



Year 6 Maths Checklist



These are the expected standards for Year 6 pupils to have met by the END of the academic year. There are 7 strands within the Mathematics curriculum.

| My child is able to: | Achieving? |
|---|------------|
| Number and Place Value | |
| Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit | |
| Round any whole number to a required degree of accuracy | |
| Use negative numbers in context, and calculate intervals across 0 | |
| Solve number and practical problems that involve all of the above. | |
| Addition, subtraction, multiplication and division | |
| Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication | |
| Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context | |
| Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context | |
| Perform mental calculations, including with mixed operations and large numbers. | |
| Identify common factors, common multiples and prime numbers | |
| Use their knowledge of the order of operations to carry out calculations involving the 4 operations | |
| Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why | |
| Solve problems involving addition, subtraction, multiplication and division | |
| Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy | |
| Fractions, decimals and percentages | |
| Use common factors to simplify fractions; use common multiples to express fractions in the same denomination | |
| Compare and order fractions, including fractions >1 | |
| Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions | |
| Multiply simple pairs of proper fractions, writing the answer in its simplest form | |
| Divide proper fractions by whole numbers | |
| Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction. | |
| Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places | |
| Multiply one-digit numbers with up to 2 decimal places by whole numbers | |
| Use written division methods in cases where the answer has up to 2 decimal places | |
| Solve problems which require answers to be rounded to specified degrees of accuracy | |
| Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts | |
| Ratio and proportion | |
| Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts | |
| Solve problems involving the calculation of percentages and the use of percentages for comparison | |
| Solve problems involving similar shapes where the scale factor is known or can be found | |
| Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples | |
| Algebra | |
| Use simple formulae | |
| Generate and describe linear number sequences | |
| Express missing number problems algebraically | |
| Find pairs of numbers that satisfy an equation with two unknowns | |
| Enumerate possibilities of combinations of 2 variables. | |
| Measurement | |
| Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 2 decimal places where appropriate | |
| Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places | |
| Convert between miles and kilometres | |
| Recognise that shapes with the same areas can have different perimeters and vice versa | |
| Recognise when it is possible to use formulae for area and volume of shapes | |
| Calculate the area of parallelograms and triangles | |
| Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units | |
| Properties of shape | |
| Draw 2-D shapes using given dimensions and angles | |
| Recognise, describe and build simple 3-D shapes, including making nets | |
| Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons | |
| Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius | |
| Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. | |
| Position and direction | |
| Describe positions on the full coordinate grid (all 4 quadrants) | |
| Draw and translate simple shapes on the coordinate plane, and reflect them in the axes. | |
| Statistics | |
| Interpret and construct pie charts and line graphs and use these to solve problems | |
| Calculate and interpret the mean as an average. | |

