



A Parent's Guide Through Written Calculation - Year 1



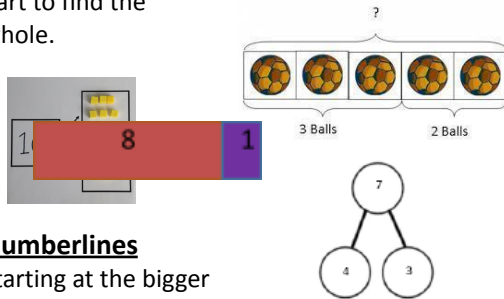
Year 1

Addition

Children use a variety of methods to combine 2 groups to find the total.

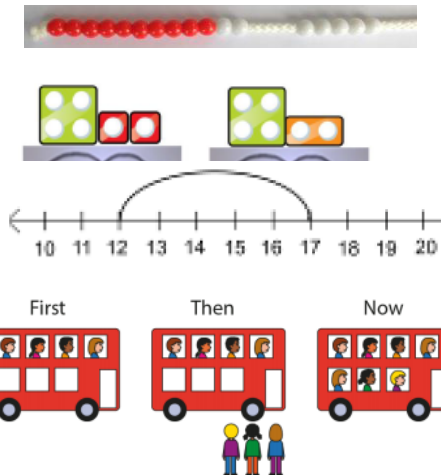
Part-part-whole

Children count one part and then the other part to find the whole.



Numberlines

Starting at the bigger number and count on in ones, some children may start drawing their own number line.



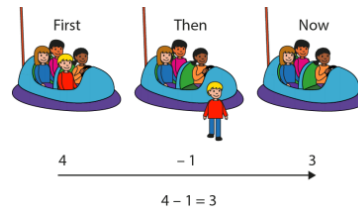
First there was 4, then we added 3 more, now there is 7.

Regrouping to make 10

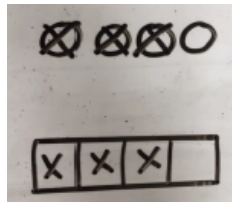
Subtraction

Taking away ones

Children use physical objects, counters, cubes etc. to show how objects can be taken away.



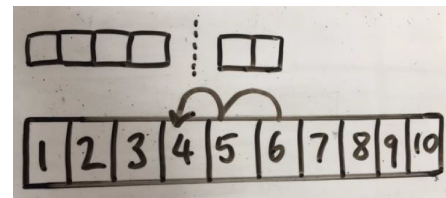
They can cross out drawn objects to show what has been taken away.



Counting back

Children start at the larger number and then count back in ones.

$$6 - 2 = 4$$



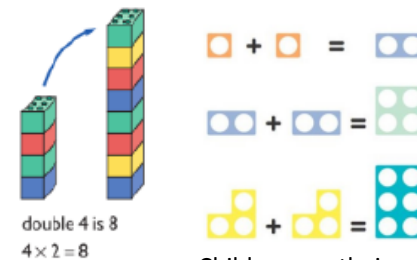
This method can also be used when subtracting larger numbers.



Multiplication

Doubling

Children use a variety of resources to find double of a number.



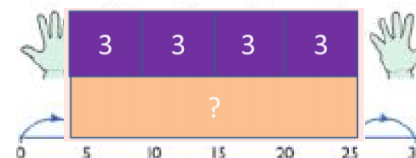
Children use their knowledge of double being an amount added twice.

Counting in multiples

Children count in multiples, supported by concrete objects in equal groups.



Count in multiples of a number aloud.



Repeated addition

Children use practical resources to count in equal groups.

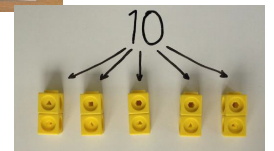
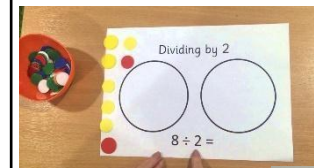
Division

Sharing using a range of objects

Children use a variety of practical resources to share 'equally' between a number of groups.

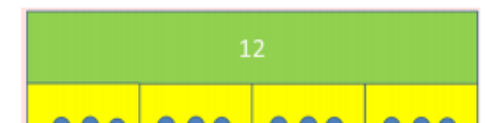
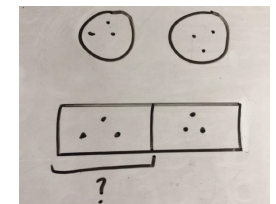


10 shared equally between 2 is 5.

