



CURRICULUM MAP: MATHEMATICS

“We believe that every one of our students, regardless of background, is entitled to encounter the best that has been thought, said and done through a broad and ambitious curriculum.”

	TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
Year 11 (2024/25 Only)	Students follow a targeted Scheme of Work with time allocated for intervention based on the Y10 Mock Exams.	Targeted Scheme of work including preparation for Mock Exams. Mock Exams Take Place.	Students follow a targeted Scheme of Work with time allocated for intervention based on the recent Mock Exams. Students sit an in-class mock exam.	Students follow a targeted Scheme of Work with time allocated for intervention based on the recent Mock Exams. Students sit an in-class mock exam.	Students follow a targeted Scheme of Work with time allocated for intervention based on the recent Mock Exams. Final preparations for GCSE are made.	
Year 10 Units	Higher Classes: - U10 Probability - U9a Quadratic Expressions & Equations Foundation Classes: - U6 Graphs - U12 Right Angled Triangles	Higher Classes: - U14 Further Statistics - U12 Similarity & Congruence Foundation Classes: - U10 Transformations - U11 Ratio & Proportion	Higher Classes: - U13 Further Trigonometry - U9b Simultaneous Equations (W Band) Foundation Classes: - U13 Probability - Functional Skills in Mathematics (W)	Higher Classes: - U9b Simultaneous Equations (V Band) - U16 Circle Theorems Foundation Classes: - Functional Skills in Mathematics (V) - U16 Quadratic Expressions, Equations and Graphs	Higher Classes: - U7 Graphs - U15 Equations & Graphs Foundation Classes: - U17 – Advanced Perimeter, Area and Volume	Higher Classes: - Preparation for Mock Exams - U11 Multiplicative Reasoning Foundation Classes: - Preparations for Mock Exams - U15 Constructions, Loci & Bearings
Key concepts	H – Experimental Probability, Mutually Exclusive Events, Tree & Venn Diagrams, Conditional Probability, Quadratic Equations, F – Coordinates, Intercepts, Gradients, Midpoints, $y=mx+c$, Pythagoras, Trigonometry with Sides and Angles,	H – Grouped Frequency, Sampling, Capture-Recapture, Histograms, Cumulative Frequency, Box Plots, Similarity, Proof, Congruency, F - Reflection, Rotations, Translation, Enlargement, Transformations, Equivalent Ratios, Sharing into Ratios, 1:n, Direct & Inverse Proportions	H – Trigonometry, Sine Rule, Cosine Rule, Area of Non-Right Angled Triangles, Simultaneous Equations (W) F – Independent and Conditional Probability, Experimental Probability, Tree Diagrams, Venn Diagrams,	H – Simultaneous Equations (V), Circle Theorems, Geometric Proof F – Expanding and Factorising Quadratics, Solving Quadratics by factorising, Plotting Quadratic Graphs, Solving Quadratic Equations using Graphs.	H – $y=mx + c$, Quadratic Graphs, Cubic Graphs, Circle Graphs, Reciprocal Graphs, Solving Quadratics using Graphs F – Circumference and Area of a Circle and part circles, Areas of sectors, Volumes and Surface Area of Pyramids, Cones and Spheres.	H – Compound Interest, Compound Measures, Direct & Inverse Proportion (Algebraic) F – Nets, Views & Elevations, Scale Drawings, Using protractors, rulers and compasses effectively. Angle Bisectors, Perpendicular Bisectors, Locus of a point, Bearings.
Builds on	H – Y9 T2 & Y8 T4 F – Y9 T2 & T3	H – Y9 T6 & Y9 T3 F – Y9 T3 & T1 and T5	H – Y9 T3 & Y9 T2 F – Y8 T4 & Y9 T5	H – Y10 T1 & T9 T6 F – Y9 T2	H – Y10 T1, T5 & Y9 T2 F – Y9 T4	H – Y10 T1 F – Y10 T1 & Y10 T2
Year 9 Units	Transition Unit 1 – Further Number	Transition Unit 2 – Further Algebra	Transition Unit 3 – Further Geometry	Transition Unit 4 – Further Data & Statistics After Term 4, classes split into Higher or Foundation Tier of Entry.	Higher Classes – U4 Ratio, Fractions, Decimals & Percentages Foundation Classes – U4 Fractions, Decimals & Percentages	Higher Classes: - U5 Polygons and RA Triangles - U8 Transformations, Constructions, Loci & Bearings Foundation Classes: - U5 Equations, Inequalities and Sequences
Key concepts	Negative Numbers, Understanding Prime Numbers, Order of Operations, Estimation, Using one calculation to find another, Rules of Indices, Standard Form, Surds.	Collecting like terms, understanding quadratic and linear expressions, expanding and factorising brackets, sequences, quadratic expressions, expanding and factorising	Plans, Elevations, Units of Measurement, Perimeter and Area of Triangles, Quadrilaterals and Compound Shapes, Nets of 3D Shapes, Surface Area, Volume of Prisms, Converting units for area and volume..	Bar Charts, Dual Bar Charts, Composite Bar Charts, Time Series, Scatter Graphs, Line of Best Fit, Correlations, Analysing Trends, Calculating Averages, Misleading Graphs	H – Equivalent, Reciprocal, Mixed, Improper Fractions. Fractions and Percentages of Amounts. Reverse Percentages and Fractions. Sharing into Ratios, 1:n, converting between FDP including recurring decimals to Fractions. F - Equivalent, Mixed, Improper Fractions. Fractions and Percentages of Amounts. Reverse Percentages and Fractions, converting between FDP, identifying percentage change.	H – Interior/Exterior Angles of Polygons, Pythagoras’ Theorem in 2D/3D, Right Angled Trigonometry, translations, reflections, rotations, enlargements (including negatives), Loci, Perpendicular and Angle Bisectors, Bearings, Scale Drawings, Plans & Elevations. F – Solving Linear Equations with different variations, including with brackets, fractions and letters on both sides. Identifying Inequalities, including on number lines, solving inequalities, understanding, using and identifying nth term



