

Calculation Policy

The following pages show the progression in calculation (addition, subtraction, multiplication and division) and how this works in line with the National Curriculum. The consistent use of the CPA (concrete, pictorial, abstract) approach across the curriculum helps children develop understanding across all the operations in an efficient and reliable way. This policy shows how these methods develop children's confidence in their understanding of both written and mental methods.

Updated January 2024





EYFS			
	Concrete	Pictorial	Abstract
Counting	Counting and adding more Children learn counting through nursery rhymes: '1, 2, 3, 4, 5 once I caught a fish alive'.	Counting and adding more Real life discussions e.g 'How many children are at the park?'	Counting and adding more Children can count by seeing the numbers in order.
	1:1 correspondence – moving objects to check they have been counted.		123 456 789
		Counting items that cannot be moved, including irregular arrangements. Crossing items off.	



Number Recognition

Recognising numbers

Using numicon to link numbers to a shape, supporting instant recall.



Number tracks



Dice - subitising.



Recognising numbers

Matching the number to its value.



Recognising numbers

Recognising numerals to 20 and representing numbers using marks they can interpret and explain.





Early Addition

Beginning to understand addition

Manipulative toys – finding one more.



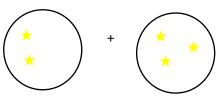
Using the language of 'more'.

Numicon – using balancing scales to find two pieces of numicon that equal 5, for example.

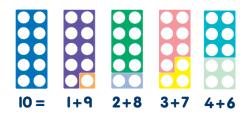


Beginning to understand addition

Counting two sets of pictures to find a total.



Tens frame images to explore number bonds.



Beginning to understand addition

Solving number sentences using the language 'more', 'add', 'altogether' and 'total'.





Early Subtraction

Beginning to understand addition

Nursery rhymes – '5 little speckled frogs'.



Using the language of 'fewer' and 'less'.

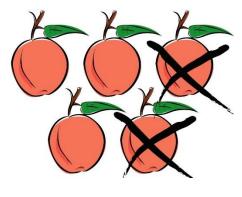
Numicon:

10-3 (cover 3, what's left?)



Beginning to understand addition

Crossing off images as a way of subtracting.



5 - 3 = 2

Beginning to understand addition

Solving number sentences using the language of 'less', 'fewer', 'takeaway'.



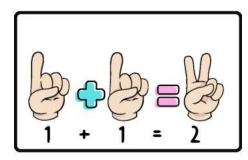


Halving Doubling Sharing

Halving, doubling and sharing

Doubling on fingers

"Show me 1, show me double 1"



Explore the relationship of doubling and halving together using numicon.

Double 4 is 8

Half of 8 is 4

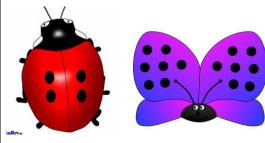


Sharing between groups in real life context e.g sharing fruit **equally** at a picnic.



Halving, doubling and sharing

Using the symmetry of ladybirds and butterflies.

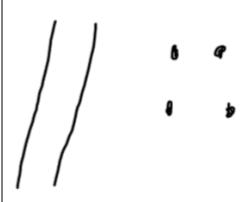


"Half of 4 is 2"

"Double 7 is 14"

Halving, doubling and sharing

Recording halving/doubling/sharing using marks they can interpret and explain.



"I doubled lines and dots. Double 1 is 2 and double 2 is 4"