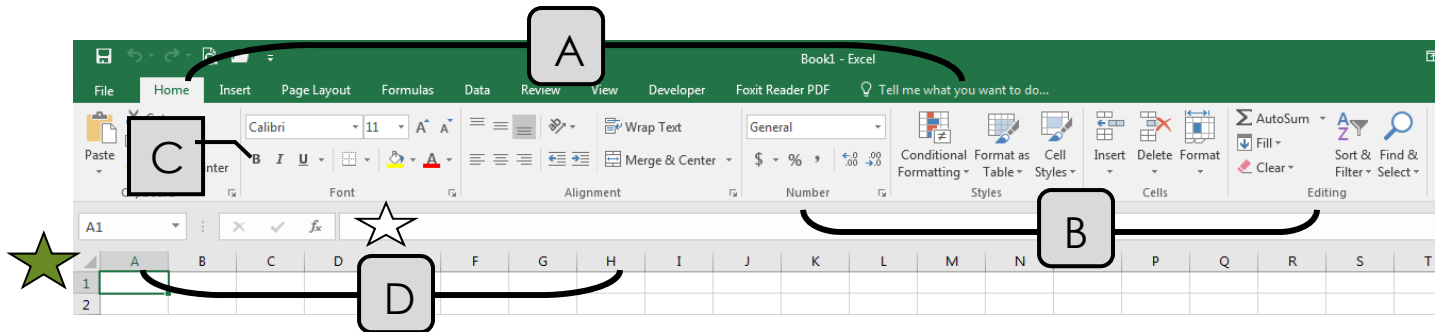


Microsoft Excel 2019



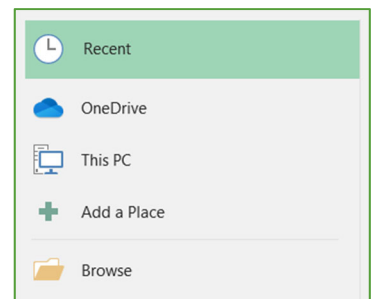
The Ribbon

- A. **Tabs** – Provides access to commands and functions of Excel
- B. **Group** – Within each tab, there are subtasks, organized by group.
- C. **Command Buttons** – Each group contains several buttons, for carrying out commands or displaying menus.
- D. **Row and Column Headings** – All cells in Excel are part of a worksheet (also called a spreadsheet). Each cell (box) can contain data and is referred to by a letter and number. For example, the first cell is A1.

The Backstage View – Manage your Spreadsheets

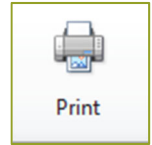
Click the File Tab

- **New** – To create a new spreadsheet
 - Click **Blank workbook** from the list of spreadsheet types, or
 - You may also choose a template by clicking any of the spreadsheet types listed, or use the search box for a specific spreadsheet (e.g. budgets, or calendars). Note: You must be connected to the Internet in order to download a template.
- **Open** - To open a spreadsheet that you created previously and is saved
 - **Recent** lists workbooks opened today, last week, and older.
 - **OneDrive** is Microsoft's cloud storage. Your document will be stored remotely, not on the hard drive of your machine. You must be connected to the Internet to take advantage of OneDrive
 - **This PC** opens a file directory to your computer
 - **Add a Place** adds a OneDrive folder to quickly save to the cloud
 - **Browse** to the desired spreadsheet on your computer, network drives, or external drives (such as a flash drive).



- **Print**

- You can make changes, such as number of copies, two-sided, orientation, scaling and paper size from this screen. For more advanced changes, click Printer Properties below the print name, or Page Setup below Scaling.
- When you are ready to print, click the print button at the top.
- Note: Print Preview is incorporated into the Print function. You will see the preview on the right side. Zoom in or out and navigate to a different page of the document by using the tools at the bottom of the screen.



- **Save** – save a copy of your file for later access

- You may also click the Save icon located in the Quick Access Toolbar.
- **Note:** The first time you save a spreadsheet, it automatically takes you to Save As, so you can designate a file name and a save location. However, every subsequent Save, you will *not* see this window. To change the name or location of a file, choose **Save As**.



