Microsoft Excel 2016
## Beginners class

Wilmette Public Library

Which Excel are you using?
2010? 2013? 2016? 2019? Office 365?

Can Excel open in Numbers (Apple version)?
When a spreadsheet created in Microsoft Excel is opened in Apple Numbers, the file is imported and converted. To open the same file again in Microsoft Excel, you need to "EXPORT TO EXCEL" and save it back to Excel's format called Excel Workbook with the **.xlsx** extension. (Older format = .xls version 1997-2004)

Keep in mind that some Excel features like pivot tables, surface charts and certain graphic elements are not supported by Numbers.

Note: If you have to use a conversion tool, you can find a few online but I suggest NOT because your computer might catch some unwanted virus.
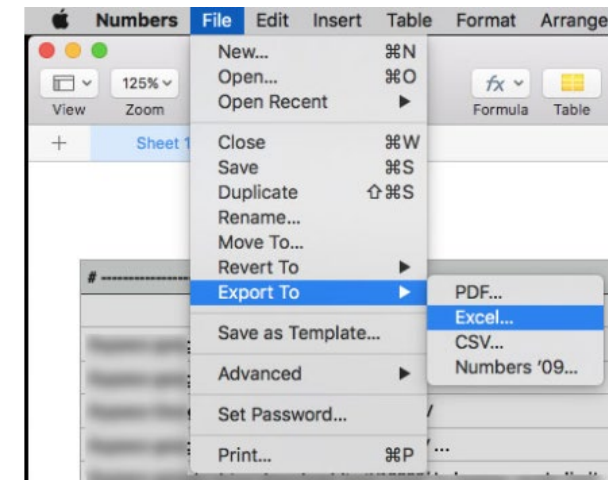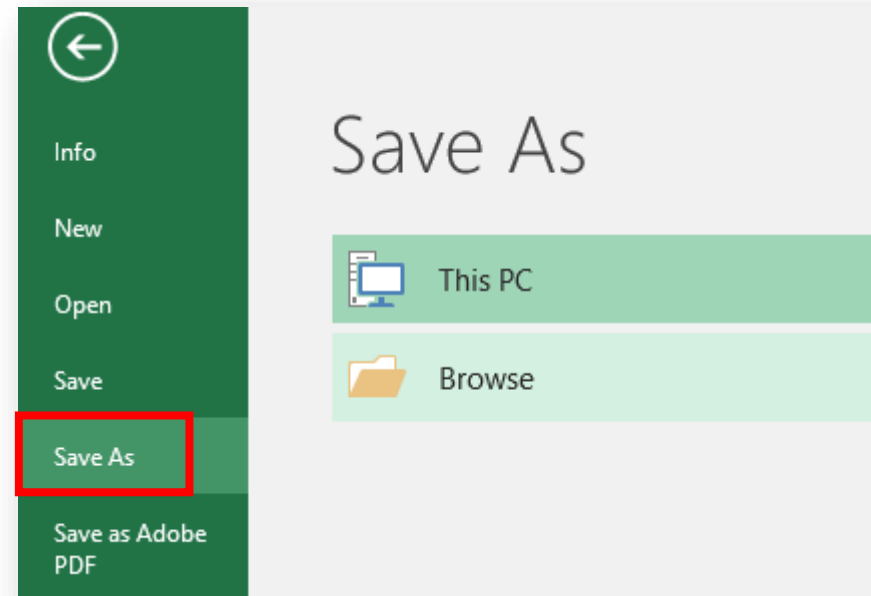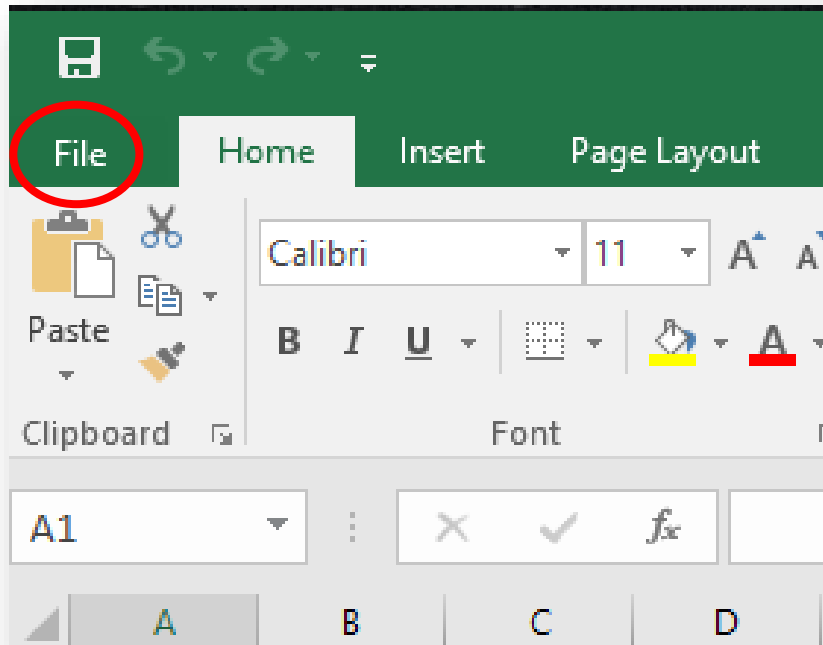
We will learn the following topics:
- Save file, rename document, Copy and Paste
- Formatting
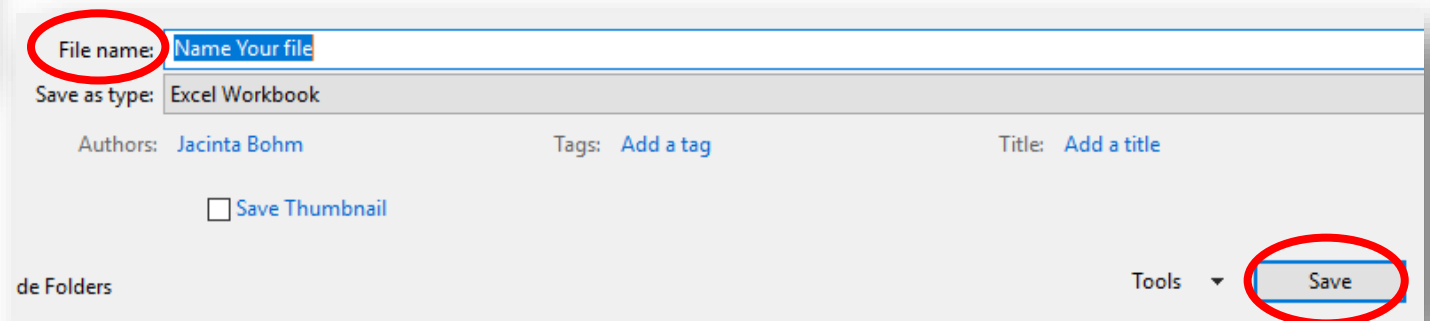- Functions, Formulas, and Arrays
- Insert a Chart

Exercise 1
On the desktop, open Excel file called "Excel_Beginners"
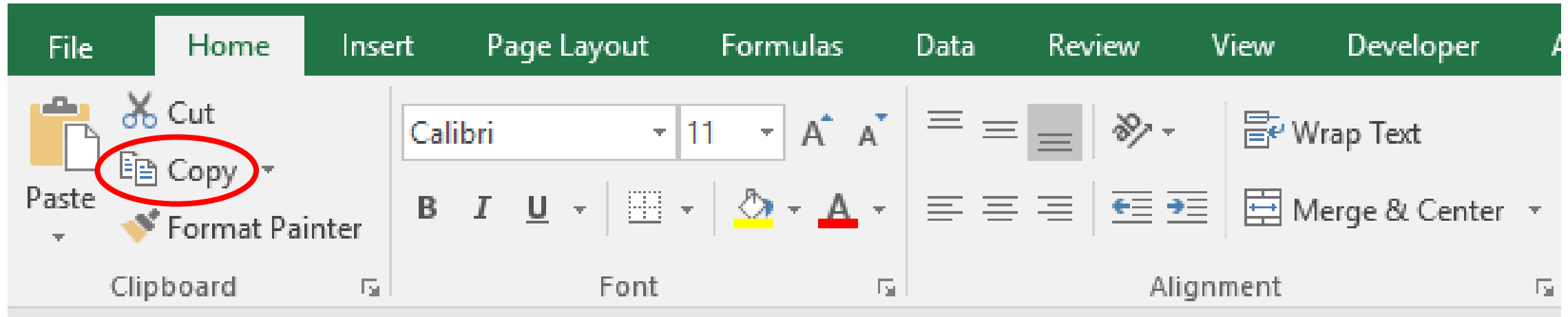
How to save/name/re-name a file?

The tab "File".

Next, click "Save As", and then click Browse. By default, a folder called "Documents" will open. This varies from one computer to another. Under File name: "Name your file" and then click "Save"
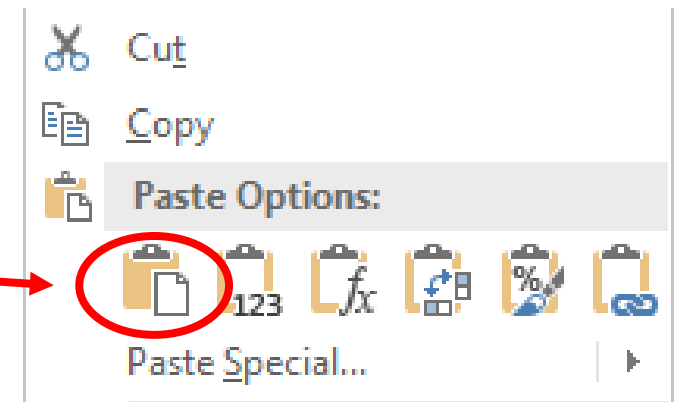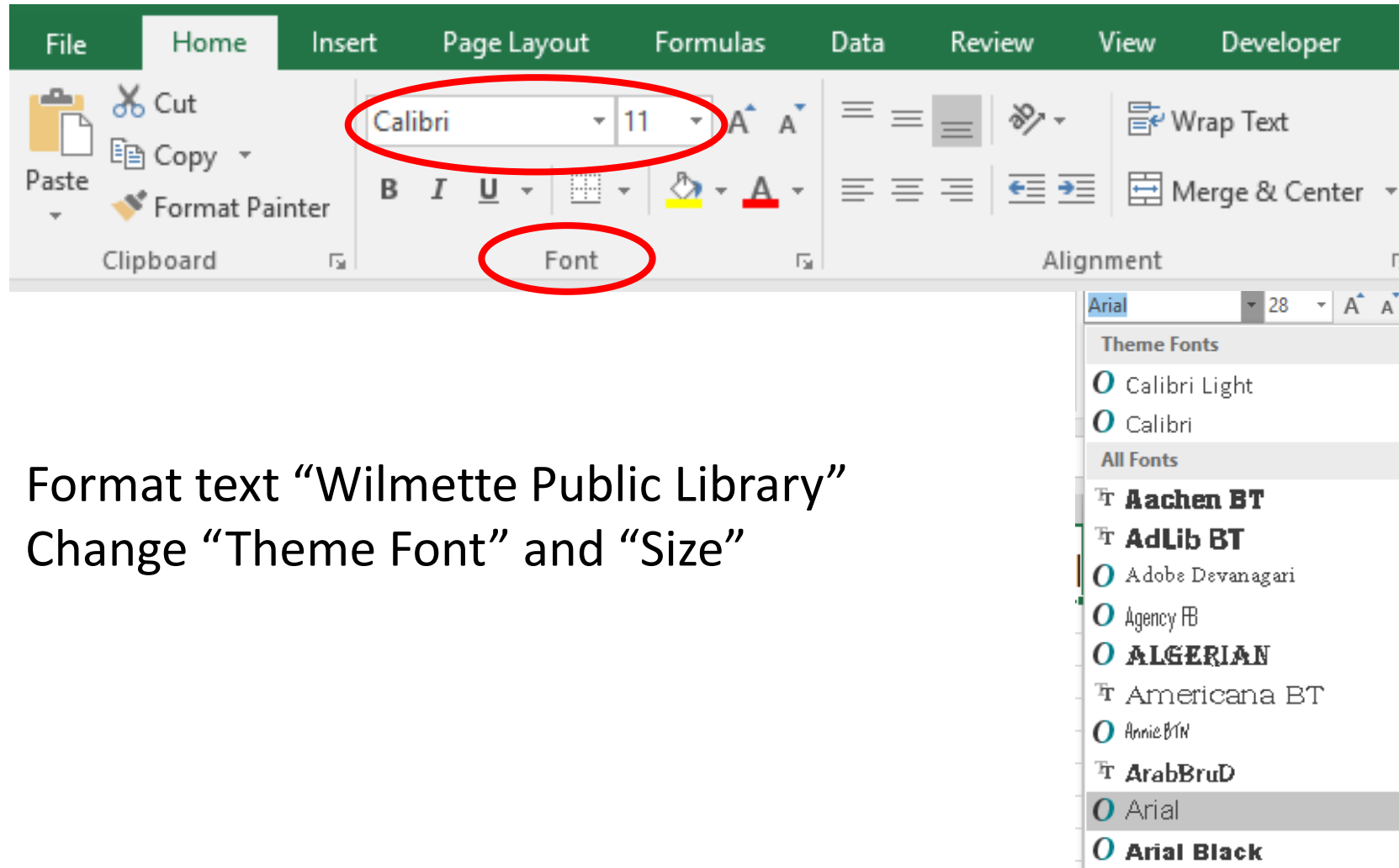
The "Home" tab - Clipboard

Copy, Paste and Cut:
Place cursor on "Wilmette Public Library", click "Copy", choose another cell, right click on the mouse and choose the first paste option.
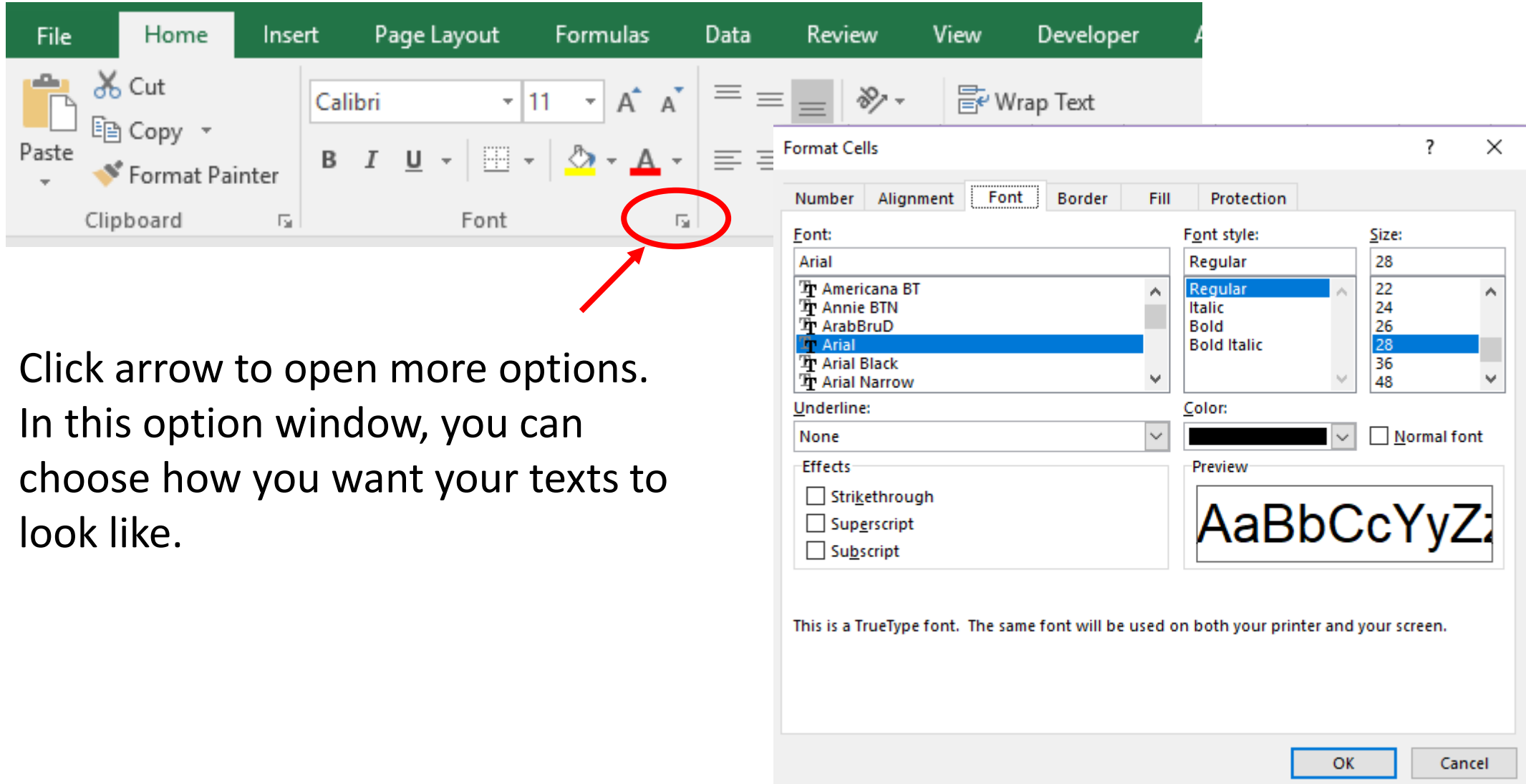
Shortcuts: Copy: Ctrl + C ;   Paste: Ctrl + V

The "Home" tab - Font
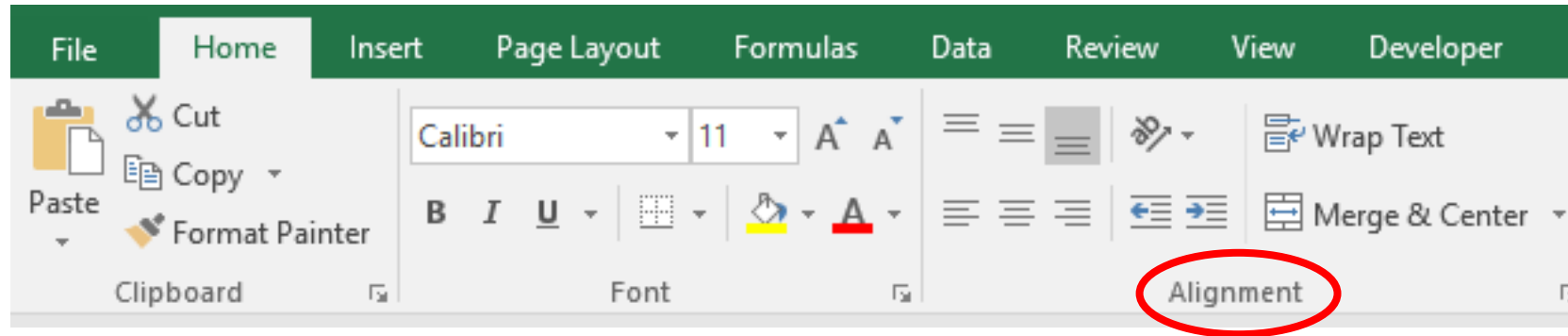

Format text "Wilmette Public Library"
Change "Theme Font" and "Size"

