How To Create a Line Graph in Google Sheets

Let's imagine that after we've created a Cumulative Distribution Table for the data we collected on the number of hours of sleep college students get each night, we want to create a Line Graph to visually represent our data.

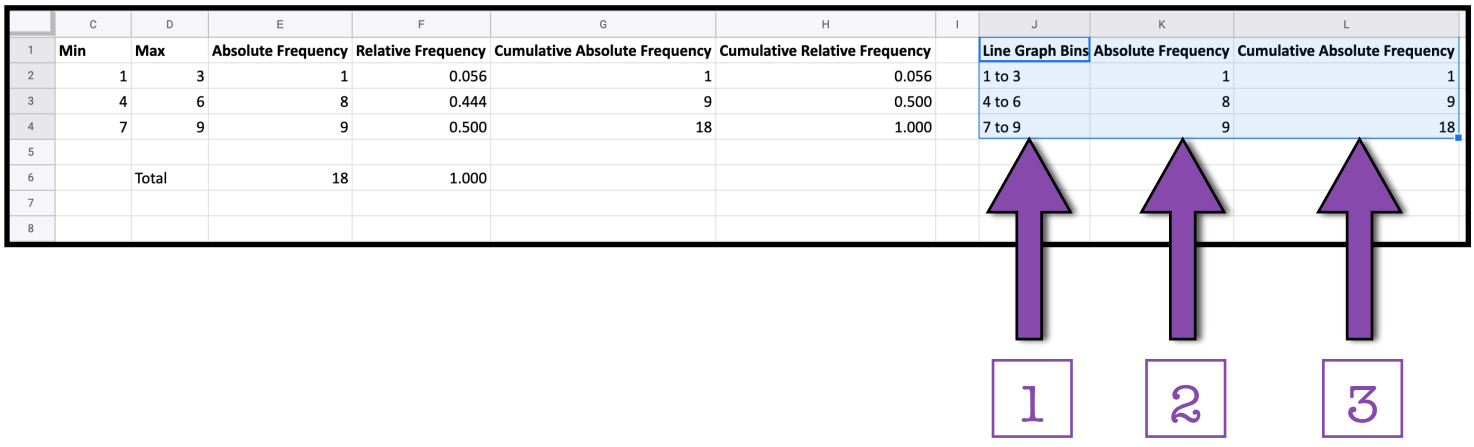
First, we will create our Line Graph Bins. A Line Graph Bin is an interval that is entered into only one cell of our spreadsheet. For example, when we created our Absolute Frequency Table, we entered the minimum and maximum of each interval into two separate columns (Min and Max). Now, we want our interval to be together in one cell, under one Column Heading.

J	K	L
Line Graph Bins	**Absolute Frequency**	**Cumulative Absolute Frequency**
1 to 3	1	1
4 to 6	8	9
7 to 9	9	18

To create our Line Graph Bins, we start by entering the Column Header "Line Graph Bins" into a blank column in our spreadsheet. In the first cell of this column we enter our first bin value (our first interval). In this example our first bin value is 1 to 3. We then continue to enter the rest of our intervals into the Line Graph Bins column.