Builds on	Y8 Term 1 - Key Number Concepts	Y8 Term 2 – Expressions, Equations and Sequences	Y8 Term 3 – Area, Volume and Angles	Y8 Term 6 – Representations of Data	H&F – Y8 Term 3 – Using Parts of Amounts	H – Y8 Term 5 F – Y8 Term 2
Leads to	H – U11 F - U4, U11	H – U5, U9, U11, U13, U15, U17, U18 F – U5, U12, U16, U17	H – U5, U8, U12, U13, U16, U18	H – U14 F – U16	H – All future units F – All future units	H – U12, U13, U16, U18 F – U12, U16, U17
Year 8 Units	Key Number Concepts	Expression, Equations and Sequences	Using Parts of Amounts	Probability & Proportionality	Area, Volume and Angles	Representations of Data
Key concepts	Place Value Problems, Negative Numbers, Square/Cube Numbers, Rules of Indices, Roots, Factors/HCF, Multiples/LCM, Rounding, Estimating, Prime Factor Decomposition.	Expressions, Solving Linear Equations with many variations, Rules of Indices, Expanding & Factorising Brackets, Understanding Inequality statements,	Equivalent Fractions, Converting Mixed/Improper, Comparing Fractions, 4 Operations with Fractions, Converting between FDP, Decimal Multipliers, Percentages & Fractions of Amounts	Identifying, Simplifying and Sharing into Ratios, Direct Proportion, Probability of Events, Frequency Trees, Mutually Exclusive Events, Experimental Probability	Areas of basic quadrilaterals, compound shapes, identifying prisms & pyramids, volume and surface area of prisms, key angle facts.	Bar Charts, Line Graphs, Frequency Diagrams, Analysis of data, making judgements of data.
Builds on	Y7 Term 1 – Fundamentals of Number	Y7 Term 2 – Fundamentals of Algebra	Y7 Term 3 – Parts of Amounts	Y7 Term 4 – Applying Parts of Amounts to Ratio & Probability	Y7 Term 5 – Introduction to Geometry – Lines and Angles	Y7 Term 6 – Understanding Data
Leads to	Y9 Term 1 – Transition GCSE Number	Y9 Term 2 – Transition GCSE Algebra	Y9 Term 5 – H/F Fractions of Amounts	Higher – U10 Foundation – U13	Y9 Term 3 – Transition GCSE Geometry	Y9 Term 4 – Transition GCSE Data & Statistics
Year 7 Units	Fundamentals of Number	Fundamentals of Algebra	Understanding Parts of Amounts	Applying Parts of Amounts to Ratio & Probability	Introduction to Geometry – Lines and Angles	Transformations and Understanding Data
Key concepts	Place Value, Factors, Multiples, Order of Operations, Primes, Squares, Roots, Sequences	Expressions, Equations, Function Machines, Rules of Indices, Expanding Brackets	Identifying, Simplifying, Calculating with fractions. Converting between FDP, Percentages of Amounts.	Identifying probability of independent events, comparing parts using ratio, sharing into a ratio.	Identifying shapes by mathematical properties, parallel & perpendicular lines, types of angles, angle facts.	Reflection, Rotations, Translation, Enlargement, Collecting Data, Mean, Median, Mode, Range, Basic representations of data.
Builds on	KS2 Number	KS2 Number	KS2 Number	Y7 Term 4 – Parts of Amounts	KS2 Geometry	KS2 Data
Leads to	Y8 Term 1 - Key Number Concepts	Y8 Term 2 – Expressions, Equations and Sequences	Y7 Term 4 – Parts of Amounts & Y8 Term 3 Parts of Amounts	Y8 Term 4 – Probability & Proportionality	Y8 Term 5 – Area, Volume and Angles	Y8 Term 6 – Representations of Data

