

Year 4

Number and place value

- Count in multiples of 6, 7, 9, 25, and 1,000
- 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 1,000
- Identify represent and estimate numbers using different representations
- Round any number to the nearest 10, 100, or 1,000
- Solve number and practical problems that involve all of the above 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

Addition and subtraction

- 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

Multiplication and division

- Recall multiplication and division facts for multiplication tables up to 12 x 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-digit and 3-digit numbers by a one-digit number using a formal written layout
- Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to n objects

Fractions including decimals

- 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 100 and dividing tenths by 10
- 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 equivalent to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$
- Find the effect of dividing a 1 or 2 digit number by 10 and 100, identifying the value of the digits in the answers 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
- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
- 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 digital 12 and 24-hour clocks
- Solve problems involving converting from hours to minutes, minutes to seconds, years to months, and weeks to days

Properties of shape

- 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
- Identify lines of symmetry in 2D shapes presented in different orientations
- Complete a simple symmetric figure with respect to a specific line of symmetry

Position and direction

- Describe positions on a 2D 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 specific 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
- Solve comparison sum and difference problems using information presented in bar charts, pictograms, tables, and other graphs