

## Mathematics Curriculum - Year 1

### Autumn 1

- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.
- Read and write numbers from 1 to 20 in numerals and words.
- Count, read and write numbers to 100 in numerals.
- Begin to recognise the place value of numbers beyond 20 (tens and ones).
- Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.
- Solve problems and practical problems involving all of the above.
- Given a number, identify one more and one less.
- Count in multiples of, twos, fives and tens.
- Solve problems and practical problems involving all of the above.
- Compare and describe lengths and heights (for example, long/short, longer/shorter, tall/short, double/half).
- Measure and begin to record lengths and heights, using non-standard and then manageable standard units (m and cm) within children's range of counting competence.
- Compare and describe mass/weight (for example, heavy/light, heavier than, lighter than).
- Measure and begin to record mass/weight, using non-standard and then standard units (kg and g) within children's range of counting competence.
- Solve practical problems for lengths, heights and masses/weights.
- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.
- Represent and use number bonds and related subtraction facts within 20.
- Add and subtract one-digit and two-digit numbers to 20, including zero (using concrete objects and pictorial representations).
- Solve simple one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems, such as  $7 = \square - 9$ .
- Present and interpret data in block diagrams using practical equipment.
- Ask and answer simple questions by counting the number of objects in each category.
- Ask and answer questions by comparing categorical data.
- Recognise and name common 2-D shapes, including rectangles (including squares), circles and triangles.
- Recognise and name common 3-D shapes, including cuboids (including cubes), pyramids and spheres.

### Autumn 2

- Recognise and create repeating patterns with numbers, objects and shapes.
- Identify odd and even numbers linked to counting in twos from 0 and 1.
- Sort objects, numbers and shapes to a given criterion and their own.
- Understand that a fraction can describe part of a whole.
- Understand that a unit fraction represents one equal part of a whole.
- Recognise, find and name a half as one of two equal parts of an object, shape or quantity (including measure).
- Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
- Compare and describe capacity/volume (for example, full/empty, more than, less than, half, half full, quarter).<sup>30</sup>
- Measure and begin to record capacity and volume using non-standard and then standard units (litres and ml) within children's range of counting competence.
- Solve practical problems for capacity/volume.
- Recognise and know the value of different denominations of coins and notes.
- Solve simple one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems, such as  $7 = \square - 9$ .
- Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.
- Recognise and use language relating to dates, including days of the week, weeks, months and years.
- Measure and begin to record time (hours, minutes, seconds).
- Compare, describe and solve practical problems for time (quicker, slower, earlier, later).

### Spring 1

- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.
- Read and write numbers from 1 to 20 in numerals and words.
- Count, read and write numbers to 100 in numerals.
- Begin to recognise the place value of numbers beyond 20 (tens and ones).
- Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.
- Given a number, identify one more and one less.
- Given a number, identify ten more and ten less.
- Order numbers to 50.
- Solve problems and practical problems involving all of the above.
- Compare and describe mass/weight (for example, heavy/light, heavier than, lighter than).
- Measure and begin to record mass/weight, using non-standard and then standard units (kg and g) within children's range of counting competence.
- Solve practical problems for masses/weights.
- Solve simple one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems, such as  $7 = \square - 9$ .
- Recognise and name common 2-D shapes, including rectangles (including squares), circles and triangles.
- Recognise and name common 3-D shapes, including cuboids (including cubes), pyramids and spheres
- Count in multiples of, twos, fives and tens.
- Recognise and know the value of different denominations of coins and notes.
- Add one-digit and two-digit numbers to 20, including zero.
- Recall and use doubles of all numbers to 10 and corresponding halves.
- Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
- Subtract one-digit and two-digit numbers to 20, including zero.
- Recall and use doubles of all numbers to 10 and corresponding halves.
- Solve one-step problems involving division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

### Spring 2

- Compare and describe lengths and heights (for example, long/short, longer/shorter, tall/short, double/half).
- Measure and begin to record lengths and heights, using non-standard and then manageable standard units (m and cm) within children's range of counting competence.
- Compare and describe mass/weight (for example, heavy/light, heavier than, lighter than).
- Measure and begin to record mass/weight, using non-standard and then standard units (kg and g) within children's range of counting competence.
- Solve practical problems for lengths, heights and masses/weights.
- Represent and use number bonds and related subtraction facts within 20.
- Add and subtract one-digit and two-digit numbers to 20, including zero (using concrete objects and pictorial representations).
- Solve practical problems for length and height and mass/weight.
- Understand that a fraction can describe part of a whole.
- Understand that a unit fraction represents one equal part of a whole.
- Recognise, find and name a half as one of two equal parts of an object, shape or quantity (including measure).
- Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
- Describe position, directions and movements, including half, quarter and three-quarter turns.
- Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
- Compare, describe and solve practical problems for time (quicker, slower, earlier, later).
- Measure and begin to record the following time (hours, minutes, seconds).

## Summer 1

- Read and write numbers from 1 to 20 in numerals and words.
- Count, read and write numbers to 100 in numerals.
- Begin to recognise the place value of numbers beyond 20 (tens and ones).
- Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.
- Given a number, identify one more and one less.
- Given a number, identify ten more and ten less.
- Order numbers to 50.
- Solve problems and practical problems involving all of the above.
- Represent and use number bonds and related subtraction facts within 20.
- Add and subtract one-digit and two-digit numbers to 20, including zero (using concrete objects and pictorial representations).
- Solve simple one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems, such as  $7 = \square - 9$ .
- Present and interpret data in block diagrams using practical equipment.
- Ask and answer simple questions by counting the number of objects in each category.  
Ask and answer questions by comparing categorical data.
- Compare, describe and solve practical problems capacity/volume (full/empty, more than, less than, quarter).
- Measure and begin to record capacity and volume using non-standard and then standard units (litres and ml) within children's range of counting competence.
- Solve simple one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems, such as  $7 = \square - 9$ .
- Understand that a fraction can describe part of a whole.
- Understand that a unit fraction represents one equal part of a whole.
- Recognise, find and name a half as one of two equal parts of an object, shape or quantity (including measure).  
Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
- Describe position, directions and movements, including half, quarter and three-quarter turns.  
Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
- Recognise and name common 2-D shapes, including rectangles (including squares), circles and triangles.  
Recognise and name common 3-D shapes, including cuboids (including cubes), pyramids and spheres.

## Summer 2

- Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.
- Recognise and use language relating to dates, including days of the week, weeks, months and years.
- Measure and begin to record time (hours, minutes, seconds).
- Compare, describe and solve practical problems for time (quicker, slower, earlier, later).
- Solve one-step problems involving multiplication and division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
- Subtract one-digit and two-digit numbers to 20 using 'difference' as finding how many more to make (using concrete objects and pictorial representations).
- Solve problems involving how many more to make.
- Present and interpret data in block diagrams using practical equipment.
- Ask and answer simple questions by counting the number of objects in each category.
- Ask and answer questions by comparing categorical data.
- Compare and describe lengths and heights (for example, long/short, longer/shorter, tall/short, double/half).
- Measure and begin to record lengths and heights, using non-standard and then manageable standard units (m and cm) within children's range of counting competence.
- Compare and describe mass/weight (for example, heavy/light, heavier than, lighter than).
- Measure and begin to record mass/weight, using non-standard and then standard units (kg and g) within children's range of counting competence.
- Solve practical problems for lengths, heights and masses/weights.
- Recognise and create repeating patterns with numbers, objects and shapes.
- Identify odd and even numbers linked to counting in twos from 0 and 1.
- Sort objects, numbers and shapes to a given criterion and their own.