

Topic	Heading	Sub-heading
NUMBER		
	Integers	Ordering numbers
	Integers	Rounding numbers
	Integers	Adding and subtracting whole numbers
	Integers	Dividing whole numbers
	Integers	BIDMAS
	Integers	Inverse operations
	Negative numbers	Understanding negative numbers
	Decimals	Integers and decimals : the four basic operations
	Decimals	Ordering decimals
	Decimals	Using place value in calculating with decimals
	Decimals	Order of operation : BIDMAS
	Decimals	Rounding decimals
	Decimals	Estimating decimals
	Decimals	Recognising their corresponding fractions
	Factors, primes and powers	Multiples, factors and prime numbers
	Factors, primes and powers	Highest common factor (hcf) and lowest common multiple (lcm)
	Fractions	Equivalent fractions
	Fractions	Adding and subtracting fractions
	Fractions	Multiplying and dividing fractions
	Fractions	Comparing fractions
	Fractions	Improper fractions and mixed numbers
	Fractions	Performing calculations with mixed numbers
	Fractions	Solving problems involving fractions
	Fractions, decimals and percentages	Converting fractions
	Fractions, decimals and percentages	Converting decimals

	Fractions, decimals and percentages	Converting percentages
	Fractions, decimals and percentages	Ordering decimals, fractions and percentages
	Fractions, decimals and percentages	Recurring decimals
	Index notation and surds	Standard form
	Measure	Upper and lower bounds
	Percentages	Writing one quantity as a percentage of another
	Percentages	Calculating the percentage of an amount
	Percentages	Increasing or decreasing an amount by a percentage
	Percentages	Real-life percentage problems
	Percentages	Percentage of a quantity
	Percentages	Multiplier use in calculations
	Percentages	Profit and loss
	Percentages	Compound and simple interest
	Percentages	Depreciation
	Percentages	Reverse percentages
	Ratio and proportion	Simplifying a ratio
	Ratio and proportion	Unitary form
	Ratio and proportion	Solving ratio problems
	Ratio and proportion	More complex direct and inverse proportion problems
	Ratio and proportion	Simplifying a ratio
	Ratio and proportion	Unitary form (1 : n)
	Ratio and proportion	Ratio problems
	Ratio and proportion	Dividing a quantity in a given ratio
	Ratio and proportion	Direct proportion
	Set notation and Venn diagrams	Use set notation and Venn diagrams
ALGEBRA		
	Algebraic expressions	Evaluating expressions
	Algebraic expressions	Simplifying expressions
	Algebraic expressions	Multiplying out a pair of brackets
	Algebraic expressions	Introduction to factorising
	Algebraic expressions	Factorising a quadratic

	Algebraic expressions	Factorising a more complex quadratic
	Algebraic expressions	Simplifying algebraic fractions
	Algebraic expressions	Writing an expression
	Algebraic expressions	Evaluating and simplifying an expression
	Algebraic expressions	Multiplying in algebra
	Algebraic expressions	Factorising
	Algebraic statements	Equation, expression or formula?
	Calculus	Variable rates of change and differentiation
	Calculus	Gradients
	Calculus	Turning points
	Calculus	Motion of a particle
	Factors, primes and powers	Squares, cubes and roots
	Factors, primes and powers	Index form
	Factors, primes and powers	Reciprocals
	Formulae	Using formulae
	Formulae	Changing the subject of a formula
	Formulae	Formulae
	Formulae	Writing an algebraic formula
	Formulae	Changing the subject of a formula
	Function	Understand and use function notation
	Further graphs	Cubic functions
	Further graphs	Reciprocal functions
	Further graphs	Exponential functions
	Further graphs	Equations and their graphs
	Further graphs	Trigonometric functions
	Further graphs	Graph of the circle
	Further graphs	Using graphs to solve a pair of equations
	Index notation	Using index notation
	Index notation and surds	Index form and the law of indices
	Index notation and surds	Fractional indices
	Index notation and surds	Surds
	Inequalities	Solving inequalities and showing inequalities on a number line

	Inequalities	Finding integer solutions to an inequality
	Inequalities	Solving linear inequalities
	Inequalities	Inequalities with integer solutions
	Inequalities	Solving inequalities with two variables graphically
	Linear equations	Methods for solving equations
	Linear equations	Setting up and solving equations
	Linear equations	Solving equations with an unknown on both sides
	Linear equations	Solving equations which contain brackets
	Linear equations	Solving equations with brackets and negative numbers
	Linear equations	Solving equations
	Linear equations	Setting up equations
	Linear equations	Solving equations with an unknown on both sides
	Linear equations	Solving equations containing brackets or fractions
	Linear graphs	Simple linear graphs
	Linear graphs	Using $y = mx + c$
	Linear graphs	Parallel and perpendicular lines
	Number patterns and sequences	Introduction to number sequences
	Number patterns and sequences	The nth term
	Quadratic equations	Factorising quadratic equations : example
	Quadratic equations	Solving quadratic equations by completing the square
	Quadratic equations	The quadratic formula
	Quadratic equations	Equations with algebraic fractions
	Quadratic equations	Problems involving quadratic equations
	Quadratic graphs	Plotting quadratic graphs
	Quadratic graphs	Solving quadratic equations : example
	Ratio and proportion	Direct and inverse proportion
	Real-life graphs	Real-life plots and graphs
	Simultaneous equations	Solving simultaneous equations using elimination
	Simultaneous equations	Solving simultaneous equations using substitution

	Simultaneous equations	Solving simultaneous equations graphically
	Simultaneous equations	Setting up and solving simultaneous equations
	Simultaneous equations	Solving a linear and quadratic equation simultaneously
	Substitution	Substitution in an expression
	Transformation of functions	Types of transformations
	Transformation of functions	Translation
	Trial and improvement	Trial and improvement
	Trial and improvement	Finding an approximate solution using trial and improvement

