

# **Hadleigh Infants and Nursery School**

## **Calculation Policy Year 1**



# Addition

It is important that children's mental methods of calculation are practised on a regular basis and secured alongside their learning and use of written methods of addition.

There are some key skills that children need to help with addition, which include:

- Counting forwards in ones from any number.
- Recalling their addition facts for 10 and 20.
- Doubles to 20.
- Adding mentally a series of one-digit numbers ( $5 + 8 + 4$ )

Using and applying is a key theme and one of the aims of National Curriculum, it is important that their skills are broadened through their use and application in a range of contexts, these include:

- Missing number questions
- Using units of measure including money
- Word problems
- Open ended investigations

Mathematical vocabulary used in relation to addition

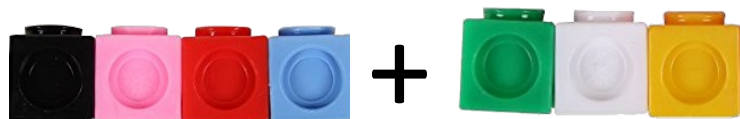
- Add
- Plus
- Altogether
- Total
- Sum
- Make
- More



# Addition

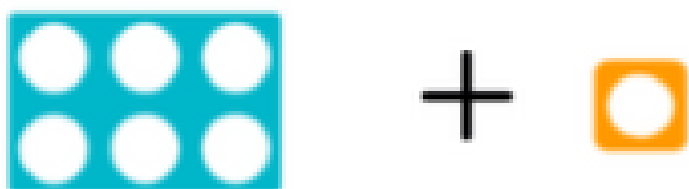
## Objects

$4 + 3 =$



## Numicon

$6 + 1 =$



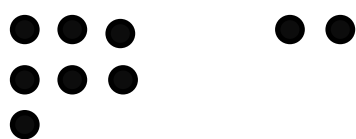
## Pictures

$3 + 2 =$



## Dots

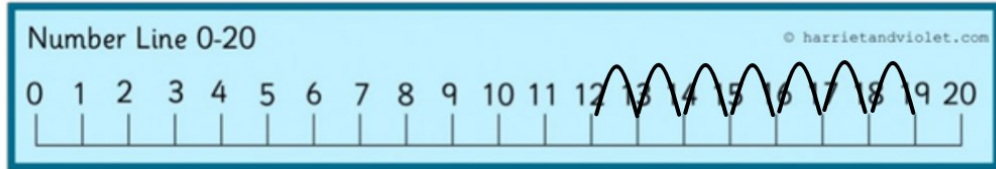
$7 + 2 =$



# Addition continued

## 0—20 Numberline

$12 + 7 =$



## Dienes

$11 + 4 =$



## 0—30 Number square

$8 + 6 =$

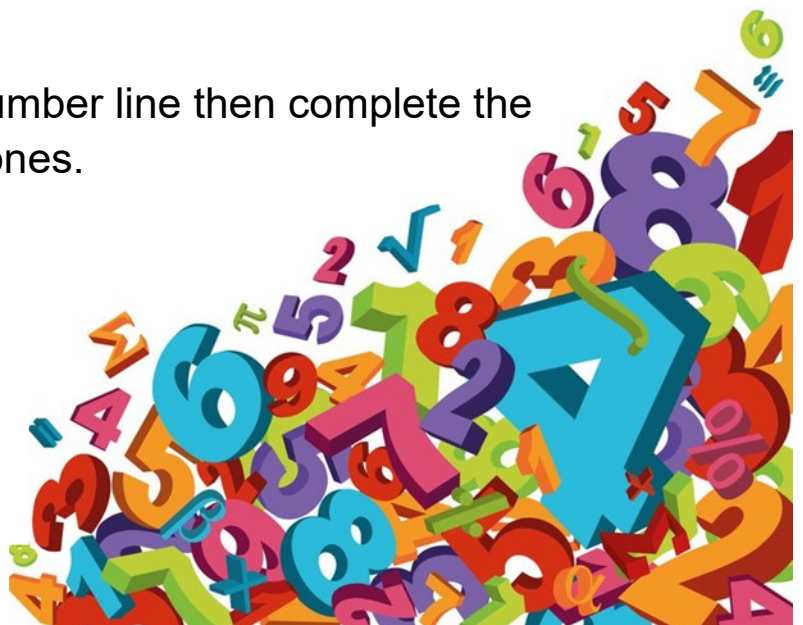
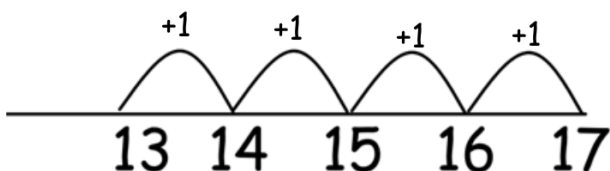
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

