

Year 4: Mathematics

The national curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

| Key performance indicator | Performance standard |
|---|--|
| <p>Number and place value Counts in multiples of six, seven, nine, 25 and 1,000 Counts backwards through zero to include negative numbers Orders and compares numbers beyond 1,000 Rounds any number to the nearest 10, 100 or 1,000</p> <p>Addition and subtraction (inc statistics) Solves addition and subtraction two-step problems in context, deciding which operations and methods to use and why</p> <p>Statistics: Solves comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</p> <p>Multiplication and division Recalls multiplication and division facts for multiplication tables up to 12 x 12</p> <p>Fractions (including decimals) Recognises and shows, using diagrams, families of common equivalent fractions Counts up and down in hundredths; recognises that hundredths arise when dividing an object by 100 and dividing tenths by 10 Rounds decimals with one decimal place to the nearest whole number Solves simple measure and money problems involving fractions and decimals to two decimal places</p> <p>Measurement Converts between different units of measure eg kilometre to metre; hour to minute</p> <p>Geometry: properties of shape Compares and classifies geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Identifies lines of symmetry in two dimensional shapes presented in different orientations</p> <p>Geometry: position and direction Plots specified points and draws sides to complete a given polygon</p> | <p>With reference to the KPIs</p> <p>By the end of Y4, a child should be fluent with whole numbers and the four operations, including number facts and the concept of place value. A child will be developing efficient written and mental methods and performing calculations accurately with increasingly large whole numbers.</p> <p>A child can:</p> <ul style="list-style-type: none"> • solve a range of problems including those with simple fractions and decimal place value; • draw shapes with accuracy using mathematical reasoning and analyse shapes and their properties, confidently describing the relationships between them; • use measuring instruments accurately, making connections between measure and number; • recall the multiplication tables up to and including the 12 multiplication table and show precision and fluency in the work; and • read and spell mathematical vocabulary correctly and confidently using a growing word reading knowledge and a knowledge of spelling. |