

Long Term Plan for Mathematics



The curriculum for mathematics aims to ensure that all children:

- become fluent in mathematics, so that children develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- reason mathematically using the correct mathematical language
- can solve problems by applying their mathematics to problems and persevere in seeking solutions

To enable our children to develop this knowledge and skills, we use The Mastery Approach to teaching. This approach enables children to learn key mathematical concepts at a deeper level as more time is spent exploring and investigating. These key skills are revisited throughout the year, allowing children to continuously review their understanding and support them to remember long term the content they have been taught and to integrate new knowledge into larger ideas. Although the curriculum is divided into specific areas of maths, our curriculum is planned and sequenced to enable all pupils to develop fluency, mathematical reasoning and problem solving skills by making rich connections across mathematical ideas.

During the autumn term all children from Nursery to Year 6 will focus their learning on number and place value and move through the different domains of maths at the depth and pace appropriate to their age and level of development. The expectation is that the majority of children within each year group will move through the programmes of study at broadly the same pace. Pupils who grasp concepts rapidly will be challenged through rich and sophisticated problems before any acceleration to new content. Those who are not sufficiently fluent will consolidate their understanding through additional practice, before moving on.

Domains of maths in sequence for teaching focus

Number and Place Value (YN - Y6)	Addition and Subtraction (YN - Y6)	Multiplication and Division (Y1 - Y6)	Fractions (Y1 - Y6)	Decimals (Y3 - Y6)	Percentages (Y5 - Y6)	Measurement (YN - Y6)	Geometry (YN - Y6)	Statistics (Y2 - Y6)	Ratio and Proportion Y6 only	Algebra Y6 only
Counting	Mental methods	Times tables and related division facts	Recognise, name and draw fractions of shapes, quantities and measures	Counting	Identify percentages as part of a whole number and understand their decimal and fraction equivalents	Compare, describe and solve practical problems involving height, length, mass, capacity, money and time	Use the correct vocabulary to describe patterns, position and direction	Interpret data using bar charts, pictograms and tables	Solve problems involving the relative sizes of two shapes or quantities	Use simple formulae
Read and write numbers using numerals and words	Formal written methods	Formal written methods	Compare and order fractions (Y2 - Y6)	Identify decimals as parts of whole numbers linked to place value	Compare and order fractions, decimals and percentages	Know and use the correct standard units of measurement (Y2 - Y6)	Recognise and describe the properties of shape	Ask and answer questions using data including finding the difference and totalling	Solve problems involving scale factor of shapes using coordinate grids	Generate and describe linear number sequences
Identify and describe patterns within numbers	Solve contextual problems using addition and subtraction e.g. involving measurement, money and time	Solve contextual problems using multiplication and division e.g. involving measurement, money and time	Recognise equivalent fractions (Y2 - Y6)	Compare and order fractions and decimals	Compare and order fractions, decimals and percentages	Describe and measure angles and turns (Y3 - Y6)	Interpret and present continuous data using appropriate graphical methods (Y5 - Y6)	Express missing number problems algebraically	Find pairs of numbers that satisfy an equation with two unknowns	Express missing number problems algebraically
Solve problems using number facts and place value			Solve problems involving fractions (Y2 - Y6)	Solve problems involving decimals	Solve problems involving decimals	Convert between different units of measurement (Y3 - Y6)	Describe lines using the correct vocabulary and recognise lines of symmetry (Y3 - Y6)		Solve problems using unequal sharing	Solve problems involving algebra