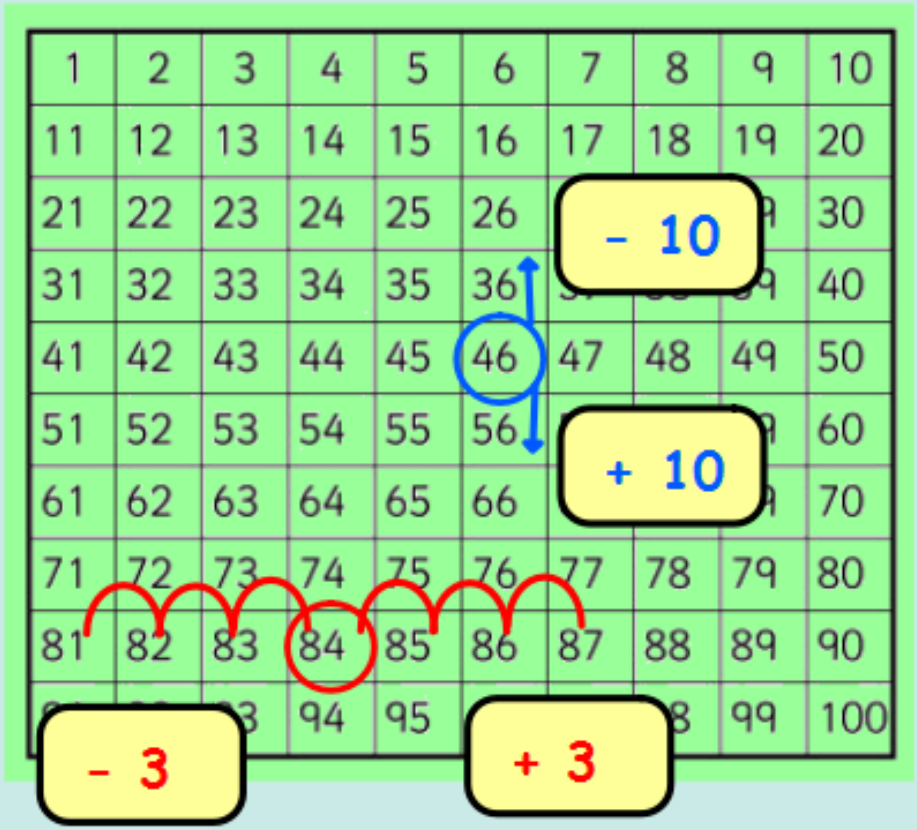
Addition and Subtraction - Hundred Square

In Year 2 we use a hundred square to add and subtract tens by moving up and down the columns.



$46 + 10 = 56$

$46 - 10 = 36$

We add and subtract ones by counting forwards or backwards.

$84 + 3 = 87$

$84 - 3 = 81$

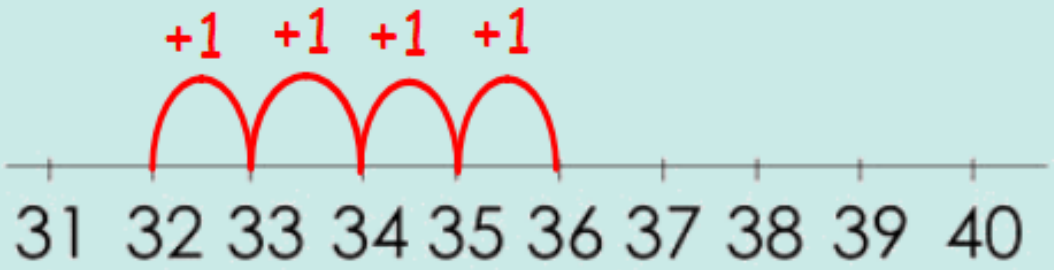
We partition numbers then add or subtract tens and ones using these two methods.

