

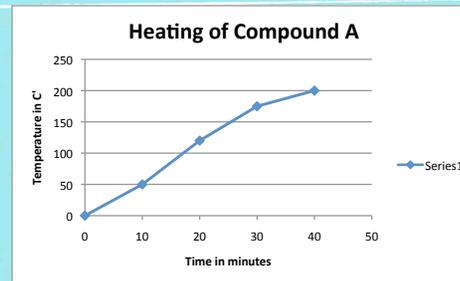
Graphs

A graph is a visual display of information or data. Graphs are often helpful to show what happens during the course of an investigation.

Different Types of Graphs

- * Different kinds of graphs are appropriate for displaying different types of information. The graphs we will be using are
 - * line graph
 - * bar graph
 - * pie graph (circle)

Line graph



* When do I use a line graph?

* Use a line graph to show trends or continuous change.

* On a line graph the **independent variable** is graphed on the X-axis.

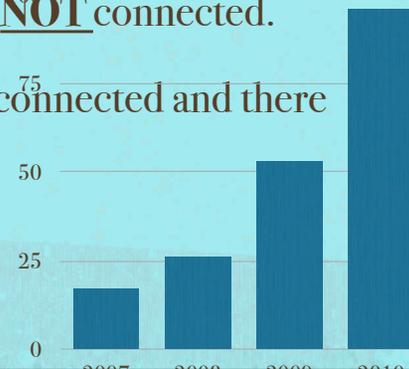
* The **dependent variable** is graphed on the Yaxis.

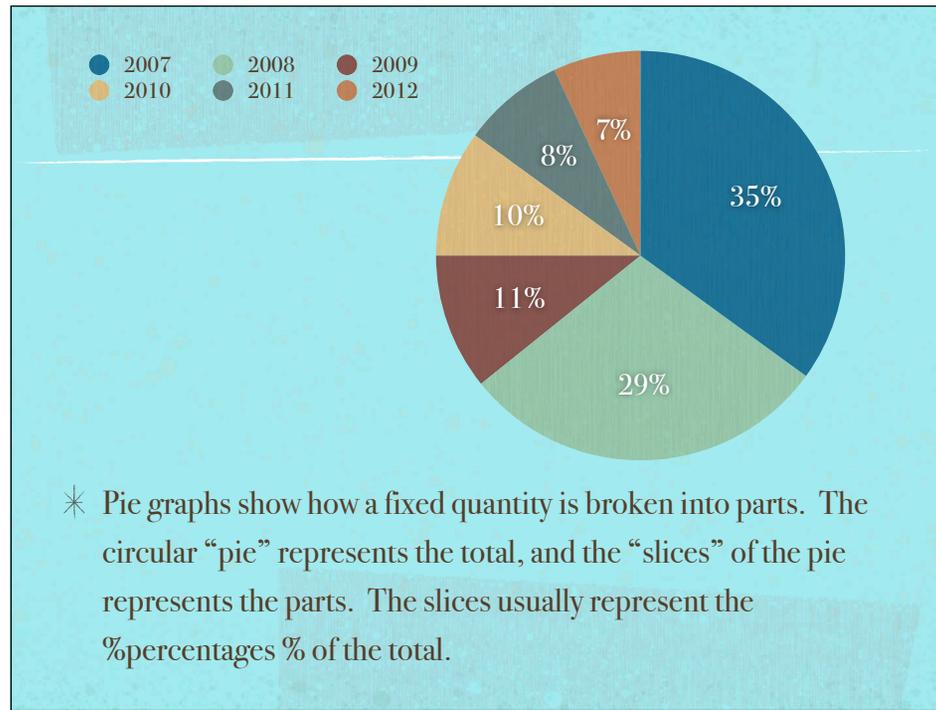
Bar Graphs

* Bar graphs are used to show information collected by counting. Bar graphs show comparisons, but does not indicate trends.

* In bar graphs - the bars are NOT connected.

* In histograms - the bars are connected and there is a range of data.





RULES

- * 1. All graphs should have a title that describes the information in the graph.
- * ALWAYS label the X and Y axis.
- * Use units and words (EX.- time in hours)
- * Number your graphs in even intervals and consistently
- * Spacing must be consistent
- * ALWAYS label the intersection of the X and Y axis as 0,0.

* On a bar graph

* space evenly between the bars - bars must have space in between them

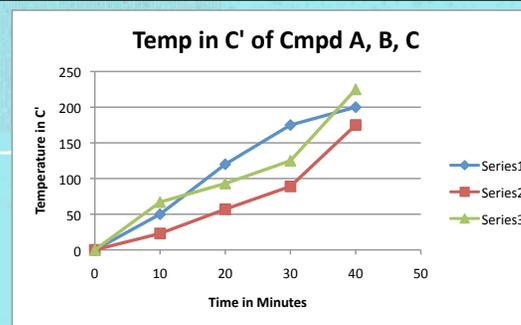
* bars must be even in width

* label all bars

Pie graphs

- * All % must = 100%
- * % and size of section on the graph should be equal in value
- * label all sections of the pie with % and word description

- * Use pencil on graphs - so you can erase any mistakes
- * If you want to color in your graphs, only use colored pencils, as markers and crayons bleed on the paper, making it difficult to see where points have been plotted.
- * **ALWAYS, ALWAYS, ALWAYS use a ruler to draw any lines, bars, etc.**



* Multiple line graphs must have a key.