The "Home" tab – Expand Font Options

Click arrow to open more options. In this option window, you can choose how you want your texts to look like.
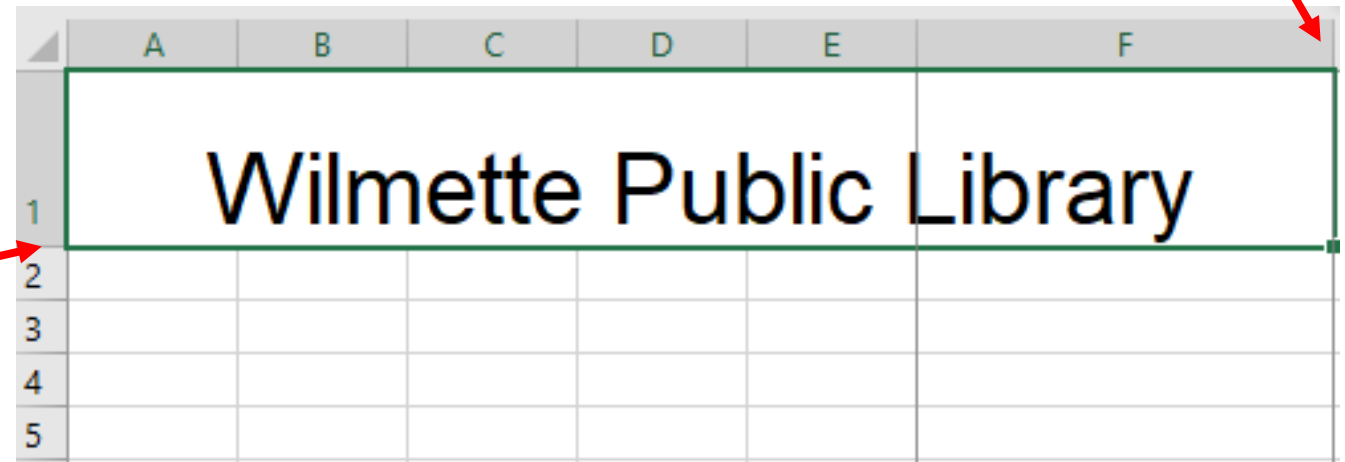
The "Home" tab – Alignment

Wrap Text, Merge & Center
Highlight number of cells you
want to "Merge & Center".

Adjust "height"
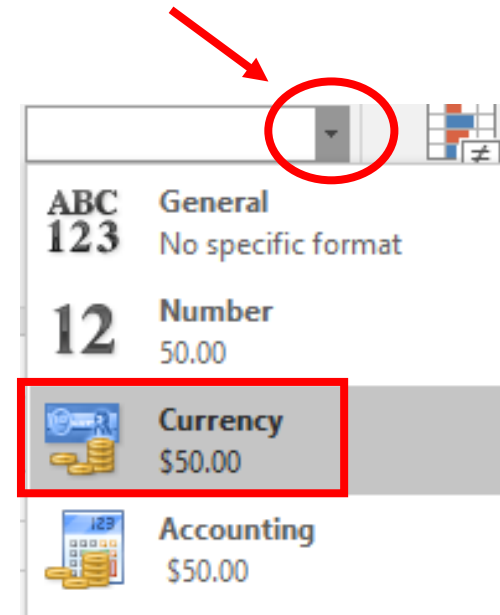Hold down left click on the
mouse and drag the plus like
sign symbol.