$32 + 14 = 32 + 10 + 4 = 46$

$32 - 14 = 32 - 10 - 4 = 18$

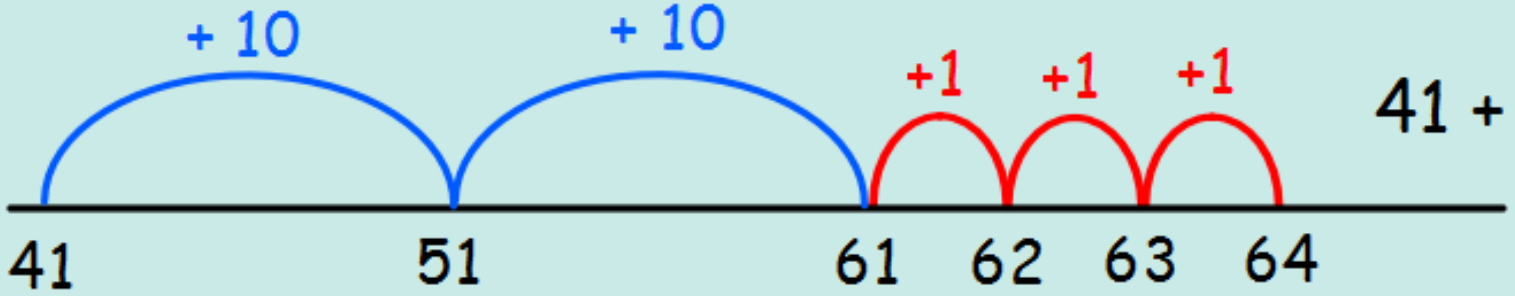
Addition and Subtraction - Numberlines

In Year 2 we use existing number lines to 50 or 100 to add and subtract numbers by counting on or back.



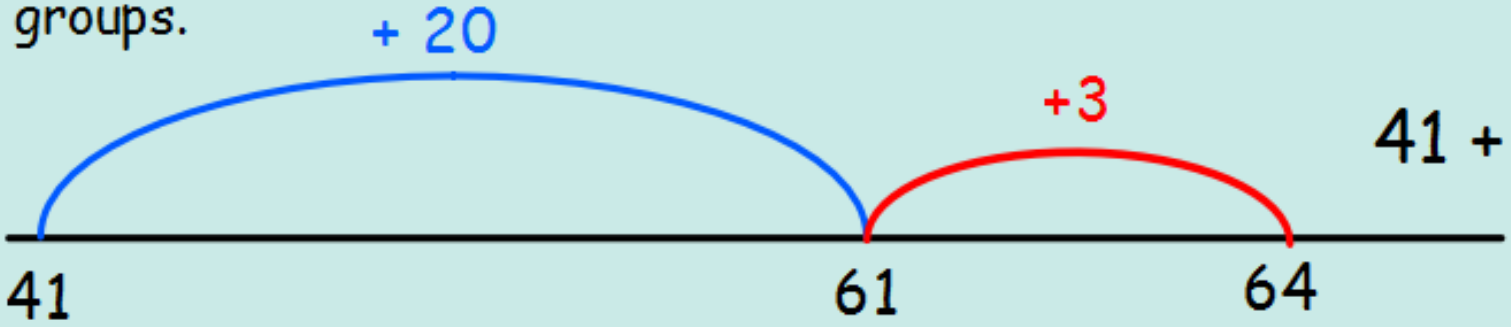
32 + 4 = 36

We move on to use blank number lines to add/subtract tens and ones.



41 + 23 =64

Then becoming more efficient by adding/subtracting the tens and ones in groups.



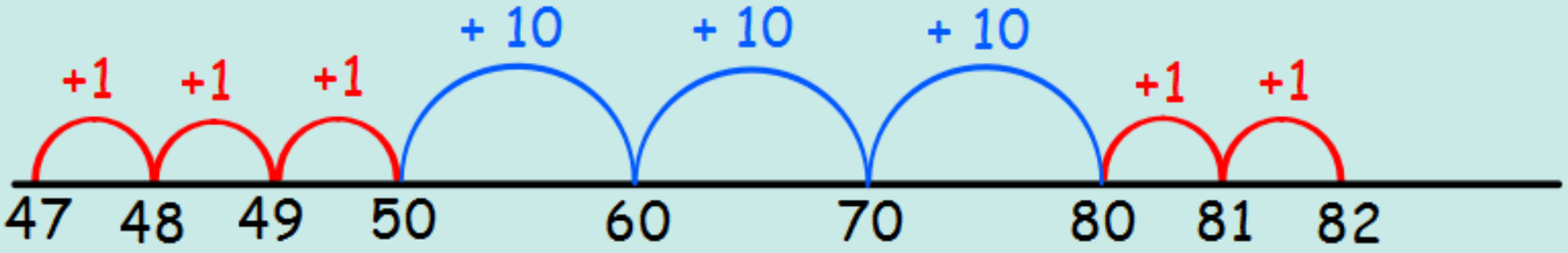
41 + 23 =64

Addition and Subtraction

Sometimes if the numbers in the calculation are close together or near to multiples of 10, 100 etc, it can be more efficient to count on.

$$82 - 47 = 35$$

Count up from 47 to 82 in jumps of 10 and jumps of 1.



Later in the year we also add/subtract by partitioning tens and ones and then adding or subtracting the groups.

21 + 45 =

20 + 40 = 60

1 + 5 = 6

60 + 6 = 66

adding tens first then adding ones

86 - 54 =

80 - 50 = 30

6 - 4 = 2

30 + 2 = 32

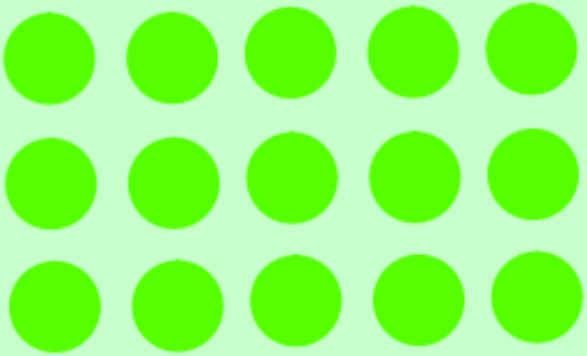
subtracting tens first then subtracting ones

Multiplication

In Year 2 children need to be confident with the 2, 5 and 10 times table and be able to count on and back in multiples of 2, 3, 5 and 10 from 0.

Children use lots of practical apparatus and will develop to using jottings and different ways of solving and recording answers.

Arrays



3 groups of 5

3 x 5 = 15

Children draw or use counters to create arrays to solve multiplication calculations.

5 groups of 3

5 x 3 = 15

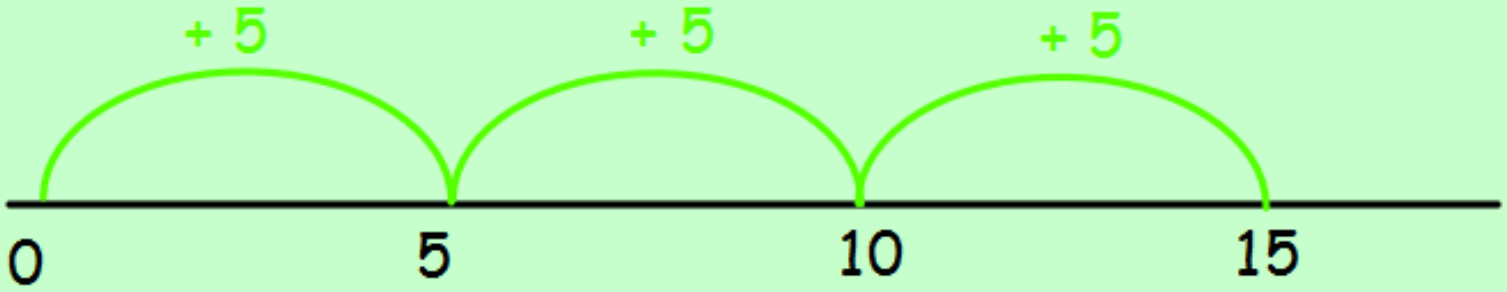
Arrays also help to show that multiplication is **commutative**.

3 x 5 = 15 but also 5 x 3 = 15

Multiplication

Repeated Addition

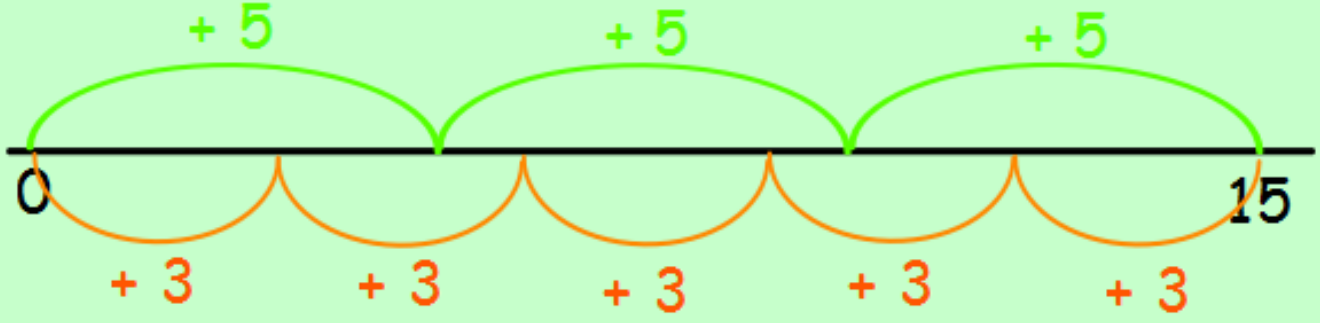
In Year 2 children also use blank numberlines to show multiplication as repeated addition.



5 + 5 + 5 = 15

3 x 5 = 15

This method can again be used to show that multiplication is **commutative**.