Please note that, following a KS4 Curriculum Review, the Year 11 Scheme of Work will be adapted to reflect the following in the 2025/26 Academic Year:

Year 11 Units (2025/26 Academic Year Onwards)	Higher Classes: - U17 Further Algebra - U9C Further Quadratics Foundation Classes: - U14 Multiplicative Reasoning - U18 Standard Form	Higher Classes: - U18 Vectors - Preparation for Mock Exams Foundation Classes: - U19 Similarity & Vectors - Preparation for Mock Exams Mock Exams Take Place	Students follow a targeted Scheme of Work with time allocated for intervention based on the recent Mock Exams.	Students follow a targeted Scheme of Work with time allocated for intervention based on the recent Mock Exams.	Students follow a targeted Scheme of Work with time allocated for intervention based on the recent Mock Exams.	
Key concepts	H - Simplifying & Calculating with Algebraic Fractions, Algebraic Proof, Functions (Standard, Inverse & Composite), Quadratic Formula, Roots, Completing the Square, Quadratic Inequalities F – Converting between ordinary and standard form for large & small numbers, calculating in standard form.	H – Understanding Vectors, Translation through Vectors, Vector Magnitude, Vector Arithmetic, Position Vectors, Proving lines are parallel or collinear. F – Properties of Shapes, Identifying Similarity, Finding missing lengths using similarity, Column Vectors (Drawing and Reading), Vector arithmetic including scalars.	Students sit an in-class mock exam.	Students sit an in-class mock exam.	Final preparations for GCSE are made.	
Builds on	Higher – Algebraic concepts from Y7 T1, Y8 T2, Y9 T2, T10 T1 & T3/T4. Foundation	Higher – All Prior learning	All Prior Learning	All Prior Learning	All Prior Learning	