Excel Basics

Quick Access: Shortcuts to commonly used functions. You can edit the list to include the functions you use most.

Ribbon: This bar holds all the available tools used for working in Excel. It is broken into tabs organized with similar tools in each tab.

Active Cell: The cell you are currently working with. Highlighted by a green border.

Formula Bar: Displays the text of the active cell as it exists and not as viewed. You can type here to enter text into a cell.

Sheets: Your workbook can have multiple sheets. This can help you keep related information organized but in one common location. Clicking on a different sheet name will select a different sheet.

Worksheet: The active sheet you are working with. Organized into columns (A, B, C...) and rows (1, 2, 3...).

View Controls: Zoom controls to change sizing of the program. You also have additional ways to view the worksheet such as Normal, Page Layout, and Page Break Preview.
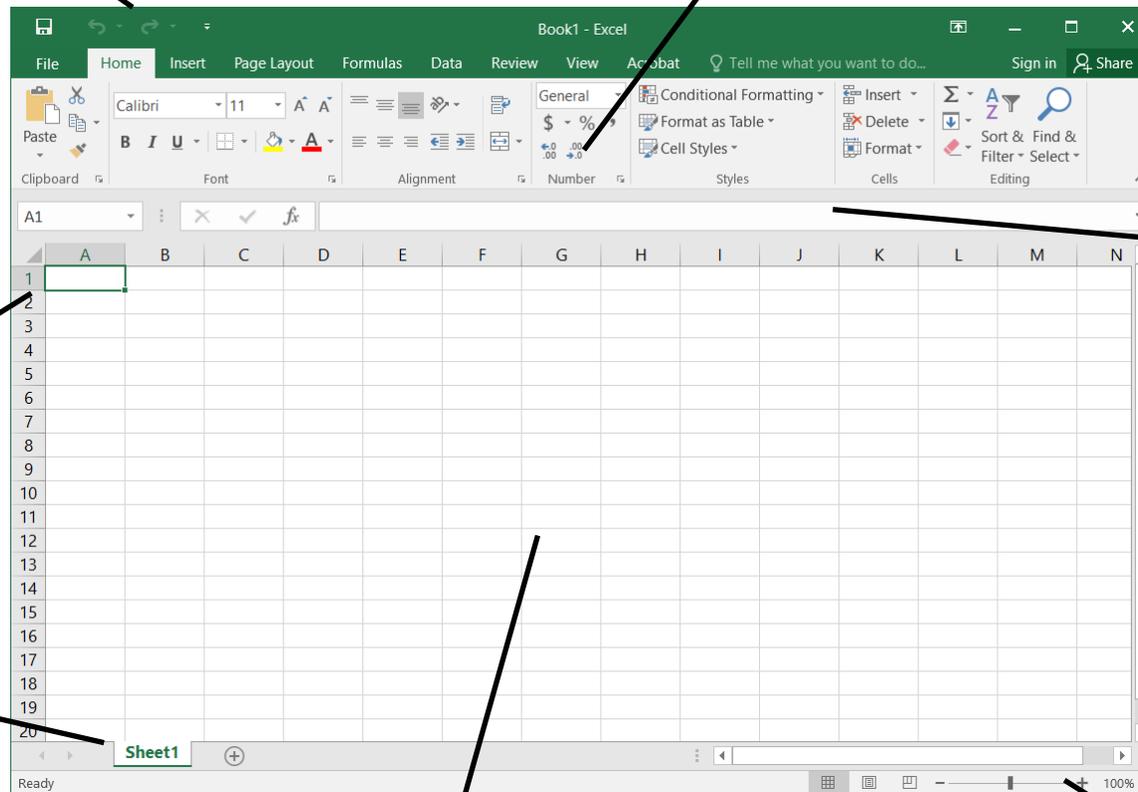
Excel Terminology

Workbook – The complete Excel file you are working on.

Worksheet – An individual page within the Workbook.

Column – Columns are the vertical sections of a worksheet. They are labeled at the top of the page with letters (A, B, C…).

Row – Rows are the horizontal sections of a worksheet. Rows are numbered along the left side of the window (1, 2, 3…).

