EYFS - addition

Objective/s

Concrete

Pictorial

Abstract

- To know that a group of things change in quantity when something is added.
- To find the total number of items in two groups by counting all of them.
- To say the number that is one more than a given number.
- To find one more from a group of up to five objects, then ten objects.
- To begin to use vocabulary based on adding in practical activities and discussion.



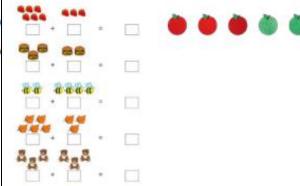




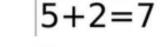
Children should have access to a range of physical resources within the classroom. This can come in the form of toys and other classroom resources (pencils etc). These will be useful for children to physically manipulate, group and regroup.

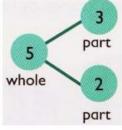


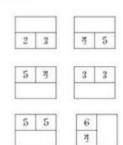
Children should use resources such as counters, multilink cubes, Numicon, etc.



Use two groups of pictures so children are able count the totals. Encourage methods of crossing off or pointing as they count to ensure reliability.







Focus on symbols and numbers to form a calculation. Children should be familiar with symbols such as addition in preparation for Year 1. Think about showing children the symbol and begin

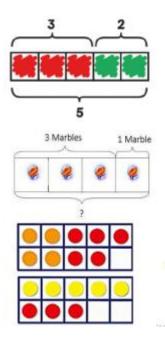
- To be able to use quantities and objects, to add two single digit numbers and count on to find the answer.
- To solve problems including doubling.







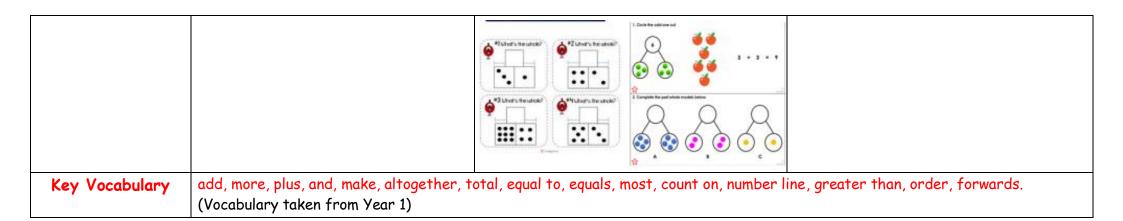
Using visual supports such as tens frames, part whole models with physical objects and resources that can be manipulated, this will help support skills that will be taught in Year 1 upwards.



Use bar models with pictures and colours to represent amounts.

Using visual frames such as bar models, tens frames, part whole models with pictures or icons. This can be done in different ways to support understanding.

to familiarise children with different ways of saying addition.



EYFS - subtraction

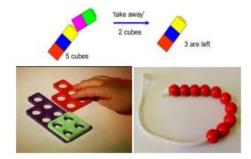
Objective/s

- To know that a group of things change in quantity when something is taken away.
- To find one less from a group of five objects, then ten objects.
- To use vocabulary involved in subtracting in practical activities and discussion.
- To quantities and objects, they subtract two single digit numbers and count back to find the answer.

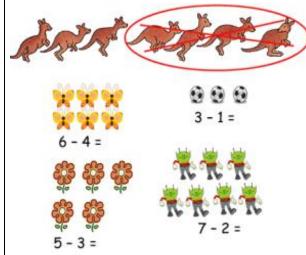
Concrete



Children should have access to a range of physical resources within the classroom. This can come in the form of toys and other classroom resources (pencils etc). These will be useful for children to physically manipulate, group and regroup.



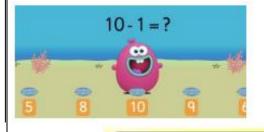
Pictorial



Use pictures for children to cross the images out or cover quantities to support subtraction. This can be done in different ways to support understanding.

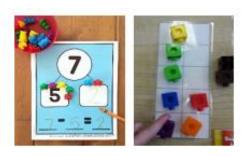
Abstract

Focus on symbols and numbers to form a calculation. Think about showing children the symbol and begin to familiarise children with different ways of saying subtraction.

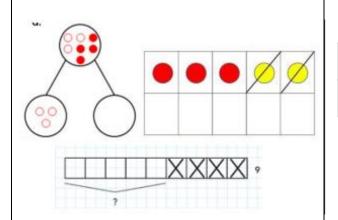


$$10 - 6 = 4$$

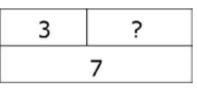
Use maths resources such as counters, multilink cubes, Numicon, etc.



