

## Subject area: Year 10 Mathematics Foundation (Stage 9)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Numbers and the Number System  Calculating  Visualising and Constructing	Algebraic Proficiency: tinkering  Proportional Reasoning  Pattern Sniffing	Solving Equations and Inequalities I  Calculating Space	Conjecturing  Algebra: Visualising	Solving Equations and Inequalities II  Understanding Risk	Presentation of Data  Revision of key concepts as identified from assessments
Assessment	2 BAM Tests Past GCSE exam paper in last week of half term	3 BAM Tests Past GCSE exam paper in last week of term	2 BAM Tests Past GCSE exam paper in last week of half term	2 BAM Tests Year 10 Examinations – 2 or 3 Past GCSE exam papers	3 BAM Tests Past GCSE exam paper in last week of half term	1 BAM Test Past GCSE exam paper in last week of term
H/W	60 minute homework per week	60 minute homework per week	60 minute homework per week	60 minute homework per week	60 minute homework per week	60 minute homework per week

Building on prior learning	<ul style="list-style-type: none"> <li>• Calculate with roots and integer indices</li> <li>• Manipulate algebraic expressions by expanding the product of two binomials</li> <li>• Manipulate algebraic expressions by factorising a quadratic expression of the form <math>x^2 + bx + c</math></li> <li>• Understand and use the gradient of a straight line to solve problems</li> <li>• Solve two linear simultaneous equations algebraically and graphically</li> <li>• Plot and interpret graphs of quadratic functions</li> <li>• Change freely between compound units</li> <li>• Use ruler and compass methods to construct the perpendicular bisector of a line segment and to bisect an angle</li> <li>• Solve problems involving similar shapes</li> <li>• Calculate exactly with multiples of <math>\pi</math></li> <li>• Apply Pythagoras' theorem in two dimensions</li> <li>• Use geometrical reasoning to construct simple proofs</li> <li>• Use tree diagrams to list outcomes</li> </ul>
Enrichment within the Curriculum	National Mathematics Challenge for students who show very good problem solving skills.
Extracurricular opportunities	Lunchtime support offered where students require extra help.
Positive impacting on personal development (SMSC)	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.
Preparing for the next stage of education	Development of topics in the areas of Number, Ratio and Proportion, Algebra, Geometry and Statistics

<p><b>Ways to support your child's learning</b></p>	<p>Check student planner / SPACE for Maths homework and support them with this. Access to commercial websites, have many resources and videos for you to help support your child's learning and revision for assessments. Numeracy can be developed adding totals during a supermarket shop, working with percentages in shop sales etc.</p> <p><b>Useful Websites:</b>  <b>Corbettmaths-</b> <a href="http://www.corbettmaths.com">www.corbettmaths.com</a>  <b>Mymaths-</b> <a href="https://www.mymaths.co.uk/">https://www.mymaths.co.uk/</a>  <b>BBC Bitesize-</b> <a href="https://www.bbc.co.uk/bitesize/examspecs/z9p3mnb">https://www.bbc.co.uk/bitesize/examspecs/z9p3mnb</a>  <b>Mathsgenie-</b> <a href="https://www.mathsgenie.co.uk/gcse.html">https://www.mathsgenie.co.uk/gcse.html</a>  <b>Mathsbot-</b> <a href="https://mathsbot.com/">https://mathsbot.com/</a>  <b>Maths Made Easy-</b> <a href="https://mathsmadeeasy.co.uk/">https://mathsmadeeasy.co.uk/</a>  <b>On Maths-</b> <a href="https://www.onmaths.com/">https://www.onmaths.com/</a>  <b>Exam Solutions-</b> <a href="https://www.examsolutions.net/gcse-maths/">https://www.examsolutions.net/gcse-maths/</a>  <b>Study Maths-</b> <a href="https://studymaths.co.uk/">https://studymaths.co.uk/</a></p>
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