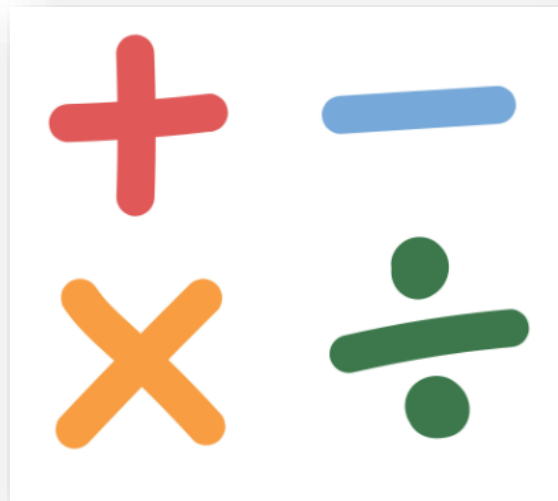# Weston Favell CE Primary School

Calculation Guide

Year 2

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This calculation guide will demonstrate the written calculation strategies that are covered for addition, subtraction, multiplication and division.

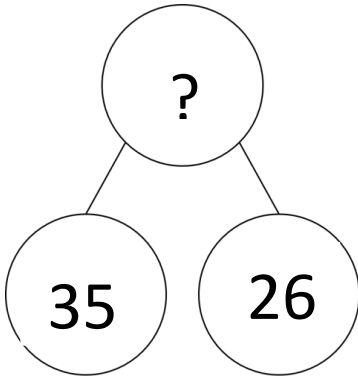Practising these will help in preparation for Year 3 and beyond!

If you have any questions or need any further support, please ask your class teacher and they will be happy to help you.
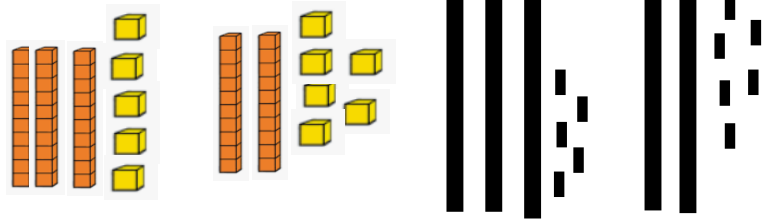
Addition

$$8 + 9 = 17$$

addend + addend = sum

Example question: 35 + 26

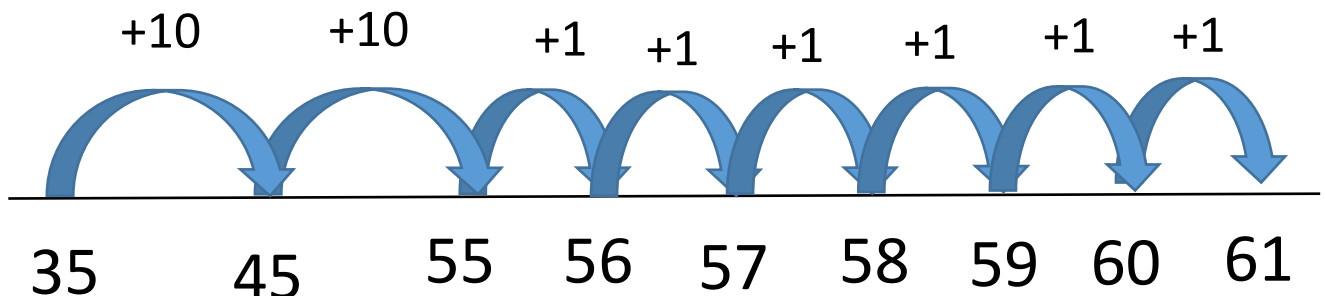?

