Graphing Basics

* Every graph needs a title
  + A title of the graph
  + A title for the X axis
  + A title for the Y axis
* It needs units of measure, i.e. milligrams, ounces etc.

Types of graphs:

Pie graph: shows the whole thing

Bar graph: used to compare amounts

Line graph: used to show the change of one piece of information as it relates to another

Parts of a graph:

Bar graph and a line graph both have an “X” axis (horizontal) and a “Y “axis (vertical).

Title: Summarizes information being represented in ANY graph.

Legend: A short descriptive narrative concerning the graph’s data. It should be short and concise and placed under the graph.

Variables: something changes

Independent Variable: The variable that is controlled by the experimenter such as, time, date, depth, and temperature. This is what we control; what we know. It is always on the “X” axis.

Dependent Variable: The variable that id directly affected by the dependent variable. It is the result of what happens as the time, dates, depth, and temperature are changed.

It is always on the “Y’ axis.

Scales for each variable: Always start with “0”. Make the scale fit your graph.

Mean for a group of variables: To determine the mean for a group of variables divide the sum of the variables by the number of variables to get an average.

Median for a group of variable: To determine the median or middle for an even number of values, out the numbers in ascending order , add the 2 middle numbers and divide by 2.

Mode for a group of variables: the number that shows up the most often.