

Maths Year 4

Expected

- Count in multiples of 6, 7, 9, 25 and 1000
- Count backwards through zero to include negative numbers
- Order and compare numbers beyond 1000
- Find a 1000 more or less than a given number
- Recognise the place value of each digit in a four digit whole number
- Round any number to the nearest 10, 100 or 1000
- Read roman numerals up to 100, know that over time, the numeral system changed to include the concept of zero and place value
- Identify, represent and estimate numbers using different representations
- Solve number and practical problems that involve all of the above and with increasingly large positive numbers
- Add and subtract numbers up to 4 digit using formal written methods of columnar addition and subtraction - see school calculation policy
- 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 a calculation
- Recall multiplication and division facts of 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 2 and 3 digit numbers by 1 digit number using a formal written layout - see school calculation policy
- 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.
- Recognise and show, using diagrams (e.g fraction walls), families of common equivalent fractions
- Find fractions of a given quantity
- Count up and down in hundredths: recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten, including representing as a decimal
- solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole

	<p>number</p> <ul style="list-style-type: none"> • 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. • Convert between different units of measure (kilometre to metre; hour to minute) • Measure and calculate the perimeter and area of rectilinear shapes - including squares in m and cm • Find the area of rectilinear shapes by counting squares • Estimate, compare and calculate different measures, including money in pounds and pence • Read, write and convert time between analogue and digit 12 and 24 hour clocks • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days • Compare and classify geometric shapes, using the language of orientation, including quadrilaterals and triangles, based on their properties and sizes • Identify acute, obtuse angles and right angles and order sizes with up to two right angles • Identify lines of symmetry in 2D shapes presented in different orientations • Complete a simple symmetric figure with respects to a specific line of symmetry • Plot specified points and draw sides to complete a given polygon • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs • Describe and plot positions on 2D grids as co-ordinates, including describing movements as translation • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
<p>Greater Depth:</p>	<ul style="list-style-type: none"> • Work in a systematic, logical way to find patterns, generalise and justify mathematical thinking. • Recognise products in multiplication tables as multiples of the corresponding number 4NF-1

- Reason about the location of any *four-digit* number in the linear number system, including identifying the previous and next multiple of 1000 and 100 and rounding to the nearest of each - 4NPV-3
- Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant 4G-1
- identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons
- Developing maturity at making mathematical links. E.g. Work out 345×6 mentally by calculating 300×6 is 1800 40×6 is 240 and 5×6 is 30 to get 2070
- Recognise relationships between fractions and decimals and express them as equivalent quantities • Can you order these decimals and fractions on a number line? 0.35 $\frac{3}{4}$ 0.5 $\frac{1}{5}$ $\frac{4}{9}$
- Substitute values into a simple formula to solve problems
 - $3 \times a + 2 = 17$ What is the value of a ?