



# Early Maths Skills in Reception

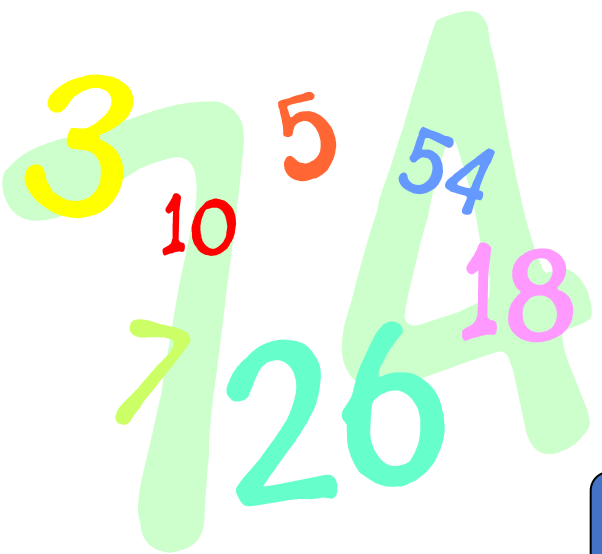


## Number

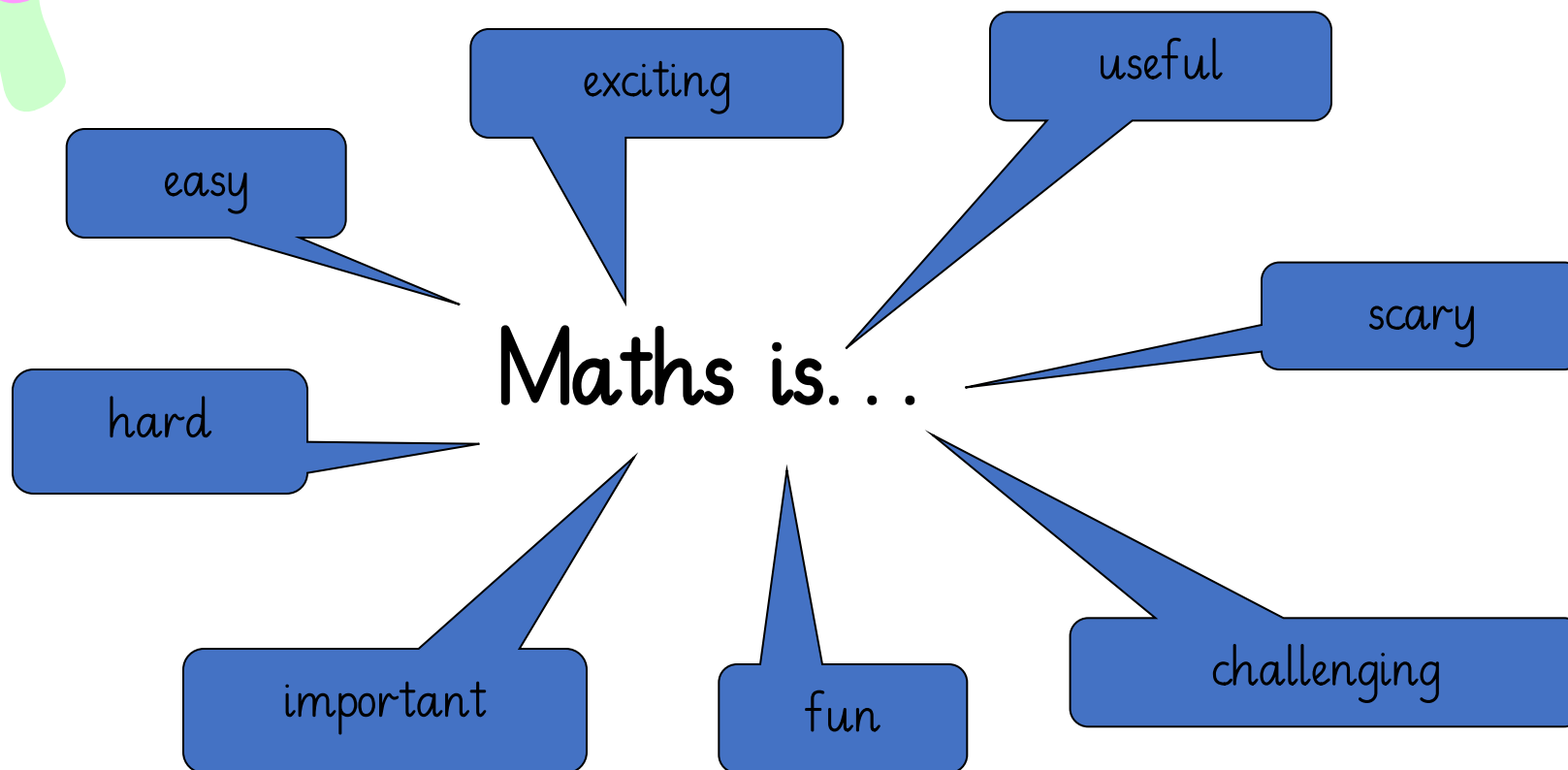
Oldbury Park Primary RSA Academy

November 2020

(Photos in this presentation are from a variety of settings)



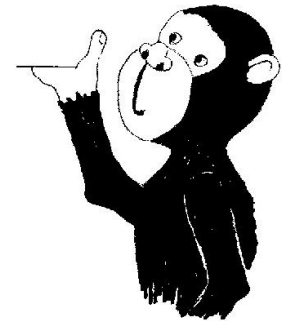
*Which of these words would you use to describe mathematics?*



We work on building the children's self-confidence with Maths. We use phrases like "I'm not sure what to do. I wonder what could help us". We are helping the children to develop a positive attitude towards Maths and you can support us in this at home. Lots of people found Maths tricky at school but it really helps to stay positive when supporting the children.

# Maths in Reception

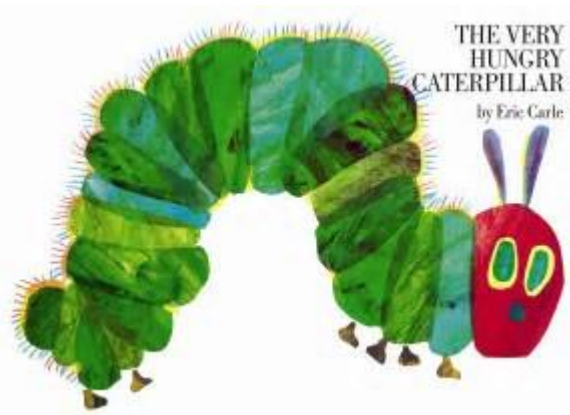
- We approach Maths in a fun, practical and collaborative way.
- It is a part of our daily routines.
- Our Maths is purposeful and is based on real-life contexts.
- 'Having a go' is fundamental to all our activities.



# Early Learning Goal: Number

By the end of the Reception year, children will be able to:

- Count reliably with numbers from one to twenty
- Place them in order and say which number is one more or one less than a given number
- Use quantities and objects to add and subtract two single-digit numbers and count on or back to find the answer
- Solve problems, including doubling, halving and sharing



# Number is everywhere!

There are opportunities to explore Maths in our every day life ...

Can you add 2 more?



How many blocks have you got in your tower?

I've got more than you...



I think I've got about 20...



