Statistics

YEAR 10 – GCSE Statistics

Students will learn statistical skills and how to apply new techniques in other subjects:

Autumn Term

1. **Planning Data Collection** – Students gain the core knowledge of planning a data cycle as well as the types of sampling.
2. **Collecting Data** – How we collect the data and what are the benefits and the risks to each method.
3. **Representing Data –** Students learn about how data is collected and grouped, and then expressed in diagrams. The skills examined include Stem and Lead, Population Pyramids, Pie Charts and Comparative Pie Charts.

In the Spring Term this develops

4. Analysing and Interpreting Data: Students develop their knowledge of Averages at GCSE to include Standard Deviation, Outliers, Skew.
5. Introduction to Index number serving as a cross over with economics and geography.
6. Estimation of populations and how that can affect findings.

- **Analysing and Interpeting Diagrams**
  Developing the use of Scatter Diagrams so analysis of results is refined. This includes the difference between extrapolation and interpolation.
- **Introduction to Probability**
  Recap of the Core topics that serves as a GCSE crossover of Sample Space, Tree Diagrams, and Venn Diagrams.

Year 11 – GCSE Statistics

In the Spring Term students refine and close any gaps in knowledge identified by the autumn mock exam and then work on exam sprints to ensure that they maximise their grade.

- In the Autumn Term of Year 11 Students continue to learn
- **Further probability** – Separate to their Maths GCSE. Students look at Relative Risk and Absolute Rish as well as the laws of probability.
- **Probability Distributions** – The introduction to distributions that serves as an excellent foundation for A-Level. Students cover the Binomial and Normal Distribution, as well as Quality Assurance.

A-Level Exams

Exam Therapy: Students will use their most recent assessments to have bespoke lessons to target gaps in knowledge and ensure they are ready for exams.

Students will sit three papers:

- **A-Level Paper 1: Data and Probability** (9ST0/01)
- **A-Level Paper 2: Statistical Inference** (9ST0/02)
- **A-Level Paper 3: Statistics in Practice** (9ST0/03)

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