

Subject area: Mathematics Year 10 Foundation

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Calculating Space 1 Calculating Solving Equations 1	Mathematical Movement 1 Algebra: Quadratics Proportional Reasoning	Pattern Sniffing Solving Inequalities Calculating Space 2	Conjecturing Algebra: Graphs Calculating: Fractions, Decimals and Percentages	Solving Equations 2 Probability Presentation of Data	Mathematical Movement 2 Visualising and construction Revision of key concepts as identified from assessments
Assessment	Year 10 Test 1 Sparx Homeworks Mini-Tests	Year 10 Test 2 Sparx Homeworks Mini-Tests	Year 10 Test 3 Sparx Homeworks Mini-Tests	Year 10 Test 4 Sparx Homeworks Mini-Tests	Sparx Homeworks Mini-Tests	Mock Exams (Calc & Non-Calc) Sparx Homeworks Mini-Tests
H/W	Half Exam Papers Sparx Maths	Half Exam Papers Sparx Maths	Half Exam Papers Sparx Maths	Half Exam Papers Sparx Maths	Half Exam Papers Sparx Maths	Half Exam Papers Sparx Maths
Literacy Task	<i>Famous Mathematicians</i>	<i>Engineering</i>	<i>Astronomy</i>	<i>Sport</i>	<i>Art</i>	

Literacy	Use of Tier 3 vocabulary in lessons Mini-tests focussing on knowledge and literacy Literacy maths challenge in Spring term Half termly Cross Curricular Literacy
Building on prior learning	<ul style="list-style-type: none"> • Calculate with roots and integer indices • Manipulate algebraic expressions by expanding the product of two binomials • Manipulate algebraic expressions by factorising a quadratic expression of the form $x^2 + bx + c$ • Understand and use the gradient of a straight line to solve problems • Solve two linear simultaneous equations algebraically and graphically • Plot and interpret graphs of quadratic functions • Change freely between compound units • Use ruler and compass methods to construct the perpendicular bisector of a line segment and to bisect an angle • Solve problems involving similar shapes • Calculate exactly with multiples of π • Apply Pythagoras' theorem in two dimensions • Use geometrical reasoning to construct simple proofs • Use tree diagrams to list outcomes
Enrichment within the Curriculum	National Mathematics Challenge for students who show very good problem solving skills. Maths Challenges and House Competitions Sparx Leader Board
Extracurricular opportunities	Lunchtime support offered where students require extra help. Beat the teacher maths clubs. KS4 Maths clubs
Positive impacting on personal development (SMSC)	In Maths lessons students are always encouraged to portray British Values. They are also 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>Ways to support your child's learning</p>	<p>Check student planner / Inspire 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>Useful Websites: Sparx Maths- https://www.sparxmaths.uk/ Corbettmaths- www.corbettmaths.com Mymaths- https://www.mymaths.co.uk/ BBC Bitesize- https://www.bbc.co.uk/bitesize/examspecs/z9p3mnb Mathsgenie- https://www.mathsgenie.co.uk/gcse.html Mathsbot- https://mathsbot.com/ Maths Made Easy- https://mathsmadeeasy.co.uk/ On Maths- https://www.onmaths.com/ Exam Solutions- https://www.examsolutions.net/gcse-maths/ Study Maths- https://studymaths.co.uk/</p>
<p>Response to COVID</p>	<p>Targetted starters to address gaps in knowledge Sparx homework based on gaps in knowledge</p>
<p>Cross Curricular Links</p>	<p>Half termly cross curricular literacy in Sport, History, Astrology, Engineering and Art. Geography – Percentage of an amount, reading bars charts, the averages, coordinates, percentage change Science - Percentage of an amount, percentage change, reading bars charts, constructing bar charts, the averages, converting units, data collection tables, SDT, FPA, DMV, Standard Form, Pythagoras DT – Converting units, using rulers and protractors, finding missing angles, area and perimeter, Pythagoras MFL – Etymology of words History – Pythagoras</p>

Assessment Tracking

Test	Date	Percentage
Year 10 Test 1		
Year 10 Test 2		
Year 10 Test 3		
Year 10 Test 4		
Year 10 Mock Exam Paper 1 (Non-Calculator)		
Year 10 Mock Exam Paper 2 (Calculator)		