

## Data

- 1** **Statistics** are a way to answer questions using information. The information has to be observed or collected, ordered, represented and then analysed.
- 2** A **hypothesis** is an assumption made as a starting point for an investigation. It may or may not be true.
- 3** **Quantitative variables** are numerical observations or measurements. **Qualitative variables** are non-numerical observations.
- 4** **Continuous data** can take any value on a continuous numerical scale. **Discrete data** can only take particular values on a continuous numerical scale.
- 5** A set of data is **categorical** if values or observations belonging to it can be sorted into different categories.
- 6** **Ranked data** has values/observations that can be ranked (put in order) or have a rating scale attached. Ranked data can be counted and ordered, but not measured.
- 7** **Bivariate data** are pairs of related variables.
- 8** A measurement given correct to the nearest whole unit can be inaccurate by up to  $\pm \frac{1}{2}$  unit.

## Sampling

- 9** A **population** is everything or everybody that could possibly be involved in an investigation.
- 10** **Census** data contains information about every member of the population.
- 11** A **sample** contains information about part of the population.
- 12** The **sampling units** are the people or items that are to be sampled. The **sampling frame** is a list of the people or items that are to be sampled.
- 13** A **random sample** is chosen without a conscious decision about which items from the population are selected.
- 14** **Primary data** is collected by, or for, the person who is going to use it. **Secondary data** has been collected by someone else.

## Surveys

- 15** A **survey** is the collection of data from a given population. The data is used to analyse a particular issue.
- 16** A **pilot survey** is conducted on a small sample to test the design and methods of that survey.
- 17** A **questionnaire** is a set of questions designed to obtain data.
- 18** An **open question** is one that has no suggested answers.
- 19** A **closed question** has a set of answers for the respondent to choose from.