

Progression in Calculations. Y1

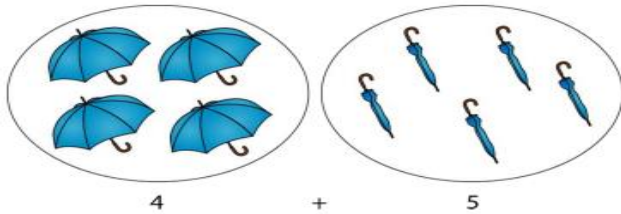
Addition.

Year 1

The Addition Symbol

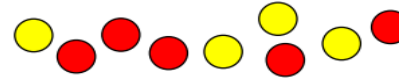
Children are introduced to the addition symbol (+) for the first time. They combine this with the 'equal to' symbol (=) to create their first number sentences e.g. $3+2=5$.

At this stage, children focus on a specific order to the numbers sentence ($a+b=c$)



- 'There are four open umbrellas and five closed umbrellas.'
 - 'We can write this as four plus five.'
- $4 + 5$
- 'The 4 represents the four open umbrellas.'
 - 'The 5 represents the five closed umbrellas.'

Here are some counters.



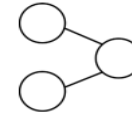
Group the counters by colour.

Fill in the gaps in the sentence and say it out loud.

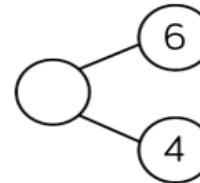
_____ red counters plus _____ yellow counters is equal to _____ counters.

Complete the part-whole model and the number sentence.

$$\square + \square = \square$$

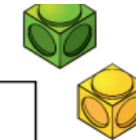


Use cubes to solve the following calculations.



$$5 + 3 = \square$$

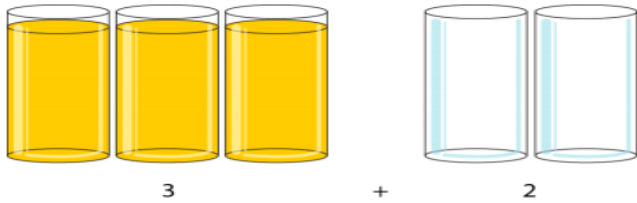
$$8 + 1 = \square$$



Progression in Calculations. Y1

Addition.

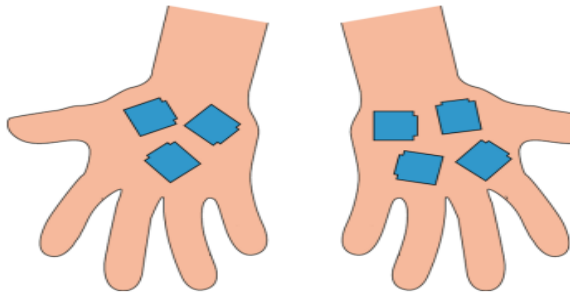
Two parts clearly grouped – scaffolded:



'There are three full glasses and two empty glasses.'

'We can write this as three plus two.'

$$3 + 2$$

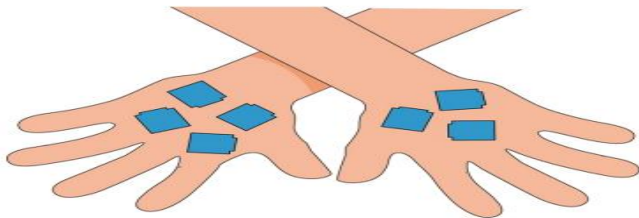


'There are three cubes in this hand.'

'There are four cubes in this hand.'

'We can write this as three plus four.'

$$3 + 4$$



'There are four cubes in this hand.'

'There are three cubes in this hand.'

'We can write this as four plus three.'

$$4 + 3$$

Fact Families – Addition Facts

Progression in Calculations. Y1

Addition.

Children build on initial number sentences by looking at addition fact families. They can see that the order of an addition sentence can be varied, and they begin to discover that addition is commutative.

E.g. $3 + 2 = 5$ $2 + 3 = 5$
 $5 = 3 + 2$ $5 = 2 + 3$

Number Bonds within 10

Children combine their knowledge of the part-whole model and addition facts to explore number bonds within 10. Starting with the whole, children break numbers into parts and explore how many different ways a number can be partitioned.

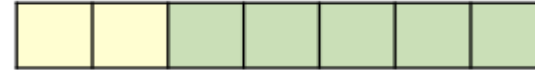
E.g. $5 = 3 + 2$
 $5 = 4 + 1$

Systematic Number Bonds

Children apply their partitioning skills to work systematically starting with the whole. E.g.

$7 + 0 = 7$
 $6 + 1 = 7$
 $5 + 2 = 7$
 $4 + 3 = 7$

Complete the number sentences.



$\underline{\quad} + \underline{\quad} = 7$ $7 = \underline{\quad} + \underline{\quad}$
 $\underline{\quad} + \underline{\quad} = 7$ $7 = \underline{\quad} + \underline{\quad}$

Here are 5 cubes.



Break them apart in different ways to find all the number bonds to 5

One has been done for you.



Progression in Calculations. Y1

Addition.

Add Together

Children will use a part-whole model to understand the concept of addition. They should be accurately using the '+' and '=' symbols.

Children should also become familiar with language related to addition such as 'total' and 'altogether.'

Complete the number sentences.



$5 = 5 + 0$



$5 = 4 + 1$



$_ = _ + _$



$_ = _ + _$



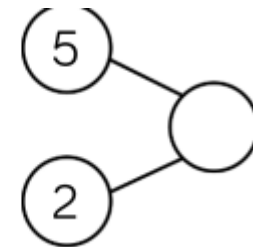
$_ = _ + _$



$_ = _ + _$

If 2 is a part and 5 is a part, what is the whole?

$\square + \square = \square$



Complete the table to represent the owls.



<p>Ten Frame</p>	<p>Part Whole Model</p> <p>$\square + \square = \square$ $\square = \square + \square$</p>
<p>Sentences</p> <p>$_$ is a part. $_$ is a part. The whole is $_$.</p>	<p>Make your own story</p>

Progression in Calculations. Y1

Addition.