- To **Save Your Spreadsheet as a PDF**, choose **Save As**.

- In the **Save as type** box, below File name, choose **PDF**.

- **Close** - To close a document without closing Excel.


Entering Data

The green box surrounding cell A1 above is called the Active Cell (aka cell pointer, highlight or current cell). The active cell shows you in which cell you are typing. To move the active cell, you may use the mouse or a variety of keys on the keyboard.

- **Tab** moves one cell to the right.
- **Enter** takes you one row down, sometimes to column A, but possibly to the cell directly underneath the active cell.
- All four **arrow keys** work to move in any direction.

Editing Data

If there is data in a cell, and you would like to change it, simply move the active cell to that cell and begin typing. Any new data that you type replaces the old.

To replace a portion of the data, double-click in the cell, delete what you don't want and type. Or, once the cell is selected, click in the Formula Bar , delete the section of data you don't want, and replace it with new information.

Inserting and Deleting Cells

To Insert a Single Cell:

Click on the Cell to the right, or underneath where you want the new cell to go.

- Go to **Home** (tab) → **Cells** (group) → **Insert** (bottom half of the button) → **Insert Cells**

To Delete a Single Cell:

Click on the Cell that you would like to delete

- Go to **Home** → **Cells** → **Delete** (bottom half of the button) → **Delete Cells**

To Insert an Entire Row or Column

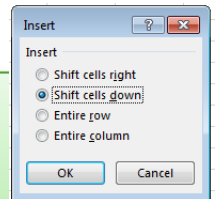
Click on Row Number underneath or the Column Letter to the right of the location you need to insert.

- Go to **Home** → **Cells** → **Insert** → **Insert Sheet Rows** or **Insert Sheet Columns**
- Or, from the Column/Row Headings, Right-click → **Insert**

To Delete an Entire Row or Column

Click on the Row or Column you need to delete

- Go to **Home** → **Cells** → **Delete** drop-down menu → **Delete Sheet Rows** or **Delete Sheet Columns**
- Or, from the Column/Row Headings, Right-click → **Delete**




WHERE WILL THE CELLS GO?


When you insert an individual cell, a window appears.
Make sure you select the correct direction or your data may become misaligned.

Note: You may also insert an entire row or column.

Changing Cell Size

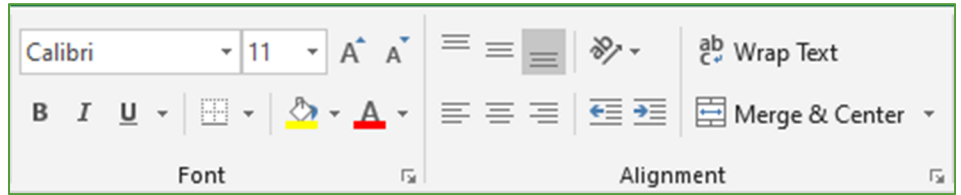
- You may need to adjust the width or height of a cell to make the text or a number fit.
Note: If there is *no* data in the adjacent cell, the overflowing text is visible, so it is not always necessary to adjust the cell size.
- Move your mouse pointer to the line between the two Column Heading Buttons. For example, between columns B and C. The mouse pointer changes to a double-headed  arrow with a line through it.
- Click and Drag to the left or right to increase or decrease the size of the cells.

***Try This! Move your mouse pointer in between two column headings, and then double-click. The cells in the left row will automatically adjust in size to accommodate the largest amount of text in any cell.*

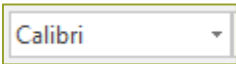





To automatically adjust all columns at once, select the entire sheet (see  on the diagram on Page 2), go to Home → Cells → Format → Autofit Column Width.

Formatting

To make formatting changes, first select the cell by clicking on it, and then apply the changes as needed.





