



Year 10 Statistics Learning Map

- TERM 1 -

The Collection of Data

Planning Data

Students will begin to understand the components of designing investigations to test hypothesis and learn to deal with potential problems whilst doing so.

Types Of Data

Students will learn to describe the different types of data and understanding their individual advantages and disadvantages.

Populations and Sampling

Students will explore how data is collected for populations. They will learn about Random, Systematic and Quota Sampling and their advantages and bias will be introduced.

Estimation

Students will explore summary statistics to make estimations of population characteristics, including proportions. Sampling reliability will be investigated.

Collecting Data

A whole host of variables will be explored – Laboratory collected data, questionnaires, observations, census, interviews, and sampling to name a few. They will learn techniques to perform these data captures appropriately.

LINKS TO PRIOR LEARNING

This unit is the first unit, which enables the understanding of the data handling cycle. This will be the fundamental foundation for which students will progress through KS4 Statistics.

- TERM 2 -

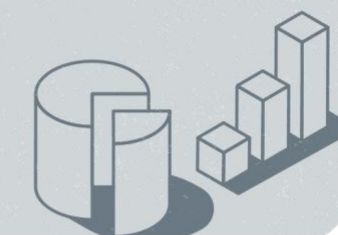
Processing, Representing and Analysing Data

Processing and Representing Data

This leads on from the collection of data unit and students will begin to display the data in multiple formats. Expressing data will be explored as – Tabulation, Frequency Tables, Pictograms, Pie Charts, Bar Charts, Stem and Leaf Diagrams, Population Pyramids, Choropleth Maps, frequency Polygons, Cumulative Frequency Charts, Histograms, and others. Students will learn to construct and interpret and understanding the uses of each.

Analysing Data

Students will determine and justify appropriate forms of representation for different data. They will learn about misrepresentations that appear graphically and begin to look at skewness by inspection.



LINKS TO PRIOR LEARNING

HT3 is designed to give students the opportunity to apply their knowledge from collecting data. The students will build on the representations and interpret and infer the uses of each.

- TERM 3 -

Summarising Data

Summarising Data

Students will use averages from raw or grouped data. They will learn how to decide on the most appropriate average and begin exploring measures of dispersion from discrete and grouped data and begin to calculate Skewness.



LINKS TO PRIOR LEARNING

This term will incorporate skills used in both of the previous terms. They will use a variety of collected data and represent it in a variety of ways. They will then begin to process and analyse this data, leading to further statistical analysis and a more developed understanding of the processes.