Use visual supports such as tens frames and part whole models with physical objects and resources that can be manipulated. This will help understanding of using pictorial methods on tens frames etc.



Use visual supports such as tens frames, part whole models and bar models with pictures.



Key Vocabulary

equal to, take-away, less, minus, subtract, how many fewer/less than, count back, how many left, how much less is, backwards. (Vocabulary taken from Year 1)

EYFS - multiplication

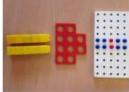
Objective/s

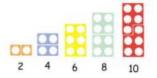
-To solve problems including doubling.

- To identify number patterns (counting in 2s).
- To know odd and even numbers.

Concrete

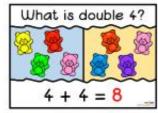




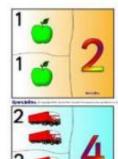


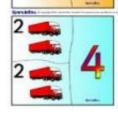
Use counting and other maths resources such as numicon, sorting rings and peg boards for children to make 2 equal groups. Children will be able to physically see and make doubles in a variety of ways.

Pictorial







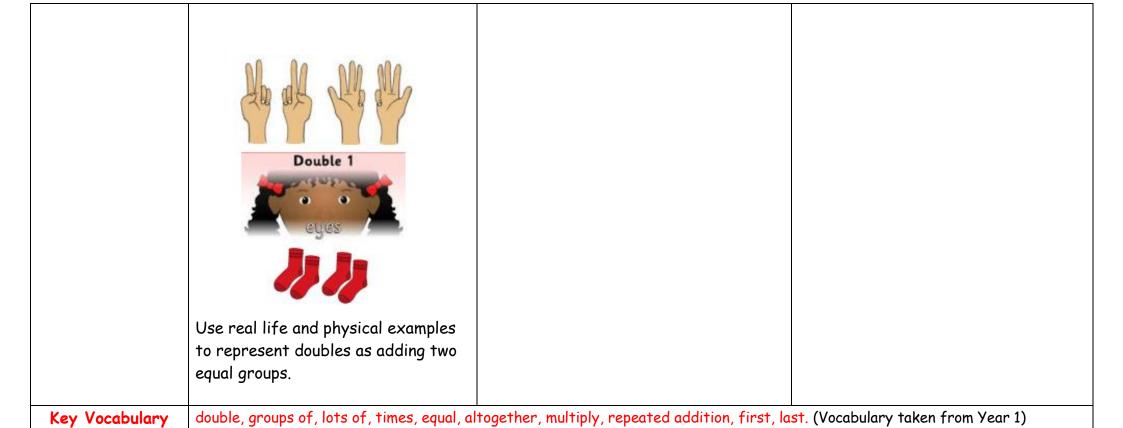


Use pictures that promote the idea that the children can see doubling as adding two equal groups. Ensure that you relate to prior knowledge of using numicon etc to support this.

Abstract

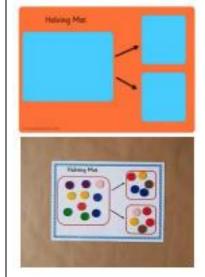
1+1=	7+7=
2+2=	8+8=
3+3=	9+9=
4+4=	10+10=
5+5=	11+11=
6+6=	12+12=

Use addition calculations to model adding two equal groups. Make sure that you are using the vocabulary of doubling, repeated addition etc.



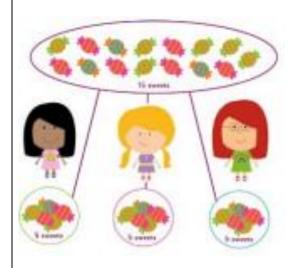
EYFS - division			
Objective/s	Concrete	Pictorial	Abstract
To solve problems including halving and sharing. • Halving a whole, halving a quantity of objects. • Sharing a quantity of objects.	Give children the opportunity to cut shapes, food and objects (such as playdough) in half. Ensure that you are focusing on vocabulary and looking at making sure they are equal.	Use pictures that encourage children to see concepts of halving in relations to subitising, addition and subtraction knowledge. For example, knowing 4 is made of 2 groups of 2, so half of 4 is 2.	

Use sorting rings with other manipulative resources to make two equal groups.



Using visual supports such as part whole model and halving mats, with physical resources that can be manipulated into equal groups.

Use bar models to support understanding of finding 2 equal parts of a number, to further understand how two halves make a whole.



Use pictures of children to help create and visualise groups of 3 or more.

	Using counting objects such as	
	compare bears, counters etc,	
	children can explore sharing	
	between 3 or more.	
Key Vocabulary	share, share equally, half, one each, two each, group, groups of, lots of. (Vocabulary	v taken from Year 1)