

Maths-GCSE Statistics

Teachers: Lee Thompson

The Maths department offer an additional qualification as a Key Stage 4 option subject. GCSE Statistics has a Foundation tier (grades 1 – 5) and a Higher tier (grades 4 – 9).

Syllabus materials KS4:

[AQA | Mathematics | GCSE | Statistics](#)

Careers in Maths:

1438_My Learning My Future_Mathematics_FINAL.pdf (careersandenterprise.co.uk)

Schemes of work:

	Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
Year 10	<p>Data and Tables</p> <ul style="list-style-type: none"> Types of data Frequency tables Two way tables Primary/secondary data Valid/reliable experiments <p>Sampling</p> <ul style="list-style-type: none"> Sampling from a population Random/systematic sampling Sampling techniques 	<p>Charts and Diagrams (1)</p> <ul style="list-style-type: none"> Pictogram Bar charts Pie charts Time series Histogram Frequency polygon 	<p>Probability (1)</p> <ul style="list-style-type: none"> Probability scale Probability tree diagrams Mutually exclusive events Space diagrams <p>Averages (1)</p> <ul style="list-style-type: none"> Average for discrete/grouped data Calculating mean Compare two sets of data Moving average Draw and interpret a trend line 	<p>Charts and Diagrams (2)</p> <ul style="list-style-type: none"> Box plot Stem and leaf diagrams Interpret a population pyramid <p>Averages (2)</p> <ul style="list-style-type: none"> Seasonal variation Weighted mean Geometric mean 	<p>Cumulative Frequency</p> <ul style="list-style-type: none"> Draw and interpret cumulative frequency diagrams Calculate mean from a cumulative table Calculate a percentile 	<p>Probability (2)</p> <ul style="list-style-type: none"> Expected frequency Relative frequency Calculate probabilities from table Venn diagram Conditional Probability <p>Charts and Diagrams (3)</p> <ul style="list-style-type: none"> Proportional pie charts Interpret histograms of unequal class width

Year 11	Scatter diagrams, correlation and regression <ul style="list-style-type: none"> • Types of correlation • Plot and interpret scatter graphs • Line of best fit 	Standard Deviation, Skew and the normal distribution <ul style="list-style-type: none"> • Calculate standard deviation • Calculate skew • Properties of normal distribution 	Statistical Enquiry Cycle <ul style="list-style-type: none"> • Planning • Data collection • Processing and presentation • Interpretation • Evaluation and review 	Revision		
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