

Overview of KS4Higher 9-1 Curriculum Topics: 3 year

Term	Year 9	Year 10	Year 11
1	<p>Number 1:</p> <p>Integers and place value, Decimals, Indices, powers and roots, Factors, multiples and primes, Standard form and surds</p>	<p>Quadratic algebra:</p> <p>Solving quadratic and simultaneous equations, Inequalities</p>	<p>Vectors and geometric proof,</p> <p>Reciprocal and exponential graphs; Gradient and area under graphs</p>
	Whole School Assessment 1/4	Whole School Assessment 1/4	Whole School Assessment 1/4
2	<p>Algebra 1:</p> <p>Algebra: the basics, Setting up, rearranging and solving equations, Sequences</p>	<p>Probability 1:</p> <p>Outcomes, Sample space diagrams, $1 - p$, Relative frequency and experimental probability, Tree diagrams, Frequency trees, Venn diagram</p> <p>Multiplicative reasoning</p>	<p>Proportional reasoning:</p> <p>Direct and inverse proportion</p>
3	<p>Data Handling 1:</p> <p>Averages and range, Representing and interpreting data, Scatter Graphs</p> <p>Number 2:</p> <p>Fractions, Percentages, Ratio and Proportion</p>	<p>Similarity and congruence in 2D and 3D</p> <p>Trigonometry 2:</p> <p>Graphs of trigonometric functions, Further trigonometry</p> <p>Right-angled triangles: Pythagoras and trigonometry</p>	<p><u>Revision for GCSE based on QLA feedback</u></p>
4	<p>Geometry 1:</p> <p>Polygons, angles and parallel lines, Pythagoras' Theorem and trigonometry</p>	<p>Data handling 2:</p> <p>Collecting data, Cumulative frequency, box plots and histograms</p>	<p><u>Revision for GCSE based on QLA feedback</u></p>
5	<p>Graph work:</p> <p>Graphs: the basics and real-life graphs, Linear graphs and coordinate geometry, Quadratic, cubic and other graphs</p> <p>Geometry 2:</p> <p>Statistics and sampling, The averages</p>	<p>Quadratic algebra 2:</p> <p>Quadratics, expanding more than two brackets, sketching graphs, graphs of circles, cubes and quadratics</p> <p>Circles:</p> <p>Circle theorems, Circle geometry</p>	<p><u>Revision for GCSE based on QLA feedback</u></p>

6	Shape, space and measure: Perimeter, area and circles, 3D forms and volume, cylinders, cones and spheres, Accuracy and bounds, Transformations, Constructions, loci and bearings	Complex algebra: Changing the subject of formulae (more complex), algebraic fractions, solving equations arising from algebraic fractions, rationalising surds, proof	
	Whole School Assessment 2/4	Whole School Assessment 2/4	Whole School Assessment 2/4

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Subject Leader: Katherine Ling	Date updated: June 2016
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