

Term	Block number	Block title	Small step number
Autumn	1	Properties of number	1
			2
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	2	Percentages	1
			2
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	3	Area and volume	1
			2
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			10
	4	Equations, inequalities and formulae	1
			2
			3
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	5	Fractions	1
			2
			3
	6	Rates	1
			2
			3
			4
			5
			1

Small step title
Factors, multiples and primes
Write a number as a product of prime factors
Use prime factors (E)
Highest common factor (HCF) and lowest common multiple (LCM)
Venn diagrams
Use a Venn diagram to calculate the HCF and LCM
Integers, real numbers and rational numbers
Introduction to surds (E)
Percentage increase and decrease
Express a change as a percentage
Find the original value after a percentage change
Solve problems with percentages (non-calculator)
Solve problems with percentages (calculator)
Repeated percentage change
Understand interest
Simple interest
Compound interest
Nets
Area of a 2-D shape
Area and circumference of a circle
Surface area of cubes and cuboids
Surface area of a triangular prism (E)
Surface area of a cylinder (E)
Volume of a prism
Volume of a cylinder
Volume of cones, pyramids and spheres (E)
Convert metric units of area and volume (E)
Solve equations and inequalities
Solve equations and inequalities with brackets
Inequalities with negative numbers (E)
Solve equations and inequalities with unknowns on both sides
Solve problems with equations and inequalities
Substitute into formulae and equations
Change the subject of a formula (one-step)
Change the subject of a formula (two-step)
Change the subject of complex formula (E)
Add and subtract fractions
Multiply and divide fractions
Fraction of an amount
Speed, distance and time
Distance-time graphs
Flow problems and their graphs
Rates of change and their units
Convert compound units (E)
Numbers in standard form

	7	Standard form	2
			3
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Spring	1	Maths and money	1
			2
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			12
	2	Straight line graphs	1
			2
			3
			4
			5
			6
			7
			8
	3	Ratio and proportion	1
			2
			3
			4
			5
			6
	4	Constructions and congruence	1
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			3
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			6
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	5	Similarity	1
			2
			3
			4
	6	Algebraic manipulation	1
			2
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Compare and order numbers in standard form
Multiply and divide numbers in standard form
Add and subtract numbers in standard form
Understand a bank account
Spending
Ways to pay
Ways to save
Jobs and pay
Investing
Borrowing (buying a house)
Running a house or a business
Budgeting
Borrowing (loans)
Spending overseas
Insurance
Lines, parallel to the axes, $y=x$ and $y=-x$
Explore gradients
Explore intercepts
$y=mx+c$
Rearrange equations to the form $y=mx+c$ (E)
Find the equation of a line from a graph
Interpret gradient and intercepts of real-life graphs
Graph inequalities (E)
Direct proportion
Direct proportion and conversion graphs
Inverse proportion
Inverse proportion graphs (E)
Ratio problems (whole or part given)
Solve problems with ratio and algebra (E)
Draw and measure angles
Construct and interpret scale drawings
Construct triangles using ASA, SAS and SSS
Construct an angle bisector
Construct a perpendicular bisector
Construct a perpendicular from or to a point
Construct more complex polygons
Identify congruent figures
Congruent triangles
Recognise enlargement and similarity
Work out unknown lengths and angles in similar shapes
Solve problems with similar triangles (E)
Ratio in right-angled triangles (E)
Expand single brackets and simplify
Factorise into a single bracket
Expand double brackets
Expand more complex double brackets

Summer	b	Algebraic manipulation	5
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	1	Pythagoras' theorem	1
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			8
	2	Non-linear graphs	1
			2
			3
			4
			5
			6
			7
			8
	3	Probability	1
			2
			3
			4
			5
			6
			7
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			9
			10
	4	Transformations	1
			2
			3
			4
			5
			6
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			11
	5	Simultaneous equations	1
			2
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Use identities
Factorise quadratic expressions (E)
Solve quadratic equations (E)
Expand triple brackets (E)
Solve equations with squares and square roots
Identify the hypotenuse
Determine whether a triangle is right-angled
Pythagoras' theorem (find the hypotenuse)
Pythagoras' theorem (find any side)
Use Pythagoras' theorem on coordinate axes
Proofs of Pythagoras' theorem (E)
Pythagoras' theorem in 3-D shapes (E)
Substitute into quadratic expressions
Draw quadratic graphs
Draw more complex quadratic graphs
Interpret quadratic graphs
Interpret reciprocal and exponential graphs
Draw cubic graphs (E)
Interpret cubic graphs (E)
Interpret roots, intercepts and turning points (E)
Identify and represent sets
Intersection of a set
Union of a set
Complement of a set (E)
Probability of a single event
Use diagrams to work out probabilities
Relative frequency
Expected outcomes
Independent events
Probabilities from Venn diagrams
Enlargement (positive scale factor)
Enlargement from a point (positive scale factor)
Enlargement (fractional scale factor)
Enlargement (negative scale factor) (E)
Describe an enlargement
Rotation about a point
Describe a rotation
Translation
Describe a translation
Reflection
Find the result of a series of transformations (E)
Use one value to find another
Introduction to simultaneous equations
Solve simultaneous equations using graphs
Solve simultaneous equations (no adjustments)
Manipulating equations

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	6	Trigonometry	1
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Solve simultaneous equations (adjust one)
Solve simultaneous equations (adjust both) (E)
Solve simultaneous equations by substitution (E)
Identify hypotenuse, opposite and adjacent sides
Use the tangent ratio to find unknown side lengths
Use sine and cosine ratios to find unknown side lengths
Use sine, cosine and tangent ratios to find unknown angles
Choose the right method
Key angles in right-angled triangles (E)
Trigonometry in 3-D shapes (E)