# Counting skills

The children will learn to:

- Count aloud forwards and backwards in ones
- Count reliably using objects – saying one number name for each object
- Count on a number line to help with number recognition
- Count in 2's, 5's, 10's (summer term)



# Addition

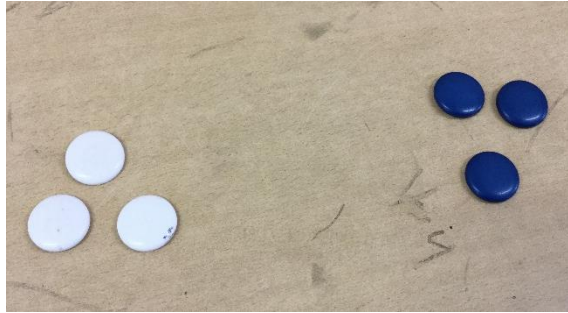
By the end of the Reception year, children should be able to add two single-digit numbers and count on to find the answer.

## Vocabulary

- Addition
- Add
- Plus
- More
- Altogether
- Total

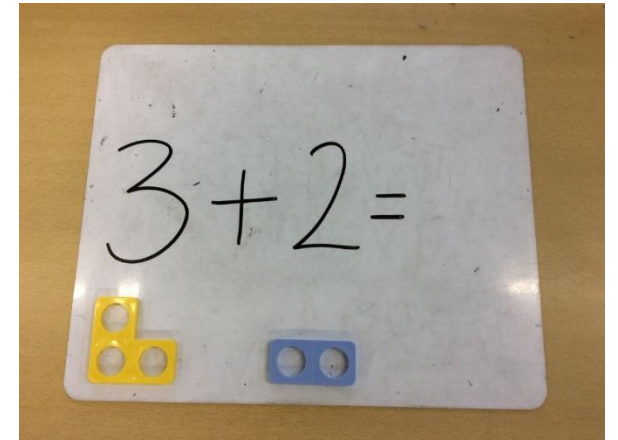
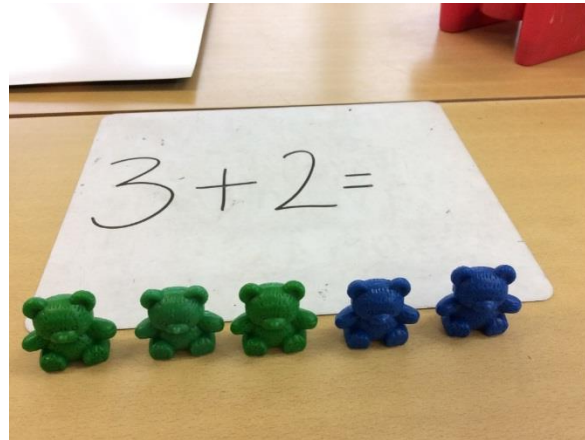
We expose the children to a range of vocabulary throughout the year so they are able to understand different problems as they move up through the school.

# Combining 2 groups of objects



We introduce addition through combining 2 groups of objects.

Later in the year, we introduce the addition and equals symbols. However, the children do not need to use these to make the end of year expectation.



How many do we have altogether?



# Introducing the + symbol

$$3 + 2 = 5$$

We call this a number sentence.

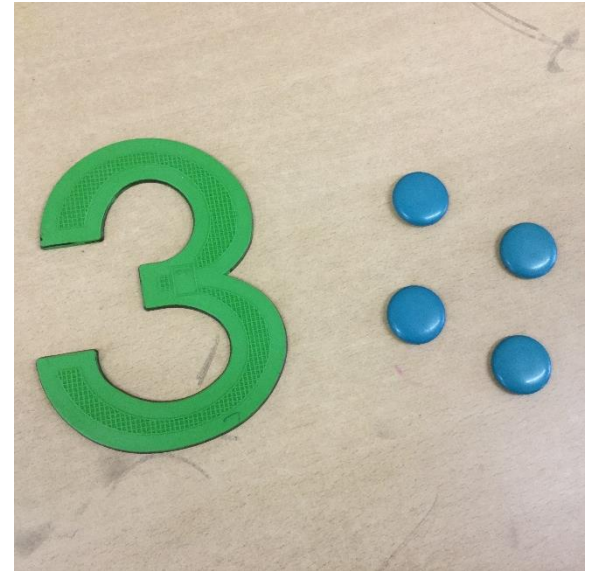
We explain that this symbol is another way of saying add or plus.

