

Calculation and Number in EYFS

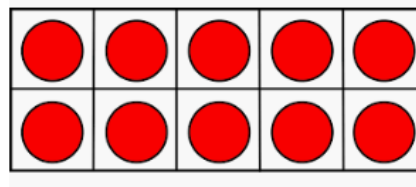
What will my child be expected to know by the end of their first year in school?

The Early Learning Goal (ELG) for Number states that

“Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.”

There is daily counting as part of every maths lesson where we count forwards and back. We count using apparatus to help recognise numerals and develop counting concrete objects.

We use number lines and 5 and 10 frames to support counting and number recognition.



We sing songs such as 10 Green Bottles to support identifying '1 less'. Large number lines in the classroom and outdoor area encourage pupils to locate and use numbers in their learning, regardless of the activity.



Counters and other objects are used for counting so that children can physically identify quantity and relation to numeral – “give me 7” “give me half” “give me 1 less



than 8”.

Children practice writing numerals throughout the day. They do this through many creative ways that develop an understanding of correct formation. Many young children

will reverse numerals as they write them so daily practise allows them plenty of opportunities to establish the correct shapes.



Follow the link below to see how we teach the formation of numbers. Your child can practise using their fingers in flour or rice/sand. Use

sticks in mud or soil. Paint with water or paint to develop the formation of the numerals

<https://www.youtube.com/watch?v=BHQ2MbcSRB8>

Children are taught to calculate as soon as they become familiar with numbers, starting with addition within 5.

Understanding of calculation develops through the teaching of 3 key stages:

Concrete → Pictorial →
Abstract

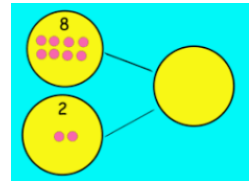
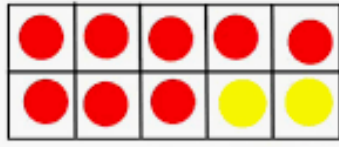
Children are given concrete/physical objects to combine or add or remove (subtraction). This involves them counting and moving objects to create a total.



There are daily opportunities for this **concrete** calculation stage.



Pupils move onto representing their understanding of **concrete** calculation **pictorially**, for example as a 10 frame, bar model or part- part whole representation.



model

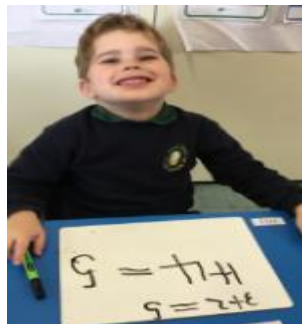
Part – part whole

10 frame

Bar

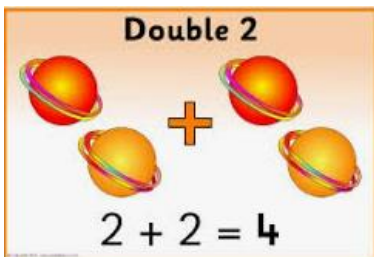
Children become confident with their understanding of the calculation process and are able to demonstrate their learning in **abstract** form through a numeral representation (calculation or number sentence) using operation symbols such as +, - and =.

$10+0=$	$1+1=$	$3+4=$
$5+3=$	$1+4=$	$2+7=$

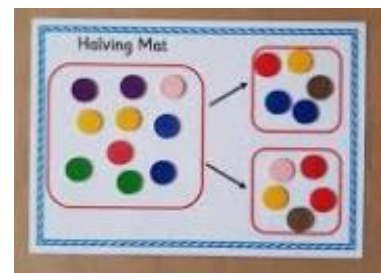


Pupils use all 3 methods for both addition and subtraction. They will use strategies for calculation using numbers to 20 in their first year at school but

will count to and recognise numbers greater than 20.



Pupils use concrete, pictorial and abstract strategies to support their understanding of doubling and halving. They use numbers to 20 and record their



learning as number sentences.