Graphing with Excel

Microsoft 365

After completing this module you will be able to:

Create and edit a graph in Excel

Export a graph from Excel in different formats

We assume you already know:

The basics of plotting data points

How to identify dependent and independent variables

You can review these concepts in the Introduction to Graphing (A2) module

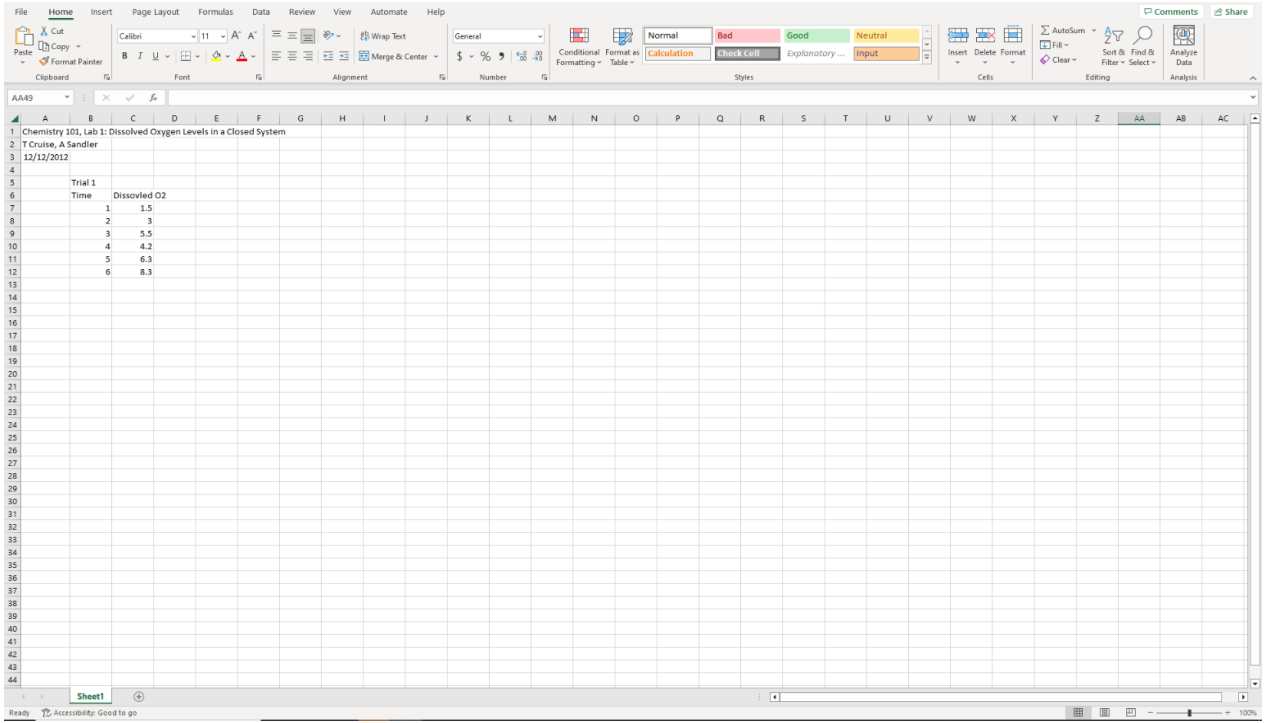
What is the point of this module?

To create uncluttered graphs where it’s easy to see any patterns in the data

“above all else show the data”

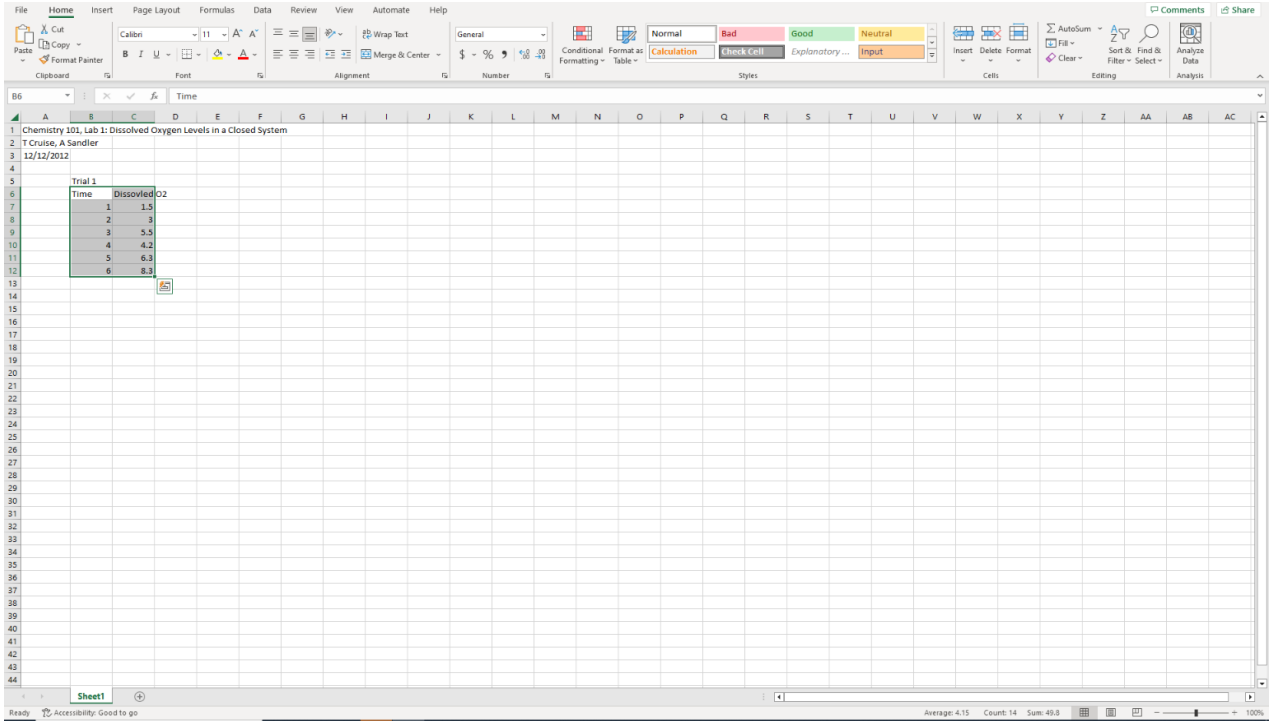
Tufte, ER (1983) The Visual Display of Quantitative Information. CT: Graphics Press.

Entering Data



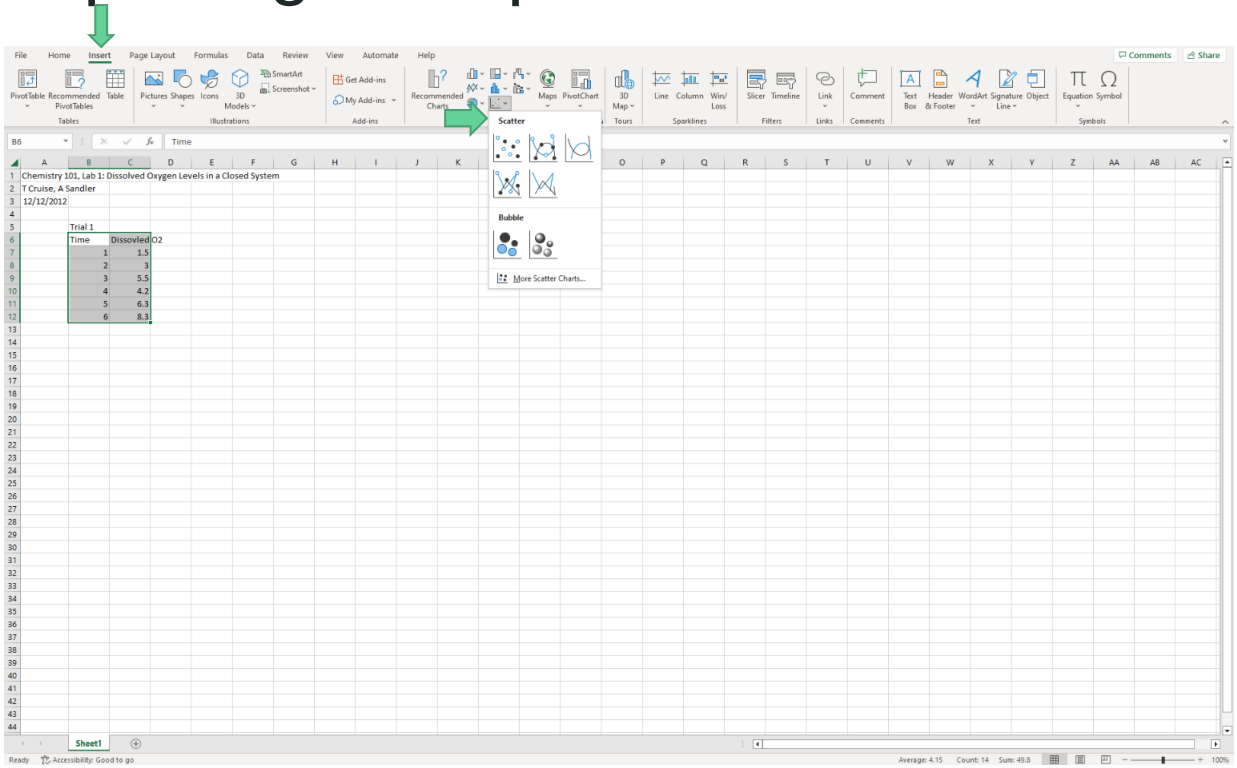
Enter your data by inputting the independent variable (x-axis) on the left side and the dependent variable (y-axis) on the right side.

