Redborne Upper School

Aspiration • Responsibility • Respect



KS4 Curriculum Overview - Mathematics - Year 10

Your child will learn about number, algebra, geometry, ratio and proportion, statistics and probability over the course of the curriculum.

Term	Foundation	Crossover	Higher
Autumn I	 Decimals Percentages Prime factors Perimeter and area 	 Decimals Percentages Prime factors Perimeter and area Volume Brackets Substitution 	 Decimals Percentages Prime factors Perimeter and area Algebra
Autumn 2	 3D forms Surface area Algebra Brackets Substitution Ratio and proportion 	 Equations Charts Averages Ratio and proportion 	 Ratio and proportion Collecting data Representing data Equations Inequalities
Spring I	 Tables Charts Averages Equations Sequences 	 Sequences Straight line graphs Inequalities Angles Indices 	 Volume Similarity and congruence Pythagoras
Spring 2	 Straight line graphs Inequalities Indices Standard form 	 Standard form Real life graphs Probability 	 Trigonometry Linear graphs Real life graphs
Summer I	 Angles Shapes and symmetry Real life graphs Scatter graphs 	 Scatter graphs Pie charts Pythagoras Similarity Trigonometry Vectors 	 Linear simultaneous equations Sequences Angles Indices Standard form Surds
Summer 2	Pie chartsVolumeProbability	TransformationsQuadratics	 Direct and inverse proportion Cumulative frequency and histograms Vectors

Through the study of mathematics your child will be expected to develop the following knowledge, skills and understanding:

Procedural Fluency	Students are drilled to recall facts and processes quickly.
Conceptual Understanding	Students make mathematical connections instead of over-reliance on procedures.
Critical Thinking	Students are encouraged to check their answers and consider efficiency.

Parents can support their child by encouraging them to use corbettmath.com/contents where there are videos and worksheets are available.



Redborne Upper School

Aspiration • Responsibility • Respect



KS4 Curriculum Overview - Mathematics - Year II

Your child will learn about number, algebra, geometry, ratio and proportion, statistics and probability over the course of the curriculum.

Term	Foundation	Crossover	Higher
Autumn I	PythagorasSimilarityTrigonometry	 Harder graphs Simultaneous Equations Constructions and loci 	QuadraticsCubic graphsReciprocal graphs
Autumn 2	QuadraticsVectorsTransformations	Following the mock exam, students will follow a pathway to higher or foundation.	 Probability Scatter graphs Transformations Constructions and loci
Spring I	 Constructions and loci Plans and elevations Multiplicative reasoning 	Topics will be bespoke to the teaching groups. For further information, please contact the class teacher.	FunctionsTrig graphsFurther Trigonometry
Spring 2	Harder graphsSimultaneous graphs		 Circle theorems Circle geometry Algebraic fractions Proof
Summer I	Revision for exam		Revision for exam
Summer 2	GCSE Public Examinations	GCSE Public Examinations	GCSE Public Examinations

Through the study of mathematics your child will be expected to develop the following knowledge, skills and understanding:

Procedural Fluency	Students are drilled to recall facts and processes quickly.
Conceptual Understanding	Students make mathematical connections instead of over-reliance on procedures.
Critical Thinking	Students are encouraged to check their answers and consider efficiency.

Parents can support their child by encouraging them to use mathsgenie.co.uk/gcse.html where there are videos and worksheets are available.

