Mathematics Curriculum Overview

Year Group	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Reception	Matching, Sorting and Comparing Exploring pattern	Representing numbers to 5 Shapes (up to 4 sides)	Compare numbers to 5 6, 7 & 8 Making pairs Length, height and time	Comparing numbers to 10 Bonds to 10 3D shapes	Build numbers beyond 10 Adding more Taking away	Doubling, sharing and grouping Even & Odd Patterns & Relationships
Year 1	Place value (within 10)	Addition and Subtraction (within 10)	Place value (within 20) Addition and Subtraction (within 20)	Place value (within 50) Length and Height Mass and Volume	Multiplication and Division Fractions Position and Direction	Place Value (within 100) Money Time
Year 2	Place Value	Addition and Subtraction Shape	Money Multiplication and Division	Length and Height Mass, Capacity and Temperature	Fractions Time	Statistics Position and Direction
Year 3	Place Value Addition and Subtraction	Multiplication and Division	Multiplication and Division Length and Perimeter	Fractions Mass and Capacity	Fractions Money Time	Shape Statistics
Year 4	Place Value Addition and Subtraction	Area Multiplication and Division	Multiplication and Division Length and Perimeter	Fractions Decimals	Decimals Money Time	Shape Statistics Position and Direction
Year 5	Place Value Addition and Subtraction	Multiplication and Division Fractions	Multiplication and Division Fractions	Decimals and Percentages Perimeter and Area Statistics	Shape Position and Direction	Decimals Negative Numbers Converting Units Volume

Mathematics Curriculum Overview

Year 6	Place Value Addition, Subtraction, Multiplication and Division	Fractions Converting Units	Ratio Algebra Decimals	Fractions, Decimals and Percentages Area, Perimeter and Volume Statistics	Shape Position and Direction	Themed Projects, Consolidation and Problem Solving

Year 7 Expectations

Working mathematically

Through the mathematics content, pupils should be taught to:

Develop fluency
- consolidate their numerical and mathematical capability from key stage 2 and extend their understanding of the number system and place value to include decimals, fractions, powers and roots
- select and use appropriate calculation strategies to solve increasingly complex problems
- use algebra to generalise the structure of arithmetic, including to formulate mathematical relationships
- substitute values in expressions, rearrange and simplify expressions, and solve equations
- move freely between different numerical, algebraic, graphical and diagrammatic representations [for example, equivalent fractions, fractions and decimals, and equations and graphs]
- develop algebraic and graphical fluency, including understanding linear and simple quadratic functions
- use language and properties precisely to analyse numbers, algebraic expressions, 2-D and 3-D shapes, probability and statistics

Reason mathematically
- extend their understanding of the number system; make connections between number relationships, and their algebraic and graphical representations
- extend and formalise their knowledge of ratio and proportion in working with measures and geometry, and in formulating proportional relations algebraically
- identify variables and express relations between variables algebraically and graphically
- make and test conjectures about patterns and relationships; look for proofs or counter-examples
- begin to reason deductively in geometry, number and algebra, including using geometrical constructions
- interpret when the structure of a numerical problem requires additive, multiplicative or proportional reasoning
- explore what can and cannot be inferred in statistical and probabilistic settings, and begin to express their arguments formally

Solve problems
- develop their mathematical knowledge, in part through solving problems and evaluating the outcomes, including multi-step problems
- develop their use of formal mathematical knowledge to interpret and solve problems, including in financial mathematics
- begin to model situations mathematically and express the results using a range of formal mathematical representations
- select appropriate concepts, methods and techniques to apply to unfamiliar and non-routine problems