Selecting Data for Graph



Click and drag to select your data

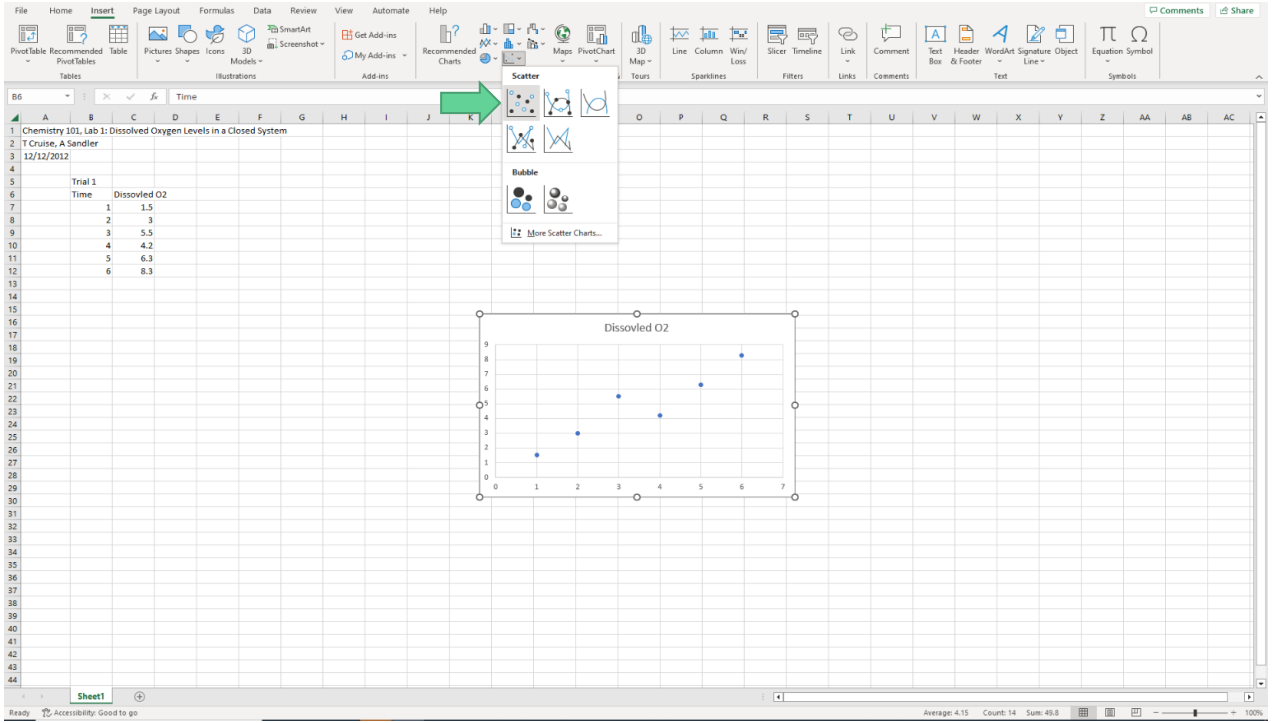
Inputting a Graph



At the top of the screen, select “Insert”

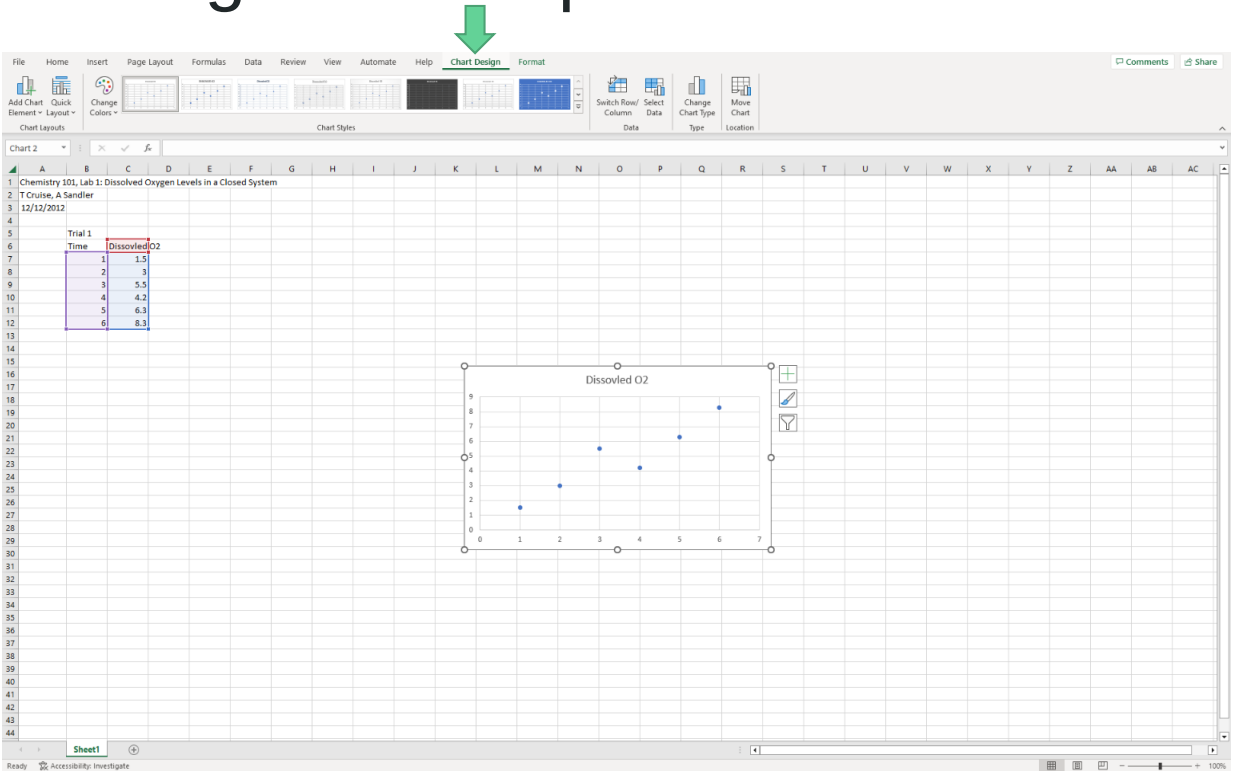
Under the Chart section, select the dropdown box labeled “Scatter”

Inputting a Graph Continued



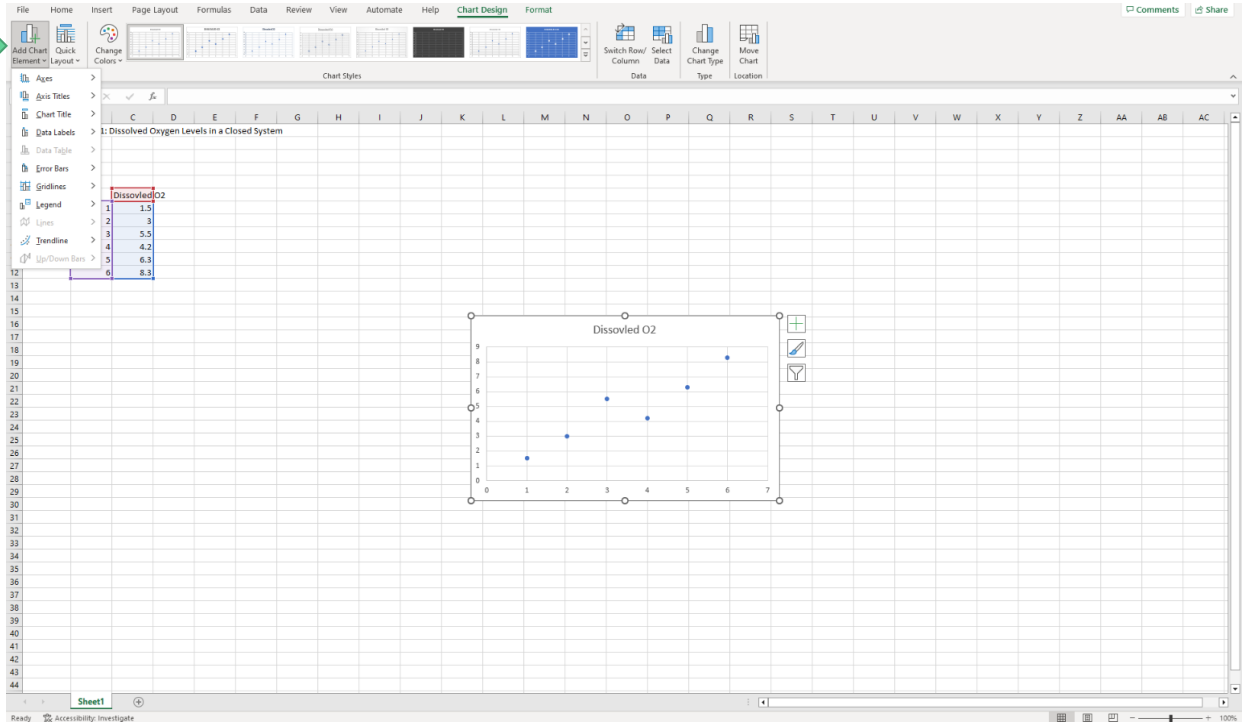
Select the graph labeled “Scatter”

