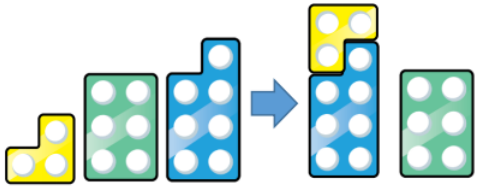
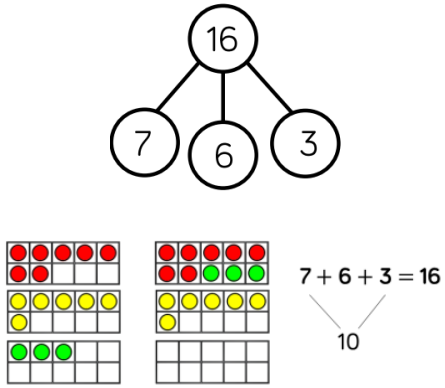
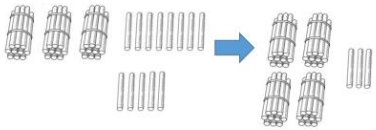
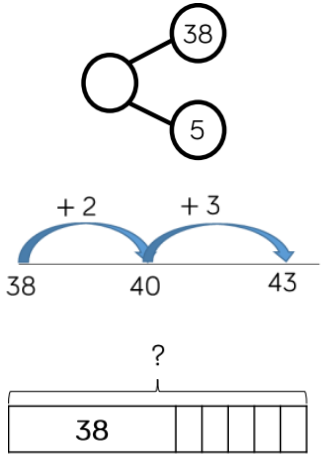
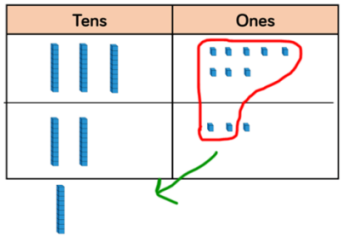
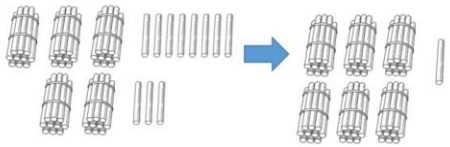
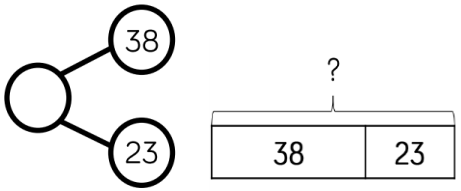
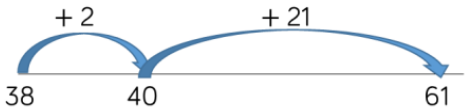
Year 2 Calculations Policy

Year 2 Addition

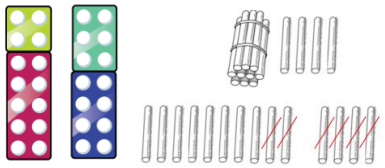
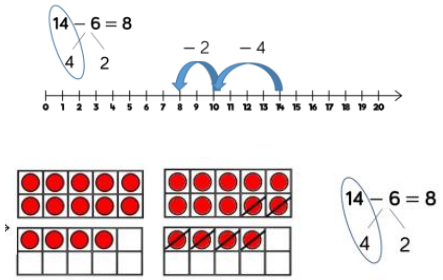
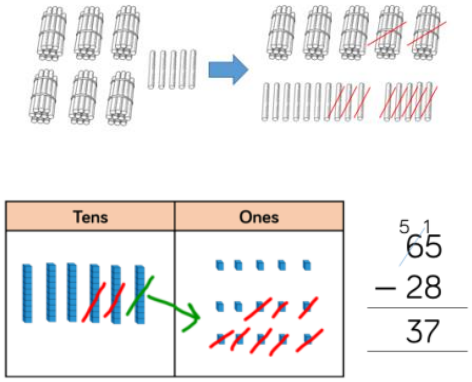
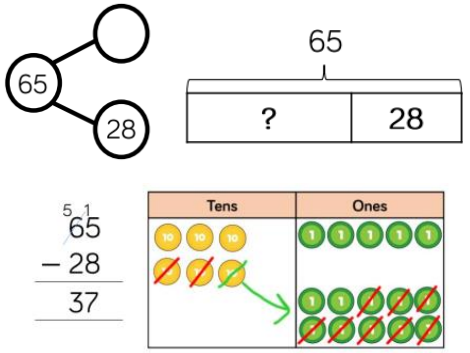
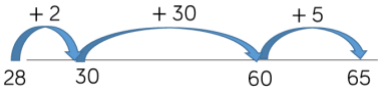
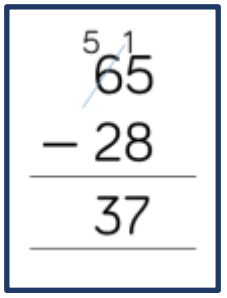
Objective / Strategy	Concrete	Pictorial	Abstract
Adding 3 1-digit numbers	$7 + 6 + 3 = 16$ A range of concrete resources could be used such as Numicon: 	$7 + 6 + 3 = 16$ Represent pictorially: 	$7 + 6 + 3 = 16$ (Children should be encouraged to look for number bonds to 10 or doubles to add the numbers more effectively)
Adding 1-digit and 2-digit numbers to 100	$38 + 5 = 43$ A range of concrete resources could be used such as straws:  Encourage children to count on from the largest number. (Hundred squares and straws can support children to find number bonds to 10).	$38 + 5 = 43$ Represent pictorially: 	$38 + 5 = 43$ (Children should be able to apply their knowledge of number bonds to add more efficiently e.g. 8 + 5 = 13 so 38 + 5 = 43)

