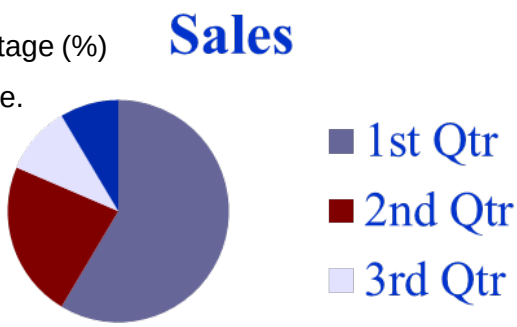
Pie Charts

When: Often pie charts are used to show components of a whole (100%). Do not use a pie chart if you have more than **six** components or if each component is similar in size.

Why: Pie charts are a good method of showing relative sizes.

How:

1. Make a table with the total
2. Divide each value by the total and x100 to get a percentage (%)
3. Multiply by 360 (full circle) to find out the size of each pie.



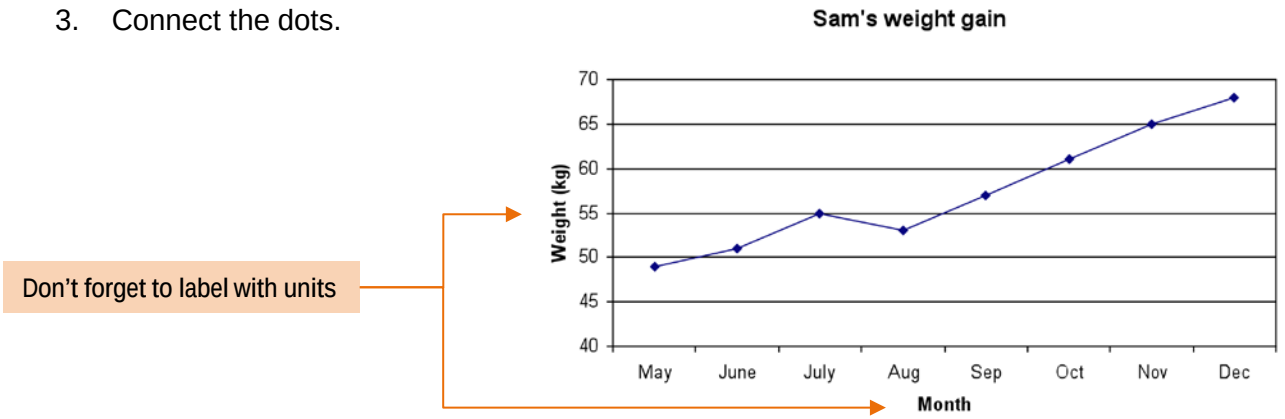
Line Graphs

When: Line graphs are used to display changes over time or when you have continuous variables (these are numbers with decimal places in them such as height, weight, time).

Why: Line graphs help to determine specific values (if you know one variable you can find the other). This will illustrate changes over time.

How:

1. Put your independent variable on the x-axis (*horizontal*) and your dependent variable on the y-axis (*vertical*)
2. For each coordinate for x and y put a dot on the graph
3. Connect the dots.



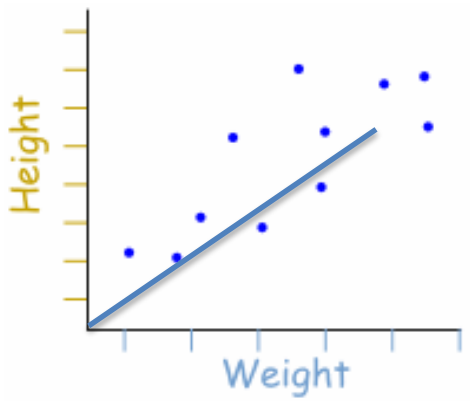
Scatterplots

When: Use scatter plots to show a relationship between two variables.

Why: Scatter plots are used to suggest there is a correlation between the two variables in the form of a line of best fit, which then can be used to make predictions.

How :

1. Put your independent variable on the x-axis (*horizontal*) and your dependent variable on the y-axis (*vertical*).
2. For each coordinate for x and y put a dot on the graph.
3. For a line of best fit try to draw a line that is as close to all the dots as possible.



Get more information on scatterplots from:
http://www.mathsisfun.com/data/scatter-xy-plots.html

Bar Graphs

When: Use bar graphs when you have *nominal variables* (these are values with no numbers and is not ordered e.g. blood type, country of birth) or *ordinal data* (no numbers, but can be ordered e.g. level of education, satisfaction level).

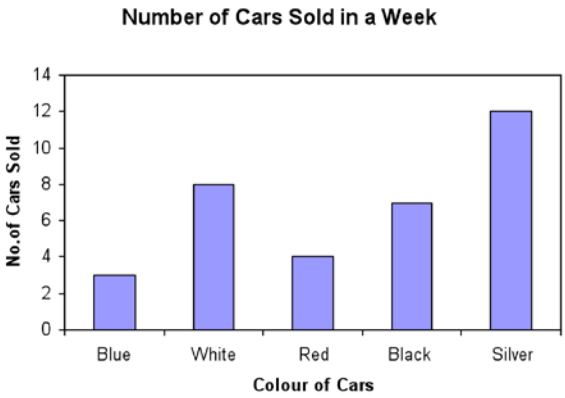
Why: Bar graphs help to compare different variables of variety of sizes.

How:

Step 1: Tabulate how many of each category.

Step 2: Insert the categories on the x-axis (*horizontal*) and the continuous variables on the y-axis (*vertical*).

Step 3: Draw the Bars in relation to its number



Student Learning Centre
Registry Building Annexe

Tel: 61-8-8201 2518
E-mail: slc@flinders.edu.au

Internet: http://www.flinders.edu.au/SLC
Postal: PO Box 2100, Adelaide, SA 5001