3 x 5 = 15

5 x 3 = 15

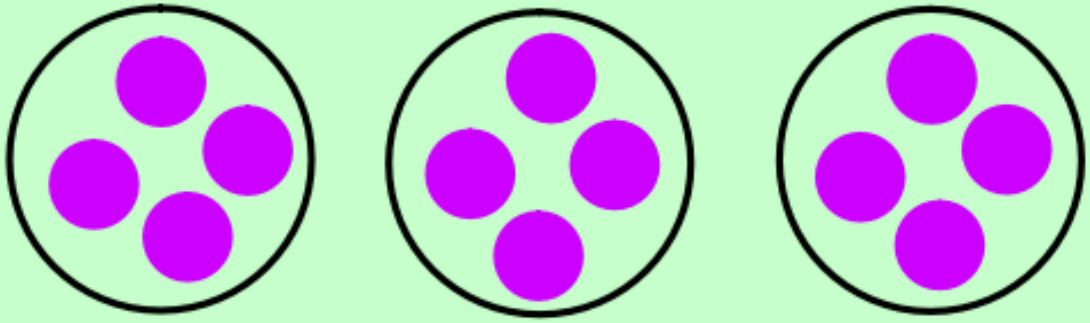
Division

In Year 2 we use three different division methods.

Children use lots of practical apparatus and will develop to using jottings and different ways of solving and recording answers.

Sharing

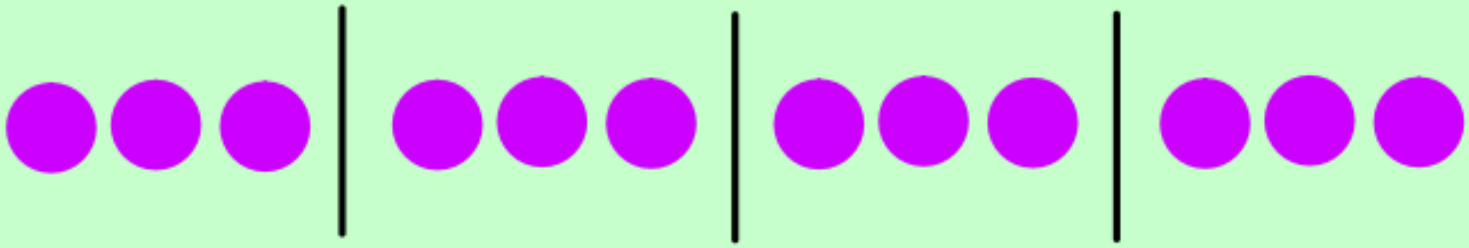
$12 \div 3 = 4$ 12 shared equally into 3 groups.



There are 4 in each group.

Grouping

$12 \div 3 = 4$ 12 shared equally into groups of 3.



There are 4 groups.

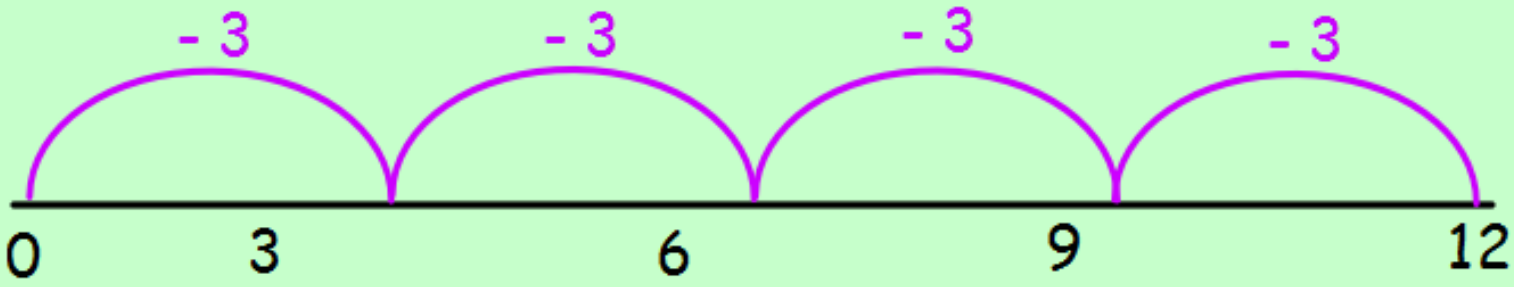
Division

Repeated Subtraction

We use blank numberlines to show division as repeated subtraction.

$12 \div 3 = 4$ subtracting groups of 3

We subtracted 3
a total of 4 times.



Children need to know that division isn't **commutative**.

$12 \div 3$ isn't the same as $3 \div 12$