# A Year 2 mathematician

#### Number and place value

- I can count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.
- I can read and write numbers to at least 100 in numerals and in words.
- I can compare and order numbers from 0 up to 100; using  $\langle \rangle =$  signs.
- I recognise the place value of each digit in a 2-digit number.
- I can identify, represent and estimate numbers using different representations, including the number line.
- I can use place value and number facts to solve problems.

#### Calculations

- I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- I can add and subtract mentally, including:
- a 2-digit number and ones
- a 2-digit number and tens  $\geq$
- two 2-digit numbers
- $\geq$ adding three 1-digit numbers
- I can add and subtract numbers using concrete objects and pictorial representations, including:
- > a 2-digit number and ones
- > a 2-digit number and tens
- two 2-digit numbers
- adding three 1-digit numbers  $\geq$
- I recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
- I can solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures.
- I can solve problems with addition and subtraction applying my increasing knowledge of mental and written methods.
- I can recall and use multiplication and division facts for the 2, 5 and 10x tables, including recognising odd and even numbers.
- I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication, division and equals signs.
- I can solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.
- I can show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
- I can show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

## Fractions

- I recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity.
- I can write simple fractions. •
- I recognise the equivalence of 2/4 and 1/2.

#### Measurement

- I can compare and order lengths, mass, volume/capacity and record the results using >< and =.
- I can choose and use standard units to estimate and measure length/height in any direction in m and cm using rulers.
- I can choose and use standard units to estimate and measure mass in kg and g using scales.
- I can choose and use standard units to estimate and measure temperature in °C using thermometers.
- I can choose and use standard units to estimate and measure capacity in I and mI using measuring • vessels.
- I recognise and use symbols for £ and p and combine amounts to make a particular value.
- I can find different combinations of coins that equal the same amount of money. •
- I can tell and write the time to five minutes, including quarter to/past and draw the hands on a clock face to show these times.
- I can compare and sequence intervals of time.
- I know the number of minutes in an hour.
- I know the number of hours in a day.
- I can solve simple problems in a practical context involving addition and subtraction of money of the same units, including giving change.

# Geometry – properties of shapes

- I can compare and sort common 2D shapes and everyday objects.
- I can compare and sort common 3D shapes and everyday objects.
- I can identify and describe the properties of 2D shapes, including the number of sides and line of symmetry in a vertical line.
- I can identify and describe the properties of 3D shapes including the number of edges, vertices and faces.
- I can identify 2D shapes on the surface of 3D shapes.

## Geometry – position and direction

- I can order and arrange combinations of mathematical objects in patterns and sequences.
- I can use mathematical vocabulary to describe position, direction and movement (including movement • in a straight line and distinguishing between rotation as a turn and
- in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

## Statistics

- I can interpret and construct simple pictograms.
- I can interpret and construct tally charts.
- I can interpret and construct block diagrams.
- I can interpret and construct simple tables.
- I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
- I can ask and answer questions about totalling and comparing categorical data.