

# Oak Tree Primary School



## A Guide to Calculations in Reception

The aim of this booklet is to provide you with a clear guide as to how we teach addition and subtraction in Reception.

We hope that this gives you greater confidence when working with your children at home.

## End of Year Early Learning Goals for Mathematical Development:

### **Number**

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.

### **Shape, Space and Measures**

Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

## Addition Strategies Children Move Through:

$5 + 2 =$



Count out each set then find the total.

Children will start by counting all the numbers 1, 2, 3, 4, 5 and then 1, 2 and we would then encourage counting on from 5. So we would say 1, 2, 3, 4, 5 ... 6, 7.

$5 + 2 =$



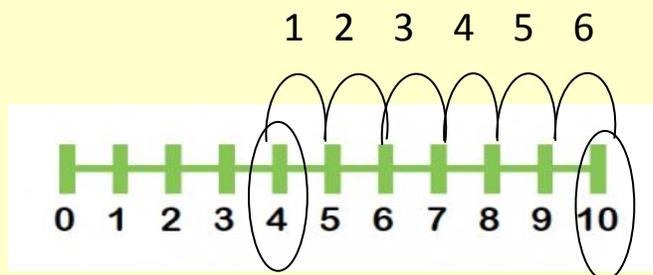
$5 + \quad =$



Count on from first number (Cover first number so counters are hidden or display as numeral)

Children may use objects or fingers for smaller number if necessary. Eventually they may be able to recognise the biggest number in the calculation and count on from it.

$4 + 6 =$



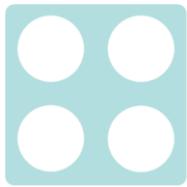
Count on from the first number using their fingers, using a number line or mentally.

Eventually they may be able to recognise the biggest number in the calculation and count on from it.

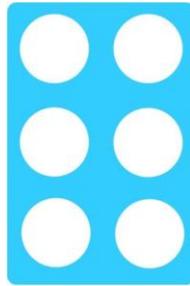
Ways of showing the addition

$$4 + 6 = 10$$

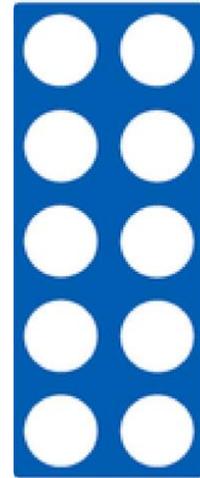
Numicon



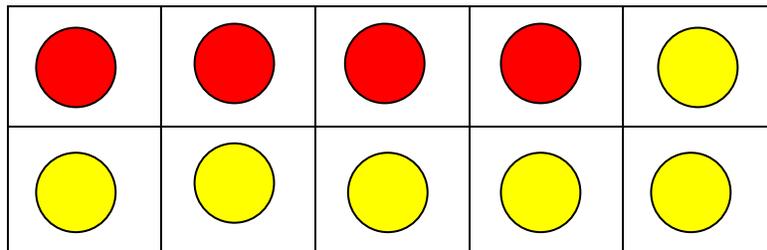
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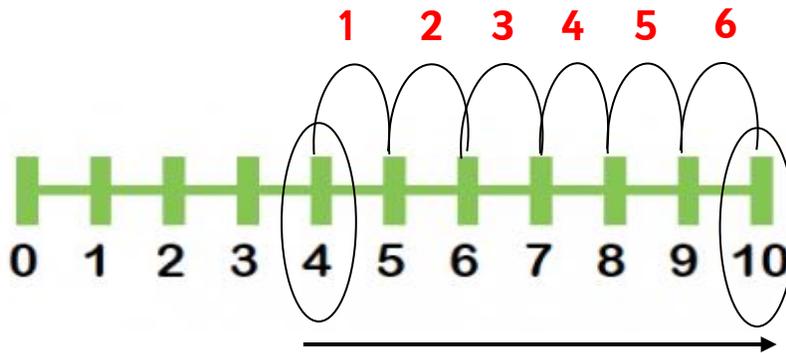
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Place value counters on a tens frame

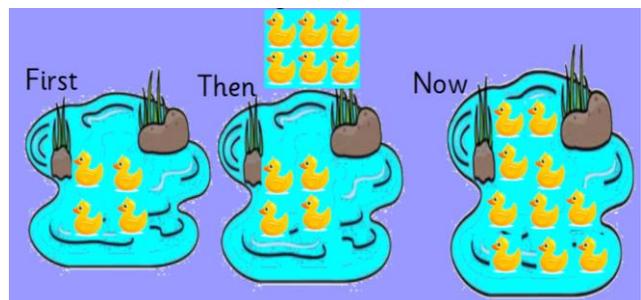


Counting on a number line



Drawing stories

At first there were \_\_\_ ducks in the pond. Then \_\_\_ more came along. Now there are \_\_\_ ducks in the pond.