35   26

A part/part whole model

?	
35	26

A bar model

Drawing Base 10 Equipment

35 + 26

Partitioning tens and ones and adding them together

50   11   = 61

+10   +10   +1   +1   +1   +1   +1   +1

35   45   55   56   57   58   59   60   61
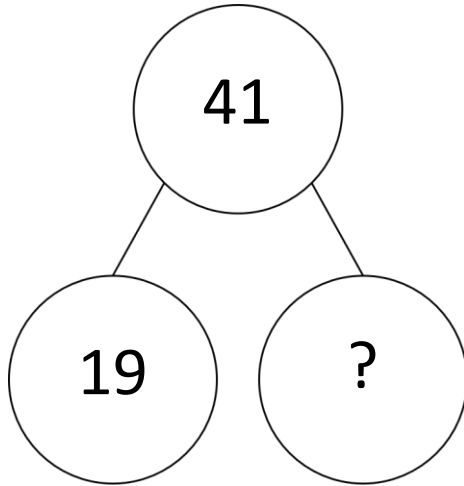
A number line

Subtraction
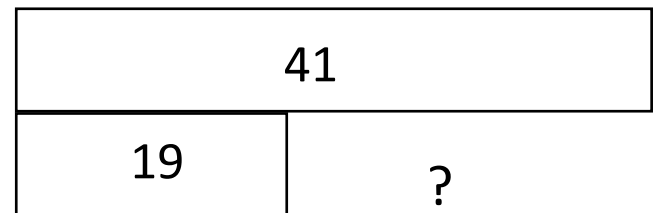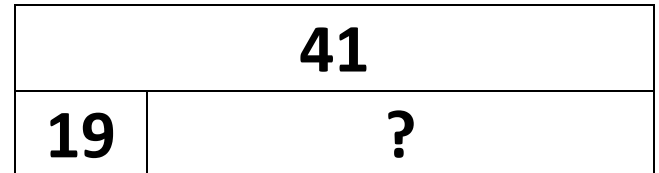## (Finding the Difference)
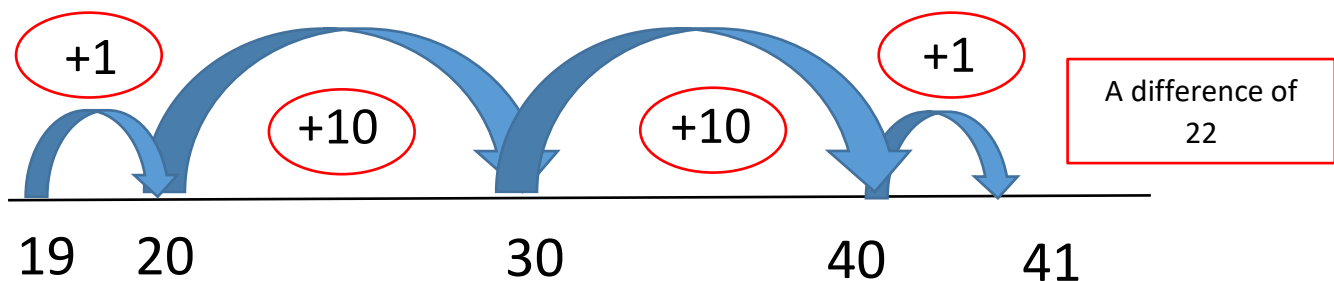
$$17 - 9 = 8$$

minuend - subtrahend = difference
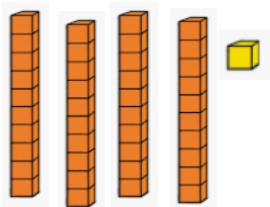
Example question: 41 - 19

41

19   ?

A part/part whole model

41	
19	**?**

41	
19	?

A bar model

+1   +10   +10   +1

A difference of 22

19 20   30   40   41

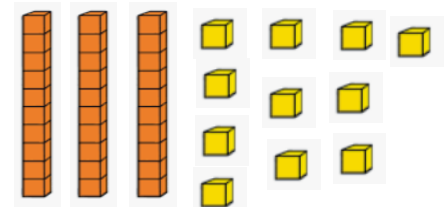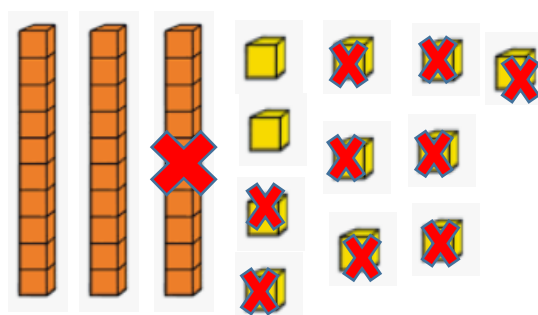**A number line**