GEOMETRY AND MEASURE

	Angles and lines	Types of angles
	Angles and lines	Estimating the size of angles
	Angles and lines	Measuring angles and lengths
	Angles and lines	Parallel and perpendicular lines
	Angles and lines	Constructing an angle
	Angles and lines	Constructing a triangle
	Angles and lines	Angles on a straight line and angles around a point
	Angles and polygons	Triangles and quadrilaterals
	Angles and polygons	Interior and exterior angles in a polygon
	Angles and polygons	Corresponding and alternate angles
	Angles and polygons	Proving angle facts
	Angles and polygons	Bearings
	Shapes and angles	Angle facts: triangles
	Shapes and angles	Angle facts: quadrilaterals
	Shapes and angles	Interior and exterior angles
	Shapes and angles	Parallel lines
	Shapes and angles	Bearings
	Circles	The circle
	Circles	Circumference and area
	Circles	Circles and arcs
	Circles	Sectors and segments

	Circles	Circle theorems
	Circles	Circle theorem: examples
	Construction and loci	Constructing a triangle
	Construction and loci	Constructing other shapes
	Construction and loci	Constructing a perpendicular bisector of a line
	Construction and loci	Bisecting an angle
	Construction and loci	Constructing the perpendicular from a point to a line
	Construction and loci	Constructing the perpendicular to a line from a point on the line
	Construction and loci	Constructing the locus of points from a fixed point
	Construction and loci	Constructing the locus of points from a fixed line
	Construction and loci	Constructing a region that satisfies a given set of conditions
	Co-ordinates	Understanding co-ordinates
	Co-ordinates	3-D co-ordinates
	Measure	Imperial and metric units
	Measure	Convert metric units
	Measure	Speed, distance and time
	Measure	Mass, density and volume
	Measure	Converting metric units
	Measure	Converting imperial units
	Measure	Speed, distance and time conversion
	Measure	Mass, density and volume conversion
	Measure	Length, area or volume expressions
	Measuring from scales	Measurements and scales
	Measuring from scales	Time and units
	Measuring from scales	Timetables
	Perimeter and area	Calculating perimeter
	Perimeter and area	Calculating area
	Perimeter and area	Compound shapes
	Perimeter and area	Converting units
	Perimeter and area	Area and perimeter of 2-d shapes
	Perimeter and area	Area and circumference of a circle
	Perimeter and area	Converting between units of measure

	Volume and surface area	Volume of 3-D shapes
	Volume and surface area	Converting units of volume
	Volume and surface area	Surface area of a prism and a cylinder
	Volume and surface area	Surface area of a sphere and a cone
	3-D shapes	Names and nets of common shapes
	3-D shapes	Front and side elevations
	3-D shapes	Using elevations to draw shapes
	3-D shapes	Planes of symmetry
	Pythagoras' theorem	Finding the hypotenuse using Pythagoras' theorem
	Pythagoras' theorem	Finding a shorter side using Pythagoras' theorem
	Pythagoras' theorem	Calculating the distance between two points
	Pythagoras' theorem	Pythagoras' theorem and real-life problems
	Pythagoras' theorem	3-dimensional shapes
	Similarity and congruence	Calculating sides and areas of similar shapes
	Similarity and congruence	Calculating volumes of similar 3-d shapes
	Similarity and congruence	Volume and area of similar solids: example
	Similarity and congruence	Congruence
	Similarity, congruence and symmetry	Similarity and congruence
	Similarity, congruence and symmetry	Line symmetry
	Similarity, congruence and symmetry	Rotational symmetry
	Similarity, congruence and symmetry	Tessellation
	Surface area and volume	Calculating volume of 3-d shapes
	Surface area and volume	Converting units of volume

	Surface area and volume	Calculating the surface area of a prism
	Transformations	Rotation
	Transformations	Reflection
	Transformations	Translation
	Transformations	Enlargement
	Transformations	Multiple transformations and describing these as a single transformation
	Transformations	Rotation
	Transformations	Reflection
	Transformations	Translation
	Transformations	Enlargement
	Transformations	Multiple transformations
	Trigonometry	The three trigonometric ratios
	Trigonometry	Using trigonometry to find a length
	Trigonometry	Using trigonometry to find angles
	Trigonometry	Using trigonometry to solve problems
	Trigonometry	Using trigonometry in 3-d shapes
	Trigonometry	The area of a triangle
	Trigonometry	The sine rule
	Trigonometry	The cosine rule
	Vectors	Vector quantities
	Vectors	The laws of vector addition
	Vectors	Parallel vectors
	Vectors	Solving geometric problems involving vectors

STATISTICS AND PROBABILITY		
	Averages	Comparing distributions
	Averages	Mean, median, mode and range
	Averages	Stem and leaf diagrams
	Averages	Ungrouped frequency tables
	Averages	Grouped frequency tables
	Averages	Inter-quartile range and stem and leaf diagrams
	Averages	Moving averages
	Collecting data	Collecting and recording data
	Collecting data	Two-way tables
	Collecting data	Questionnaires

	Collecting data	Sampling
	Presenting data	Bar charts, pie charts, line graphs, frequency diagrams, histograms and frequency polygons
	Presenting data	Pictograms
	Presenting data	Cumulative frequency graphs
	Presenting data	Box plots, data comparison and histograms with unequal widths
	Presenting data	Scatter graphs and correlations
	Probability	The probability scale and writing probabilities
	Probability	Two-way probability tables
	Probability	Mutually exclusive events
	Probability	Relative frequency
	Probability	Probability and sample spaces
	Probability	Mutually exclusive events
	Probability	Independent events
	Probability	Probability trees
	Probability	Relative frequency