Mathematics Scheme of Work

Unit	Hours	Learning	Essential knowledge
Autumn 1		•	•
Numbers and the number system	9	Use positive integer powers and associated real roots	Know the first 6 cube numbers
Counting and comparing	4	Apply the four operations with decimal numbers	Know the first 12 triangular numbers
Calculating	9	Write a quantity as a fraction or percentage of another	• Know the symbols =, ≠, <, >, ≤, ≥
End of term test		Use multiplicative reasoning to interpret percentage change	Know the order of operations including brackets
Autumn 2		Add, subtract, multiply and divide with fractions and mixed numbers	Know basic algebraic notation
Presentation of data	6	Check calculations using approximation, estimation or inverse operations	Know that area of a rectangle = I × w
Measuring data	5	Simplify and manipulate expressions by collecting like terms	• Know that area of a triangle = b × h ÷ 2
Visualising and constructing	5	Simplify and manipulate expressions by multiplying a single term over a bracket	Know that area of a parallelogram = b × h
Investigating properties of shapes	6	Substitute numbers into formulae	• Know that area of a trapezium = ((a + b) ÷ 2) × h
End of term test		Solve linear equations in one unknown	• Know that volume of a cuboid = I × w × h
Spring 1		• Understand and use lines parallel to the axes, y = x and y = -x	Know the meaning of faces, edges and vertices
Algebraic proficiency: tinkering	9	Calculate surface area of cubes and cuboids	Know the names of special triangles and
Exploring fractions, decimals and percentages	3	Understand and use geometric notation for labelling angles, lengths, equal lengths and parallel lines	quadrilaterals
Proportional reasoning	4		Know how to work out measures of central tondage.
Patterns	3		tendency Know how to calculate the range
End of term test			• Know now to calculate the range
Spring 2			
Measuring space	5		
Investigating angles	3		
Calculating fractions, decimals and percentages	12		
End of term test			
Summer			
Solving equations and inequalities	6		
Calculating space	6		
Checking, approximating and estimating	2		
Mathematical movement	8		
End of year test			