

# Maths @ WBS Year 10 Roadmap

**Subject Aim:** To develop confidence with the wide breadth of topics within GCSE Mathematics. A more dedicated focus on GCSE exam questions. Students begin to develop understanding of key links between different areas of mathematics.

		Curriculum and Assessment								
Summer	<b>MAPS &amp; CONSTRUCTIONS</b>	<p>Our <b>Scheme of Learning</b> is split into two parts: Foundation and Higher. A third strand called Intermediate consists of the more accessible parts of the higher tier. Your teachers will start with the more accessible parts of the Foundation content and stretch your group as far as they can in the time available. The more challenging parts of each tier are marked by a star in our Scheme of Learning.</p> <p>You will have <b>regular assessments</b>, covering several units, building up your experience with cumulative exams and well as encouraging your retrieval of previously studied topics.</p> <table border="1"> <thead> <tr> <th>Foundation</th> <th>Intermediate</th> <th>Higher</th> </tr> </thead> <tbody> <tr> <td>Aimed at building confidence with problem solving questions and developing security with the more challenging KS3 content.</td> <td>Bridging the gap between the two GCSE tiers, studying the more accessible part of the Higher GCSE content to push students towards their potential.</td> <td>Taking all opportunities to stretch students by developing clarity of thought and risk-taking in their mathematical approaches.</td> </tr> </tbody> </table>			Foundation	Intermediate	Higher	Aimed at building confidence with problem solving questions and developing security with the more challenging KS3 content.	Bridging the gap between the two GCSE tiers, studying the more accessible part of the Higher GCSE content to push students towards their potential.	Taking all opportunities to stretch students by developing clarity of thought and risk-taking in their mathematical approaches.
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TTP	<ul style="list-style-type: none"> <li>Constructing Shapes</li> <li>Understanding and Using Maps</li> </ul>									
Autumn Term	<b>INDICES, SURDS &amp; DECIMALS</b>				<p><b>Homework and Revision</b></p> <p><b>Homework</b> is set and completed on Dr Frost. You will have a feedback task in lesson based on how your class did before your next assessment.</p> <p>Our Scheme of Learning is on Dr Frost to help you revise. Prior knowledge checks, progress checks and test reviews will help you identify your strengths and work on the areas you find more challenging.</p> <p>Retrieval starters give you regular opportunities to recall topics previously learnt.</p> <p><b>Enrichment</b></p> <p>In Year 10, <b>enrichment</b> opportunities include the Intermediate Maths Challenge, which takes place in the Spring Term. Students are encouraged to further develop a passion for the subject by attending Problem Solving Club, or our weekly GCSE drop in on Mondays after school.</p>					
	<ul style="list-style-type: none"> <li>Calculating with Indices</li> <li>Using and Understanding Surds</li> </ul>									
	<b>EXPRESSIONS, IDENTITIES &amp; PROOF</b>									
	<ul style="list-style-type: none"> <li>Simplifying Expressions</li> <li>Quadratics</li> </ul>									
	<b>PRIMES, BOUNDS &amp; NUMBER THEORY</b>									
	<ul style="list-style-type: none"> <li>HCF/LCM</li> <li>Working with Bounds</li> </ul>									
<b>EQUATIONS, FORMULAE &amp; SEQUENCES</b>										
<ul style="list-style-type: none"> <li>Nth Term</li> <li>Simultaneous Equations</li> </ul>										
Spring Term	<b>RATIO, FRACTIONS, %, PROPORTION</b>	<p><b>Where Next?</b></p> <p>In Year 11, achievement in GCSE Mathematics becomes the core focus. Some challenging final topics are introduced such as Quadratic Equations, Conditional Probability and Inverse Proportion. Additional Intervention is utilised to drive students towards their true potential in the subject.</p>								
	<ul style="list-style-type: none"> <li>Compound Interest</li> <li>Understanding Proportion</li> </ul>									
	<b>ANGLES &amp; CIRCLES</b>									
	<ul style="list-style-type: none"> <li>Interior &amp; Exterior Angles</li> <li>Circle Theorems</li> </ul>									
	<b>STATS &amp; PROBABILITY</b>									
	<ul style="list-style-type: none"> <li>Frequency Tables</li> <li>Calculating Probabilities</li> </ul>									
<b>COORDINATE GEOMETRY</b>										
<ul style="list-style-type: none"> <li>Parallel and Perpendicular Lines</li> <li>Linear Graph Equations</li> </ul>										
Summer Term	<b>QUADRATIC GRAPHS &amp; EQUATIONS</b>				<p><b>Enrichment</b></p> <p>In Year 10, <b>enrichment</b> opportunities include the Intermediate Maths Challenge, which takes place in the Spring Term. Students are encouraged to further develop a passion for the subject by attending Problem Solving Club, or our weekly GCSE drop in on Mondays after school.</p>					
	<ul style="list-style-type: none"> <li>Plotting Quadratic Graphs</li> <li>Solving Quadratics</li> </ul>									
	<b>FURTHER TRIGONOMETRY</b>									
<ul style="list-style-type: none"> <li>Pythagoras in Context</li> <li>Trigonometry in Context</li> </ul>										