

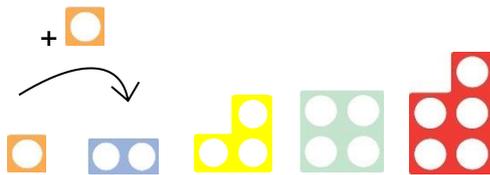
# Addition

## By the end of Y1

- Understand the concept and vocabulary of:  
put together, add, altogether, total and more than
- Counting forwards in steps of 1,2,5 and 10 from different starting numbers eg 8,10,12, 14 ...
- Working out what is one more than a number.
- Using pictures and marks to explain 1 more  
e.g There are 3 cars in the garage. 1 more came along



- Create a Numicon staircase to show 1 more- 'take one for a walk' up the staircase to show the numbers getting bigger each time



- Read, write and understand number sentences involving addition (+) signs
- Add numbers (including zero) up to 20 such as 12+5. Using a number line to help where necessary.



- Represent and use number bonds within 20 eg  $14 + 6 = ?$  Use Numicon:
- Solve one-step problems that involve addition. Use real-life objects and pictures to represent the numbers.
- How many conkers did Sam collect in total?

Monday 

Tuesday 

- Solve missing number problems eg  $10 = \quad + 7$   
(using the balances with Numicon to solve)



- Using a number line ( up to 100) to count on

# Subtraction

## By the end of Y1

- Children should understand the language of: take away, distance between, difference between and less than

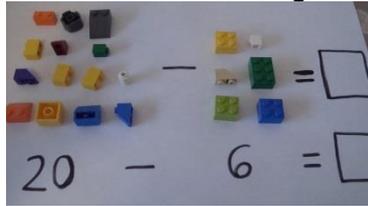
- Finding one less than a number  
(Using objects and number lines to demonstrate)



- Counting backwards from numbers up to 100
- Reading and writing number sentences using the – symbol
- Represent and use number bonds and related subtraction facts within 20  
(Show using Numicon)

- Children to understand how addition and subtraction are the inverse of each other (use Numicon and show using the same numbers e.g.  $5+6=11$  and  $11-6=5$ )

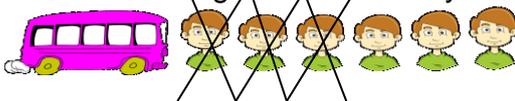
- Subtract one-digit and two-digit numbers to 20, including zero



(Show using multilink/counters/Lego)  $20 - 6 = 14$

- Solve one-step problems that involve subtraction eg:

6 children were on a bus. 3 got off. How many were left on the bus?



- Using concrete objects and pictures (including jottings) and missing number problems such as  $9 - \square = 2$ .

E.g.

Here are 2 worms. How much **longer** is the 2<sup>nd</sup> worm? (link to measuring)

What is the difference in the lengths of the worms?



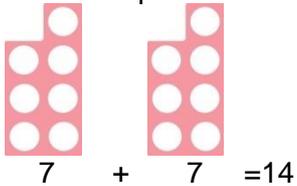
- Talk about 'counting on' for subtraction

# Multiplication

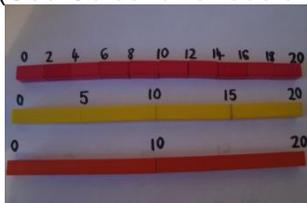
## By the end of Y1

Through practical activities and meaningful contexts

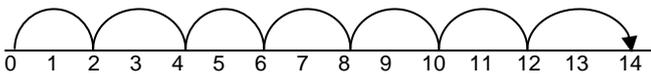
- Doubles up to  $10 + 10$  ( Use Numicon)



- Counting in 2s, 5s to 50 and 10s to 100 (Use Cuisenaire rods and Numicon 2, 5 and 10 pieces)



- Continue to use Number Lines



- Use of the '100 Square' up to 20 to count in 2s, 5s and 10s up to 50/100

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

- In context: how many wheels do we need to make three Noddy cars?  $5 + 5 + 5 = 15$



- Counting multiples of coins: 2p, 5p, 10p

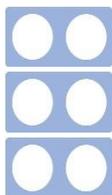


$2p + 2p + 2p$

- Introduce the idea of arrays using practical and real life equipment e.g.



Egg box array



Numicon array

# Division

## By the end of Y1

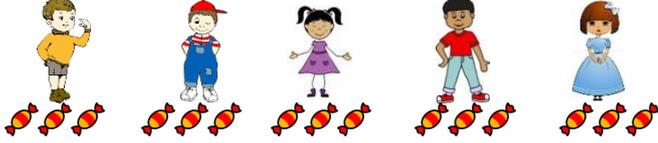
Through practical activities in meaningful contexts. Children to use concrete objects and pictures throughout to help their understanding of division

- Division as Sharing

Share equally

Share a bag of 15 sweets between 5 children

– one for you, one for you, one for you, one for you, one for me

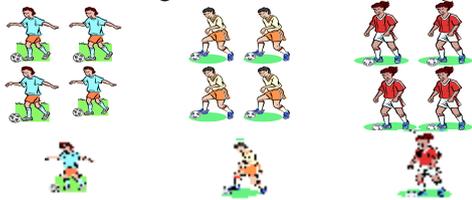


- Introduce number sentences using  $\div$  sign

- Division as Grouping, 2s, 5s and 10s

A bag of sweets, how many children can have 2 sweets each? - Put into groups of 2

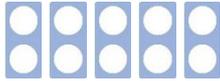
15 children get into teams of 5 to play a game. How many teams are there?



- Consolidate halving even numbers up to 10 and link to inverse of doubling (Ext to 20)  
Continue to use multilink.

Understanding  $8 \div 2$  as half of 8

- Use of Numicon and Numicon Number Lines



0 10

How many 2s in 10? and 5s in 20?