INTRODUCTION TO MICROSOFT EXCEL
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MICROSOFT EXCEL is a SPREADSHEET program used for organizing and managing data. This data can be anything, but EXCEL is most useful when managing quantitative, or numerical, data such as for accounting, statistics, or record keeping.

THE SPREADSHEET

A SPREADSHEET is a sheet full of rows and columns that make up a great many boxes or CELLS. COLUMNS are labeled along the top of the SPREADSHEET A to Z and then AA to ZZ and so on. ROWS are labeled along the left side of the SPREADSHEET numerically. These Labels are not part of your end product and will not be seen if you were to print, they only exist to designate CELLS.

FOR EXAMPLE

The top left CELL is A-1, five spaces below is A-6 and five spaces to the right of A-6 is F-6.

In EXCEL the SPREADSHEET stretches out almost indefinitely; you’ll never run out of CELLS.

To enter data, simply click on a CELL and begin typing. You can put anything in the cell, numbers, letters, or punctuation. When you click on a cell you effectively highlight it, so if you want to edit a CELL and not completely retype it, you’ll need to take an extra step.

To select multiple CELLS, click on a CELL and drag your mouse until the desired set are highlighted. You can also click a CELL once and tap the arrow keys while holding shift for the same result. Selecting multiple cells is handy when using SORT, SUM or formatting.

To select all CELLS, click the box in the upper left corner of the SPREADSHEET between A and 1 in your columns and rows. It will look like a triangle pointing to the bottom right corner.

To stretch/shrink a COLUMN or ROW hover your mouse over the label (ex. A, B, C, 1, 2, 3) where a faint blue line separates the adjacent label. Your mouse should change from an arrow or a plus sign into a bold cross with two arrows pointing in opposite directions. Drag and Drop the line in order to adjust the size.
THE FORMULA BAR

Just above the SPREADSHEET you’ll find a long text box that has “fx” to the left of it. This is called the FORMULA BAR. When you select a CELL the data you input is fed through the FORMULA BAR, so if you wanted to edit a CELL with data already in it, if you click the CELL you’ll find that data in the FORMULA BAR and can edit it just like it was a typical text box, like the address bar in Internet Explorer.

The FORMULA BAR is set up this way because it has the unique capability of executing equations, for instance you can use the FORMULA BAR to have CELL F-1 display the sum of CELLS A-1 through A-10. This is something we’ll cover a little later.

FORMATING

If you look at the top of the EXCEL screen you’ll find a toolbox similar to what you would see in Microsoft Word. Just like in Microsoft Word your toolbox is broken into several tabs.

Just like Microsoft Word, HOME is where you’ll find the most frequently used tools. CLIPBOARD and FONT are just as they appeared in Microsoft Word. Within FONT you will find two buttons in the lower right corner with a bar of color underneath. These are used to add color to your SPREADSHEET. Use the button with the paint can icon, FILL COLOR, to color the background of a CELL. Use the icon with the fancy A, FONT COLOR, to color the text of a CELL.

ALIGNMENT will affect the characters in the cells, not the cells themselves. Everything is as it was in the PARAGRAPH field of Microsoft Word, but you’ll notice new icons on the far left of the ALIGNMENT field. The top button is WRAP TEXT.

When you type in a cell and go beyond the boundaries of the cell, the text will be cut off visually (it will still be there, you just won’t see it). You can either stretch the cell manually, or click WRAP TEXT to automatically adjust the cell size.

Below WRAP TEXT is MERGE AND CENTER which will allow you to merge two or more cells into one, and will also center any text within.
SORTING

On the right side of the HOME tab you’ll find EDIT. EDIT contains two essential functions, the first being SORT. SORT allows you to rearrange the values in a COLUMN to organize your ROWS. You cannot SORT values by ROWS to organize your columns.

FOR EXAMPLE
Say you were recording the prices of your book collection in Excel. COLUMN A would contain the title, B would contain the author, and C would contain the price. You can use SORT to arrange the collection alphabetically by author or title or from most expensive to least. Values will stay together in the same row, so everything will be sorted together.

To SORT first highlight the column you wish to sort. For best results only use one column. Click on SORT and select either A->Z (Smallest to Largest) or Z->A (Largest to Smallest). Sometimes you will get a prompt asking if you wish to expand the selection to include nearby values. This is asking you if you missed a value in the column you highlighted, if you did miss something select “expand the selection” if you did not miss anything select “continue.”

SUM

Perhaps the most important part of EXCEL is SUM. SUM the top left button in EDIT and allows you to calculate values based on your CELLS. To calculate in EXCEL simply select a cell for the resulting value to be placed and then click the drop down menu in SUM and select what you wish to find. Then highlight the relevant CELLS, i.e. the ones with values (not labels) in the following prompt (the outline should be a blue broken line). You do not need to select only one COLUMN or ROW. CELLS do not need to be adjacent either, to select a remote group of values hold CTRL to add a CELL to the highlighted group. When you are finished hit the enter key.

FOR EXAMPLE
Picking up with our book collection, we can use EXCEL to calculate the total value of our collection. All we need to do is click a CELL (like right beneath all of the prices we entered) and then click on the SUM icon and select SUM. We then highlight the values in COLUMN C (prices) and hit enter. We can use the same method to find the average price of a book in our collection or the range of prices.
FORMAT CELLS

Sometimes a CELL will not present values the way you intend. For instance, it may add or delete decimal places on you. It is good to know about FORMAT CELLS... in order to be able to fix problems like these directly. If you right click a CELL you should see an option labeled FORMAT CELLS... this option allows you to see the format settings of a specific CELL. Many tabs in this menu should be familiar to you as they are in the HOME tab, but NUMBER is new. NUMBER controls how the CELL simplifies values within it, be it by including or eliminating decimals or by rounding up.

PRINTING

Printing is just as it was in Microsoft Word with one crucial exemption: Microsoft Word deals with finite pages of 8.5x11 inches, but SPREADSHEETS go on forever. When you print in EXCEL the program breaks the SPREADSHEET into sections and prints pages based off of this, therefore, you may not have all the same information on the page you desire. Always click PRINT PREVIEW to show how a page will print. Once a PRINT PREVIEW is generated, EXCEL will indicate the size of a page with a black broken line on the SPREADSHEET, allowing you to adjust COLUMN and ROW sizes to accommodate.