Key Stage 3

Unit and focus	1	2	3
Unit and Tocus	Number	Number	Ratio & proportion
Year 7	Place value, integers and decimals Rounding using d.p. and s.f. × and ÷ by 10, 100, 1000 Multiplication/division of decimals Arithmetic with directed numbers Understand index notation	 4 Factors, multiples 3 Prime numbers 2 Prime factors 4 LCMs, HCFs 5 Equivalence of fractions 3 +, -, ×, ÷ of fractions 	 Equivalence between fractions, decimals and percentages without a calculator Calculating percentages without a calculator Calculating percentages using a multiplier Sharing in a ratio (including reverse problems) Fractions of quantities Pie charts
	Square and cube roots	2 Estimation	4 21

Unit and focus	1 Number, ratio & proportion		2 Algebra		3 Geometry & Measures
Year 8	Index laws (multiplication, division, power-to-a-power Zero and negative indices Standard form for large/small numbers Fractions above 1 Fractional changes Percentage changes Multipliers for percentage changes	4 2 4 2 3 4	Solve linear equations with the unknown on each side Change the subject of an equation Multiply double brackets Work out and use the <i>n</i> th term of linear sequence Represent any linear relationship using a graph Gradient and <i>y</i> -intercept of a straight line graph	4 4 3 3 4	Calculate the area and circumference of circle Calculate the volume and surface area of a cul Use Pythagoras' theorem in two dimensions Reflection Rotation Translation using vectors Enlargement (positive integer scale factor)

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	25
rcle a cuboid ns	4 4 2 2 1 3

Key Stage

Unit and focus	4 Algebra		5 Geometry & Measures		6 Algebra
Year 7	Order of operations Formulating expressions Substitution Simplifying expressions by collecting like terms Multiply out and factorise using single brackets	3 3 3 3	Area of rectangle and triangle Area: parallelogram and trapezium Perimeter Angle facts (point, straight line, triangle, opposite) Measuring angles Construct triangles: SSS, SAS, ASA Solve simple problems using compasses Reflection and rotation symmetry	4 3 4 2 2 4	Work with sequences using a term-to-term rule Work with sequences using a position-to-term rule Represent a simple linear relationship on a graph Formulate and solve one-step equations Formulate and solve two-step equations Solve linear equations involving brackets
		15		25	
Unit and focus Year 8	4 Ratio & proportion Direct proportion Graphs showing direct proportion	3 3	5 Geometry & Measures Angle properties of parallel and intersecting lines Bearings	4 2	6 Statistics & Probability Mean, median, mode, range Simple data representation

- 4 Construct perpendicular and angle bisectors
- 4 Construct the perpendicular to a straight line

3 Angle and symmetry properties of quadrilaterals

Relationship between lengths/angles in similar shape 3 Isometric drawings and nets

Plans and elevations

Faces, edges, vertices of 3D shapes

2 Addition and multiplication laws for probability

Scatter diagrams

4 Probability as a simple fraction

Sample space diagrams

2 Product rule for counting

Listing equally likely outcomes

4

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Interpreting the gradient of a real-life graph

Problems involving distance, speed, time

Compound measures

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