

National Curriculum Objectives YEAR 4

Number - number and place value

Count in multiples of 6, 7, 9, 25	
Find 1000 more or less than a given number	
Count backwards through zero to include negative numbers	
Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	
Order and compare numbers beyond 1000	
Identify, represent and estimate numbers using different representations	
Round any number to the nearest 10, 100 or 1000	
Solve number and practical problems including measures that involve all of the above and with increasingly large positive numbers	
Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value	

Number - addition and subtraction

Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	
Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	
Estimate and use inverse operations to check answers to a calculation	

Number - multiplication and division

Recall multiplication and division facts for multiplication tables up to 12×12	
Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	
Recognise and use factor pairs and commutativity in mental calculations	
Multiply two-digit and three-digit numbers by a one-digit number using formal written layout	
Solve problems including two step problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	
Pupils practise to become fluent in the formal written method of short multiplication and short division with remainders	

Number - fractions

Recognise and show, using diagrams, families of common equivalent fractions	
Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	
Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	
Add and subtract fractions with the same denominator	
Recognise and write decimal equivalents of any number of tenths or hundredths	
Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$	
Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	
Round decimals with one decimal place to the nearest whole number	
Compare numbers with the same number of decimal places up to two decimal places	
Solve simple measure and money problems involving fractions and decimals to two decimal places.	

Measurement

Convert between different units of measure [for example, kilometre to metre; hour to minute]	
Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	
Find the area of rectilinear shapes by counting squares. Expressed algebraically as $2(a + b)$ where a and b are the dimensions in the same unit	
Estimate, compare and calculate different measures, including money in pounds and pence	
Read, write and convert time between analogue and digital 12 and 24 hour clocks	
Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	

Geometry - properties of shapes

Compare and classify geometric shapes, including quadrilaterals and triangles, extending to classifying different triangles (for example: isosceles, equilateral, scalene) and quadrilaterals (for example: parallelogram, rhombus, trapezium). Pupils base observations on their properties and sizes	
Identify acute and obtuse angles and compare and order angles up to two right angles by size	
Identify lines of symmetry in 2-D shapes presented in different orientations	
Complete a simple symmetric figure with respect to a specific line of symmetry	

Geometry – Position and direction

Describe positions on a 2-D grid as coordinates in the first quadrant, including using ICT	
Describe movements between positions as translations of a given unit to the left/right and up/down	
Plot specified points and draw sides to complete a given polygon	

Statistics	
Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs and use a greater range of scales in their representations	
Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	