

## ***Graphing and Linear Equations***

We use graphs to represent data and the relationships between variables. One very important type of relationship that you will be graphing is the linear (bivariate) equation, which has the following form:

$$\mathbf{y = mx + b}$$

With the variables defined as follows:

**'x'** the **independent variable**

## Graphing Etiquette

- Always provide a figure legend for your graph summarizing the experimental methods that led to the results. Be careful to NOT interpret the results in the legend.
- Label both axes (what variable is on the x axis, the y axis?).
- Don't forget to include units (is that time in seconds, hours or years?).
- Include the y-intercept if it seems at all important. Is (0,0) a point on your graph? This could help you determine whether you are seeing a line or a curve.
- Try to use a computer for best results.
- If you cannot use a computer to find the best line fit, draw the line with a straight edge and then find the slope of that line.