## Subtraction

## Year R (EYFS)

In Class R the children will explore subtraction by counting back to find the answer. They will work with two single-digit numbers and will use a range of resources including everyday objects. Recording will be by adults (through the use of notes or photographs) and may include the children drawing pictures of the objects they have added. Some children may also use digits to label their pictures.

Numicon may still be used:


The children will also use egg boxes grouped in 10s. Children will be able to take objects out of the different sections of the egg box to subtract. By having egg boxes grouped in 10s, the children begin to develop their understanding of place value.


## Year 1

In Year 1 the children will begin to write out subtraction calculations using the symbols "-" and "=". They will continue to use manipulatives and pictorial representations to explore the concept of subtraction. The children will also solve one step problems including missing number problems (e.g. $2+\ldots=11$ )

## Year 2

In Year 2 the children will consider different ways they can partition numbers to make them easier to work with. They will use a range of strategies (both pictorial and concrete) to develop their understanding of the concept of subtraction. They will use resources such as dienes but will begin to record their answers in columns (using place value charts to support). The children will be able to subtract TU-U and TU-TU. Through investigation they will come to see that subtraction has to be done in a certain order.
2) Partition and recombine (introduce Y2)

e.g If children were asked to find 23-16 they could explore whether it would be better to partition 23 into $20+3$ or $20+13$ to aid their subtraction.

## 3) Empty Number Lines - counting back (Y2 example)

$$
47-19=
$$



$$
47-19=28
$$

Number lines can also be used for subtraction. The children can be encouraged to start with the larger number and count back by the amount being taken away. Working backwards on the number line helps reinforce the understanding of subtraction leading to our answer getting smaller and will support the children with reading scales further up the school.

## Year 3

In Year 3 the children will use the formal method of subtraction to take away three digit numbers. They will continue to use manipulatives such as dienes to support the transition to more consistent use of the formal method of subtractions. The children will also begin to explore subtraction of money to find change, working practically using coins.



The children will begin to develop an understanding that when their top number is not big enough to subtract, they will need to exchange a different value digit. In the example above, 4 is not big enough to subtract 6 from so I exchange 1 ten for 10 ones to make 14 ones (from which I can subtract 6).

## Year 4

In Year 4 the children move on to subtract 4 digit numbers using the column method. They will also apply this method to solving 2 step word problems. The children will continue to use dienes to support their understanding of columnar subtraction however place value counters may also be used where appropriate.

## Year 5

Children use column subtraction for numbers with more than 4 digits and to solve multi-step problems. They use place value counters to support understanding of exchanging and will also subtract decimal numbers.

Year 6
By year 6 the children should be able to use the column method for subtraction independently and continue to practise and develop fluency by applying it to multi-step problems.