Editing Your Graph



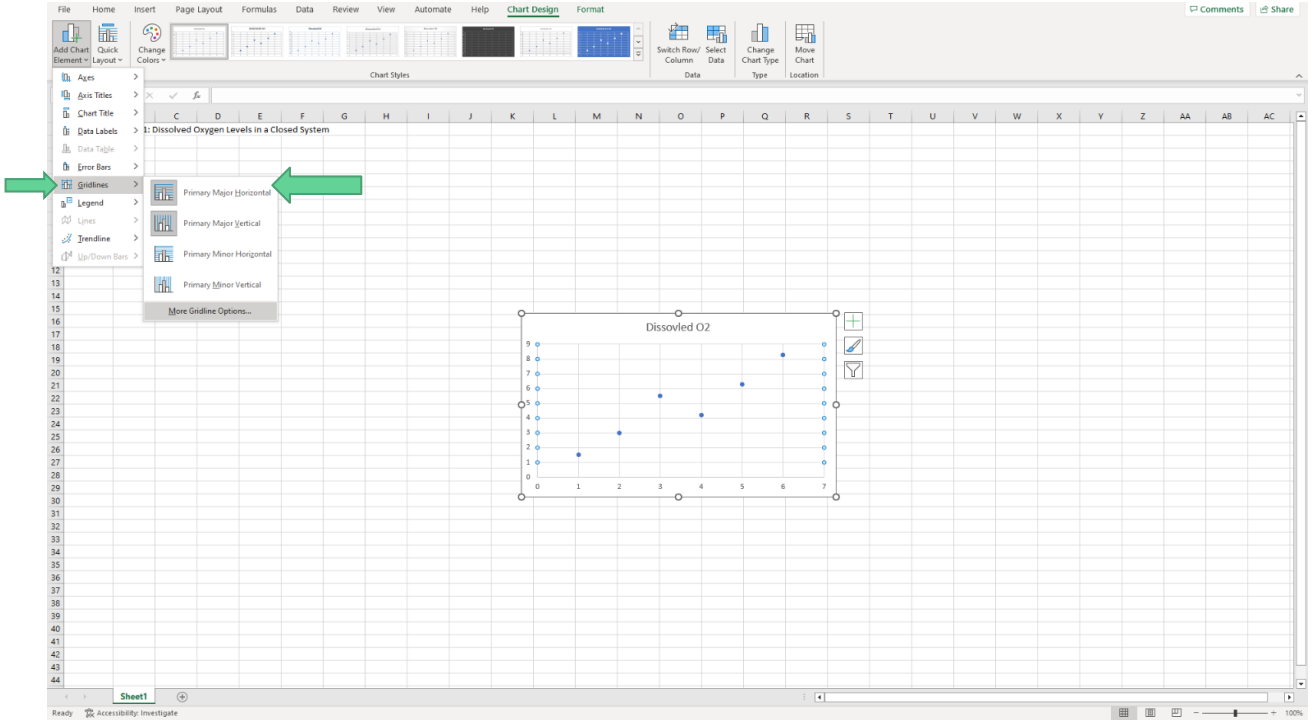
Click on the graph and select “Chart Designs” at the top of the screen

Adding Features to Graph



Within “Chart Design”, select “Add Chart Element”

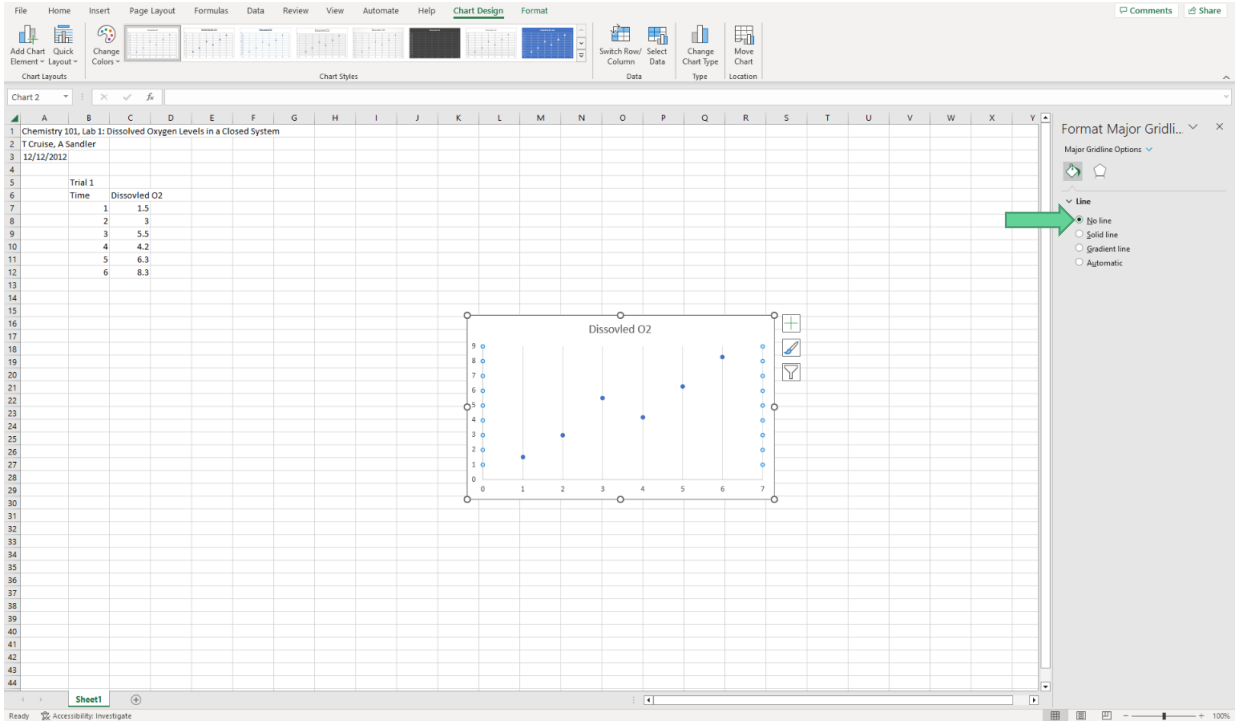
Inputting/Editing Out Gridlines



Under “Add Chart Element”, select “Gridlines”

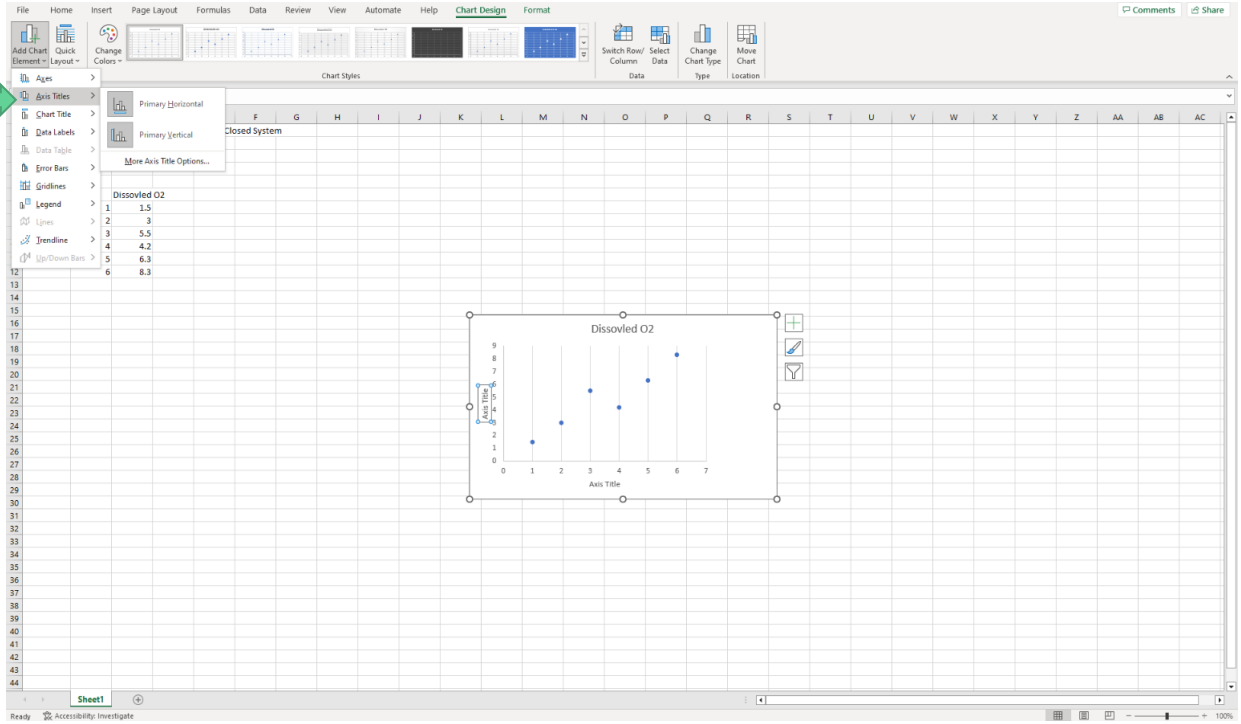
Then select “Primary Major Horizontal”