A 3x10 grid representing a number square from 1 to 30. A wavy line starts at 8 and jumps to 9, 10, 11, 12, 13, 14, and 15, representing the addition of 6.

## Blank Number line

The children will draw a blank number line then complete the number line as they jump up in ones.

$13 + 4 =$



# Subtraction

It is important that children's mental methods of calculation are practised on a regular basis and secured alongside their learning and use of written methods of subtraction.

There are some key skills that children need to help with subtraction, which include:

- Counting forwards and backwards in ones from any number.
- Recalling their number facts for 20 knowing their inverses.

( $7 + 3 = 10$  therefore  $10 - 3 = 7$  and  $10 - 7 = 3$ )

- Halves

Using and applying is a key theme and one of the aims of National Curriculum, it is important that their skills are broadened through their use and application in a range of contexts, these include:

- Missing number questions
- Using units of measure including money and time
- Word problems
- Open ended investigations

Vocabulary used in relation to subtraction

- Take away
- Minus
- Difference between
- Less
- Subtract

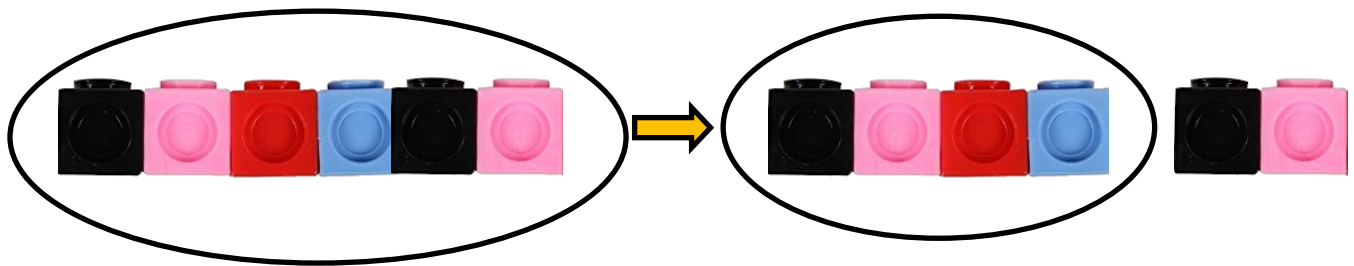


# Subtraction

## Objects

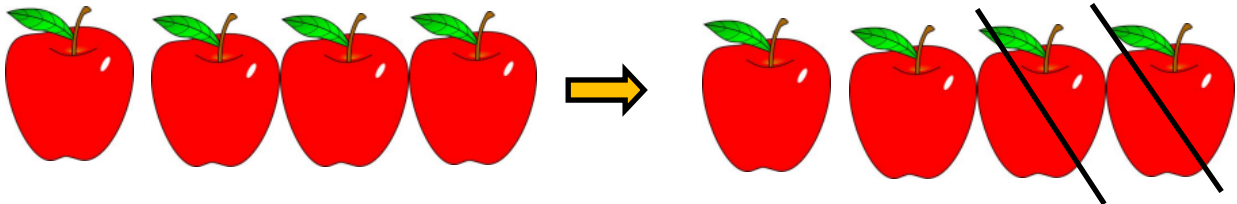
$$6 - 2 =$$

The children will count out the largest number of objects then physically take away the smaller number.



## Pictures

$$4 - 2 =$$



## Dots

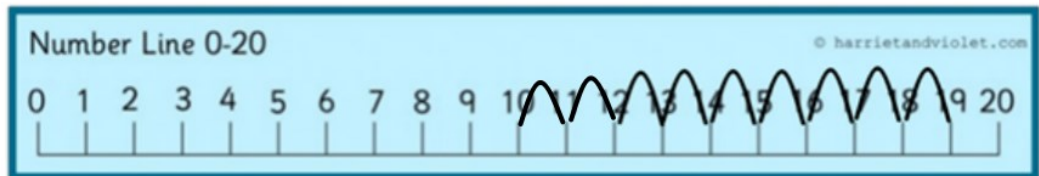
$$12 - 3 =$$



# Subtraction continued

## 0—20 Number Line

$19 - 9 =$



## 0 - 30 Number square

$15 - 7 =$

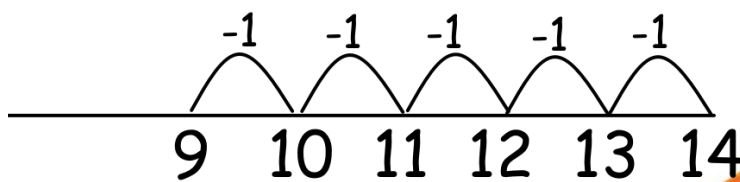
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

A 3x10 grid of numbers from 1 to 30. A wavy line starts at 10 and jumps back to 15, representing a subtraction of 5.

## Blank Number line

The children will draw a blank number line then complete the number line as they jump back in ones.

$14 - 5 =$



# Multiplication

It is important that children's mental methods of calculation are practised on a regular basis and secured alongside their learning and use of written methods of multiplication.

There are some key skills that children need to help with multiplication, which include:

- Counting in 2s, 5s and 10s
- Understanding multiplication as repeated addition
- Doubling

Using and applying is a key theme and one of the aims of National Curriculum, it is important that their skills are broadened through their use and application in a range of contexts, these include:

- Missing number questions
- Using units of measure including money and time
- Word problems
- Open ended investigations

Vocabulary used in relation to multiplication

- Times
- Groups of
- Lots of
- Repeated addition
- Multiple of
- Multiplied by





# Multiplication

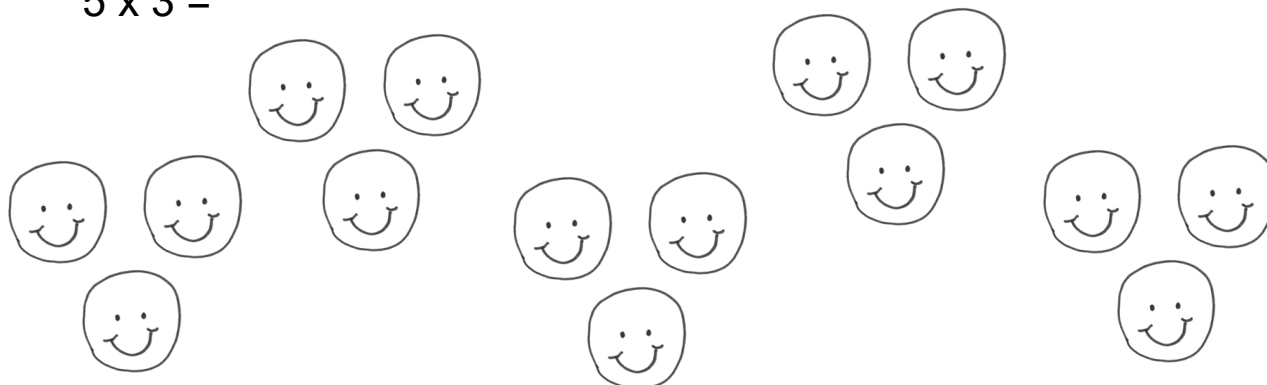
## Objects

$2 \times 4 =$



## Pictures

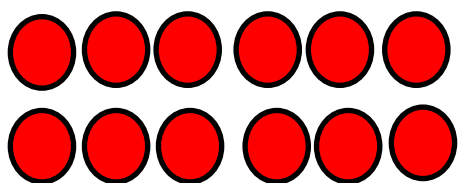
$5 \times 3 =$



$3 + 3 + 3 + 3 + 3$

## Arrays

$2 \times 6 =$



# Division

It is important that children's mental methods of calculation are practised on a regular basis and secured alongside their learning and use of written methods of division.

