

## Chapter 4

**Population** – the entire group considered for the survey

**Sample** – a part of the population

**Random sample** – each has an equal chance to be selected

**Convenience sample** – choosing those who are readily available

**Biased sample** – when specific selections are chosen

**Stratified sample** – a random sample from random subgroups.

**Systematic sample** – a sample according to a rule or formula

**Stem and leaf plot** – uses place values to organize data

**Back to back Stem and leaf plot** – compares two sets of data displaying one to the left and one to the right.

**Mean** – average

**Median** – the middle number in a set of numbers ordered from least to greatest

**Mode** – the number which occurs most frequently

**Range** – the difference between the largest and smallest numbers

**Outlier** – an extreme value

**Variability** – the spread of values in a set of data

**Quartile** – three values on a box and whiskers graph

**Box and whisker plot** – uses a number line to distribute the data

**Lower quartile** – the median of the lower half -

**Upper quartile** – the median of the upper half

**Interquartile range** – the difference between the lower and upper quartiles

**Frequency table** – a way to organize data into groups

**Cumulative frequency** – the frequency of all data values that are less than or equal to a set of values

**Bar graph** – uses bars to display numbers

**Double bar graph** – compares two sets of data

**Histogram** – a bar graph that organizes data into equal intervals.

**Circle graph** – shows how data is divide into parts (pie chart)

**Sector** – a part of the data

**Line of best fit** – a straight line that comes close to the points on a scatter plot

**Line graph** – line segments are used to connect the point of the data

**Double line graph** – compares two sets of data

**Scatter plot** – points plotted for two sets of data but not connected

**Correlation** – the description of the relationship between two sets of data.

Positive correlation – they both increase

Negative correlation – they both decrease

No correlation – no pattern