# Counting on

When the children have a secure knowledge of number, we encourage them to try adding by counting on.

How to add by counting on:

- Work out which is the biggest number
- Get the number of objects/fingers to be added
- Put the biggest number in your head
- Starting from the biggest number, count on



# Subtraction

By the end of the Reception year, children should be able to subtract two single-digit numbers and count back to find the answer.

## Vocabulary

- Subtract
- Take away
- Minus
- Less
- Left over

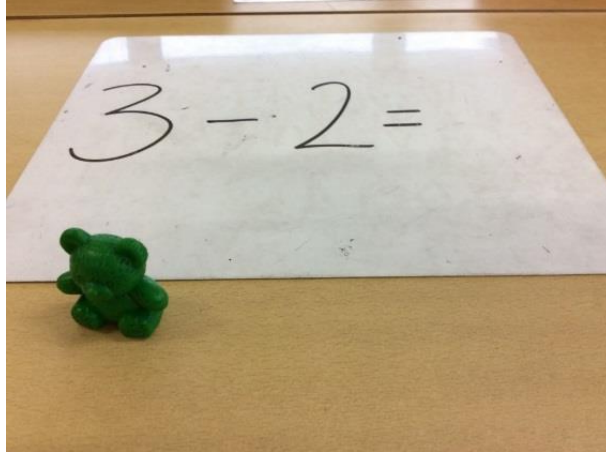
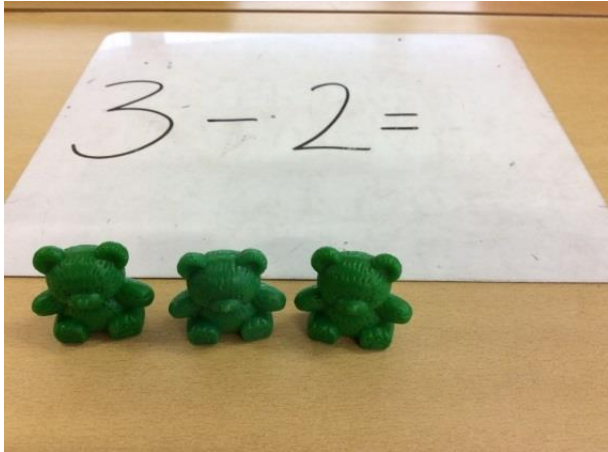
We expose the children to a range of vocabulary throughout the year so they are able to understand different problems as they move up through the school.

# Making sets and taking some away



There are 7 pink circles. Take away 3. How many are left?

We always use real objects when we introduce the concept of subtraction.