Cell – Cells are the rectangular sections where text can be entered into the worksheet. The active cell is surrounded by a thick green line.
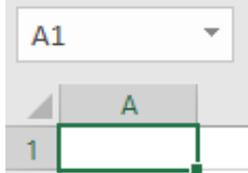
Cell address – The cell address is specific to each cell based on their column and row. The first cell of the worksheet is A1. To the right of that is B1. Below the first cell is A2. This address allows for formatting of information in relation to other cells regardless of what is entered into the cell.

Range – A range is a group of cells that are all selected for a purpose. Range is dictated by the top left and bottom right cells in the selection, separated with a colon. For example, A1:B5 would cover the cells in the top five rows of the first two columns. Everything in that range would be highlighted.
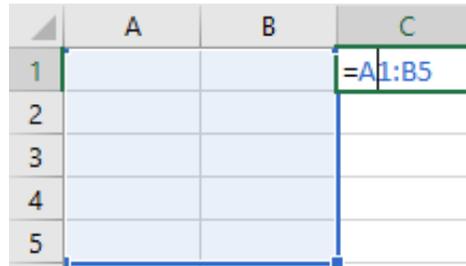
Operator – An operator is a math function used to help perform an action. The more common operators include +, -, /, *, and %.

Formula – A formula is a mathematical function that is performed in a selected cell. They can be input manually by typing into the cell or by using the "Formulas" tab.

Organizing Your Spreadsheet

There are a few ways to keep your spreadsheet organized visually. You can adjust the height and width of rows and columns by right clicking on a column or row header. From there you get the option to adjust the Row Height or Column Width.
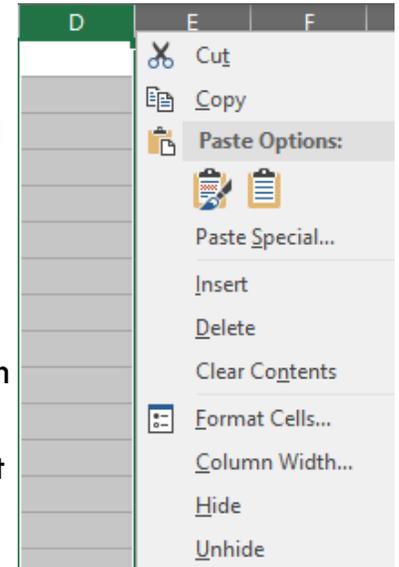
It's also possible to adjust the size of columns and rows by clicking on the line between two row or column headers and drag the line to increase or decrease the size.

The right click menu also gives you the ability to insert and delete rows and columns if you need to adjust where the information in your spreadsheet is located.

Hide and Unhide allow you to temporarily remove rows and columns from view so you can focus on just the most important information without deleting it for good. This is helpful if you have certain cells being used as a reference point for a formula, but you don't need to see it all the time.

Learning the Ribbon

The ribbon sits at the top of your page. The ribbon is broken down into sections according to similar functions. There are several tabs including File, Home, and Review. Here we'll only focus on the most commonly used sections.

File is designed for accessing and managing documents. The layout of the File tab is different from the other tabs in Excel, but looks the same across all Office applications (Word, Excel, PowerPoint, and Publisher). Unlike the other tabs, File sits on the right side of the page and its options are vertical.

Info

New

Open

Save

Save As

Save as Adobe PDF

Print

Share

Export

Publish

Close

Account
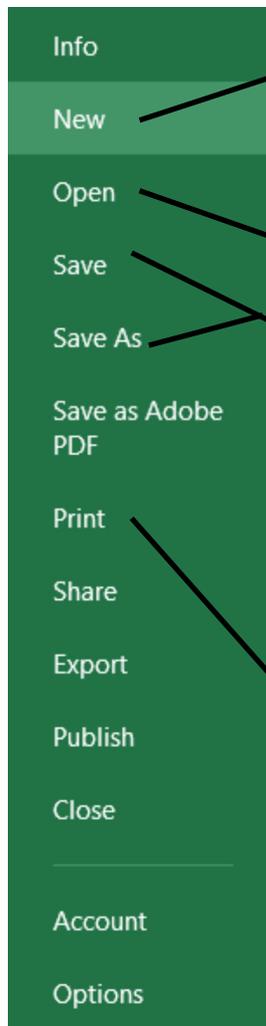
Options

New (CTRL+N) give you the option to create a new document. There are templates that you can choose to give yourself a head start on how your document will look, though you can also create a blank document and start from scratch.

