

Foundation

Term 1	Term 2	Term 3	Term 4	Term 5
<p>Number Calculations Decimal numbers Place value Factors and multiples Squares, cubes and roots Index notation prime factors</p>	<p>Fractions and percentages Working with fractions Operations with fractions Multiplying fractions Dividing fractions Fractions and decimals Fractions and percentages Calculating percentages 1 Calculating percentages 2</p>	<p>Equations, inequalities and sequences Solving equations 1 Solving equations 2 Introducing inequalities Using formulae (using but not rearranging) Generating sequences Using the nth term of a sequence</p>	<p>Expressions and equations Expressions and brackets Factorising expressions The balancing method Solving equations with brackets Quadratic equations and graphs Expanding double brackets Plotting quadratic graphs Factorising quadratic expressions Solving quadratic equations</p>	<p>Graphical solutions Simultaneous equations More simultaneous equations More algebra Solving simultaneous equations algebraically</p>
<p>Algebra Algebraic expressions Simplifying expressions Substitution Formulae Expanding brackets Factorising Using expressions and formulae (basic)</p>	<p>Angles Properties of shapes Angles in parallel lines Angles in triangles Exterior and interior angles More exterior and interior angles</p>	<p>Transformations Translation Reflection Rotation Enlargement Describing enlargements</p>	<p>Ratio and proportion Writing ratios Using ratios Multiplicative reasoning Sharing in a given ratio Using ratios 2 Using the unitary method Comparing using ratios Using proportion (just recipe questions) Scale and measures</p>	<p>Formulae Circles Perimeter, area and volume 2 Circumference of a circle 1 Circumference of a circle 2 Area of a circle Semicircles and $\frac{1}{4}$ circles Composite 2D shapes and cylinders</p>
<p>Graphs, tables and charts Frequency tables Two-way tables Representing data Stem and leaf diagrams Scatter graphs Line of best fit</p>	<p>Graphs Coordinates Linear graphs Gradient $y = mx + c$</p>	<p>Right-angled triangles Intro lesson labelling sides Pythagoras' theorem 1 Pythagoras' theorem 2 Pythagoras Pythagoras' theorem 2D shapes and 3D solids Pythagoras' theorem</p>	<p>Angles and lines Right angles and lines Measuring angles 1 Measuring angles 2 Lines and angles Lines, angles and triangles Estimating, measuring and drawing angles STEM: Calculating angles Angles in a triangle Quadrilaterals 2D shapes and 3D solids Plans and elevations</p>	<p>Graphs Real-life graphs Distance-time graphs More real-life graphs Multiplicative reasoning Distance, speed and time Vectors Vectors 1 (concentrate on vector arithmetic) Vectors 2 (concentrate on vector arithmetic)</p>
<p>Averages and range Mean and range Mode, median and range Types of average Estimating the mean</p>	<p>Perimeter, area and volume 1 Rectangles, parallelograms and triangles Trapezia (not changing units) Area of compound shapes (not changing units) Volume of prisms</p>	<p>Probability Calculating probability Two events Experimental probability Venn diagrams (not set notation) Tree diagrams More tree diagrams</p>	<p>Fractions and percentages Calculating percentages 4.8 Calculating percentages 2 Fractions, decimals and percentages FINANCE: Percentage change Percentages Growth and decay</p>	<p>Fractions, indices and standard form Multiplying and dividing fractions Algebraic powers The laws of indices Writing large numbers in standard form Writing small numbers in standard form</p>
				<p>Right-angled triangles Intro lesson labelling sides and deciding on correct ratio Trigonometry: the sine ratio 1 Trigonometry: the sine ratio 2 Trigonometry: the cosine ratio Trigonometry: the tangent ratio</p>

Assessment

Formative: Skills check daily for recall and retrieval

End of topic assessments

Summative: Mock examinations and termly assessment of prior learning

Higher

Term 1	Term 2	Term 3	Term 4	Term 5
<p>Number Number problems and reasoning Place value and estimating HCF and LCM Calculating with powers (indices) Zero, negative and (fractional indices simple) Powers of 10 and standard form Surds (basics)</p>	<p>Fractions, ratio and percentages Fractions Ratios Ratio and proportion Percentages Fractions, decimals and percentages</p>	<p>Equations and inequalities Factorising quadratic expressions Solving quadratic equations Solving quadratic equations 1 Solving quadratic equations 2 Completing the square (basics) Solving simple simultaneous equations More simultaneous equations Solving linear inequalities</p>	<p>Equations and graphs Solving simultaneous equations graphically Representing inequalities graphically (not quadratic inequalities) Graphs of quadratic functions (basic)</p>	<p>More algebra Rearranging formulae Algebraic fractions Simplifying algebraic fractions More algebraic fractions Surds Solving algebraic fraction equations Functions Proof</p>
<p>Algebra Algebraic indices Expanding and factorising Equations Formulae Linear sequences Non-linear sequences More expanding and factorising</p>	<p>Angles and trigonometry Angle properties of triangles and quadrilaterals Interior angles of a polygon Exterior angles of a polygon Pythagoras' theorem 1 Pythagoras' theorem 2 Trigonometry 1 Trigonometry 2</p>	<p>Transformations and constructions 3D solids Reflection and rotation Enlargement (not negative s.f) Transformations and combinations of transformations Bearings and scale drawings Constructions 1 Constructions 2 Loci</p>	<p>Circle theorems Radii and chords Tangents Angles in circles 1 Angles in circles 2 Applying circle theorems</p>	<p>Further statistics Sampling Cumulative frequency Box plots Drawing histograms Interpreting histograms Comparing and describing population</p>
<p>Interpreting and representing data Statistical diagrams 1 Time series Scatter graphs Line of best fit Averages and range Statistical diagrams 2</p>	<p>Graphs Linear graphs More linear graphs Graphing rates of change Real-life graphs Line segments Quadratic graphs</p>	<p>More trigonometry Accuracy Calculating areas and the sine rule The cosine rule and 2D trigonometric problems Solving problems in 3D Transforming trigonometric graphs 1 Transforming trigonometric graphs 2</p>	<p>Similarity and congruence Congruence Geometric proof and congruence Similarity More similarity Similarity in 3D solids</p>	<p>Vectors and geometric proof Vectors and vector notation Vector arithmetic More vector arithmetic Parallel vectors and collinear points Solving geometric problems</p>
	<p>Area and volume Perimeter and area Units Accuracy Prisms Circles Sectors of circles Cylinders and spheres Pyramids and cones</p>	<p>Probability Combined events Mutually exclusive events Experimental probability Independent events and tree diagrams Conditional probability Venn diagrams and set notation</p>	<p>Multiplicative reasoning Growth and decay Compound measures More compound measures Ratio and proportion</p>	<p>Proportion and graphs Direct proportion More direct proportion Inverse proportion Exponential functions Non-linear graphs Translating graphs of functions Reflecting and stretching graphs of functions</p>

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