Subject area: Mathematics Year 9

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Numbers and the Number System Calculating Visualising and Constructing	Algebra: Simplifying Exploring Fractions, Decimals and Percentages Proportional Reasoning	Sequences Solving Equations 1 Investigating Angles	Calculating Fractions, Decimals and Percentages Solving Equations 2	Calculating Space Algebra: Graphs Probability	Presentation of Data Measuring Data Revision of key concepts as identified from assessments
Assessment	Year 9 Test 1 Hegarty Homeworks Mini-Tests	Year 9 Test 2 Hegarty Homeworks Mini-Tests	Year 9 Test 3 Hegarty Homeworks Mini-Tests	Year 9 Test 4 Hegarty Homeworks Mini-Tests	Year 9 Test 5 Hegarty Homeworks Mini-Tests	End of Year Test (Calc & Non-Calc) Hegarty Homeworks Mini-Tests
H/W	Hegarty Maths Worksheets	Hegarty Maths Worksheets	Hegarty Maths Worksheets	Hegarty Maths Worksheets	Hegarty Maths Worksheets	Hegarty Maths Worksheets

Response to COVID	QLA from previous years learning to identify gaps in knowledge Targetted starters and topics to address gaps in knowledge Hegarty homework based on gaps in knowledge	
Building on prior learning	**Foundation Core** • Apply the four operations with negative numbers • Convert numbers into standard form and vice versa • Apply the multiplication, division and power laws of indices • Convert between terminating decimals and fractions • Find a relevant multiplier when solving problems involving proportion • Solve problems involving percentage change, including original value problems • Factorise an expression by taking out common factors • Change the subject of a formula when two steps are required • Find and use the nth term for a linear sequence • Solve linear equations with unknowns on both sides • Plot and interpret graphs of linear functions • Apply the formulae for circumference and area of a circle • Calculate theoretical probabilities for single events	**Higher Core** • 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 Hegarty Leader Board	
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
Ways to support your child's learning	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. **Useful Websites:** **Hegarty Maths-** https://hegartymaths.com/ **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/

Assessment Tracking

Test	Date	Percentage