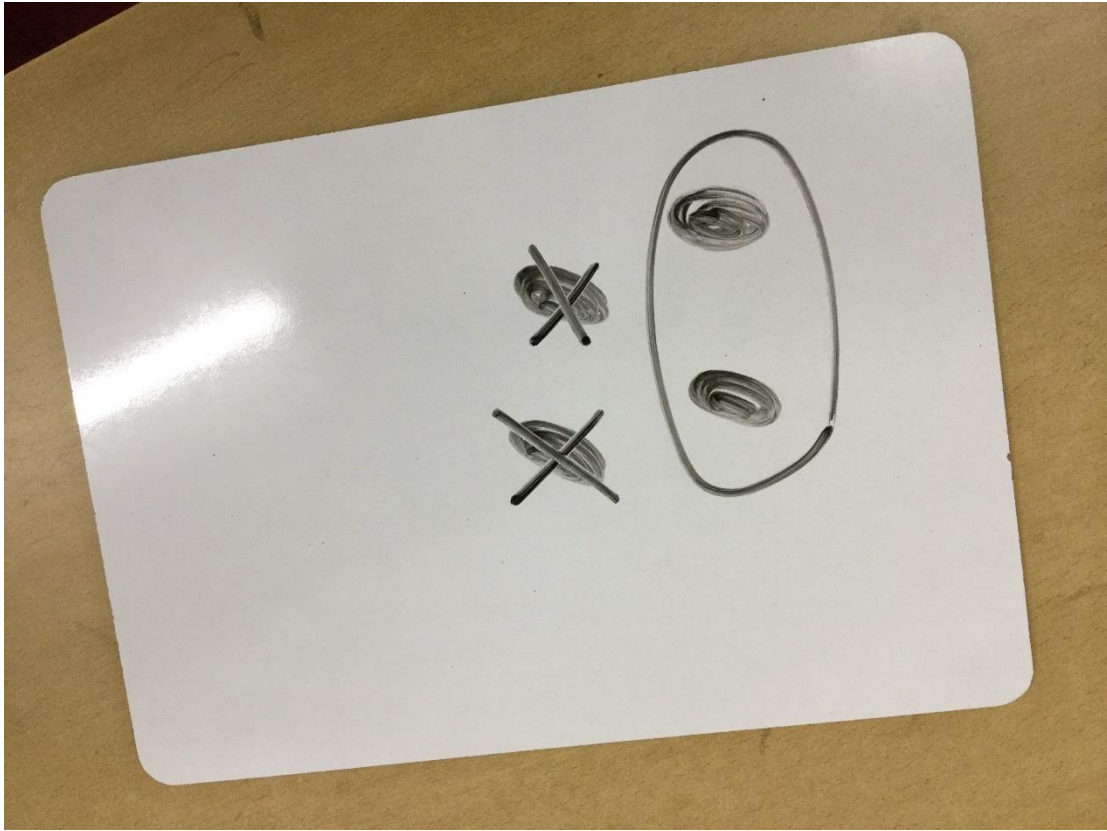


Food is a great resource to use at home as the objects really disappear.

You have 7 Cheerios. You eat 3. How many do you have left?

How many are left?

# Pictorial Representation



When the children have a secure understanding of subtraction with real objects, we move onto using pictures.

4 take away 2 equals?

# Counting Back

When the children have a secure knowledge of number, we encourage them to try subtracting by counting back.

How to subtract by counting backwards:

- Put the first number in the number sentence in your head
- Hold up the number of fingers to be subtracted
- Count back saying one number for each finger

# Introducing the - symbol

$$3 - 2 = 5$$

We call this a number sentence.

We explain that this symbol is another way of saying subtract or take away.

# Recording addition and subtraction

To begin with, we encourage the children to show their calculations practically using objects. We often record their Maths using photos. You will find lots of these photos on Tapestry.