Removing Gridlines



Select “No line” in the directory on the right side of the screen to remove the horizontal gridlines

Adding Axis Title

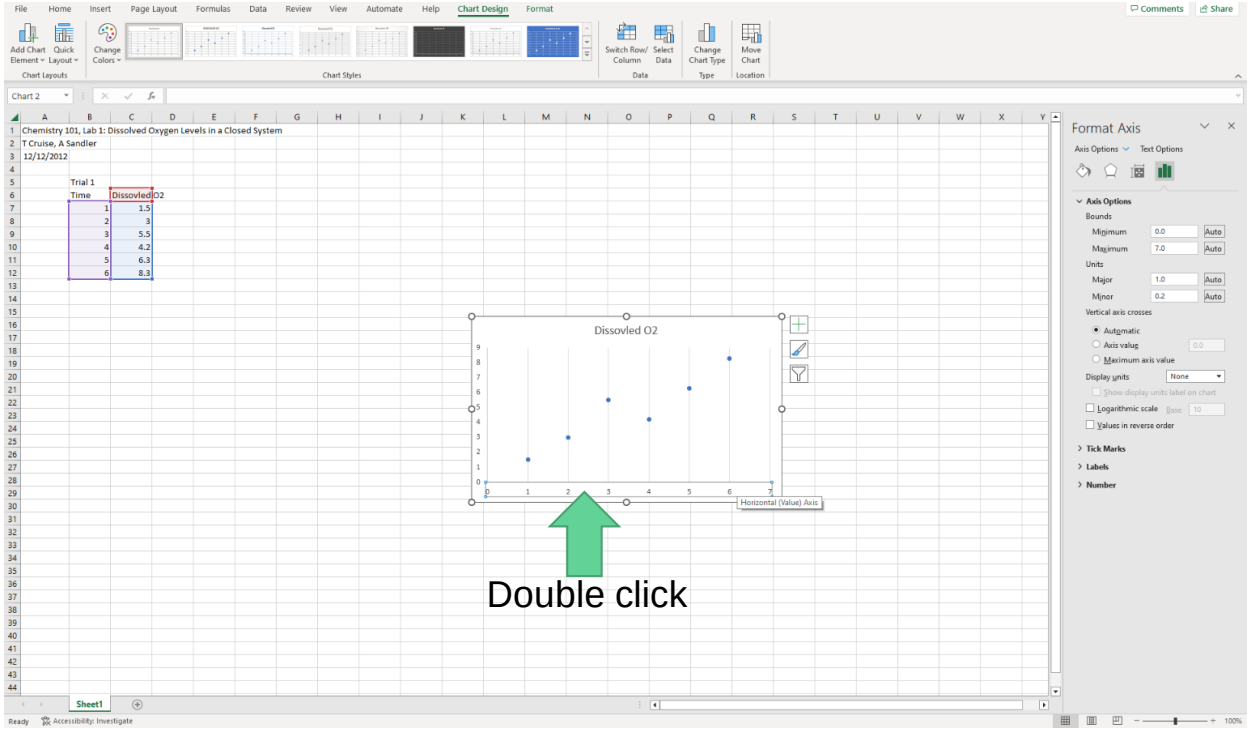


Under “Add Chart Element”, select “Axis Title”

To Add a title on the x-axis select “Primary Horizontal”

To add a title on the y-axis select “Primary Vertical”

