## The 5 Parts of a Graph

## Basic Format of Graph:



1. Axis labels: Normally you plot the independent variable (the one over which you have control, the inputs) on the horizontal axis (x-axis) and the dependent variable (the one you are measuring, the outputs) on the vertical axis (y-axis). Write a short descriptive label that represents each axis. The label is written vertically from the bottom up.
2. Units: Write the units in parenthesis after the axis label-often this is an abbreviation.
3. Intervals: Choose intervals that make it easy to read and so the data occupies the majority of the graph. You can include a break in the axis if there is a large gap between zero and the data points. Be careful not to exaggerate the variations in the data if you do this.
4. Data: Plot the data points on the graph. You do not normally connect the dots. Decide whether the origin $(0,0)$ is a valid data point. If the data points show a correlation you may add a trend line (line of best fit) or a smooth curve that represents the overall pattern. If it's linear, this typically can be added by using a ruler and "eyeballing" it. A trend line is a nice way to illustrate the basic relationship between the two variables. You may need to find the equation of the trend line.
5. Title: Choose a title for the graph that uniquely identifies it. The title should not just repeat the labels, but add information specific to what the data represents.

Examples:



