

Year 1 Programme of Study

The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources [for example, concrete objects and measuring tools].

At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Pupils should use a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

The key objectives for the teaching of mathematics in **Year 1** are listed below.

Number

Number and Place Value

Pupils should be taught to:

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- given a number, identify one more and one less
- 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
- read and write numbers from 1 to 20 in numerals and words.

Addition and Subtraction

Pupils should be taught to:

- 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
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.

Multiplication and Division

Pupils should be taught to:

- 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.

Fractions

Pupils should be taught to:

- recognise, find and name a half as one of two equal parts of an object, shape or quantity
- recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

Measurement

Pupils should be taught to:

- compare, describe and solve practical problems for:
 - *lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]*
 - *mass/weight [for example, heavy/light, heavier than, lighter than]*
 - *capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]*
 - *time [for example, quicker, slower, earlier, later]*
- measure and begin to record the following:
 - *lengths and heights*
 - *mass/weight*
 - *capacity and volume*
 - *time (hours, minutes, seconds)*
- recognise and know the value of different denominations of coins and notes
- sequence events in chronological order using language [for example, 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
- tell the time to the hour

Geometry

Properties of Shapes

Pupils should be taught to:

- recognise and name common 2-D and 3-D shapes, including:
 - *2-D shapes [for example, rectangles (including squares), circles and triangles]*
 - *3-D shapes [for example, cuboids (including cubes), pyramids and spheres].*

Position and Direction

Pupils should be taught to:

- describe position, direction and movement, including whole, half, quarter and three-quarter turns.