



Number - Number and Place Value
<ul style="list-style-type: none">• Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
<ul style="list-style-type: none">• Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
<ul style="list-style-type: none">• Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
<ul style="list-style-type: none">• Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
<ul style="list-style-type: none">• Solve number and practical problems that involve all of the above
<ul style="list-style-type: none">• Read Roman numerals to 1000 (M) and recognise years written in Roman numerals
Number - Addition and Subtraction
<ul style="list-style-type: none">• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
<ul style="list-style-type: none">• Add and subtract numbers mentally with increasingly large numbers
<ul style="list-style-type: none">• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
<ul style="list-style-type: none">• Solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why
Number - Multiplication and Division
<ul style="list-style-type: none">• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
<ul style="list-style-type: none">• Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
<ul style="list-style-type: none">• Establish whether a number up to 100 is prime and recall prime numbers up to 19
<ul style="list-style-type: none">• 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
<ul style="list-style-type: none">• Multiply and divide numbers mentally drawing upon known facts
<ul style="list-style-type: none">• 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
<ul style="list-style-type: none">• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
<ul style="list-style-type: none">• Recognise and use square numbers and cube numbers, and the notation for squared and cubed
<ul style="list-style-type: none">• Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
Number - Multiplication and Division
<ul style="list-style-type: none">• Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
<ul style="list-style-type: none">• Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
Number - Fractions (including decimals and percentages)
<ul style="list-style-type: none">• Compare and order fractions whose denominators are all multiples of the same number
<ul style="list-style-type: none">• Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
<ul style="list-style-type: none">• Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number (for example $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$)
<ul style="list-style-type: none">• Add and subtract fractions with the same denominator and denominators that are multiples of the same number
<ul style="list-style-type: none">• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
<ul style="list-style-type: none">• Read and write decimal numbers as fractions (for example $0.71 = 71/100$)



<ul style="list-style-type: none">• Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
<ul style="list-style-type: none">• Read, write, order and compare numbers with up to three decimal places
<ul style="list-style-type: none">• Solve problems involving numbers up to three decimal places
<ul style="list-style-type: none">• Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with the denominator 100, and as a decimal
<ul style="list-style-type: none">• Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25
Measurement
<ul style="list-style-type: none">• Convert between different units of metric measure (for example, km and m, cm and m, cm and mm, g and kg, l and ml)
<ul style="list-style-type: none">• Understand and use approximate equivalence between metric units and common imperial units such as inches, pounds and pints
<ul style="list-style-type: none">• Measure and calculate the perimeter of composite rectilinear shapes in cm and m
<ul style="list-style-type: none">• Calculate and compare the area of rectangles (including squares), and including using standard units, square cm and square m and estimate the area of irregular shapes
Measurement
<ul style="list-style-type: none">• Estimate volume (for example using 1cm cubed blocks to build cuboids, including cubes) and capacity (for example, using water)
<ul style="list-style-type: none">• Solve problems involving converting between units of time
<ul style="list-style-type: none">• Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling
Geometry – Properties of Shape
<ul style="list-style-type: none">• Identify 3D shapes, including cubes and other cuboids, from 2D representations
<ul style="list-style-type: none">• Know angles are measured in degrees:<ul style="list-style-type: none">▪ estimate and compare acute, obtuse and reflex angles
<ul style="list-style-type: none">• Draw given angles and measure them in degrees
<ul style="list-style-type: none">• Identify<ul style="list-style-type: none">▪ angles at a point and one whole turn (total 360 degrees)▪ angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180 degrees)▪ other multiples of 90 degrees
<ul style="list-style-type: none">• Use the properties of rectangles to deduce related facts and find missing lengths and angles
<ul style="list-style-type: none">• Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
Geometry – Position and Direction
<ul style="list-style-type: none">• 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
<ul style="list-style-type: none">• Solve comparison, sum and difference problems using information presented in a line graph
<ul style="list-style-type: none">• Complete, read and interpret information in tables, including timetables