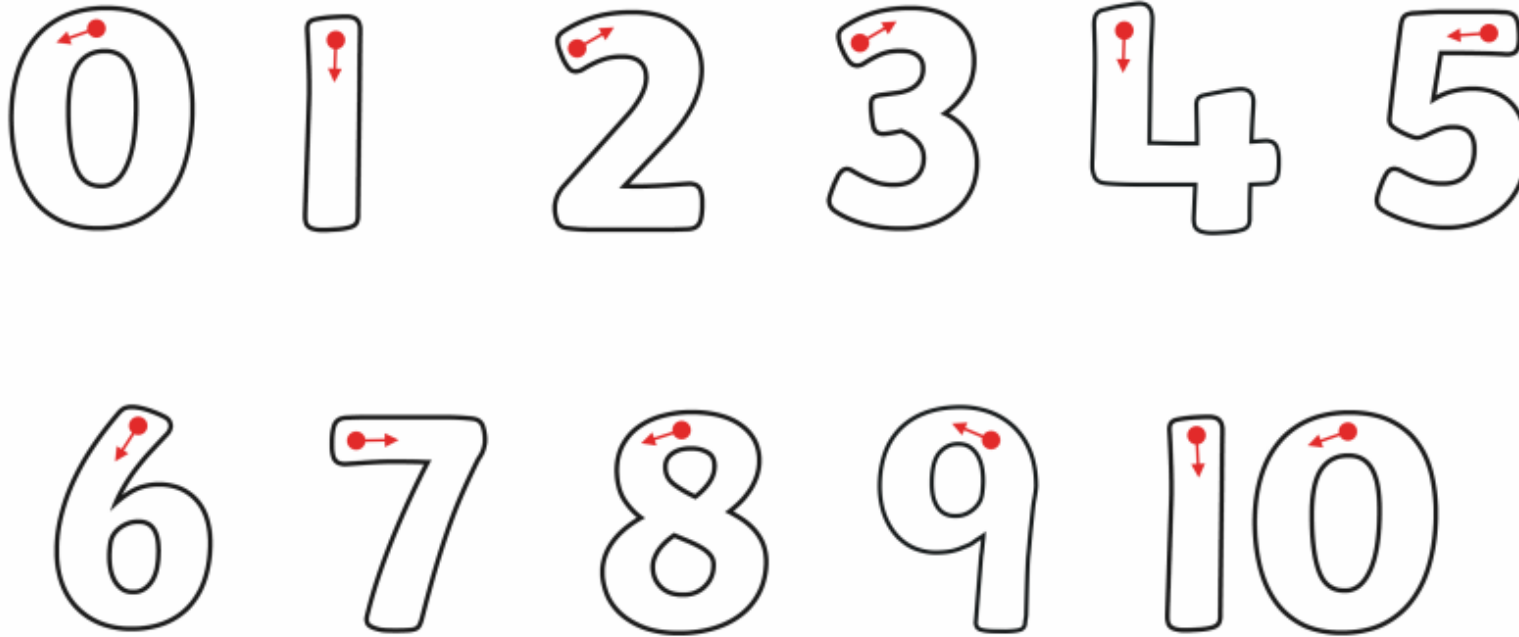
When they are ready, the children will begin to use marks to represent their mathematical thinking.

As the year goes on, the children may begin to use the numerals and symbols in a number sentence by themselves.



## Number Formation

Can you trace the numbers?



## Number Formation

It is really important that the children learn to form their numbers correctly. You can help with this at home.

# One more and one less

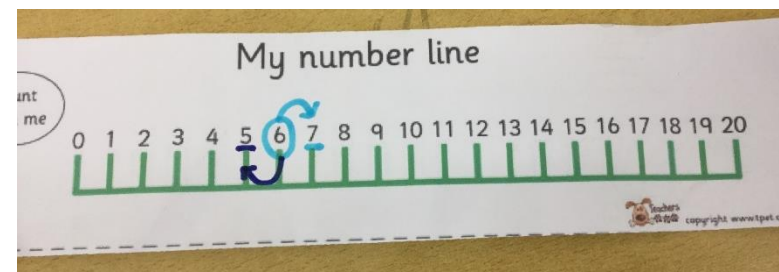
We teach the children to make the link between counting and one more or less.

e.g. What comes before 6? What comes after 6?

We also use objects to help them to work out what would be one more or less than a given number.

e.g. You have got 5 bears. How many will you have if I give you 1 more?

We then move onto using a number line.



# Doubling, Halving and Sharing

By the end of the year, the children should be able to solve problems, including doubling, halving and sharing.

## Vocabulary

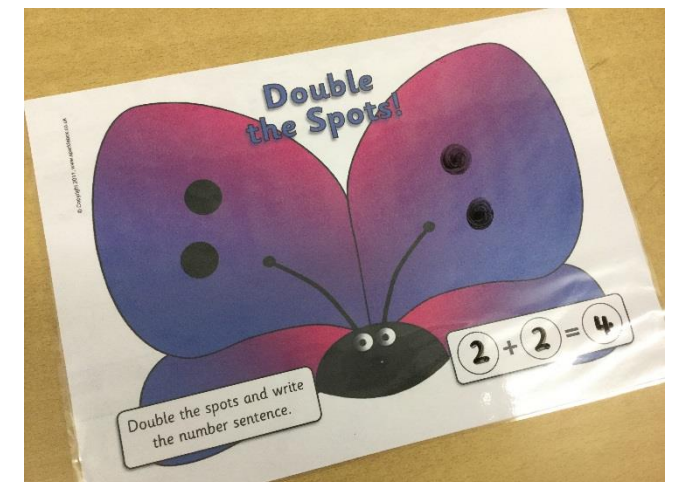
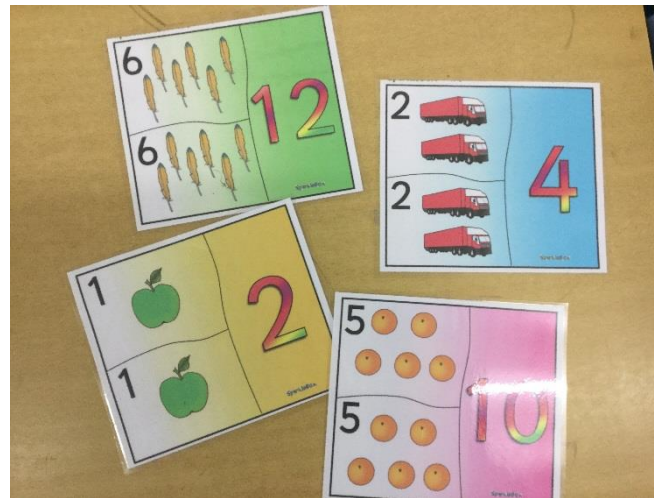
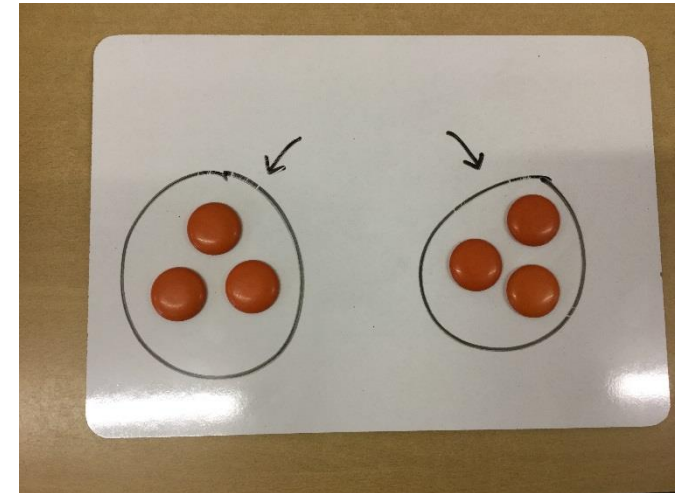
- Double
- Halve
- Half
- Equal
- Share
- Whole

We expose the children to a range of vocabulary throughout the year so they are able to understand different problems as they move up through the school.

# Doubling

Similarly to addition, we show this:

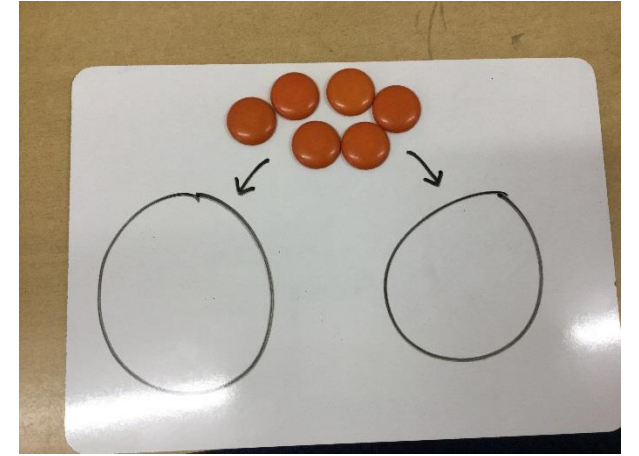
- Practically by combining 2 amounts.
- Using our fingers
- Drawings
- Mental recall



