



Curriculum Map

Subject: Mathematics

Year group: Year 11

This document maps the Year 11 Curriculum in Mathematics.

Programmes of study are carefully planned within each teaching group and, as such, this document acts as a guide to the remaining content from the syllabus that students may cover.

	Phase One <i>September – November</i> <i>(12 weeks)</i>	Phase Two <i>December– March</i> <i>(10 weeks)</i>	Phase Three <i>March - June</i> <i>(6 weeks)</i>
<p>Content</p> <p>Declarative Knowledge – ‘Know What’</p>	<p><i>INTENT: Students continue to learn new content. Where appropriate or necessary, review of Year 10 work may also be completed.</i></p> <p>Foundation Tier Arithmetic with decimals Prime Factor Decomposition Working with fractions Solving percentages problems Ratio and proportion Interior and Exterior Angles in polygons Geometric reasoning and proof Perimeter and area Conversion between units of area and volume Arc length and sector area Pythagoras Trigonometry in right angled triangles Volume Compound Measures Similarity Linear Equations</p>	<p><i>INTENT: Students complete new content by the end of January and begin formal revision</i></p> <p>Foundation Tier Simultaneous Equations Expanding brackets Factorising linear and quadratic expressions Using and rearranging formulae. Linear, Quadratic and Fibonacci sequences Drawing and interpreting straight line graphs Drawing and interpreting quadratic graphs Plot and sketch non-linear graphs</p> <p>Higher Tier Trigonometric Graphs Graph Transformations Function Notation Vectors Limits of Accuracy</p>	<p><i>INTENT: Students complete formal revision programme</i></p> <p>The revision programme is bespoke to each teaching group and will be focussed on key topics for certain grades and areas for improvement identified by ongoing assessment.</p> <p>These are supported by use of:</p> <ul style="list-style-type: none"> ● Formal revision sessions ● Regular completion of past papers ● Topic and skill specific booklets created and shared across the faculty.



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	<p>Higher Tier Laws of indices Surds Solving quadratic equations Algebraic fractions Linear and quadratic simultaneous equations Plotting and sketching non-linear functions Solving quadratic equations graphically Gradients and Area under a graph Trigonometry in non-right angled triangles Trigonometry in 3D Surface area and volume of sphere, pyramids, cones Similarity with area and volume Coordinate geometry</p>	<p>Revision All groups complete Statistics and Probability revision programme. Further revision content is bespoke to each teaching group.</p>	
<p>Skills <i>Procedural Knowledge – 'Know How'</i></p>	<p>Learn to select appropriate rules and knowledge to apply to a range of problems in different contexts.</p>	<p>Learn to select appropriate rules and knowledge to apply to a range of problems in different contexts.</p> <p>Review topics to consolidate mathematical understanding and how to apply this knowledge appropriately in the context of the exam.</p>	<p>Learn to select appropriate rules and knowledge to apply to a range of problems in different contexts.</p> <p>Review topics to consolidate mathematical understanding and how to apply this knowledge appropriately in the context of the exam.</p>
<p>Key Questions</p>			
<p>Assessment</p>	<p>YEAR 11 TRIAL EXAM 1 Students sit three papers, one in lesson time and two in the formal Trial Exam period</p>	<p>YEAR 11 TRIAL EXAM 2 Students sit three papers, one in lesson time and two in the formal Trial Exam period.</p>	<p>FINAL GCSE EXAMS Students sit three papers on dates as prescribed by exam boards.</p>
<p>Literacy/Numeracy/SMSC/Character</p>	<p>Understanding and interpreting worded questions in real-life contexts. Aspiration, Resilience, Initiative, Confidence</p>	<p>Understanding and interpreting worded questions in real life contexts. Aspiration, Resilience, Initiative, Confidence</p>	<p>Understanding and interpreting worded questions to identify and apply appropriate algebraic skills. Aspiration, Resilience, Initiative, Confidence</p>