**Graphing Guidelines**

* Purpose of graphing: to express large quantities of data in a concise way
* X-axis: where independent variable is typically plotted (horizontal)
* Y-axis: where dependent variable is typically plotted (vertical)
* Elements of a graph:
  + Descriptive title (What does the graph show us? Gives additional info that is not available in the axes titles alone. Simplest form: dependent vs independent variable. But elaboration best.)
  + Axes:
    - Tick marks at regular numbered increments
    - Labelled, with units
  + Data points
  + (Legend)
  + Trendline\*
    - Linear data:
      * Line of best fit: straight line that follows data; has ~same number of points above as below it
    - Non-linear data:
      * Connect the dots
      * Follow the curve

\*not always required

* Good graph:
  + Will take up a reasonable amount of space. Aim for half a page at least; as much space, the better!
  + Axes will be scaled appropriately to the amount of space you have to work with. (Should use as much of the axis as possible! Tip: Divide largest value by # of squares)
  + Neat and tidy! Use pencil for majority of graph! (pen for axes, labels, etc. is ok)