# Halving

We teach the children to find half of an amount by:

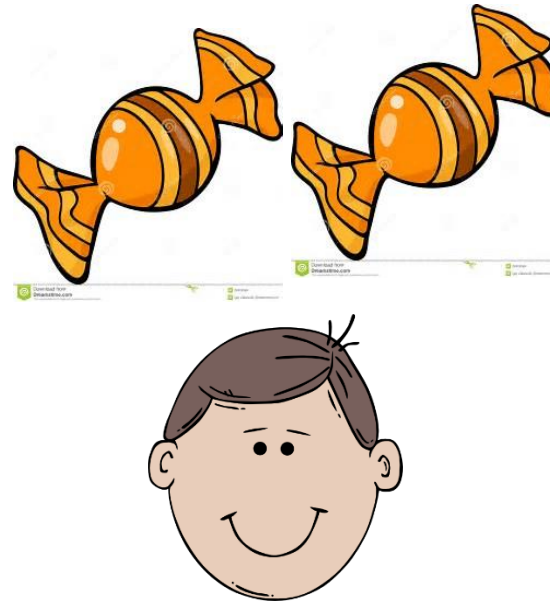
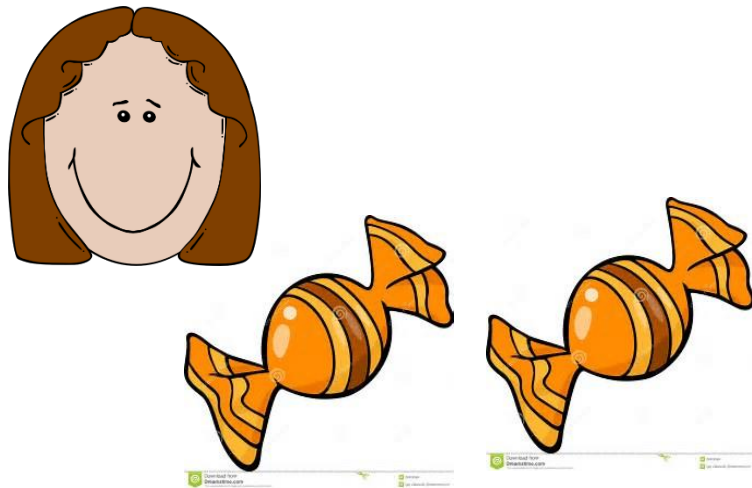
- Working practically
- Mental recall



We help the children to notice the link between doubling and halving.

# Sharing

Again, we work practically with objects sharing them into groups. We talk about the importance of making sure each group is equal/has the same amount.



# What Number looks like in Reception

Learning and talking about number happens throughout the day, both within the children's play and our daily routines.

For example:

- Counting how many children are in the class/line
- I need 2 more blocks for my Lego tower
- It's her turn first and my turn second
- Four children are allowed to play in the water tray
- I'm 4, how old are you?

Wherever possible, we use real-life contexts for the children's learning.

These are some of the resources we use in Reception.

A fan of ten yellow cards, each with a black digit or symbol. The cards are arranged in a semi-circle, showing the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and a decimal point (.) from left to right.

d string

A blue rope is shown with several beads. There are four red beads at the bottom left, followed by a single red bead, then five white beads, and finally a single white bead at the top right. The rope is curved, starting from the bottom left, going up and to the right, then curving back down and to the left, and finally curving up and to the right again.

A cluster of approximately 15 circular markers in various colors including red, blue, yellow, orange, green, and purple, arranged in a loose, overlapping group.



# Thank you for reading our presentation

- If you have any questions, please don't hesitate to send us a message on Tapestry or phone the school office (01905 424878) and someone will get back to you.
- Please take the time to watch the Maths 'How to...' videos which are on the school website.