Graphical representation

Frequency table

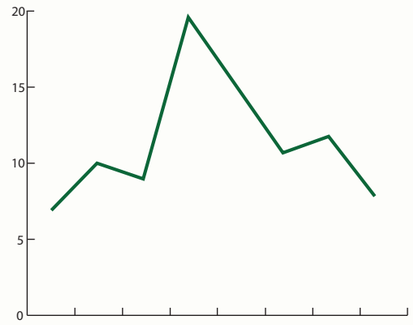
Frequency table to show pet ownership

Number who own a pet	Number who do not own a pet
5	2

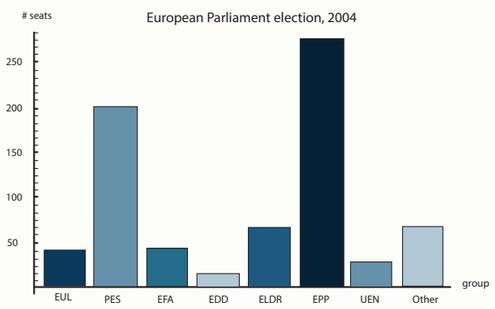
A chart/table that shows the rate of occurrence (frequency) for a number of measured values/categories.

Line graph

A diagram that shows a linear representation of frequencies of data. Scores are plotted and joined one by one with straight lines.



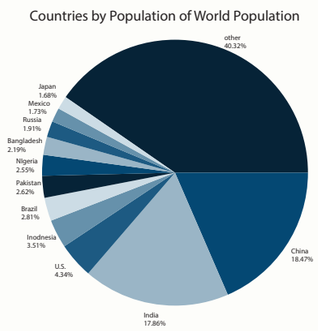
Bar chart



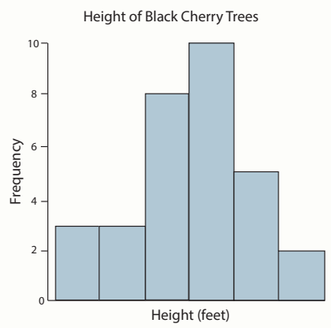
A diagram that represents frequencies of non-continuous (discrete) data. There should be gaps between all bars, and a gap between the first bar and legend/y-axis.

Pie chart

A diagram that represents data proportionately, as part of a whole picture of responses. Needs a key to explain segment labelling/shading.



Histogram



A diagram that represents the distribution of frequencies for continuous data. There should be NO GAPS between bars.

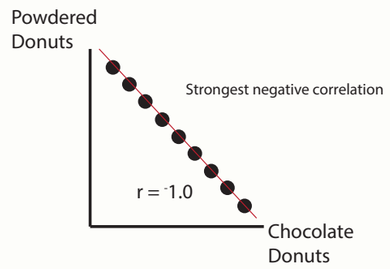
Assessment

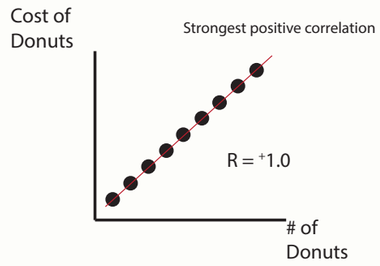
AO1: Demonstrate knowledge of frequency tables, graphical representation (Units 2 and 4) and distribution curves (Unit 4).

AO2: Construct and interpret frequency tables, graphical representation (Units 2 and 4) and distribution curves (Unit 4).

Scatter diagram

A diagram that represents a relationship/correlation between two or more co-variables. It does not need to include a line of best fit. You may need to be able to describe whether the correlation is negative (from top left down to bottom right) or positive (bottom left to top right).





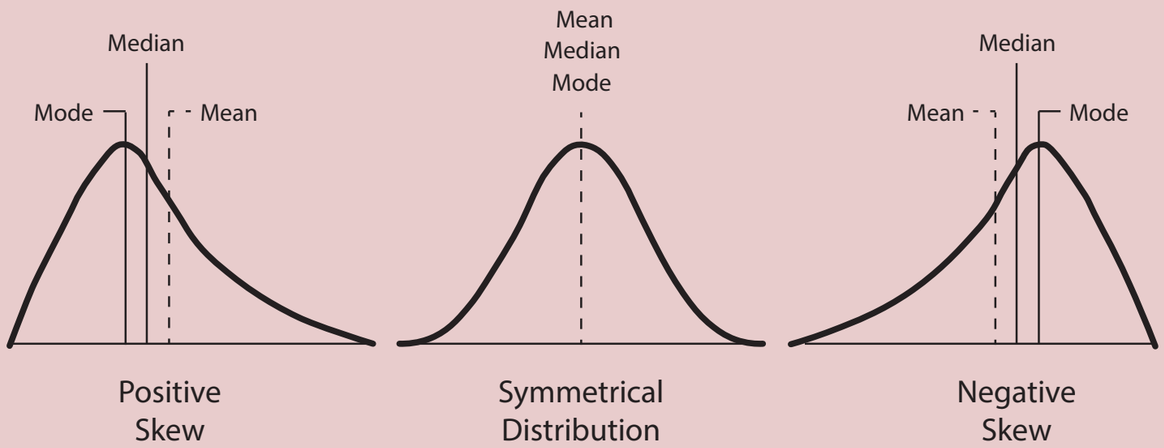
Unit 4 ONLY

Distribution curves: Linear representations of data that include a mean, median and modal score to show a spread of data.

Positive skew: A type of skewed distribution, where the mode is less than the mean.

Normal distribution: A type of distribution where the mean, median and mode are equal (bell curve).

Negative skew: A type of skewed distribution, where the mode is greater than the mean.



Rules for the construction of tables, charts, graphs and distribution curves

You should always include: 1) **a title** for the table/chart/graph/curve, 2) **a key/legend** where there are multiple types of data being displayed, 3) an **appropriate scale** for bar charts, histograms, line graphs and scatter diagrams, and 4) **labels of your axes** (where appropriate). Use a ruler and don't forget your protractor.