



# Mathematics Year 4



## Number and Place Value

1. I can count in multiples of 6, 7, 9, 25 and 1000.
2. I can find 1,000 more or less than a given number.
3. I can recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones).
4. I can count backwards through zero to include negative numbers.
5. I can order and compare numbers beyond 1,000.
6. I can identify, represent and estimate numbers using different representations.
7. I can round any number to the nearest 10, 100 or 1,000.
8. I can read Roman numerals to 100 (I to C) and know that over time, the numerical system changed to include the concept of zero and place value.
9. I can solve number and practical problems that involve all of the above and with increasingly large positive numbers.

## Addition and Subtraction

1. I can add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction.
2. I can estimate and use inverse operations to check answers to a calculation.
3. I can solve addition and subtraction two-step problems in contexts, deciding which operation and methods to use and why.
4. I can add and subtract numbers mentally to and from a 4 digit number e.g.  $2,300 - 400$ .

## Multiplication and Division

1. I can recall multiplication and division facts for multiplication tables up to  $12 \times 12$ .
2. I can multiply together three single digit number e.g.  $600 \div 3 = 200$  can be derived from  $6 \div 3 = 2$ .
3. I can recognise and use factor pairs and commutativity in mental calculations.
4. I can multiply and divide two-digit and three-digit numbers by a one-digit number using formal written layout.
5. I can solve problems involving multiplying and dividing.
6. I can multiply and divide a decimal by 10, 100 and 1000.

## Fractions, Decimals, Percentages and Proportions

1. I can recognise and show, using diagrams, families of common equivalent fractions e.g.  $6/9 = 2/3$  or  $1/4 = 2/8$ .
2. I can count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
3. I can 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.
4. I can add and subtract fractions with the same denominator and beyond one whole.
5. I can recognise and write decimal equivalents to  $1/4$ ,  $1/2$  and  $3/4$ .
6. I can round decimals with one decimal place to the nearest whole number.
7. I can compare numbers with the same number of decimal places up to two decimal places.
8. I can solve simple measure and money problems involving fractions and decimals to two decimal places.

## Measure

1. I can convert between different units of measure[ for example, km to m, hr to min]
2. I can measure and calculate the perimeter of a rectilinear figures (including squares) in cm and m.
3. I can find the area of rectilinear shapes by counting squares.
4. I can relate finding the area of a shape to multiplication and arrays e.g.  $2(a+b)$  where a and b are the dimensions in the same unit.
5. I can estimate, compare and calculate different measures, including money in pounds and pence.
6. I can read, write and convert time between analogue and digital 12- and 24- hour clocks.
7. I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
8. I can draw tables with a specific number of squares for columns and rows.
9. I can draw rectangles and squares accurately using a ruler to a half cm.

## Geometry

1. I can describe positions on a 2-D grid as coordinates in the first quadrant.
  2. I can describe movements between positions as translations of a given unit to the left/right and up/down.
  3. I can plot specific points and draw sides to compare a given polygon.
  4. I can compare and classify geometric shapes, including quadrilaterals (for example, parallelogram, rhombus, trapezium) and triangles (for example, isosceles, equilateral, scalene), based on their properties and sizes.
  5. I can compare lengths and angles in a polygon to decide if it is regular or irregular.
  6. I can identify acute and obtuse angles and compare and order angles up to two right angles by size.
  7. I can identify lines of symmetry in 2-D shapes presented in different orientations.
- PLEASE NOTE: 3D shapes will also need to be covered within this section as an opportunity to secure knowledge learnt in Y3.

## Statistics

1. I can interpret discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
2. I can present discrete and continuous data using appropriate, accurately drawn graphical methods, including bar charts and time graphs.
3. I can solve comparison (mean, median, mode and range), sum and difference problems when interpreting information presented in bar charts, pictograms, tables and other graphs.