**Complementary Core** 

# Statistics

**GCSE** Qualification - Edexcel

#### Course Leader: Mr Whitehouse

#### Successful learner profile

- Enjoys the challenge of solving problems.
- Has an analytical approach and is able to apply Statistics in the real world.
- Is able to use a calculator efficiently.
- Has a good understanding of the Key Stage 3 Maths curriculum.

#### Why choose this course?

 GCSE Statistics incorporates numerous examples of real-life data and contexts, which build skills that students will use in other subjects, such as science and geography. Based on the principles of the statistical enquiry cycle, students gain a rounded understanding of how to interpret and apply data to a number of scenarios, both across subjects and in the real world.

#### What will you study?

The order of the content follows the order of the statistical enquiry cycle (Plan, Collect Data, Process and Represent Data, Interpret Results, Evaluate). Students have the opportunity to understand that different approaches, including the use of technology, may be appropriate at each stage of the statistical enquiry cycle, and that statistical conclusions are developed through an iterative process of testing and refinement.

There are three main topics that students will study in GCSE Statistics:

1) Collecting data, planning statistical investigations, understanding ways of sampling data and the different types of data.

- You will learn to apply statistical techniques in a variety of investigations using real life data in contexts such as population, climate, sales etc., as well as across the curriculum in subjects such as computing, geography, business and psychology.
- You will critically evaluate data, calculations and evaluations that are commonly encountered in everyday life.
- You will understand how technology has enabled the collection, visualization and analysis of large quantities of data to inform decision making processes in public, commercial and academic sectors, including how technology can be used to generate diagrams and visualizations to represent data
- You will understand ways that data can be organized, processed and presented, including statistical measures to compare data, understanding the advantages of using technology to automate processing

2) Processing, representing and analyzing data using tables, diagrams and measures of central tendency and dispersion.

3) Probability of events happening based on data collected

#### How will you be assessed?

- Examination (100%).
- Two papers, each worth 50% of the overall qualification.
- Each paper lasts 1 hour 30 minutes.
- Each paper contains 80 marks.
- Both papers involve the use of a calculator
- Foundation tier covers grades 1-5, Higher tier covers grades 4-9

#### **Possible progression post 16**

Statistics is an integral part of many A Level subjects, in particular Mathematics, Psychology and Business.

### Weblinks



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