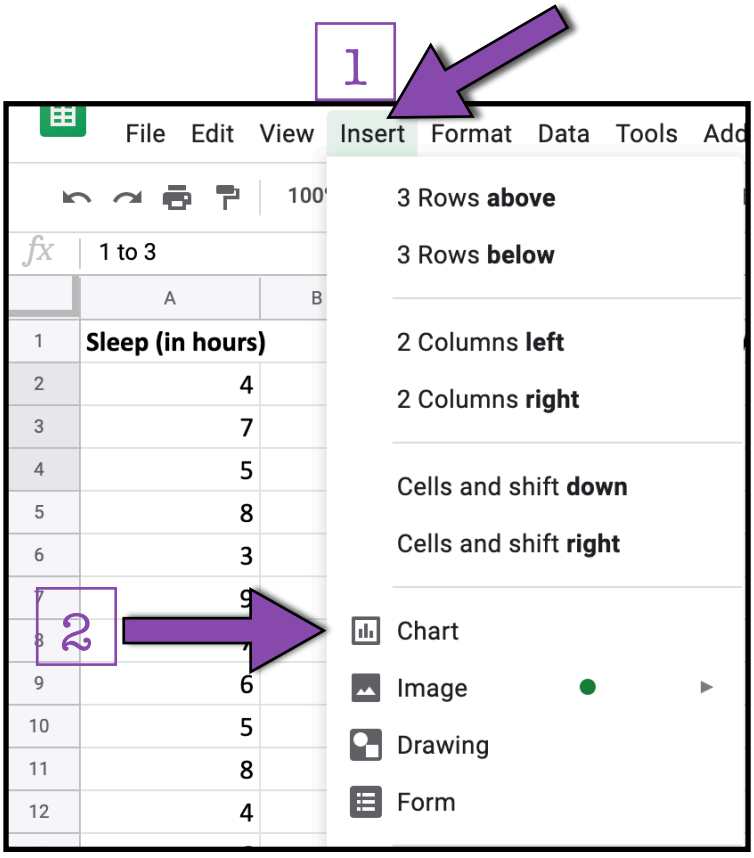
Second, in the column to the right of the Line Graph Bins column, we enter the Column Header "Absolute Frequency." In this column, we enter our Absolute Frequency values from Column E for each interval. In this example, they are 1, 8, and 9.

Third, to the right of the Absolute Frequency column, we enter the Column Header "Cumulative Absolute Frequency." In this column, we enter our Cumulative Absolute Frequency values from Column G for each interval. In this example, they are 1, 9, and 18.



Once we've created our three new columns for our Line Graph Bins, our Absolute Frequency, and our Cumulative Absolute Frequency we are ready to begin making our Line Graph.

To create a Line Graph, we begin by selecting the data in our "Line Graph Bins" column, the "Absolute Frequency" column, and our data in our "Cumulative Absolute Frequency" column. These data are highlighted in blue in the figure above. And we want to be sure to select **both** the data and the Column Headings.

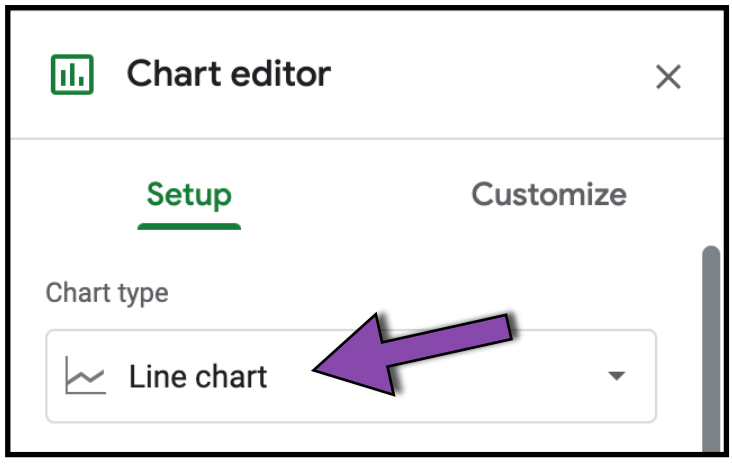


First, click "Insert" in the ribbon at the top of the Google Sheets window.

Second, from the drop down menu select "Chart."

Selecting "Chart" will give us a new "Chart Editor" toolbar on the right side of the screen.

Under the "Chart Type" drop down menu select "Line Chart."