## Subtraction Strategies

$$5 - 2 =$$

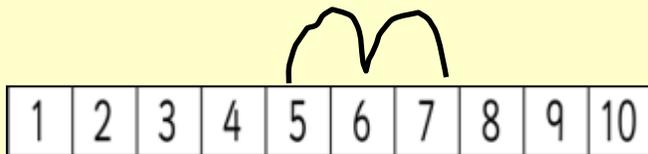
Count out 5 and remove 2 to find the answer



We encourage children to use their fingers to support them through this process.

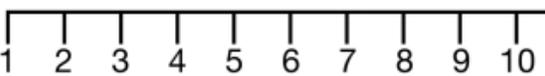
$$7 - 2 =$$

Count back on the number line by saying start on 7, count back 1,2, what number are you on?

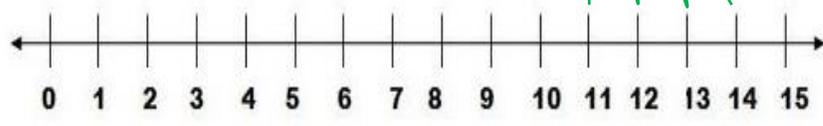


Again we encourage children to use their fingers to support them through this process.

$$8 - 2 =$$



$$14 - 3 =$$



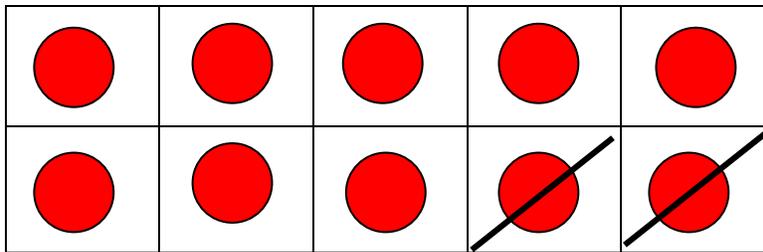
Count backwards mentally or using a number line.

# Ways to support subtraction eg $10 - 2 = 8$

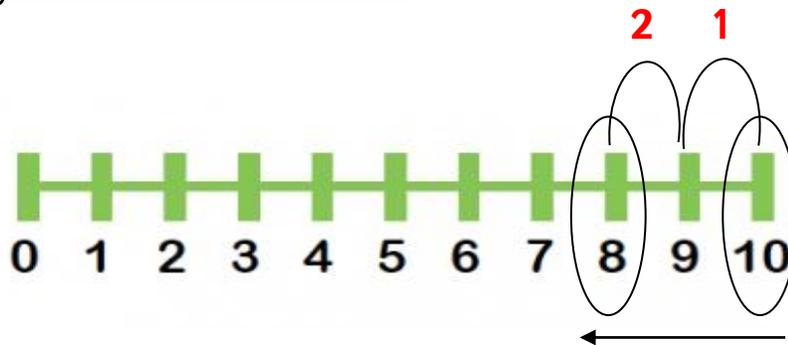
## Practical objects and fingers

- Counting out ten counters and taking two away.
- Putting 10 fingers up and then putting two down.

## Place value counters on a tens frame



## Counting back on a number line



## Drawing stories

At first there were \_\_\_ cakes.  
Then \_\_\_ cakes were eaten. Now  
there are \_\_\_ cakes on the plate.



First



Then



Now

## Doubling, Halving and Sharing

Children will begin to learn 'double number facts' initially up to  $5 + 5$  and then up to  $10 + 10$ .

Using their fingers for doubles up to  $5 + 5$  will help them to recall the number patterns.

As children learn the double numbers, they will begin to learn to use the language of half. They will begin to say I know  $4 + 4 = 8$ , so I know half of 8 is 4.

We use 'people' and objects to share and halve.



Share 6 sweets between the three bears. We teach the children to share methodically, putting one item on each plate in turn.

