

# Year 1 Maths at Acton

In Year 1, we build on the foundations taught in EYFS. Children will use concrete manipulatives (physical resources), pictorial and abstract representations throughout the year. Concrete manipulatives are always available within the classroom and children can freely access these.

## Topics covered in Year 1

### Year 1 autumn term

- Place value (within 10)
- Addition and subtraction (within 10)
- Shape

### Year 1 spring term

- Place value (within 20)
- Addition and subtraction (within 20)
- Place value (within 50)
- Length and height
- Mass and volume

### Year 1 summer term

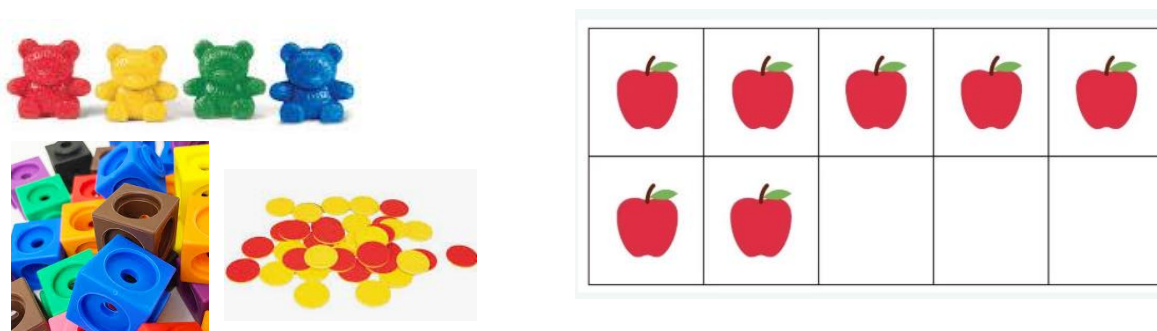
- Multiplication and division
- Fractions
- Position and direction
- Place value (within 100)
- Money
- Time

## Place Value Within 10

This is the first unit that children will experience as part of their maths journey in Year 1. The focus is about building on the prior knowledge the children have gained in Reception.

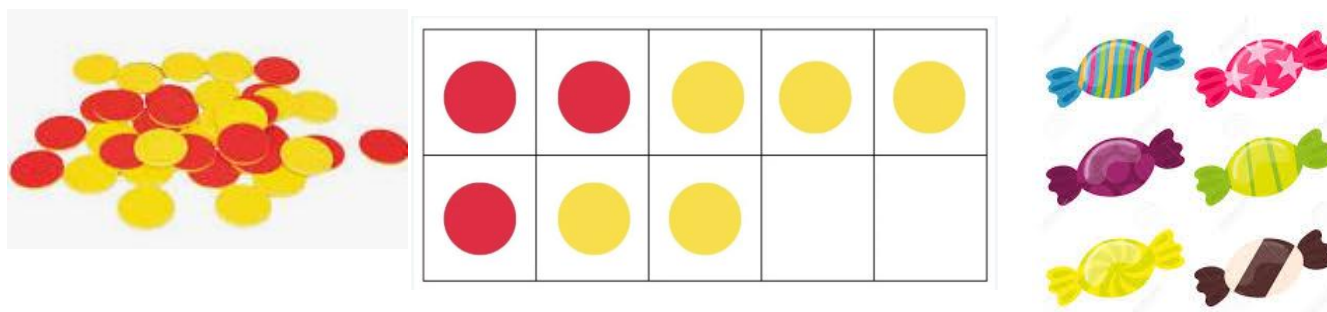
In this unit, children will learn to sort, count and represent objects, recognise numbers as words, count on and backwards within 10 and find 1 more /1 less. Children will also learn to compare and order numbers and use a number line.

Children will use both concrete manipulatives (physical resources) and pictorial representations to support their learning.



## Addition and Subtraction Within 10

In this unit, children use part-whole models to investigate parts and wholes. Children will learn a number of skills including writing number sentences, identifying fact families and learning number bonds to 10. They will use concrete manipulatives and pictorial representations to add and subtract.



