

## Subject area: Mathematics Year 11 Higher

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Topics	<b>Higher:</b> Investigating Properties of Shapes  Calculating  Solving Equations and Inequalities 1	<b>Higher:</b> Mathematical Movement I  Algebraic Proficiency: tinkering  Proportional Reasoning  Pattern Sniffing  Solving Equations and Inequalities 2	<b>Higher:</b> Algebraic Proficiency: visualising I  Analysing Statistics  Algebraic Proficiency: visualising II  Mathematical Movement II	<b>Higher:</b> Revision of key concepts as identified from assessments	<b>Higher:</b> Revision of key concepts as identified from assessments		
Assessment	Mock Exams Half Higher Paper x 2 Hegarty Homeworks Mini-Tests	Half Higher Paper x 2 Hegarty Homeworks Mini-Tests	Mock Exams Half Higher Paper x 2 Hegarty Homeworks Mini-Tests	Mock Exams Hegarty Homeworks Mini-Tests	GCSE Exam 3 Papers		
Homework	Hegarty Maths Worksheets Half Exam Papers	Hegarty Maths Worksheets Half Exam Papers	Hegarty Maths Worksheets Half Exam Papers	Hegarty Maths Worksheets Half Exam Papers			

<b>Responding to to post COVID gaps in learning</b>	QLA from previous years learning to identify gaps in knowledge Regular GCSE testing to identify gaps in knowledge Targetted starters to address gaps in knowledge Hegarty homework based on gaps in knowledge
<b>Building on prior learning</b>	<b>Key points for the year will include:</b> <ul style="list-style-type: none"> <li>• Simplify surds, including rationalising the denominator of a surd expression</li> <li>• Manipulate quadratic expressions by completing the square</li> <li>• Deduce roots and turning points of quadratic functions</li> <li>• Understand the concept of an instantaneous rate of change</li> <li>• Sketch translations and reflections of given functions</li> <li>• Solve quadratic inequalities in one variable</li> <li>• Use the sine and cosine rules to solve problems</li> </ul>
<b>Enrichment within the Curriculum</b>	Lunchtime Maths Masterclass to support students aiming for grade 8/9 and prepare for A-Level Maths. Maths Challenges and House Competitions Hegarty Leader Board
<b>Extracurricular opportunities</b>	Lunchtime support offered where students require extra help. After school intervention and revision sessions.
<b>Positive impacting on personal development (SMSC)</b>	In Maths lessons students are always encouraged to delve deeper into their understanding of Mathematics and how it relates to the world around them. Problem solving skills and teamwork are fundamental to Mathematics, through creative thinking, discussion, explaining and presenting ideas. Students are always encouraged to develop their Mathematical reasoning skills, communicating with others and explaining concepts to each other. Self and peer reviewing are very important to enable students to have an accurate grasp of where they are and how they need to improve.
<b>Preparing for the next stage of education</b>	Development of topics in the areas of Number, Ratio and Proportion, Algebra, Geometry and Statistics.

