How to Use Excel Spreadsheets for Middle School Students

Adapted from the following website:
http://www.wcu.edu/ccenter_inf/CatOnline/MSEX/index.html

Why use them?
- A tool to collect and organize data collections.
- Easy to produce graphs and charts of collected data.
- Can perform repeated calculations easily and quickly.

Starting Excel from the Desktop:
- In WindowsXX:
- From the <u>START</u> button, select Programs and locate Microsoft Excel in the program list.

Workbooks, Worksheets and Tabs
- To start a new file, click on <u>FILE</u> and choose <u>NEW</u>.
- Each Excel file that you create is called a Workbook. The Workbook is made up of worksheets, which are successive pages of the spreadsheet workbook. These worksheets can be for data (worksheets) or charts.
- Tabs at the bottom of the Excel window page indicate the worksheets. These tabs are labeled Sheet 1, Sheet 2, etc. The sheets can be accessed by clicking on the sheet tab, or by using the arrows to scroll through the sheets one at a time.
- You can rename the sheets on the sheet tabs by double-clicking on the sheet tab, typing in the new name, and clicking OK.

Columns, Rows and Cells
- An Excel worksheet is a grid of columns and rows; the intersection of each column and row forms a Cell.
- Columns are vertical (up and down).
- Rows are horizontal (across from left to right).

Finding your location
- Look at the spreadsheet.
- Notice on the left margin there are a string of sequential numbers, and across the top of the page, are letters of the alphabet in sequence.
- When you select a cell, it is like using a city map to find where you want to go, in other words, you find the where the column and row intersect.

Selecting Cells
- Anywhere you move your pointer and click will select and highlight that cell.
- You may select a range of cells, Click on the first cell, and drag the cursor down to the ending cell that you want included.
- To select another range at the same time, press the CTRL and move the cursor to that cell and drag as before.

Entering Text and Numbers
You can enter four basic types of data into Excel worksheets: text, numbers, calculations and dates.

There are three basic methods for entering data into Excel worksheets.
- Type the data and press ENTER or TAB.
- Type the data and press an ARROW KEY.
- Type the data and CLICK the check mark in the formula bar.

Formulas and Entering Formulas
- In Excel, you use formulas to add, subtract, multiply and divide numbers.
- You may also use functions to total cells and calculate averages.
- Formulas use cell references to calculate the values in other cells of the spreadsheet. Once you enter your formula in a cell, you may make changes in the values in the referenced cells to make Excel automatically recalculate the formula's value based on the cell changes.
- In using formulas in spreadsheets, it is important that you know the signs for representing the various mathematical operations:
  - Add (+)
  - Subtract (-)
  - Multiply (*)
  - Divide (/)
  - Exponent (^)

To enter a formula in Excel:
- Point and click the cell in which you want to enter the formula.
- Type an equal sign (=) to indicate to Excel that you want to enter a formula.
- Enter the first cell reference for your formula.
- Enter the proper mathematical operator (+, -, *, /, ^)
- Enter the second cell reference for your formula.
- Continue repeating these steps until you have entered your entire formula.
- Once you have finished entering your formula, press the Enter key.
- **Note:** When entering formulas, you need to be aware that Excel will follow the order of operations (Please Excuse My Dear Aunt Sally)

Column Width and Row Height
- Changing the Column Width:

At the top of your document, you will see columns labeled A, B, C, D, etc. with black lines separating the columns.

Place the cursor on the black line until it becomes a straight line with arrows going in both directions to the side. Drag the double arrow tool to the new column width position and release the mouse.

- Changing the Column Height:

On the side of your worksheet, you will see rows of numbers with a black line separating each number.

Click on that line and move it to your desired size. Then, release the mouse button.

Defining the Print Area and Using Print Preview
- When printing, you want to <u>print</u> only the cells you have used in your spreadsheet. Select the cells you wish to print by dragging from the bottom right cell to the top left cell of the area you wish to print.
- To <u>preview</u> what you wish to print, you must have defined your print area by following the steps above. Go to your <u>FILE MENU</u> and select <u>PRINT PREVIEW</u>. This will allow you to view the selected document you wish to print.