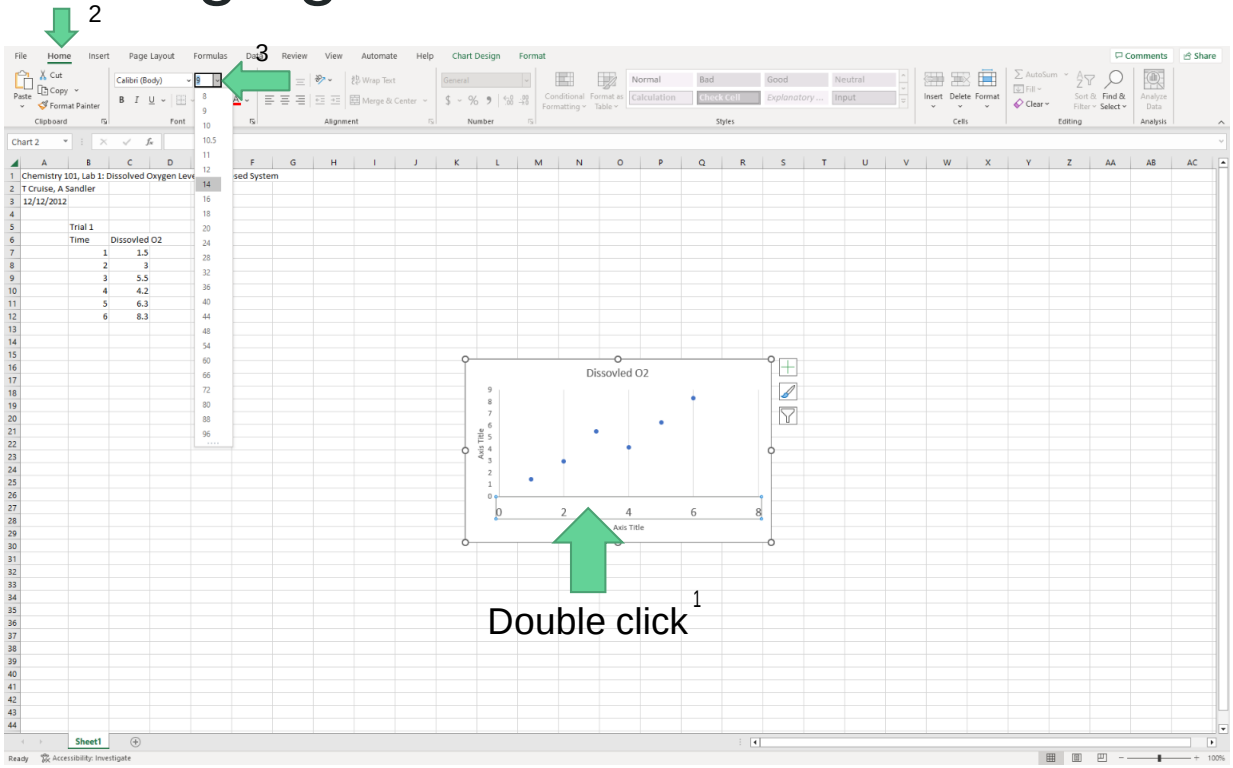
Opening Format Axis Menu



To open the x-axis menu, double click the x-axis values

To open the y-axis menu, double click the y-axis values

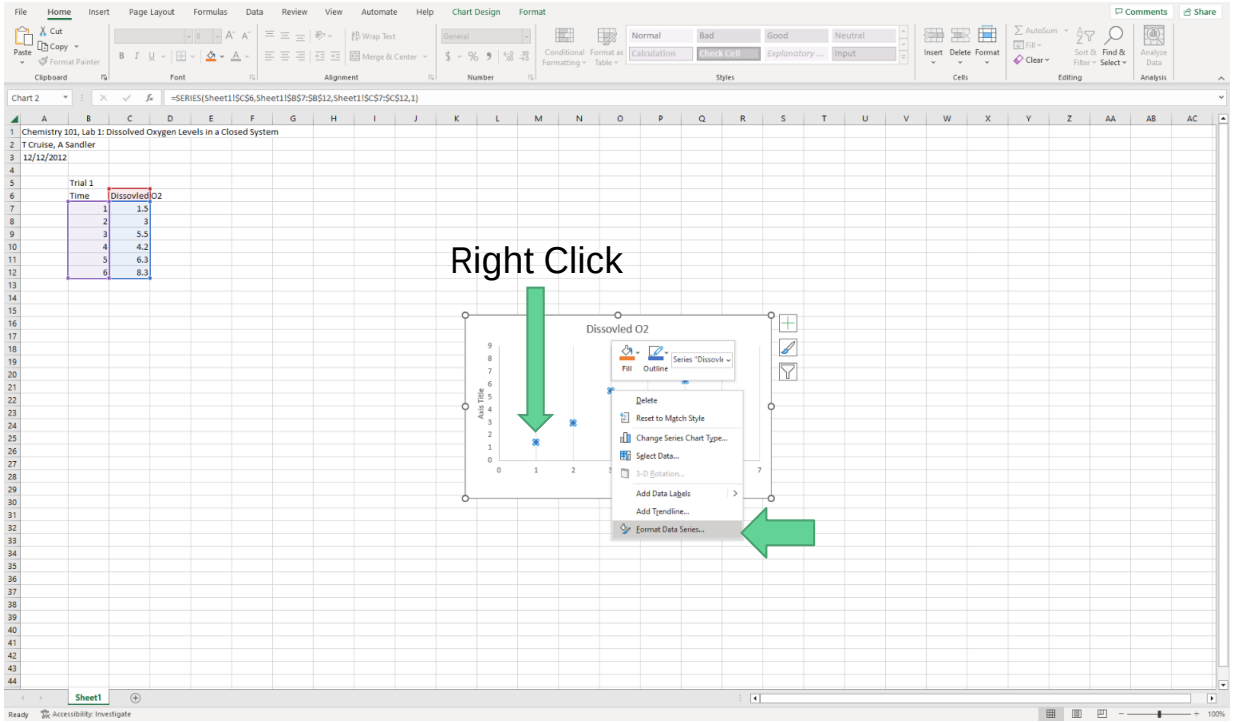
Changing Font Size on Axis



Double click the x or y-axis and highlight the text you want to change

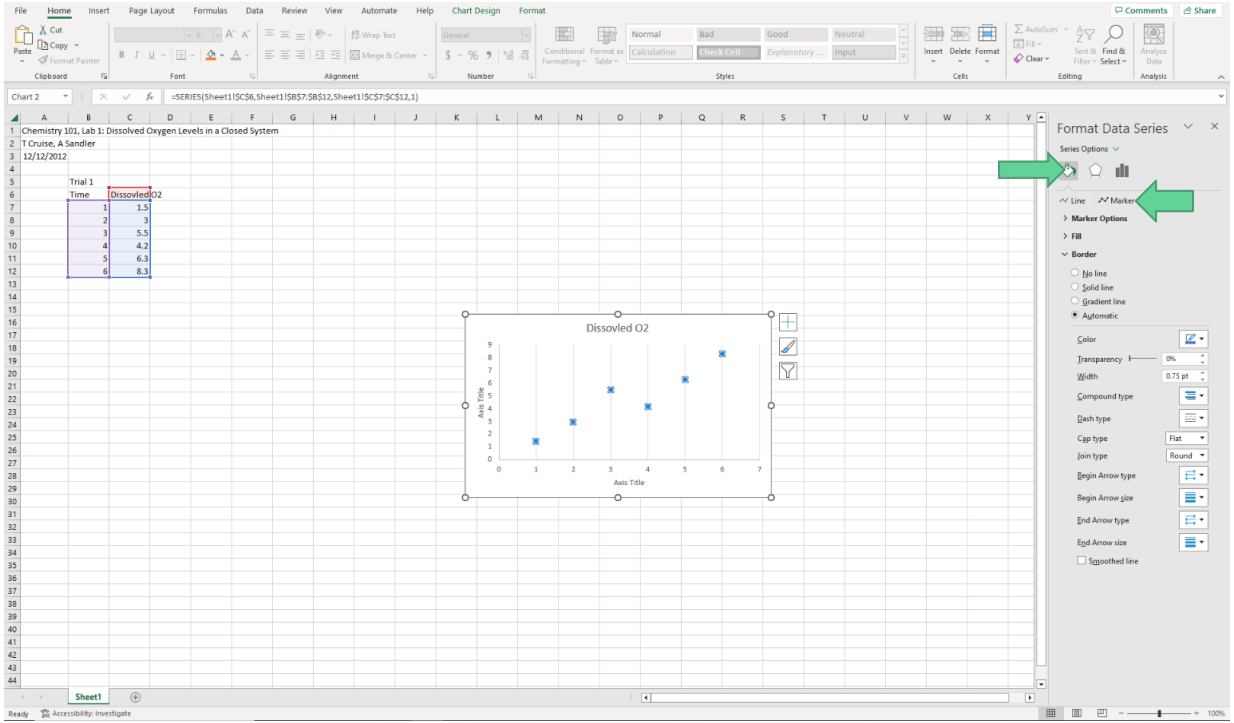
Select “Home” at the top of your screen and change your font by clicking the dropdown button labeled “Font Size”

Format Data Points



Right click one of the points on your graph, then select “Format Data Series”

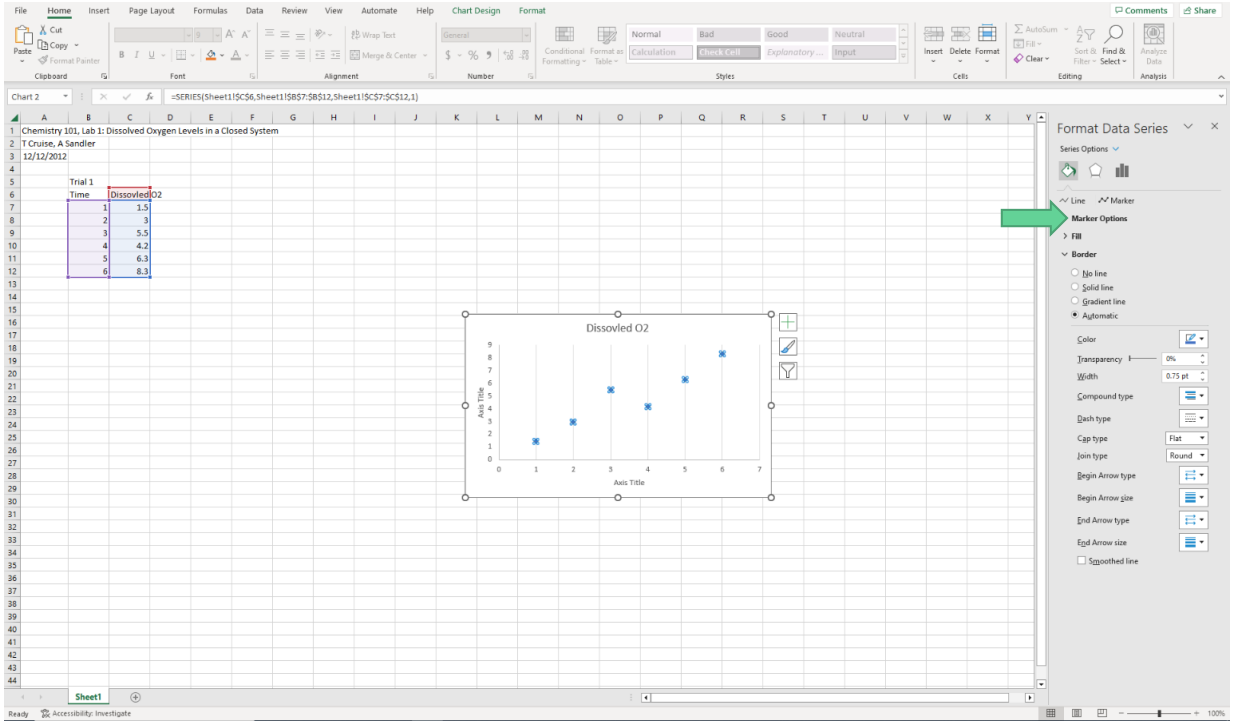
Changing Markers



After selecting “Format Data Series” on the previous page, select the dropdown labeled “Fill & Line”

