

1.1 and 1.2 Preview and Statistical Thinking

Definitions

- **Data:** observations (measurements, genders, survey responses) that have been collected.
- **Statistics:** a collection of methods for planning experiments, obtaining data, and then organizing, summarizing, presenting, analyzing, interpreting and drawing conclusions based on the data.
- **Population:** the complete collection of elements (scores, people, measurements, etc.) to be studied
- **Census:** collection of data from *every* element in a population
- **Sample:** a sub collection of elements selected from a population
- **Statistical Thinking:** when analysing data collected by you or someone else, we should consider the following factors: Context of the data, Source of the data, Sampling Method, Conclusions and Practical implications.