

Mathematics Scheme of Work

Unit	Hours	Learning	Essential knowledge
Autumn 1		•	•
Numbers and the number system	6	<ul style="list-style-type: none"> • Multiply and divide numbers with up to three decimal places by 10, 100, and 1000 • Use long division to divide numbers up to four digits by a two-digit number • Use simple formulae expressed in words • Generate and describe linear number sequences • Use simple ratio to compare quantities • Write a fraction in its lowest terms by cancelling common factors • Add and subtract fractions and mixed numbers with different denominators • Multiply pairs of fractions in simple cases • Find percentages of quantities • Solve missing angle problems involving triangles, quadrilaterals, angles at a point and angles on a straight line • Calculate the volume of cubes and cuboids • Use coordinates in all four quadrants • Calculate and interpret the mean as an average of a set of discrete data 	<ul style="list-style-type: none"> • Know percentage and decimal equivalents for fractions with a denominator of 2, 3, 4, 5, 8 and 10 • Know the rough equivalence between miles and kilometres • Know that vertically opposite angles are equal • Know that the area of a triangle = $\text{base} \times \text{height} \div 2$ • Know that the area of a parallelogram = $\text{base} \times \text{height}$ • Know that volume is measured in cubes • Know the names of parts of a circle • Know that the diameter of a circle is twice the radius • Know the conventions for a 2D coordinate grid • Know that $\text{mean} = \text{sum of data} \div \text{number of pieces of data}$
Calculating	6		
Calculating: division	6		
Presentation of data	6		
End of term test			
Autumn 2			
Measuring data	3		
Visualising and constructing	6		
Investigating properties of shapes	6		
Algebraic proficiency: using formulae	3		
End of term test			
Spring 1			
Exploring fractions, decimals and percentages	9		
Proportional reasoning	6		
Patterns	4		
End of term test			
Spring 2			
Measuring space	5		
Investigating angles	3		
Calculating fractions, decimals and percentages	12		
End of term test			
Summer			
Solving equations and inequalities	4		
Calculating space	8		
Checking, approximating and estimating	2		
Mathematical movement	6		
End of year test			