Under Fill and Line, select “Marker” to access marker features

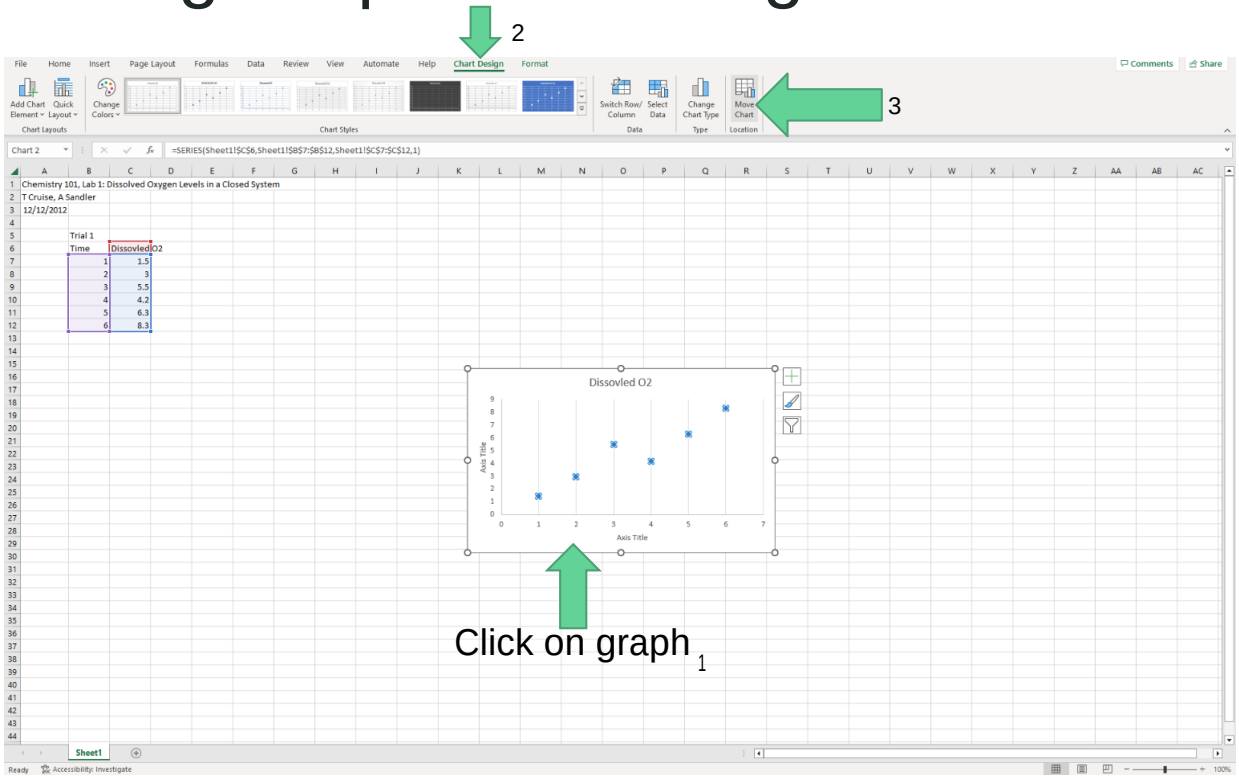
Changing Markers Continued



After selecting “Marker” on the previous page, select the dropdown labeled “Marker Options”

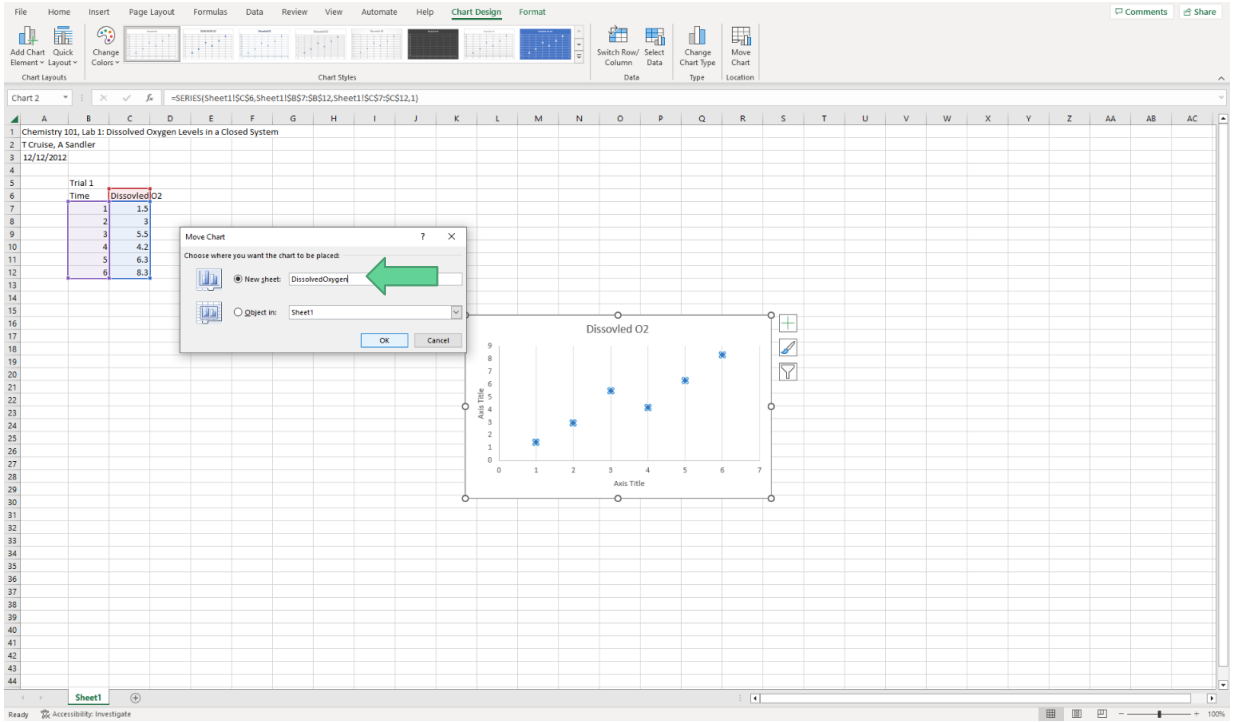
You can change the Type and Size of your markers from there

Sizing Graph to Full Page



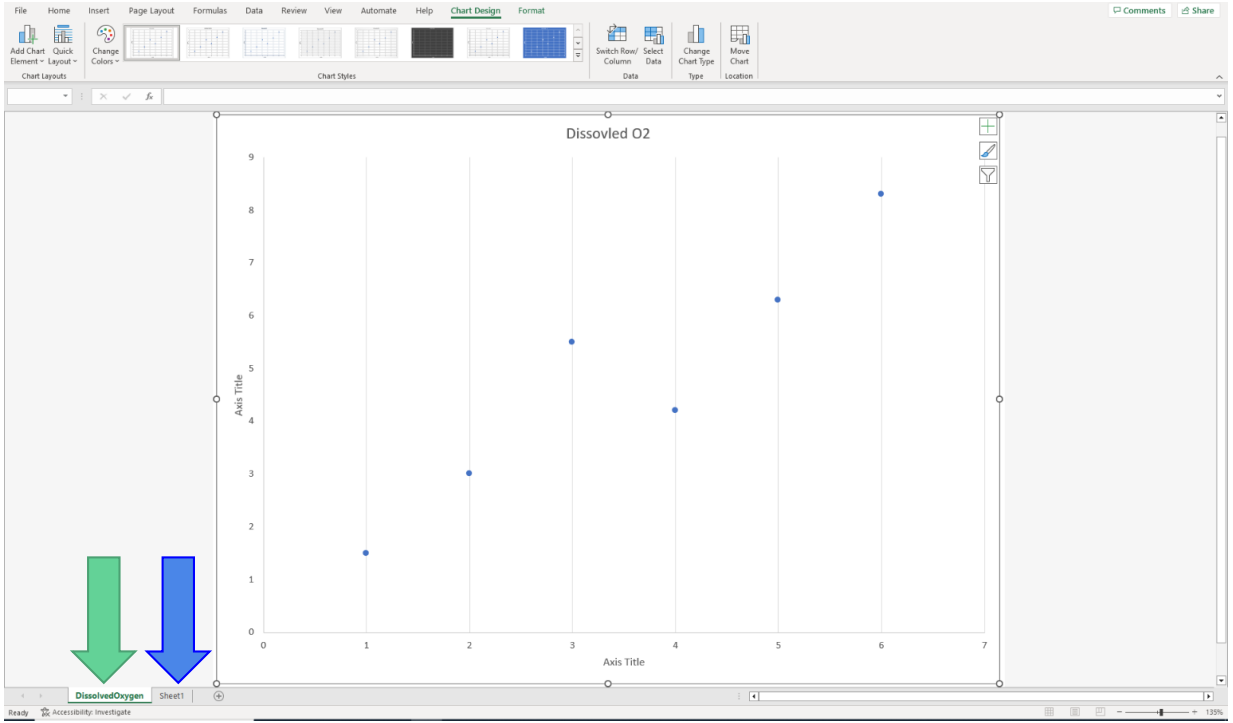
Make sure the Chart is selected. Under the tab “Chart Design”, select “Move Chart”