Exchanging using equipment: We can't take 9 ones from our 1 one. We can exchange one of our tens to ten ones so we are now able to do this.
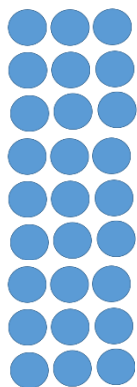
We can then take away using a cross out method:

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WFPS

Multiplication

Example question: 7 x 3

Exploring 7 lots of 3 and how it has the same product as 3 lots of 7.
(Commutativity)

Exploring Arrays and Commutativity

7 x 3 = 21

3 x 7 = 21

?						
3	3	3	3	3	3	3
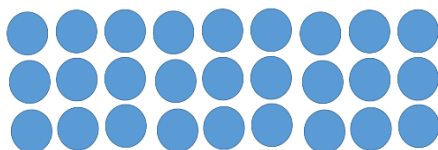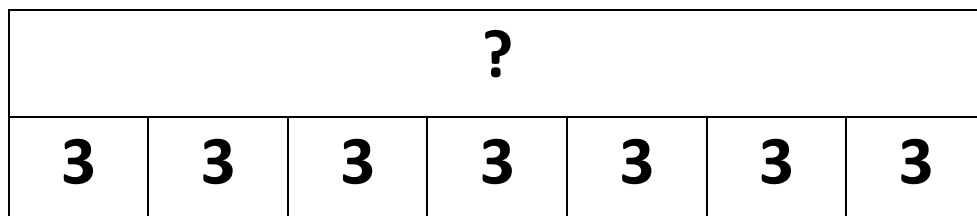
A bar model

7 Equal groups of 3

+3   +3   +3   +3   +3   +3   +3

0   3   6   9   12   15   18   21

A number line

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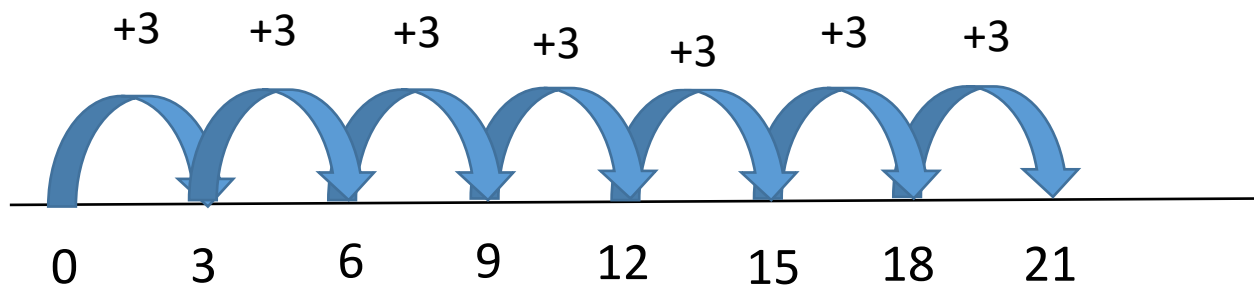
Division