There are some key skills that children need to help with division, which include:

- Counting in 2s, 5s and 10s
- Halving
- Recalling division facts

Using and applying is a key theme and one of the aims of National Curriculum, it is important that their skills are broadened through their use and application in a range of contexts, these include:

- Missing number questions
- Using units of measure including money and time
- Word problems
- Open ended investigations

Vocabulary used in relation to division

- Share
- Equal groups of
- Share equally
- Divide

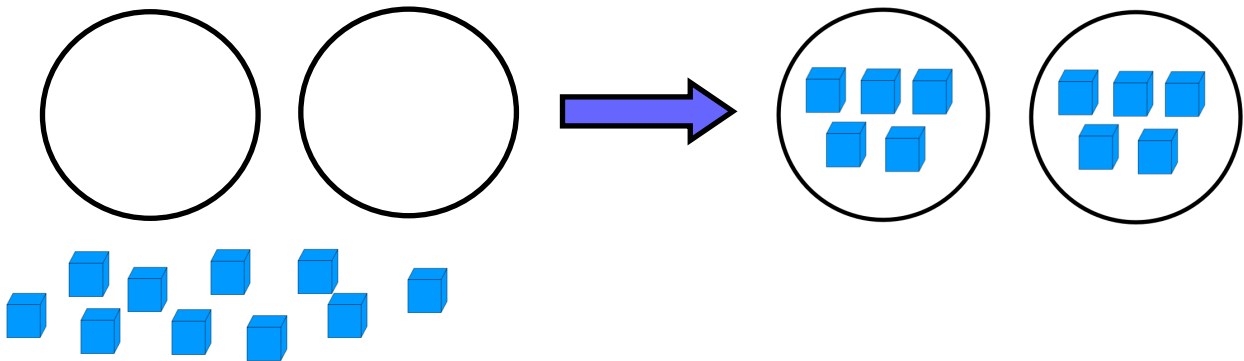


# Division

## Objects

$$10 \div 2 =$$

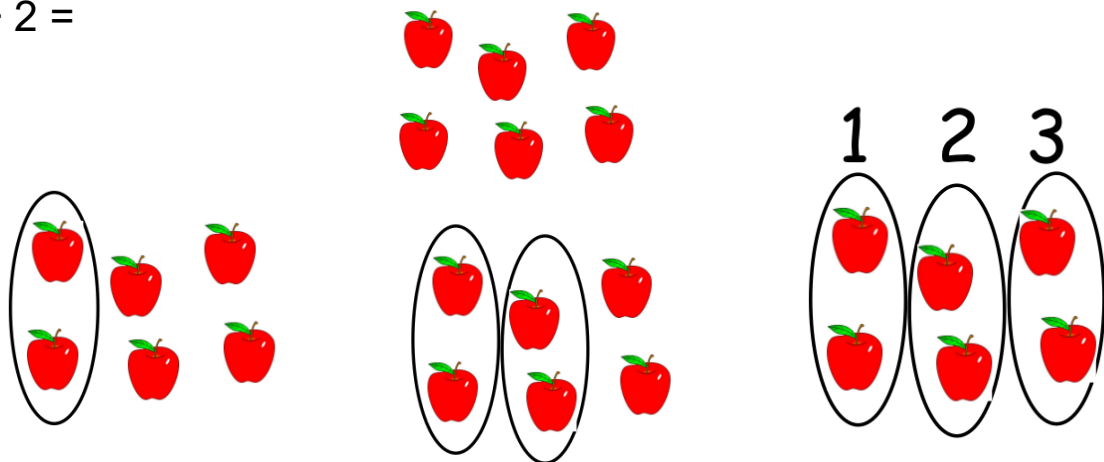
10 objects shared equally between 2 groups.



## Pictures

How many groups of 2 can you make from a set of 6 apples?

$$6 \div 2 =$$



## Arrays

$$9 \div 3 =$$