Moving Graph to New Sheet



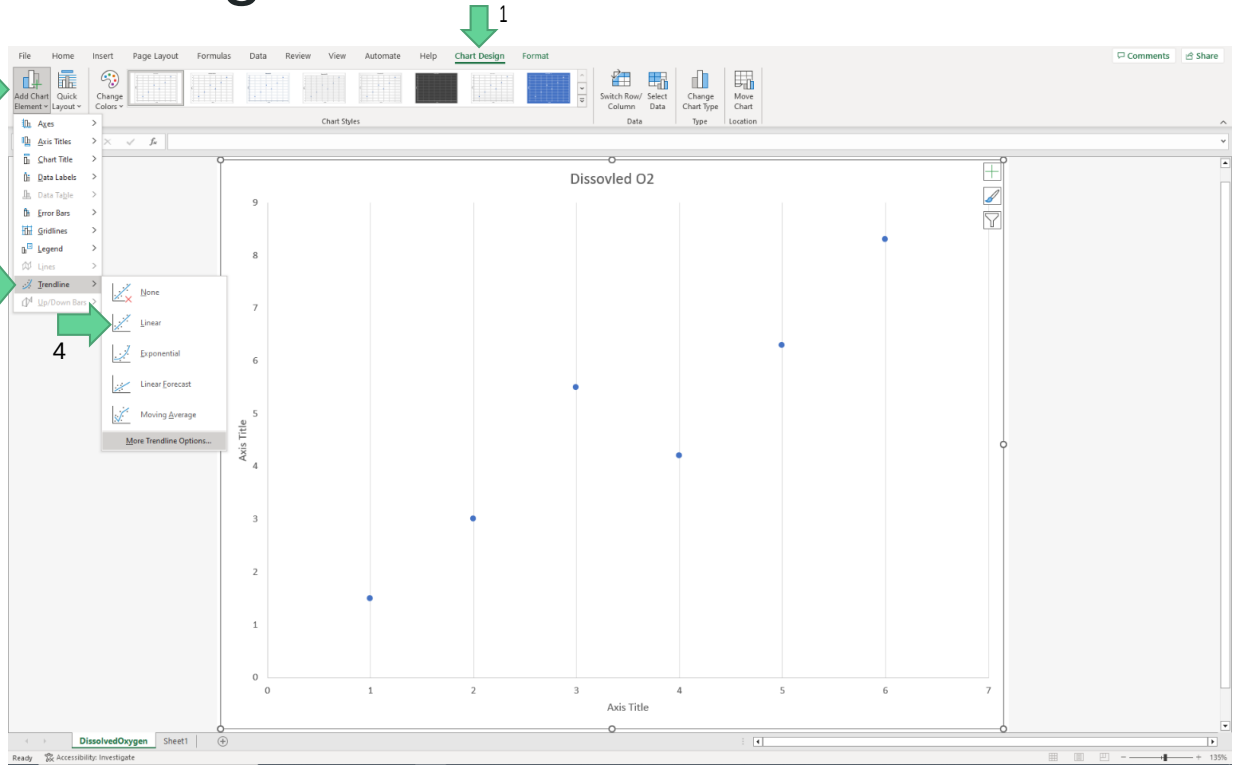
After selecting “Move Chart”, make sure “New Sheet” is marked and rename the graph. Press “Ok” to finalize.

Graph on Full Page



Your full page graph will be under the first sheet, and your data will be under the second sheet. You can toggle between the two

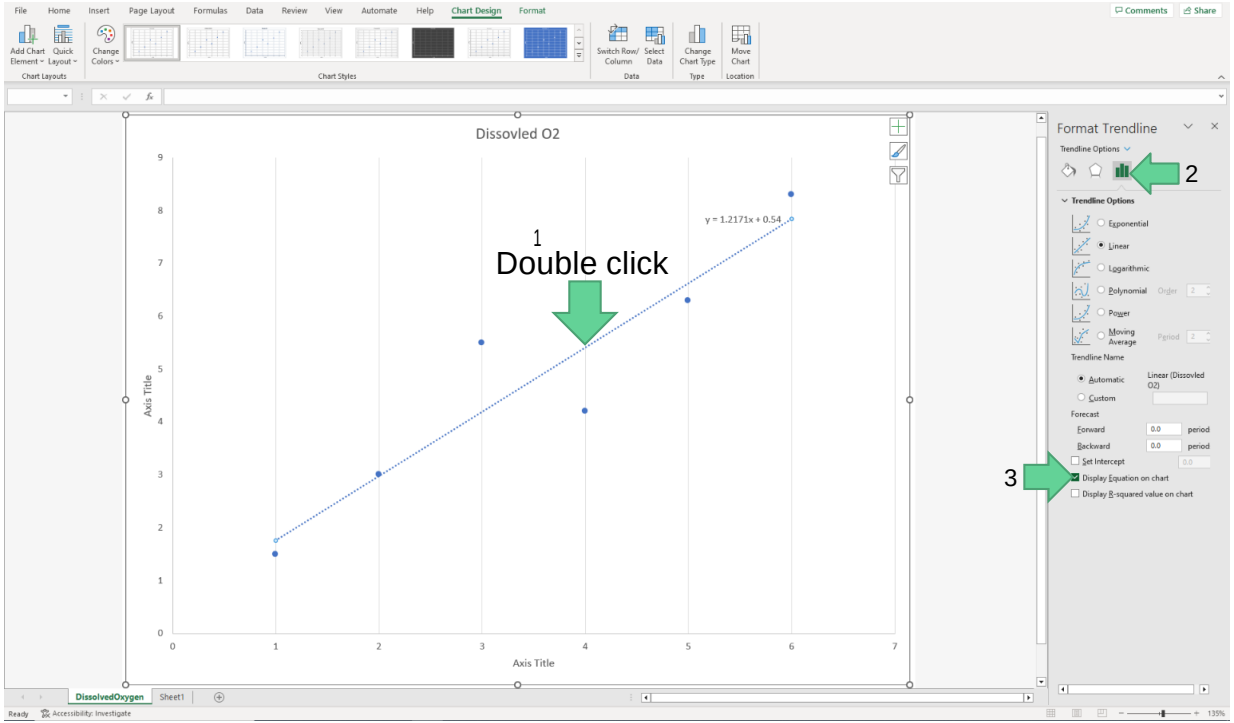
Adding a Trendline



Click on the graph.
Under “Chart Design”, select “Add Chart Element”

In the dropdown, click on “Trendline” and select “Linear”

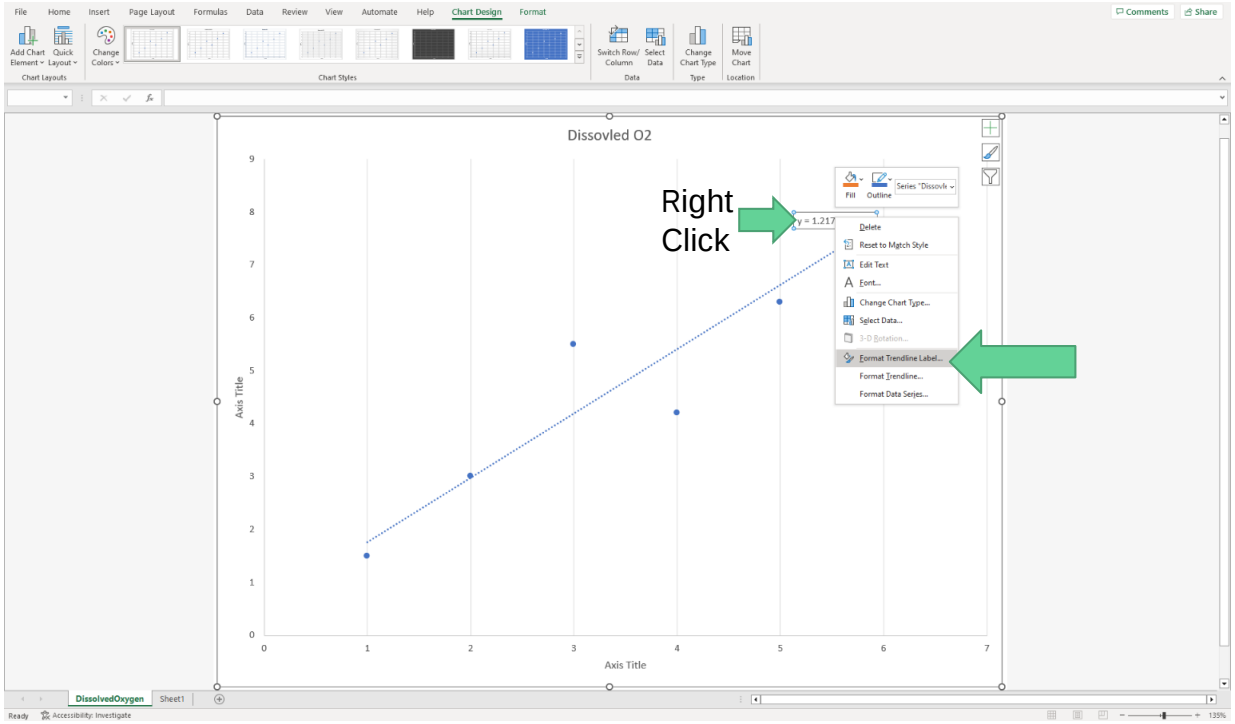
Formatting Trendline



Double click the trendline shown on the graph

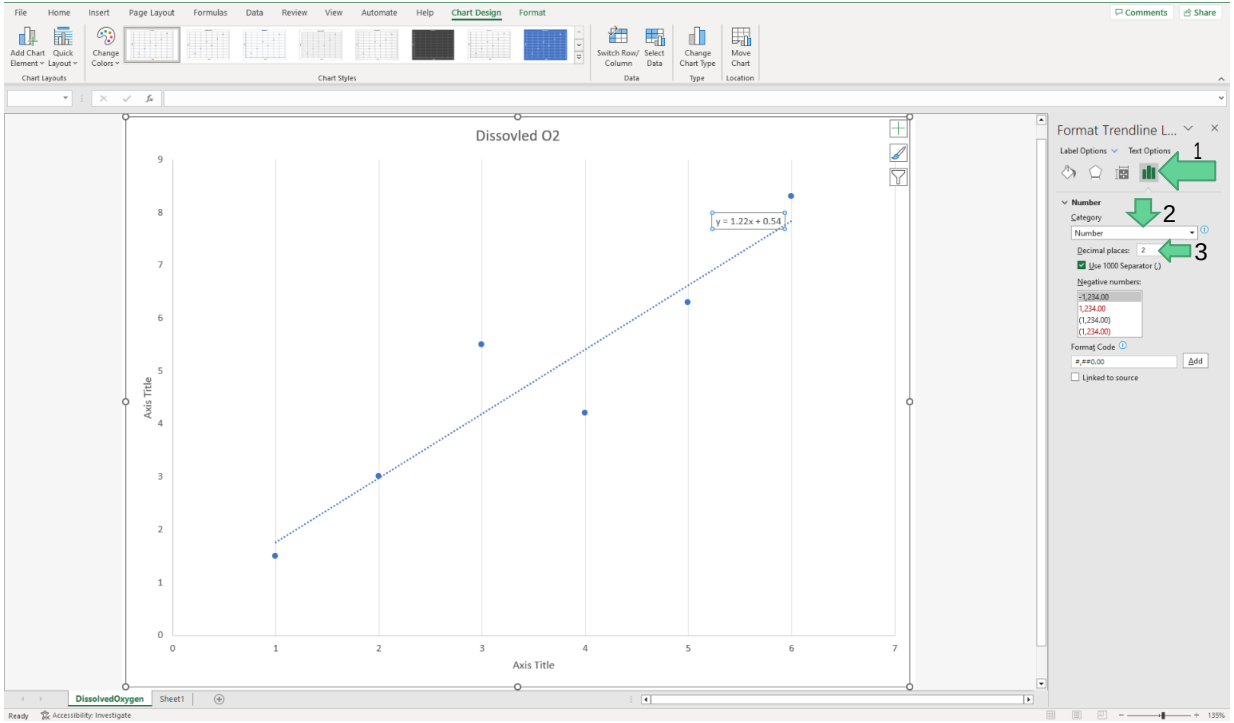
Select “Trendline Options” and click on “Display Equation on Chart”

Formatting the Equation



Right click on the equation. In the dropdown, select “Format Trendline Label”

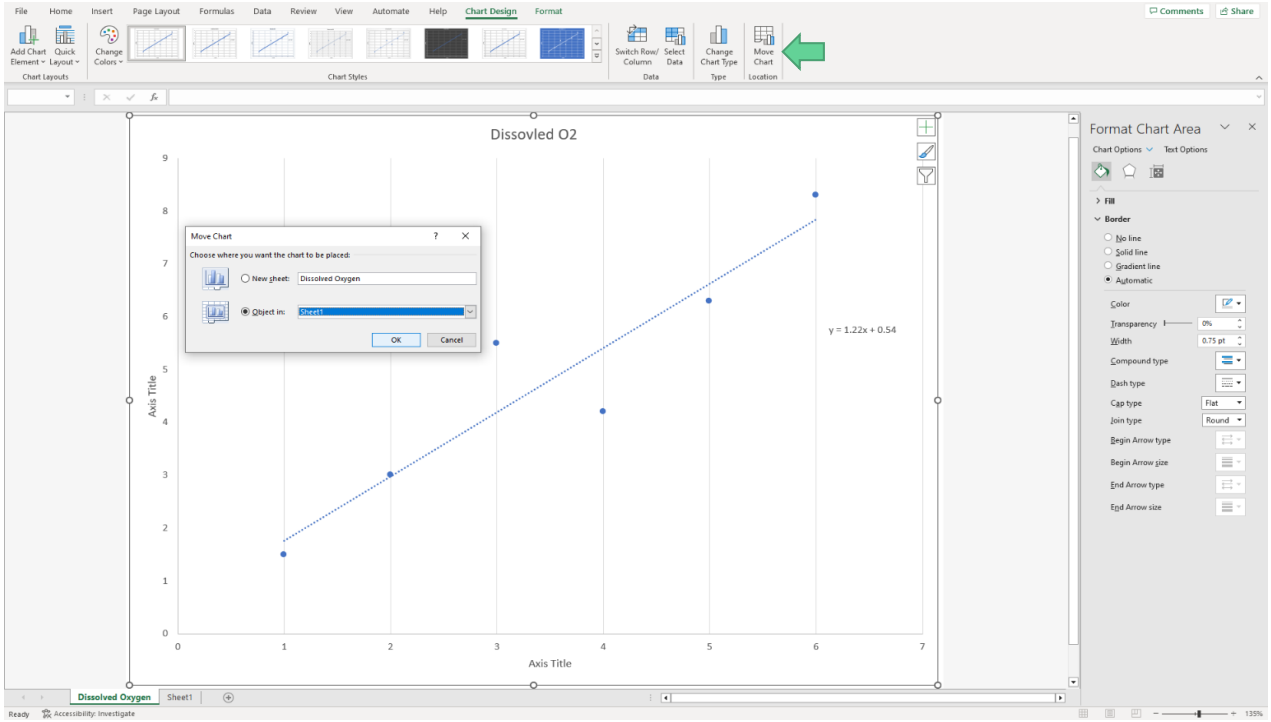
Changing Significant Figures



Under Category, click the dropdown box and select “Numbers”

In the box next to Decimal Places, input the amount of significant figures you want

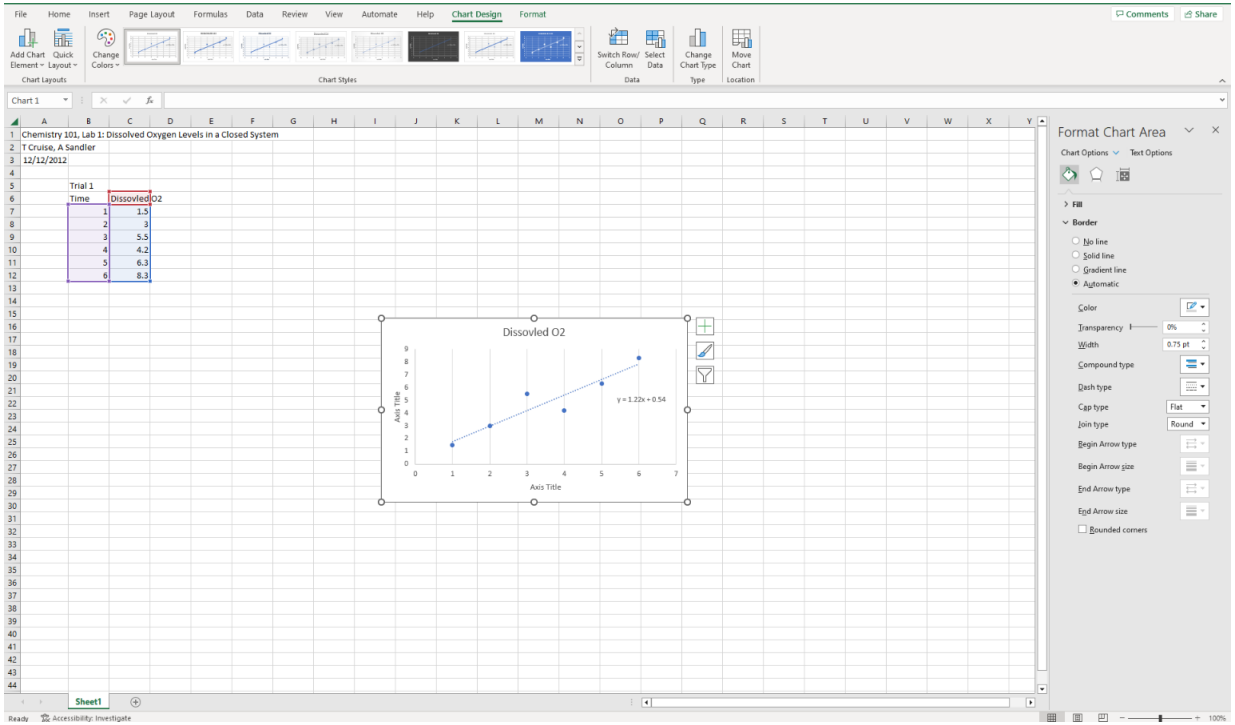
Moving the Graph back



To move the graph back to the original sheet simply press move chart

Then select “Object in:” and use the drop down to select where you would like the graph to be moved to

Conclusion



Congratulations! You can now create a clear and useful graph in excel

You can copy the graph using ctrl+c and paste it using ctrl+v