Part 1: Analyzing Your Data

Let's review the major concepts related to analyzing your data

Question	What do we learn about our data by answering this question?
Question 1: Is the data reliable?	
Question 2: What conditions do the results apply to?	
Question 3: Are the results meaningful?	

Let's now consider what are the answers to these questions for your experiment

Your hypothesis: _____

Question	Answer about your experimental results
Question 4: Is your data reliable? (Is it consistent and reproducible?)	
Question 5: What conditions do the results apply to? (Do you have any limitations?)	
Question 6: Are the results meaningful? (Is there enough similarity or difference to help support your hypothesis?)	

Part 2: Visualizing Your Data

**Matching: What does each type of visual or graph tell you about the data it represents?
Match the visual to the correct description**

Graph Type

Data Table
Pie Chart
Line Graph
Bar Graph

Purpose or Use

A graph that uses bars to represent a particular value or category of data in a set, with two axes and a legend.
A table used to organize and label data clearly, as well as display calculated values like totals and averages. Used with both qualitative and quantitative data.
A graph that shows proportions of a whole to which a value belongs.
A graph that usually shows change over time, with two axes and points scattered throughout to represent the data, connected by a line.

Now that you are familiar with a few different ways to visualize data, pick the best visual for your project. Watch the video tutorial for how to make a graph using google sheets, and then try it with your own data. You can follow along with the video tutorial, or watch first and then try on your own.

We recommend that you make a data table first to organize your results, and then make either a line graph, a bar graph, or a pie chart. If you want to make a different graph you can! Whatever you make, bring it with you to the next session! Try to keep it on google slides so you can share it with your mentor.

Once you have a data visual, answer this question:
Is your hypothesis supported? Explain why or why not.