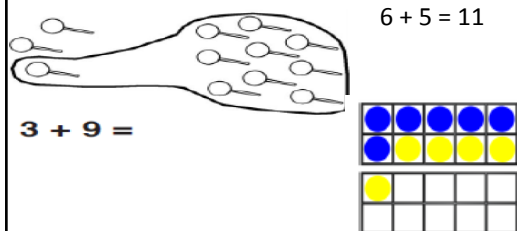


Children will start to use pictures and shapes to share quantities equally.

$$6 \div 2 = 3$$

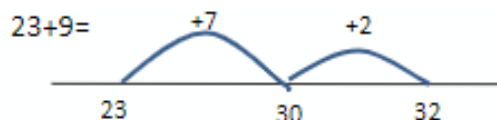
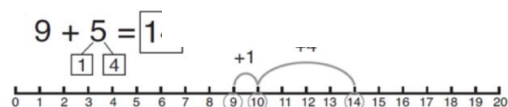


Children start with the bigger number and use the smaller number to make 10. They then count how many are left over.



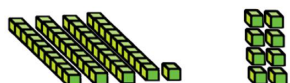
Children start to use partitioning to help them to make 10

5 has been partitioned into 1 and 4. The 1 is used to make 10 and then 4 is added to make 14.

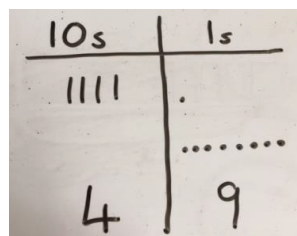


Using tens and ones.

Children continue to develop understanding of partitioning and place value.



$$41 + 8 =$$



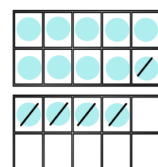
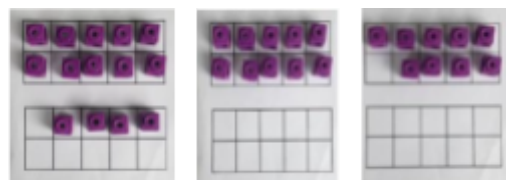
Children use lines to represent tens and dots to represent ones.

$$57 - 23 = 34$$

Making 10

$$14 - 5 =$$

Children can use number frames to help them. They make 14 on the ten frame. Then they take away the four first to make 10 and then takeaway one more so they have taken away 5. They are left with the answer 9.

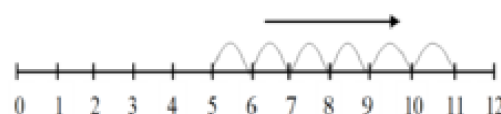
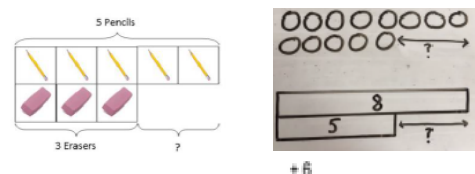


$$14 - 5 =$$

Children can draw the ten frames and cross out the circles as they take them away.

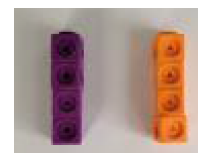
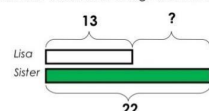
Count on to find the difference.

Children start to use basic bar models with items to find the difference. Starting on the smaller number and counting on.

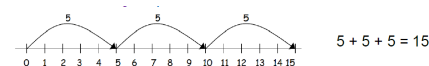
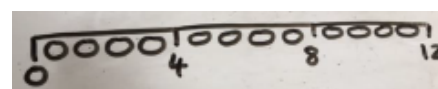


Children can draw bars to find the difference between 2.

Lisa is 13 years old. Her sister is 22 years old. Find the difference in age between them.



Children start to represent the practical resources in a picture and use a bar model.



Once knowledge is secure, children start to write addition sentences to describe objects and pictures.

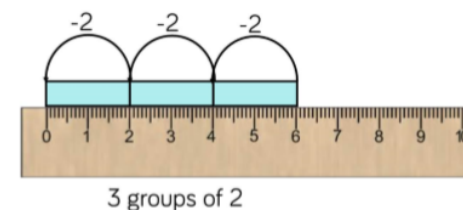
$$2 \times 5 = 10$$

Repeated subtraction and grouping

Children build on their subtraction skills to count in groups.

They use practical resources and ask 'how many groups of 2 are in 6?'

$$6 \div 2 =$$



Children continue to develop this skill by using pictorial representations to help them to solve the calculation.



Representation	Description
	There are ____ altogether. There are ____ equal groups of ____
	There are ____ altogether. There are ____ equal groups of ____