Adjust "width"

Wilmette Public Library

The "Home" tab – Number and Styles
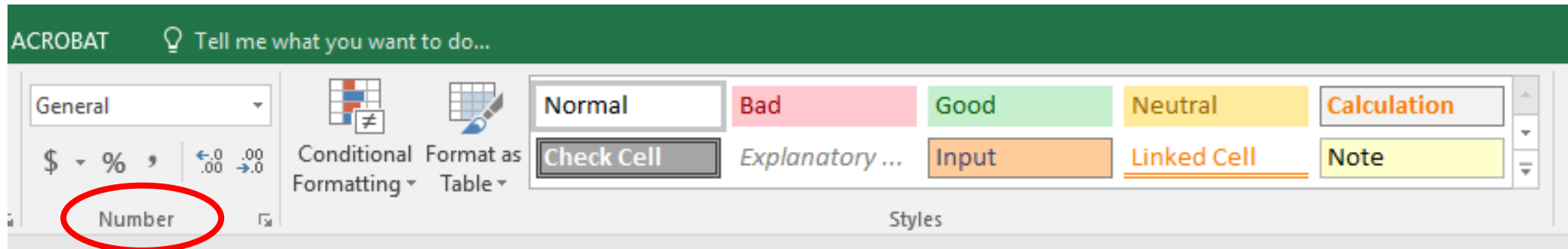
Format column B.
Click the arrow button,
choose "Currency"

In "Styles", you can format the
selected cell(s) with colors

*Note: We will not talk about
"Conditional Formatting and
Table" in this class.*

Doing arithmetic

A formula always starts with an equal sign "="

Note: There are roughly 471 functions in Excel

| Operator	Operation	Example
+ (plus sign)	Addition	=B2+B3 =SUM(A1:A10) formula using cell references =SUM(10+2) formula using constants =SUM(A1+2) formula using a cell ref and a constant
- (minus sign)	Subtraction	=A10-A2 =SUM(A1-A3)
* (asterisk)	Multiplication	=SUM(A17*B16)
/ (forward slash)	Division	=SUM(B17/C16)

Doing arithmetic

An Array Formula.

Is a formula that can perform multiple calculations on one or more of the items in an array. An array formula can return either multiple results or a single result. To enter a result, you press **Ctrl+Shift+Enter**.

Let's try exercise "Array" on the next tab.

Highlight E4 through E15, and then type the following :
=B4:B15+C4:C15+D4:D15 and then press **Ctrl+Shift+Enter**

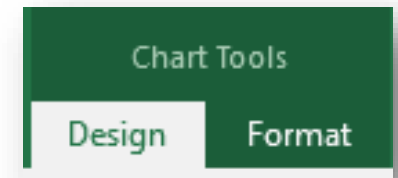Important : Array Formulas are **NOT** allowed in table.

Insert a Chart
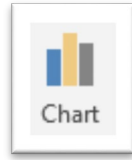
Highlight area A3 through D15

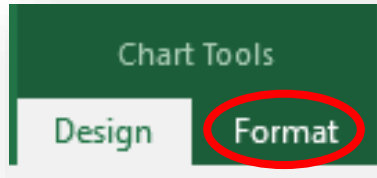On the tab "Insert", click "Recommended Charts"

Choose the chart type you want and click OK.

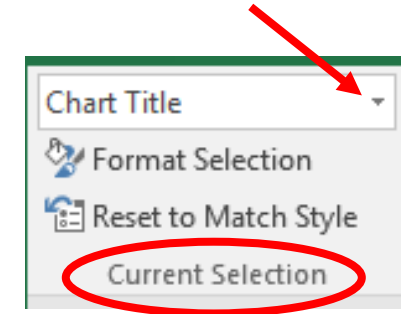Click <u>once</u> on any empty chart area to bring up the Chart Tools.

Click <u>two times</u> on any empty chart area to bring up the Format Chart Area Tools;

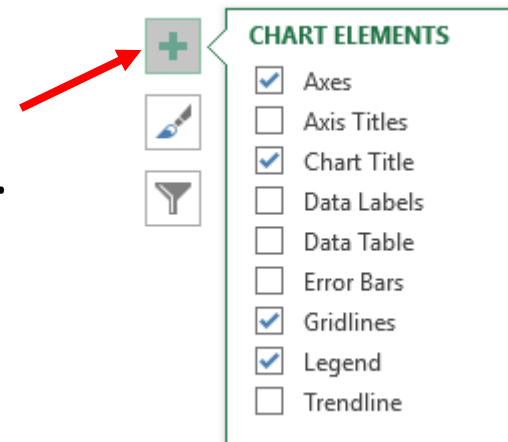A window pane will slide in from the right.

