

**GCSE**                      **Statistics**

For more information, please consult:  
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**Examination Board:** AQA

**Qualification:** GCSE Statistics

**Tiers:** Higher and Foundation

**Grades:** Higher Tier (grades 4-9) Foundation Tier (grades 1-5)

**Introduction:**            Statistics is the science of learning from data.  
Let’s say a teacher makes the claim “If you drink lots of water, you will be more alert in lessons”. A statistician would ask “how do you know this is true? Do you have any evidence to support your hypothesis? If it is true, is there a correlation between the amount of water a student drinks and lesson performance?  
The statistician would collect and analyse data to scientifically investigate the claim.

**What will I study each year?**

<b>Y9</b>	<b>Planning a strategy</b>	Hypothesis Planning an investigation Experiments/surveys Appreciation of constraints
	<b>Data Collection</b>	Types of Data Obtaining Data Census Data Sampling Conducting a survey/experiment
<b>Y10</b>	<b>Tabulation and Representation</b>	Tabulation Diagrammatic Representation
	<b>Data Analysis</b>	Measures of Location Measures of Spread Other Summary Statistics Time Series Quality Assurance Correlation and Regression Estimation

<b>Y11</b>	<b>Probability</b>	Probability
	<b>Data Interpretation</b>	Limitations of Analysis Inferential Statistics Deductions Conclusions

### **How will my work be assessed?**

The course is currently in the process of being revised. The draft specification indicates that two written examinations will be sat by candidates. Each examination will be 1 hour 45 minutes in duration. Students can take Higher Tier or Foundation Tier according to ability. The examinations will consist of multiple choice questions, short answer written questions and a Statistical Enquiry Cycle question.

### **Why study Statistics?**

Studying Statistics will train you to think analytically. You will learn sophisticated methods of data collection and data processing. When confronted with information you will be able to make sense of it, understand underlying trends and make objective decisions based on sound mathematical reasoning.

Studying Statistics will also help you with Mathematics. There is a significant overlap between GCSE Mathematics and GCSE Statistics. Topics such as probability, measures of spread, measures of location and the data handling cycle are shared by both. This will likely contribute to greater understanding and success in both disciplines.

### **Extra-curriculum activities**

N/A

### **What would this subject enable me to do when I finish school?**

GCSE Statistics could lead on to further study in Statistics at A-level. A developed understanding of statistics will also be invaluable when studying many other subjects including the Sciences, Geography, Psychology and Business Studies to name just a few. Your qualification will be valued by many employers and could lead to a career in Computing, Biochemical Sciences, Natural Sciences, Anthropology, Geography, Engineering, Medical Science, Psychology, Sociology, Linguistics, Politics, Economics, Law, Accountancy and Management, and numerous other fields.

### **How parents or other members of the public can find out more about the curriculum your subject is following**

Follow this link for more information on the course. Please bear in mind that the course structure is being revised but will retain the most of the current content.

[www.aqa.org.uk/subjects/mathematics/gcse/statistics-4310/spec-at-a-glance](http://www.aqa.org.uk/subjects/mathematics/gcse/statistics-4310/spec-at-a-glance)

