

Maths – End of Year 4 Expectations

New National Curriculum Objectives

Number and Place Value	count backwards through zero to include negative numbers
	count in multiples of 6, 7, 9, 25 and 1 000
	find 1 000 more or less than a given number
	order and compare numbers beyond 1 000
	compare numbers with the same number of decimal places up to two decimal places
	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 (
	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
	round any number to the nearest 10, 100 or 1 000
	round decimals with one decimal place to the nearest whole number
Addition and Subtraction	solve number and practical problems that involve all of the above and with increasingly large positive numbers
	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
Multiplication and Division	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
	recall multiplication and division facts for multiplication tables up to 12×12
	multiply two-digit and three-digit numbers by a one digit number using formal written layout
	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
Fractions, decimals and Percentages	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
	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 fraction and decimal equivalence $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$
	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	
Problem Solving	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	Perimeter can be expressed algebraically as $2(a + b)$ where a and b are the dimensions in the same unit.

Measurement and Time	estimate, compare and calculate different measures, including money in pounds and pence
	measure and calculate the perimeter of a rectilinear figure
	find the area of rectilinear shapes by counting squares
	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
	convert between different units of measure (e.g. kilometre to metre; hour to minute)
	read, write and convert time between analogue and digital 12 and 24-hour clocks
Geometry Shape and Position	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
	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
Statistics	plot specified points and draw sides to complete a given polygon
	interpret and present data using bar charts, pictograms and tables
	solve one-step and two step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.