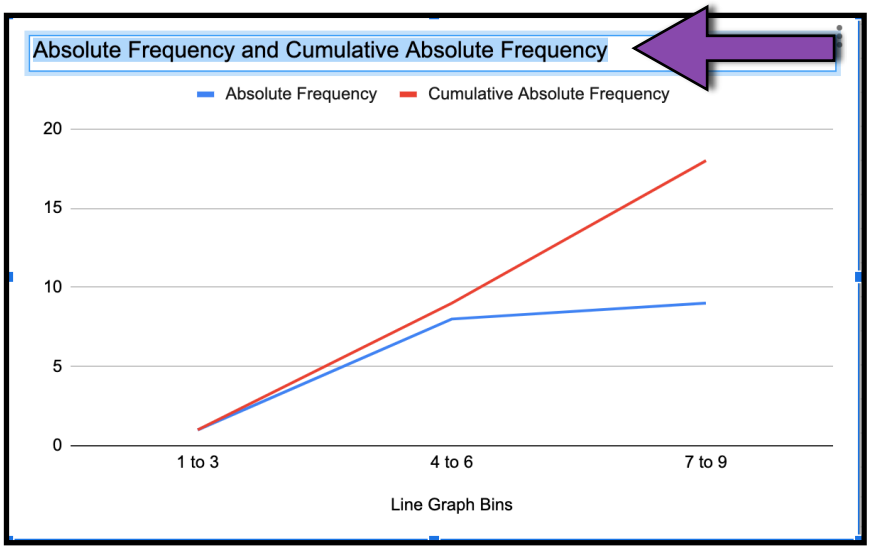


Clicking on that option will cause a Line Graph to appear!

Google Sheets will automatically create placeholder labels for our Graph Title and Axis Labels on our Line Graph.

However, we want to edit the Chart Title and Axis Labels to make them more informative.

To change the text of our Graph Title and our Axis Labels, we can simply double-click on the text of the label, highlight the existing text, and replace the existing text with our new label.



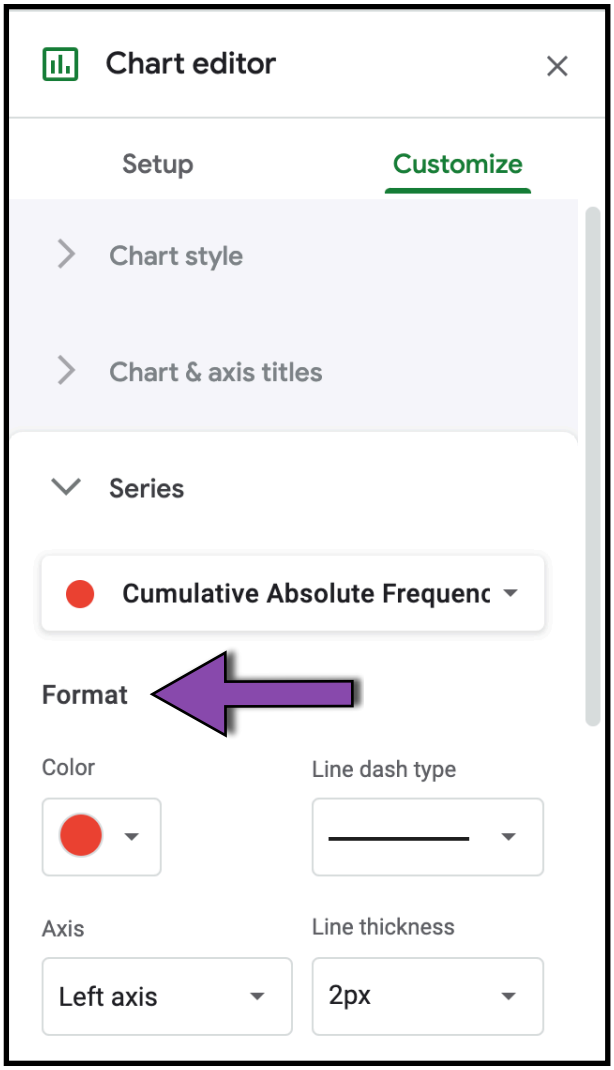
Once we've added our informative Graph Title and Axis Labels, we need to look at the Graph Units (the units of information presented on our axes).

Graph Units (the units of information presented on our axes). Google Sheets has automatically created our Graph Units in increments of 1 (e.g., 1, 2, 3). Google Sheets does not allow us to change the Graph Units, so we must use the Graph Units Google Sheets automatically creates.

Finally, we may want to adjust the color or the dash type of the lines in our Line Graph.

To change the color or dash type of our lines we first select a line by double clicking on either of the lines.

A "Chart editor" toolbar will open on the right side of our screen. Next, under "Series", we select either the "Color" dropdown menu or the "Line dash type" dropdown menu.



There are endless options for customizing the color and dash type of our lines! However, we must be sure to keep the principles of designing good graphs in mind when choosing our color or dash type.

We've now created a Line Graph using Google Sheets!