



Year 5 Maths Checklist



These are the expected standards for Year 5 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 to at least 1,000,000 and determine the value of each digit	
Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000	
Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0	
Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000	
Solve number problems and practical problems that involve all of the above	
Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.	
Addition and Subtraction	
Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	
Add and subtract numbers mentally with increasingly large numbers	
Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	
Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	
Multiplication and Division	
Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.	
Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	
Establish whether a number up to 100 is prime and recall prime numbers up to 19	
Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	
Multiply and divide numbers mentally drawing upon known facts	
Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context	
Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000	
Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	
Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes	
Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	
Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	
Fractions, decimals and percentages	
Compare and order fractions whose denominators are all multiples of the same number	
Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	
Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number	
Add and subtract fractions with the same denominator and denominators that are multiples of the same number	
Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
Read and write decimal numbers as fractions	
Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	
Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place	
Read, write, order and compare numbers with up to 3 decimal places	
Solve problems involving number up to 3 decimal places	
Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per 100", and write percentages as a fraction with denominator 100, and as a decimal fraction	
Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ & fractions with a denominator of a multiple of 10 or 25.	
Measurement	
Convert between different units of metric measure	
Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	
Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	
Calculate and compare the area of rectangles (including squares) including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes	
Estimate volume and capacity	
Solve problems involving converting between units of time	
Use all four operations to solve problems involving measure using decimal notation including scaling	
Properties of shape	
Identify 3-D shapes, including cubes and other cuboids, from 2-D representations	
Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	
Draw given angles, and measure them in degrees ($^\circ$)	
Identify: angles at a point and 1 whole turn (total 360°), angles at a point on a straight line and half a turn (total 180°), other multiples of 90°	
Use the properties of rectangles to deduce related facts and find missing lengths and angles	
Distinguish between regular and irregular polygons based on reasoning about equal sides and angles	
Position and Direction	
Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	
Statistics	
Solve comparison, sum and difference problems using information presented in a line graph	
Complete, read and interpret information in tables, including timetables	