

Our Aims are to develop in students:

- A positive attitude towards Mathematics
- An appreciation of the place and use of Mathematics in society together with the ability to apply Mathematical knowledge and understanding to solve problems which may arise in their own lives
- An appreciation of pattern and relationship in Mathematics

We follow the Sparx Maths programme in Key Stage 3 which is in line with the national curriculum for maths. Within each topic there is extension material to stretch pupils. Teaching resources can be found on students Onenote.

More information on the national curriculum for KS3 can be found at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/239058/SECONDARY_national_curriculum_-_Mathematics.pdf

Other useful websites for Maths:

Online resource <u>Sparx Maths</u> <u>Maths Genie - Free Online GCSE and A Level Maths Revision</u> https://corbettmaths.com/

Maths Careers: <u>http://www.mathscareers.org.uk/</u> <u>http://www.ima.org.uk/quiz/</u> <u>http://www.topuniversities.com/student-info/careers-advice/what-can-you-do-</u> <u>mathematics-degree</u> <u>https://plus.maths.org/content/Career</u> Radnor House Sevenoaks - Curriculum Overview Maths year 8.



	Autumn Term	Spring Term	Summer Term
Year 8	1.Percentages/Money	1.Rounding	1.Linear Graphs
4.5 hours per week Any excess weeks allow for assessment and regular revision weeks.	 Finding percentages of amounts without a calculator(M437) Finding percentages of amounts with a calculator(M905) Percentage change without a calculator(M476) 	 Rounding integers using significant figures(M994) Rounding decimals using significant figures(M131) Estimating calculations(M878) 	 Plotting horizontal and vertical lines(M797) Plotting straight line graphs(M932) Finding equations of straight line graphs(M544)
	 Percentage change with a calculator(M533) 	2. Coordinates	2.Transformations
	Value for money(M681)2. Indices	 Calculating midpoints(M622) Solving shape properties involving coordinates(M230) 	Translation(M139)Reflection(M290)
	Index rules with positive		3. Angles
	 Index rules with positive indices(M608) Index rules with negative indices(M150) Simplifying expressions using index laws(M120) Simplifying algebraic fractions by cancelling common factors(M568) 	 3. Area and Circles Finding the area of parallelograms(M291) Finding the area of trapeziums(M705) Converting units of area(M728) Identifying parts of circles(M595) Finding the circumference of circles(M169) Finding the area of circles(M231) 4. Standard Form Using standard form with positive indices(M719) Using standard form with negative indices(M678) 	 Angles in quadrilaterals(M679) Combining angle facts(M319) Angles on parallel lines(M606) Using quadrilateral properties to find angles(M393) Angles in polygons(M653) 4.Statistical diagrams and data
	 Solving equations of the form ((x+a)/b=c(M401) Solving linear equations involving brackets(M902) Solving equations with the unknown in the denominator (M387) Solving equations with the unknown on both sides (M554) Constructing and solving equations(M957) 		 Drawing pie charts(M574) Interpreting pie charts(M165) Drawing line graphs(M140) Interpreting line graphs(M183) Drawing stem-and-leaf diagrams(M648) Interpreting stem-and-leaf diagrams(M210) Finding averages from diagrams(U854)

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•	5.Venn Diagrams	
 Term-to-term rules for numerical sequences(M381) Term-to-term rules for sequences of 	 Venn diagrams(M829) Probabilities from Venn diagrams(M419) Finding the HCF and LCM using prime factor decomposition(M365) 	 5. Inequalities Reading and drawing linear inequalities on number lines(M384)
 patterns(M241) Substituting into position-to-term rules(M166) Position-to-term rules for arithmetic sequences(M991) 	 6. 3D shapes area and Volume Properties of 3D shapes(M767) Nets of 3D shapes(M518) Finding the surface area from a net(M884) Finding the surface area of cubes and cuboids(M534) Finding the surface area of prisms(M661) Finding the volume of cubes and cuboids(M765) Finding the volume of prisms(M722) Converting units of volume(M465) 	 Solving single inequalities(M118) 6. Algebra
 Position-to-term rules for sequences of patterns(M866) 5. Ratio 		 Expanding double brackets(M960) Calculating with fractions(M645) Simplifying algebraic fractions by factorising(M754) Adding and subtracting algebraic fractions(M336)
 Writing and simplifying ratios(M885) Writing ratios in the form 1:n(M543) Converting between ratios, fractions and percentages(M267) Using equivalent ratios to find unknown amounts(M801) Sharing amounts in a given ratio(M525) Drawing and interpreting scale diagrams(M112) 		• Some of this term will be devoted to revising and reviewing content in preparation for summer exams.