Open (CTRL+O) lets you open documents you've previously worked on. It shows you the most recent documents you've worked on, though you can choose "Browse" and look for any document saved on your computer.

Save (CTRL+S) and **Save As** are two ways to the save you progress. Save will keep the changes you've made to your document in the file you're working on. Save As will put those changes into a new file, leaving the original unedited. This is helpful for things like invoice templates where you don't have to edit the original, but need to save the changes you've made.

Print (CTRL+P) lets you make a physical copy of your document by sending it to a printer. You'll get a view of how your document will look when printed out, as well as options that may or may not be present depending on what your printer is capable of doing like double sided printing.

Home

The **Home** tab is what you'll likely use most often as it has the most common features for editing a document.
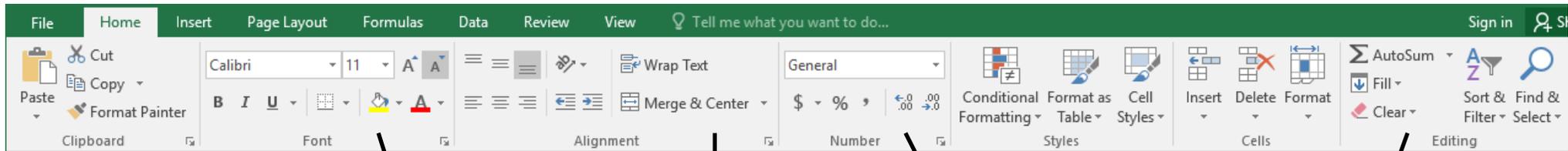
Going from left to right we have the **Clipboard** which gives you the tools to cut, copy, and paste text around the document. You can also right click to access these options, or use keyboard shortcuts as well. The Format Painter allows you to copy the formatting of one cell to a selection of other cells which can be nice to keep your spreadsheet looking uniform.

To the right is **Font** which allows you to edit the appearance of your text. You can change the font style and size, make it **bold**, *italics*, or underline, and change the font color and highlight.

Borders are available here which will add printable borders to your cells which can help visually organize your spreadsheet.

In the **Alignment** section you can adjust where the text of a cell appears, either at the top or bottom, or the left or right, or centered within the cell.

Wrap Text keeps your text within the cell, otherwise your text will just continue to the right and expand outside of the column.

Merge & Center can allow you to combine multiple cells into one which can be really nice to create header cells for your spreadsheet.

The **Number** section allows you to format your cells to display in certain ways. Choosing General will keep it as just text, but you can format your text as dates, times, currencies, or percentages. The benefit of this allows for uniformity.

For example, if you want to have every date appear as January 25, 2019, you can type in the cell 1/25/19 and when you hit Enter, it will switch it to write out the full date. This allows you to keep all your data arranged in a particular way no matter what way the information gets entered as.

Lastly is **Editing** which includes AutoSum. **AutoSum** is a feature that will quickly do basic formulas for you, specifically relating to totaling, averaging, counting, and finding the minimum or maximum value of cells. To use this, highlight the cells you want to work with and click the AutoSum button to add all the values together.

Editing also adds in the **Sort & Filter** option which allows you to sort the information you've added to your worksheet in various ways, such as alphabetically or from largest to smallest. Lastly you also have **Find and Select**. This is a very helpful tool when trying to find specific wording in a longer document.

Insert

Insert allows you to add non text based information like images, charts, and tables into your spreadsheet.

The first section is **Tables**. This allows you to add tables to your document. Tables are easily sortable sections of a worksheet. I suggest if you have any decently sized section of information that you need to arrange and sort, you should turn your spreadsheet into a table. This puts a box at the top of every column that gives you quick sorting options just by selecting the drop down boxes.
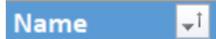
Charts were available in Word, but are much more extensive in Excel. You can do all kinds of charts based on your data included in the worksheet. Charts are added into the worksheet on top of the page as a separate image. Here you can see an example using a weekly attendance count. Turning that information into a chart appears as shown below.

The chart on the left is a bar graph and the one of the right is a pie chart. Both show the same information in different ways. It's up to you to decide what chart works best for your needs.