Font

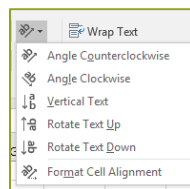
- **Font Face** - Go to **Home** → **Font** → , and select a font face
- **Size** - Go to **Home** → **Font** → , and select a font size
- **Emphasis (Bold, Italic, Underline)**- Go to **Home** → **Font** → 
- **Border**
 - Select the cell, or series of cells around which you would like to place a border
 - Go to **Home** → Click the drop-down menu to the right of the Borders icon  and select the correct border
 - Or, Right-click → **Format Cells**, select the Border tab
- **Font Color** – Changes the Color of the Text
 - Go to **Home** → **Font** → 
- **Fill Color** – Changes the Color of the Cell Background
 - Go to **Home** → **Font** → 


Alignment

– Aligns the text along an edge of one or more cells

Note: The alignment is dependent on the walls of the cell. To align text over more than one cell, use the Merge and Center icon.

- **Horizontal Alignment** – Go to **Home** → **Alignment** → 
- **Vertical Alignment** – Go to **Home** → **Alignment** → 
- **More Alignments** – Go to **Home** → **Alignment** →



- **Merge and Center** - Merges data across several cells
 - Select the range of cells you would like to center.
 - Go to **Home** → **Alignment** → 

2020			
January	542	669	7801

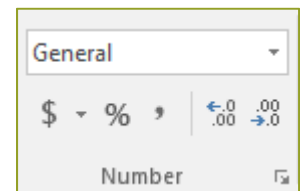
- **Wrap Text** - keeps the data within the border of the cell, and allows it to spill onto a second line, if necessary.

- Go to **Home** → **Alignment** → 

	A	B
1	Wrapped	
2	Text	
3		
4	Unwrapped Text	
5		

Number Formatting

- **Number Format** – Use the pulldown labeled **General** to change the way data is displayed. Includes Accounting (\$1,000.00), Long Date (Sunday, January 5, 2020), Fractions (1/2), Time (12:00:00) and more.
- **Accounting Number Format** – Click the Dollar Sign (\$) to automatically add any currency symbol to the cell (\$, €,¥, etc). Note: this does not convert the currency.
- **Percent Style** - Format as a Percent (e.g. changes .01 to 1%)
- **Comma Style** – Adds a comma (for numbers greater than four places) and two decimal places to a number
- **Increase/Decrease Decimal** – adds or removes decimal places.



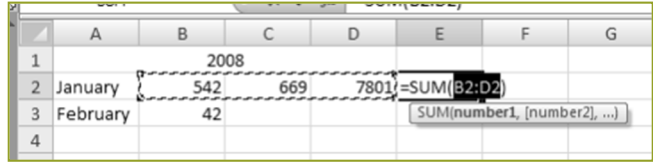
Formulas

Each formula begins with an = sign. This indicates to the program that it needs to perform a calculation. The program displays the result of the calculation in the cell. For example, if you typed “=6+9”, the cell would display 15.

Simple mathematical functions		What the formula looks like	Cell Display	
+	=	addition	=8+2	10
-	=	subtraction	=8-2	6
*	=	multiplication	=8*2	16
/	=	division	=8/2	4
^	=	exponent	=8^2	64
%	=	percentage	=8*2%	.16

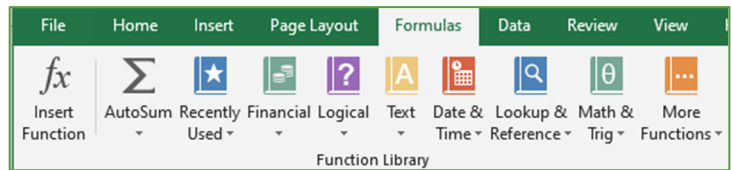
AutoSum - Adding a range of numbers is the most common formula in Excel.

- Click once on the cell where you would the total to be displayed.
- Go to **Home** → **Editing** → Σ **AutoSum**
- You will see “marching ants” around the cells that it will add.
- Press enter to complete the formula.
- If the selection Excel chooses is not the correct selection, you may highlight any selection of cells.



