## Maths

## Number

## Shape, space \& measures

## End of year expectations

## Number

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 $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s
- Given a number, identify 1 more and 1 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
- 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 0
- Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=?+5$
- 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


## End of year expectations

## Shape and Space

- Recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity
- Recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity
- 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]
- Describe position, direction and movement, including whole, half, quarter and three-quarter turns



## End of year expectations

## Measurement

- 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 and half past the hour and draw the hands on a clock face to show these times


## What is teaching for depth and mastery maths?

Mastery maths is a concept which teaches children to apply their learning and knowledge to a range of scenarios and situations, therefore deepening knowledge and developing understanding. Mastery Maths follows the 'key three'.


## The Key Three

- Fluency - number facts and quick calculation.

- Reasoning - being able to explain working and show good conceptual understanding.

- Problem Solving - applying mathematical skills and knowledge to unfamiliar situations.


## Mastering Number Programme

## NCETM

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How many on the bottom row to make 5?



How many can you see? How many more to make 5?