Sparklines are used to summarize a small set of information. Unlike a chart, a Sparkline sits inside just one cell. In the example below, you can see the same information adjusted into a Sparkline. That bar graph appears in just one cell giving an overview of the table information at a glance.

The benefit to Sparklines is that they're great a summarizing small sets of data while charts can be beneficial to the big picture.
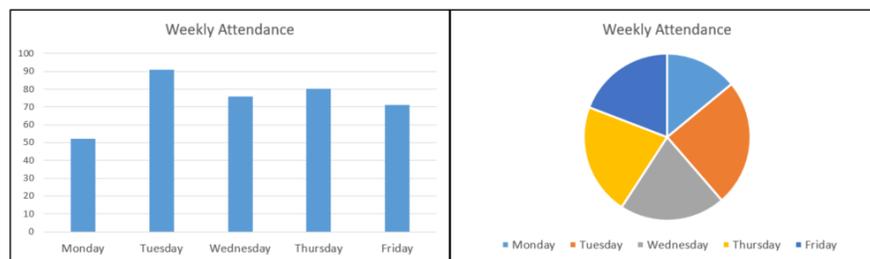
Inserting a **Symbol** allows you to get characters that don't appear on the keyboard like ©, £, and °. Each font has its own set of icons and symbols.

This isn't used very often, but comes in handy when you need something unusual.

Formulas

Excel has a wide variety of formulas which can do either simple or complex calculations automatically for you. If you know the formula you want, you can type it directly into a cell. If not, you can use the **Formulas** tab to search for them. There are several options organized by type. There are financial, logical, date & time, and more to use.
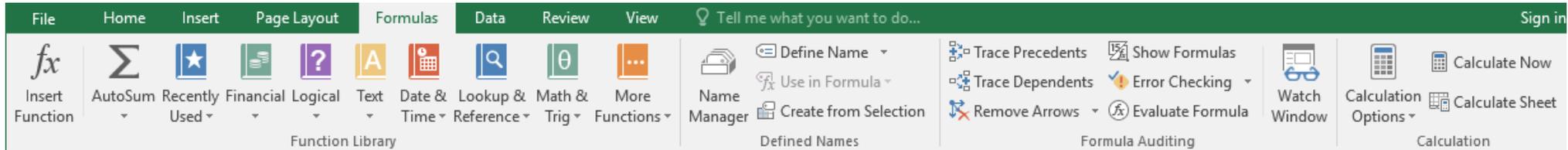
AutoSum makes another appearance here as was found on the Home tab.

All formulas are initiated by typing an equal sign "=", then typing the formula. A formula will usually be placed into a cell and use the information within other cells to answer the formula. Some common formulas for basic math are listed below.

=A1+A2 – Putting a plus sign "+" between two cells allows you to add the values the two cells. This would add the values of the first eight cells within the A column. In this example, A1 has a value of 4, and A2 has a value of 5. A3 is where we enter the formula, and after hitting enter, we get the result of 9. Now if we changed the value of either A1 or A2, A3 would automatically update to reflect the changes.

=A1-A2 – Putting a minus sign "–" between two cells will subtract the second one from the first. Here the value of A2 will be subtracted from the value of A1.

=A1*A2 – Putting an asterisks "*" between two cells will multiply their values. In this case the values of both A1 and A2 will be multiplied together.

=A1/A2 – Putting a slash "/" between two cells will divide the first cell by the second. Here the value of A1 will be divided by A2.

=SUM(A1:A8) – The SUM function will add everything that is included within the ( ). This is helpful for quickly adding a lot of cells together at once instead of one at a time.

=AVERAGE(A1:A8) – This function gives you the average value of all the cells within your selected range. In this example you would get the average of all the values in the first eight cells of the A column.

=COUNT(A1:A8) – This function counts how many cells in the range have any value in them at all.

Something to note, in all the above options where a cell address is given, you can substitute a number. =A1+A2 can easily be =1+2 in practice. You can even do =A1+2 if that's what your formula requires. The benefit to using cells instead of straight numbers is that if you need to adjust the data later, adjusting a cell value will adjust the formulas it is used in, whereas just typing numbers relies on you editing all the cells manually.