OR

- Select the cells to be added.
- Click the AutoSum button (see above for location).
- The total will be displayed in the next blank cell to the right or below.



Inserting Formulas

Excel has hundreds of formulas. To access any of them, go to the **Formulas** tab. Select from one of the categories listed in the Function Library. Or, select the **Insert Function** button. The box that appears has a search feature if you know the name of the formula you need, or you may browse through a series of categories until you get the correct formula.

Auto Fill

Autofill is a time saving tool that can fill in relative formulas, sequential series, or even copy the contents of a cell.

Formulas – to fill in the same formula on multiple rows/columns

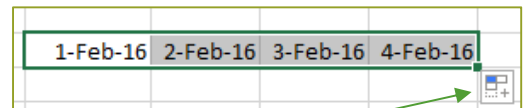


- Complete the formula in one cell.
- Move your mouse pointer over the Autofill handle (green square at the bottom of the active cell) Your mouse pointer becomes a crosshairs (+).
- Drag the fill handle across (or down) the adjacent cells to fill in the list.

1	Wheaton Book Shoppe			
2		January	February	March
3	George	570	456	785
7	Paula	759	1235	257
8	Jillian	356	786	789
9	TOTAL	\$3,207.00		

Sequential Lists – to fill in a known list (Monday, Tuesday; Jan, Feb; dates; times, etc.)

- Type the first word in the list
- Drag the fill handle to fill in as many cells as needed.

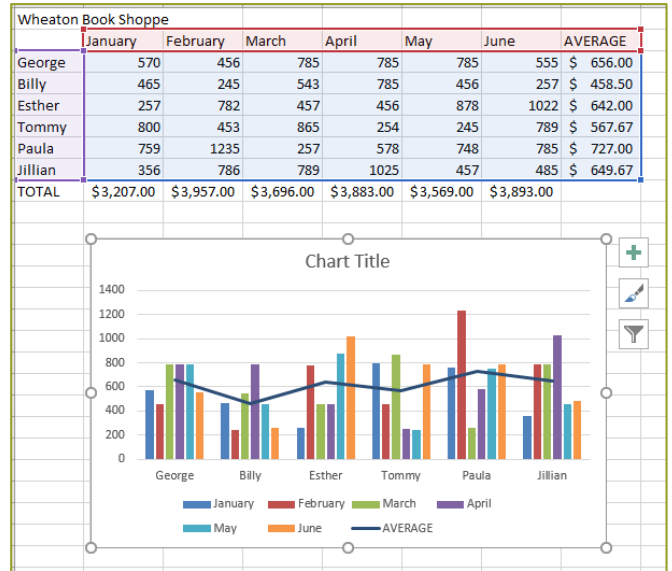


Autofill Options – if your list doesn't fill in the way you anticipate, use Autofill Options to adjust the type of fill (copying, fill series, fill weekdays, etc.)

Charts – Use Excel to create diagrams and charts of your data



- Select the data you would like to put in your chart.
- Go to **Insert** → **Charts** → Click the type of chart you need (Column, Line, Pie).
- Or, choose **Recommended Charts** and let Excel do the work for you.
- Once the chart is inserted, you will see two new tabs: Design and Format. **These will appear each time you click on your chart** and allow you to customize the chart.



Sorting – Arrange lists of data by column.

- In a list, you might occasionally need to arrange the data alphabetically, or by zip code, etc.
- Highlight the top cell in the column you would like to sort.
 - Go to **Home** → **Editing** → **Sort and Filter** → **Sort A to Z**
- To sort more than one column simultaneously, go to **Home** → **Editing** → **Sort and Filter** → **Custom Sort**.
 - In the Sort By box, select the first column to sort.
 - Click the Add Level button.
 - Select the second column to sort and repeat as necessary.

IF YOU HAVE QUESTIONS, FEEL FREE TO EMAIL ME.
techclasses@wheatonlibrary.org