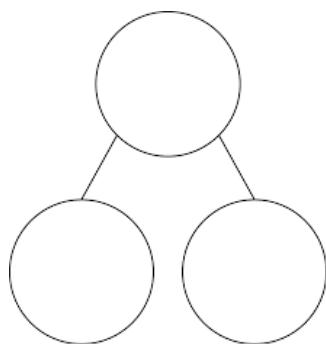
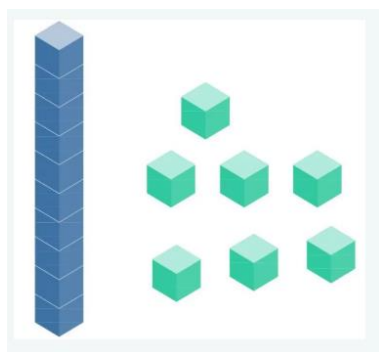
## Shape

As part of this unit of learning, children learn to recognise, name and sort 2D and 3D shapes. They then learn to make patterns using a range of the shapes they have learnt about.



## Place Value Within 20

This unit builds on the previously taught unit where children concentrated on numbers to 10. Within this unit, children learn to count within 20 and continue to build on their understanding of finding 1 more and 1 less. They learn to use a range of concrete manipulatives and pictorial representations before moving thinking about these concepts more abstractly.

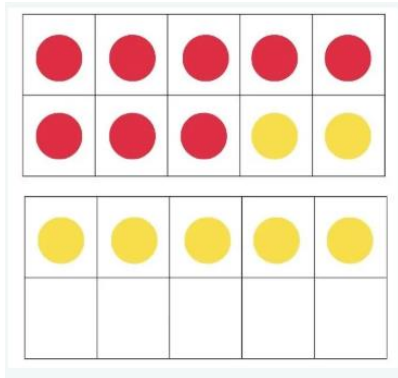


## Addition and Subtraction Within 20

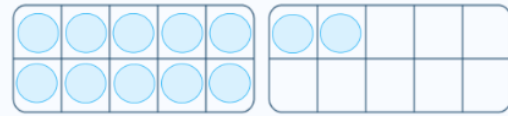
Children will have already learnt to add and subtract within 10. They will have gained an understanding of number bonds and will be able to recall number bonds to 10 with greater ease.

In this unit, children will build on their prior learning and learn to add and subtract within 20. They will go through the steps of learning and reasoning with number bonds to 20, investigating doubles and near doubles, learning to subtract

using number bonds, counting back and finding the difference. Children will also explore related facts and missing number problems.



First there were 7 frogs in the pond.  
 Then some more frogs jumped into the pond.  
 Now there are 12 frogs in the pond.  
 How many frogs jumped into the pond?



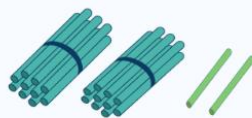
$$7 + \underline{5} = 12$$

## Place Value Within 50

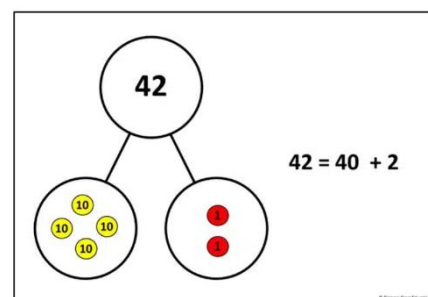
By this point in the year, children will have a firm grasp of the concept of place value to 20. This third Place Value unit, they will build on previous teaching and further deepen their understanding of how the concept of place value underpins all number-based concepts.

In this unit, children will learn to count from 20 to 50, in ones and by making groups of ten. They will learn to partition numbers into tens and ones, estimate on a number line to 50 and continue to develop their understanding of finding one more and one less.

Count the straws by making groups of 10.



There are 2 groups of 10.  
 There are 2 ones left over.  
 There are 22 straws altogether.



## Length and Height

This unit takes a step away from the number based units and focuses on the new concept of comparing and finding lengths and heights. Children will measure length using objects before being introduced to using rulers to measure in centimetres.

Their ability to read and write numbers to 50 will enable them to read and record the measurements they take with growing accuracy.



## Mass and Volume

Having covered the concepts of length and height, children move on to learning about mass and volume. In this unit, children will investigate the concepts of both heavier and lighter and full and empty. They will learn to measure and compare mass, volume and capacity.



