

### Appendix III: Procedural Steps in Graphing

1. A set of data must be obtained, either from,
  - a) literature (reference must be included) or
  - b) experimentation

The data table must accompany the graph

2. Choosing the axes:

The “independent” variable is **always** placed on the x-axis. (This is the variable that you control, such as time).

The “Dependent” variable is **always** placed on the y-axis.

3. Choosing the scale for the axes:

A scale is chosen to use most of the graph paper.

Use easy numbers, as one small square equal to 1, 2, 10, etc. **Do not** use a scale of 1 small square equal to 5, 6, etc.

4. Label the axes **clearly**, with **units**.

The name of each variable should be written out, parallel to the axis.

Include enough numbers on the lines to make the scale very clear.

5. Locate **all points** on the graph.

The points are the important part of the graph.

6. Draw a **smooth curve** through the greatest number of points, trying to keep a roughly equal number of points above the curve and below the curve.

When the points are all in place, the shape of the curve should be obvious.

7. Every graph should have a **title**, such as:  
Celsius vs. Fahrenheit Temperature