Subject area: Mathematics Year 11 Higher

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

Literacy	Use of Tier 3 vocabulary in lessons Mini-tests focussing on knowledge and literacy Exam technique eg. underlining key words
Building on prior learning	**Key points for the year will include:** • Simplify surds, including rationalising the denominator of a surd expression • Manipulate quadratic expressions by completing the square • Deduce roots and turning points of quadratic functions • Understand the concept of an instantaneous rate of change • Sketch translations and reflections of given functions • Solve quadratic inequalities in one variable • Use the sine and cosine rules to solve problems
Enrichment within the Curriculum	Taster Session for Core Maths and A-Level Maths KS4 Maths clubs Beat the teacher
Extracurricular opportunities	Lunchtime support offered where students require extra help. Breakfast, After school and holiday intervention and revision sessions. Maths Challenges and House Competitions Sparx Leader Board
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.

Ways to support your child's learning	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. **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/
Response to COVID	Revisit areas of weakness from Year 10 mocks Targetted starters to address gaps in knowledge Sparx homework based on gaps in knowledge Regular GCSE testing and ideintification of gaps
Cross Curricular Links	Half termly cross curriucular homework 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, Trignometry DT – Converting units, using rulers and protractors, finding missing angles, area and perimeter, Pythagoras, Trigonometry MFL – Etymology of words History – Pythagoras

Assessment Tracking

Test	Date	Percentage