Example question: 24 ÷ 3
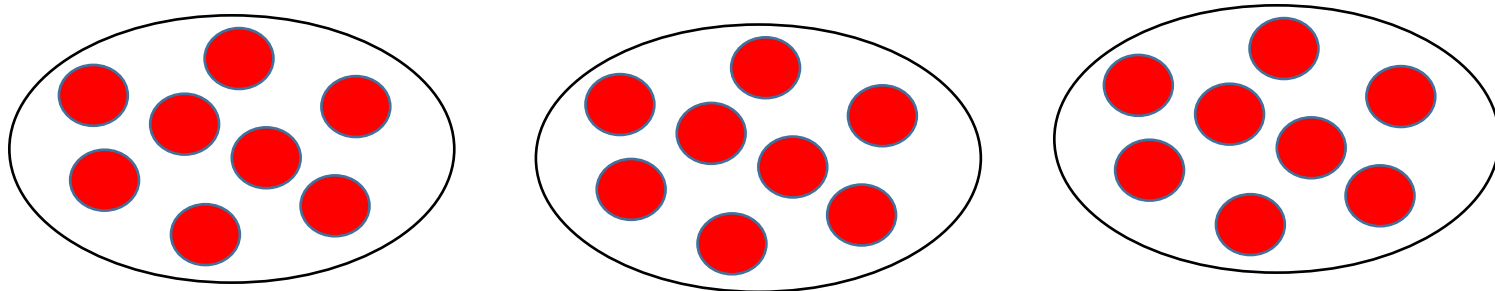
Sharing in equal groups: I have 24 counters and I have shared them equally between 3.
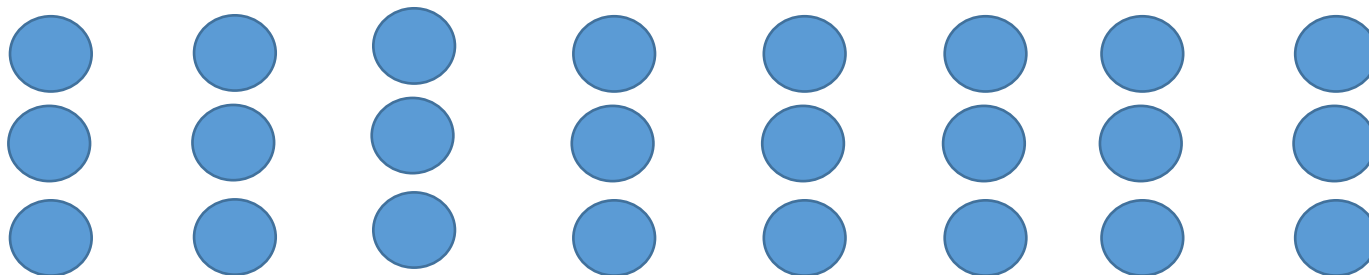
Grouping in equal groups: I have 24 counters and I have grouped them into groups of 3. I have 8 equal groups of 3.

24		
?	?	?

A bar model

1 jump 2 jumps 3 jumps 4 jumps 5 jumps 6 jumps 7 jumps 8 jumps

+3 +3 +3 +3 +3 +3 +3 +3

0   3   6   9   12   15   18   21   24

A number line

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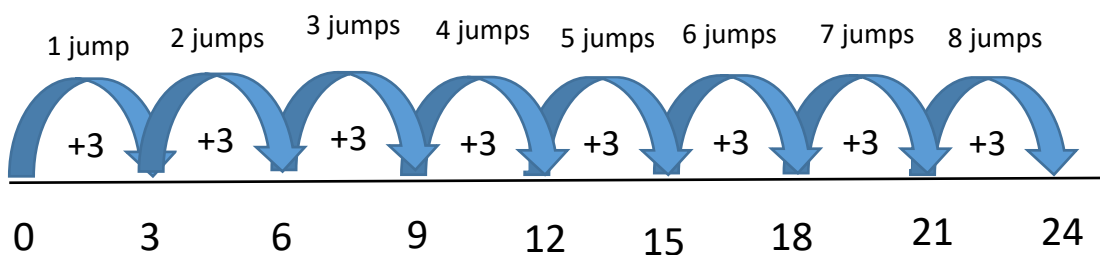
Times Tables

In Year Two, children start to learn their time tables facts alongside their corresponding division facts e.g. 3 x 2 = 6 so 6 ÷ 2 = 3.

The facts the children should focus on learning are the 2, 5 and 10 times tables. It helps children to apply this information fluently and with pace by the end of the year.

Children need to learn the times tables highlighted in the table below in order:

- 0 x 2 = 0
- 1 x 2 = 2
- 2 x 2 = 4 etc.

Then they need to be able to answer in any order e.g. 4 x 2 = 8, 12 x 2 = 24, 2 x 2 = 4

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1x1											
2	2x1	2x2							= 42 Year 2 Facts				
3	3x1	3x2										
4	4x1	4x2										
5	5x1	5x2	5x3	5x4	5x5							
6	6x1	6x2			6x5							
7	7x1	7x2			7x5							
8	8x1	8x2			8x5							
9	9x1	9x2			9x5							
10	10x1	10x2	10x3	10x4	10x5	10x6	10x7	10x8	10x9	10x10		
11	11x1	11x2			11x5					11x10		
12	12x1	12x2			12x5					12x10		

Focus on the commutativity of the times table when practising at home. If I know 3 x 5 = 15, I also know 5 x 3 is 15! This is represented in the table above.