A

B

## Multiplication and Division

This is the first unit of learning in the summer term. By this point, children have a good grasp of the concepts of place value and addition and subtraction which will support them when exploring this new concept. As part of this unit, children learn to count in steps of 2, 5 and 10, recognise and add equal groups, make arrays and consider doubles. They begin to understand division by grouping and sharing small quantities.



$$3 + 3 + 3 =$$

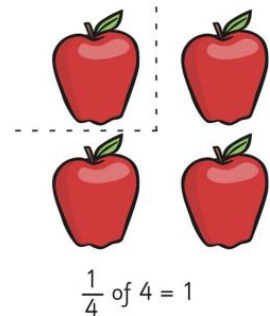
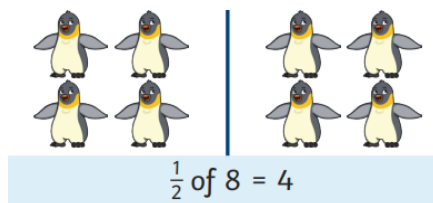
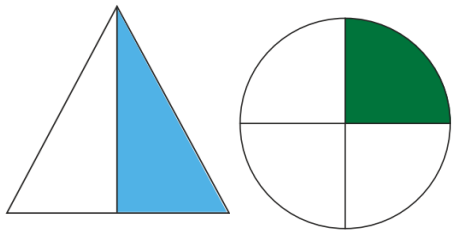


$$3 \times 3 =$$



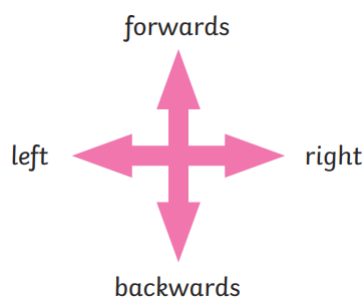
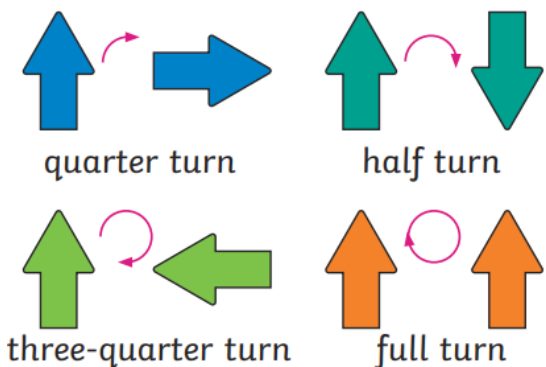
## Fractions

Children will learn to recognise and find a half and quarter of an object shape and quantity. They will use a range of concrete manipulatives and pictorial representations to develop their understanding of this concept.



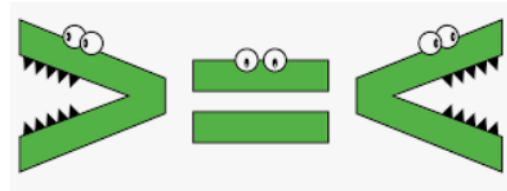
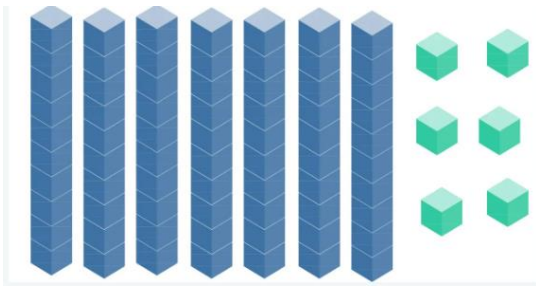
## Position and Direction

Children use the language of position, direction and motion. They learn to describe turns and position, using left, right, forwards, backwards, above and below. Children also learn to make whole, half, quarter and three-quarter turns in both directions.



## Place Value to 100

This is the final Place Value unit the children encounter Year 1. It builds heavily on the concepts already taught in the previous units. In this unit, children go through the steps of counting from 50 to 100, partitioning numbers into tens and ones, finding one more and one less, comparing numbers and using a number line to 100.



## Money

This is one of the shorter units in the Year 1 curriculum. Children learn to recognise and know the value of different denominations of notes and coins.



## Time

This is the final unit covered in summer term. Children will learn the days of the week and month is of the year. They will explore the concepts of hours minutes and seconds before learning to tell the time to the hour and the half hour.

