



Graphing Rules

- I. Use only graph paper when making graphs.
- II. Use only pencil to make graphs. (No pen or marker.)
- III. Do not write in borders or margins of graph paper! (this includes axis titles and labels as well as your title.)
- IV. Darken a set of axis lines using a ruler (No wobbly lines!)
- V. Your graph must have a TITLE. The title should not be generic—it should tell us what the graph is about.
- VI. Each axis line must be labeled with a title and units.
- VII. Use a ruler for making strait lines on graphs and bars on histograms (bar graphs).
- VIII. Be consistent in making increments while numbering an axis.
- IX. Axis numbers need to sit **ON THE LINES** and **NOT BETWEEN THEM** for line graphs and opposite for bar graphs! (When you're doing graphs in science though, line graphs are usually more useful because they tell you how one thing changes under the influence of some other variable.)
- X. You must show tick marks! (*Tick marks* are the lines placed perpendicular to the axes to show the location of the measurement numbers.)
- XI. The graph may not extend beyond the lines of the paper. (You may not add blocks to a graph or tape together several pages.)
- XII. The graph must be proportionate to the axis (use as much of the graph as possible.)
- XIII. Pie / Circle graphs must have a key as well as any Line / Bar graphs that have multiple trends must also have a key.
- XIV. The X-axis is always your independent variable and the Y-axis is always your dependent variable.
- XV. The “Line” on a graph is called a “Curve”—even if it is a straight line. The intersection of the two axes is called the “origin”.
- XVI. Unless your data is in quadrants 2-4, your axis lines should be on the left and bottom of your graph.
- XVII. Only draw in the quadrants for which you have data—usually this is quadrant one, but occasionally you will have some data for quadrant four since we can not measure backwards in time or count negative organisms...but we can have negative temperatures.
- XVIII. Exception rule: Pie / Circle graphs may have their title and key outside the graph as may computer generated graphs that do not allow one to alter where information placed.