

Mathematics Overview – Year Four

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
W 1	Mental addition and subtraction	Fractions	Place value and calculating mentally	Decimal numbers (ordering, rounding and calculating)	Number and place value (incl. negative numbers)	Problem solving strategies
W 2	Number and place value	Place value and written addition (decimal numbers)	Written subtraction	Money (adding and subtracting)	Multiplication and division (decimal numbers)	Addition and subtraction (written and mental methods)
W 3	Multiplication and division	Measurements (Mass and Capacity)	Multiplication and division Fractions	Time and Length	Written multiplication and division	Geometry (position) and Statistics
W 4	Time and Length	Rounding numbers and Subtraction	2D shapes and their properties	Addition and subtraction (written and mental methods)	2D and 3D shapes and Roman numerals	Fractions and decimals (incl. written multiplication and division)
W 5	Written addition and subtraction	Multiplication and division	Multiplication and division	Multiplication and division (written and mental calculations)	Decimals and Fractions	Multiplication and division (tables facts and written calculations)
W 6	Assess and review week	Assess and review week	Assess and review week	Assess and review week	Assess and review week	Assess and review week

Mathematics Objectives Year Four

	Mathematics Objectives
	I can...
Number and Place Value	<ul style="list-style-type: none"> count backwards through zero to include negative numbers count in multiples of 6, 7, 9, 25 and 1000 find 1000 more or less than a given number order and compare numbers beyond 1000

	<ul style="list-style-type: none"> • identify, represent and estimate numbers using different representations • 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. • recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) • round any number to the nearest 10, 100 or 1 000 • solve number and practical problems that involve all of the above and with increasingly large positive numbers • compare numbers with the same number of decimal places up to two decimal places (replicated in Fractions) • 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 units, tenths and hundredths (replicated in Fractions) • round decimals with one decimal place to the nearest whole number (replicated in Fractions)
<p>Addition and subtraction</p>	<ul style="list-style-type: none"> • add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate • estimate and use inverse operations to check answers to a calculation • solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
<p>Multiplication and division</p>	<ul style="list-style-type: none"> • count in multiples of 6, 7, 9, 25 and 1 000 (replicated in Number and Place Value) • 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 • estimate and use inverse operations to check answers to a calculation (replicated in Addition and Subtraction) • solve 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
Fractions	<ul style="list-style-type: none"> • count up and down in hundredths • recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten • compare numbers with the same number of decimal places up to two decimal places • round decimals with one decimal place to the nearest whole number • recognise and show, using diagrams, families of common equivalent fractions • recognise and write decimal equivalents of any number of tenths or hundredths • recognise and write decimal equivalents to $\frac{1}{4}$; $\frac{1}{2}$; $\frac{3}{4}$ • add and subtract fractions with the same denominator • 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 • 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 • solve simple measure and money problems involving fractions and decimals to two decimal places.
Algebra	<ul style="list-style-type: none"> • Perimeter can be expressed algebraically as $2(a + b)$ where a and b are the dimensions in the same unit.
Measurement	<ul style="list-style-type: none"> • estimate, compare and calculate different measures, including money in pounds and pence (also included in Measuring) • estimate, compare and calculate different measures, including money in pounds and pence (appears also in Comparing) • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • find the area of rectilinear shapes by counting squares • read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting) • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to

	<p>days (appears also in Converting)</p> <ul style="list-style-type: none"> • convert between different units of measure (e.g. kilometre to metre; hour to minute)
Geometry – Properties of shapes	<ul style="list-style-type: none"> • 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 • compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • identify acute and obtuse angles and compare and order angles up to two right angles by size
Geometry – Position and direction	<ul style="list-style-type: none"> • describe positions on a 2-D grid as coordinates in the first quadrant • 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	<ul style="list-style-type: none"> • interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs • solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs