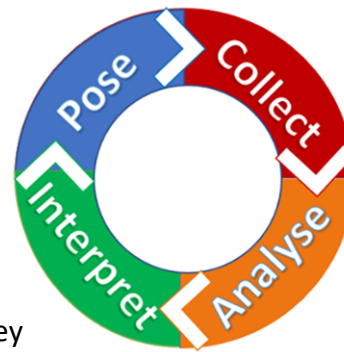# Statistics

The GCSE Statistics qualification develops skills that students will use in other subjects such as science and geography, and reinforces techniques needed for GCSE maths, as well as supporting progression to A-level Maths.

Taught through research, real-life scenarios and projects, it will capture an interest and give an insight into the importance of statistics in the real world. Projects studied will include, "the richer the country, the better they perform in the Olympics" and "the use of technological devices affects your sleep pattern." Students also create and analyse their own stocks and shares portfolios.

Year 10

Collection of data

This area will include an introduction to all of the statistical terminology required for the course. Students will learn how to collect data and about the different types of data. They will weigh up the advantages and disadvantages of data collection and sampling methods and then be able to reason, "Why is a face to face interview sometimes better than a postal questionnaire." They will learn how to design good questionnaires and how to overcome problems that can occur with collected data.

Processing and representing data

This area will enable them to develop their understanding of using relevant charts and diagrams to represent their findings. There will be some overlap with GCSE maths in studying topics, such as, pie charts and histograms, but also an introduction into why graphs can be misleading and how we can analyse detailed choropleth maps.

Project – Mayfield High

Students will study a project that they will design themselves from the Mayfield High school data set. They will choose a hypothesis, for example, "the older you are in the year group, the higher your IQ". They will then use bivariate data to investigate their hypotheses and incorporate all of the work covered in the course to verify their findings.