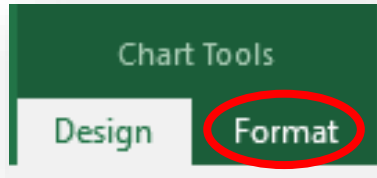# Chart Tools – Design and Format

Let's look at "Format" menu, and under "Current Selection",

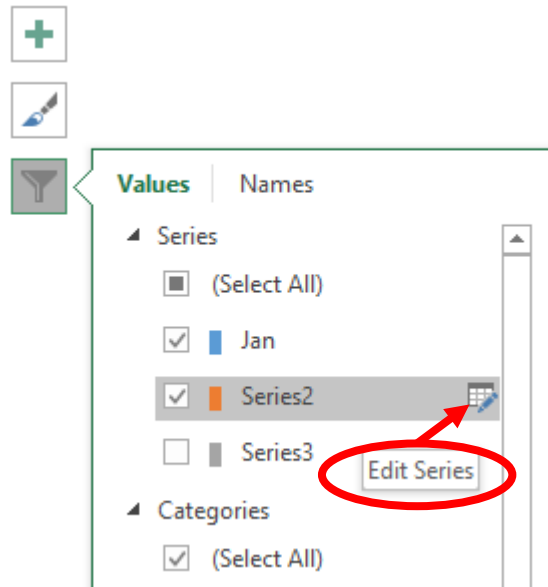click the arrow and select an element to format your chart.

You can also use the shortcut menu that

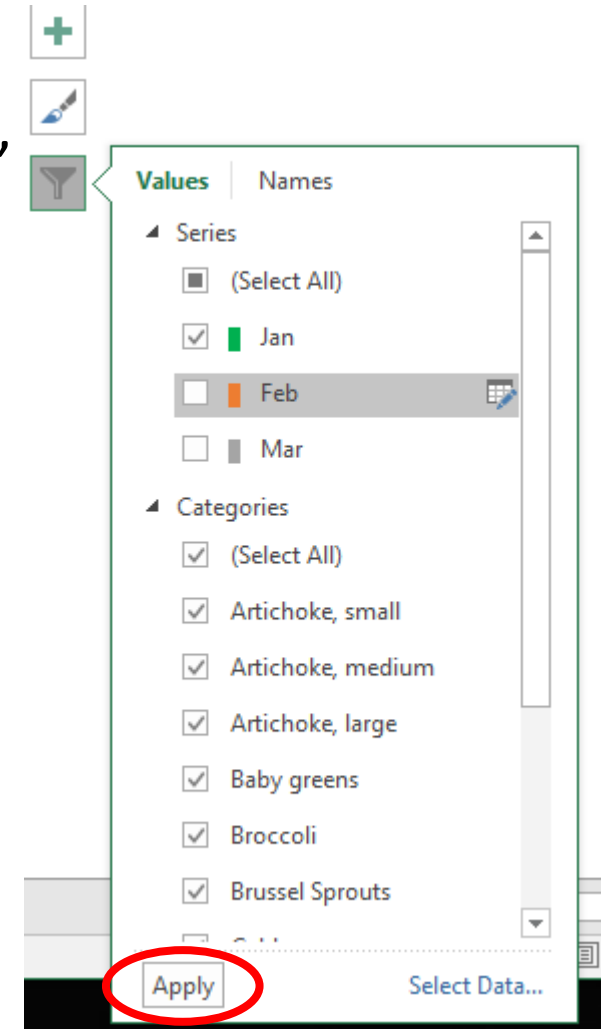is located on the right hand side of the chart.

Chart Tools – Design and Format

Rename a Series,

On the side-bar

To add a Series,
On the side-bar menu,
Check box "Feb"
and then "Apply"

Exercise 2: Create a pie chart