough at math to be able to tell you what they are. For the four simple main functions (adding, subtracting, multiplying and dividing) there are two ways to apply formulas (3 for addition):

a) Click on the cell where you want the solution to end up
b) Hit the "=" key
c) Enter the cell # for the first part of the equation
d) Hit the key for whatever function you want to perform (e.g. "+" or "*")
e) Repeat steps C and D for all the values you wish to include
f) Hit the "Enter" key
g) The solution appears in the active cell

or

a) Click on the cell where you want the solution to end up
b) Hit the "=" key
c) Click on the cell representing the first number to be added
d) Hit the key for whatever function you want to perform (e.g. "+" or "*")
e) Repeat steps C and D for all the values you wish to include
f) Hit the "Enter" key
g) The solution appears in the active cell

If you're simply adding numbers there is yet an easier way:
a) Click on the cell where you want the solution to end up
b) Click on the "Home" tab and select the "Auto-Sum" button (shaped like an epsilon) at the far right
c) A blue box shows up around the column above the box. Adjust the box to surround the values you wish to add.
d) Hit the "Enter" key
e) The solution appears in the active cell.

7. Using Mathematical Functions

Excel is a very powerful program that can perform all kinds of mathematical formulas with the click of a button or two. When using Excel for formulas, remember that you're asking Excel to factor the value the cell contains, not the number. There are a number of different functions to choose from to make formulas. The following example will be for Average.

a) Click in the cell where you'd like the result of the function to appear.
b) Click on the "Formulas" tab; the row of brightly colored book-shaped icons are drop-down menus for the various categories of functions.
c) The Average function is found under "Auto-Sum", "More Functions – Statistical", and most likely "Recently Used".
d) In the "number 1" box, the range of cells to be averaged is displayed. To select a different range than the one shown, click on the range button to the right of the box. Then highlight the range of cells you wish to average.
e) Click "OK"

Note: Once you've learned the syntax for a function, you do not need to use the Function dialog box. To calculate an average for the range of cells between C1 and C10, for example, you can type =AVERAGE(C1:C10). To calculate the sum of the cells between A1 and A10 you can type =SUM(A1:A10).

If you have questions or comments please don't hesitate to contact me!

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