

# Age-related expectations: Year Two

## MATHS

### Number and place value

- count in steps of 2, 3, and 5 from 0, forward and backward
- count in tens from any number, forward and backward
- recognise the place value of each digit in a two-digit number (tens, ones)
- compare and order numbers from 0 up to 100
- identify, represent and estimate numbers using different representations, including the number line
- use  $<$ ,  $>$  and  $=$  signs correctly
- read and write numbers to at least 100 in numerals
- read and write numbers to at least 100 in words
- use place value and number facts to solve problems

✚Count reliably up to 1000 in 2s, 5s and 10s ✚Count on and back in multiples of 4, 8, 25 and 0 and 100 from any given number to beyond 1000

### Addition and subtraction

- solve problems with addition and subtraction:
  - using concrete objects and pictorial representations, including those involving numbers, quantities and measures
  - applying their increasing knowledge of mental and written methods
- recall and use addition and subtraction facts to 20 fluently
- derive and use related facts up to 100 eg  $30+70$
- know 10 more / less
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers
- show that addition of two numbers can be done in any order (commutative) and subtraction cannot
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems

✚Apply knowledge of number up to 100 to solve one-step problems involving + and - ✚+ and - two 2-digit and numbers to 100 ✚Use appropriate strategy to + and - across 100

### Multiplication and division

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- calculate and write mathematical statements for multiplication and division within the multiplication tables, using multiplication ( $\times$ ), division ( $\div$ ) and equals ( $=$ ) signs
- show that multiplication of two numbers can be done in any order (commutative) and division cannot
- recognise and use inverse
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

✚Apply knowledge of number up to 100 to solve a one-step problem involving simple  $\times$  and  $\div$

### Fractions

- recognise, find, name and write fractions  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$  and  $\frac{3}{4}$  of a length, shape, set of objects or quantity
- recognise equivalence of simple fractions eg  $\frac{2}{4}$ ,  $\frac{1}{2}$

✚Add and subtract fractions with a common denominator

### Measurement

- choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ( $^{\circ}\text{C}$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- compare and order lengths, mass, volume/capacity and record the results using  $>$ ,  $<$  and  $=$
- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
- compare and sequence intervals of time
- tell the time to five minutes, including quarter past/to the hour
- write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
- know the number of minutes in an hour and the number of hours in a day

✚Apply knowledge of addition and subtraction to pay for items, up to £10, within a problem solving context ✚Measure, compare, add and subtract using common metric measure

### Geometry: properties of shapes

- identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
- identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
- identify 2-D shapes on the surface of 3-D shapes, [eg a circle on a cylinder and a triangle on a pyramid]
- compare and sort common 2-D and 3-D shapes and everyday objects

### Geometry: position and direction

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

✚Know about right angles and where they can be seen in the environment

### Statistics

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