Year 2 Addition

Objective / Strategy	Concrete	Pictorial	Abstract
Adding 2 2-digit numbers to 100	$38 + 23 = 61$ Straws, Base 10 or counters are the most suitable concrete resource to use:  38 + 23 61 1  (Children should write out the calculation next to the concrete resources so they can see the links to the written column method)	$38 + 23 = 61$ Represent pictorially:  Children can also use a number line to count on to find totals – encourage jumps of multiples of 10:  	$38 + 23 = 61$ Use the formal column method: 38 + 23 61 1 Moving on to applying knowledge to multi step Word Problems /Reasoning Style questions

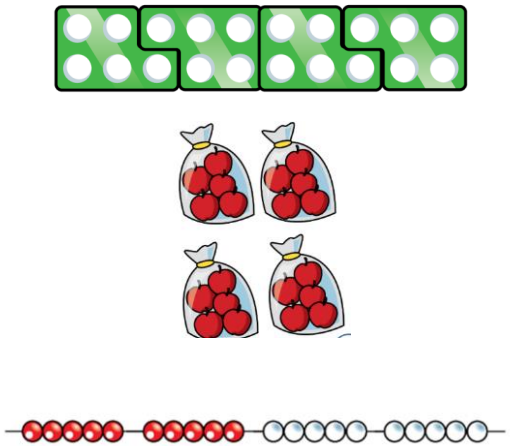
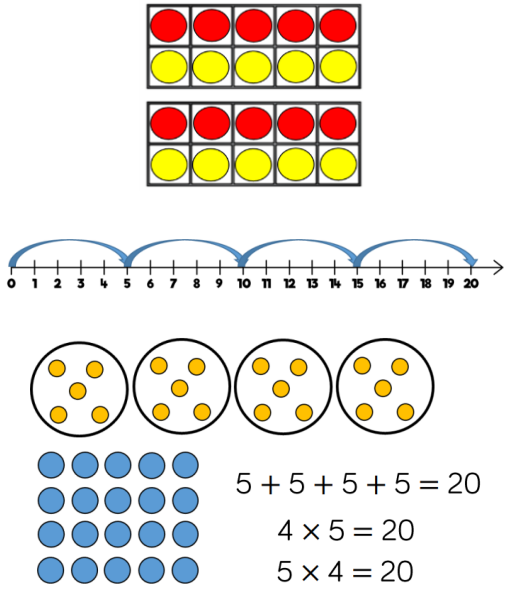
Key Vocabulary: sum, total, parts and wholes, plus, add, altogether, more, 'is equal to' 'is the same as'.

Year 2 Subtraction

Objective / Strategy	Concrete	Pictorial	Abstract
Subtracting 1 and 2-digit numbers to 20	$14 - 6 = 8$ A range of concrete resources could be used such as Numicon:  (highlight the importance of ten ones equalling one ten)	$14 - 6 = 8$ Represent pictorially: 	$14 - 6 = 8$ (Children should be encouraged to look for number bonds to 10 when partitioning the subtracted number)
Subtracting 1 and 2-digit numbers to 100	$65 - 28 = 37$ Straws, Base 10 or counters are the most suitable concrete resource to use:  (Children should write out the calculation next to the concrete resources so they can see the links to the written column method)	$65 - 28 = 37$ Represent pictorially:  Children can also use a number line to count on to find totals – encourage jumps of multiples of 10: 	$65 - 28 = 37$ Use the formal column method:  Moving on to applying knowledge to multi step Word Problems /Reasoning Style questions

Key Vocabulary: take away, less than, the difference, subtract, minus, fewer, decrease.

Year 2 Multiplication

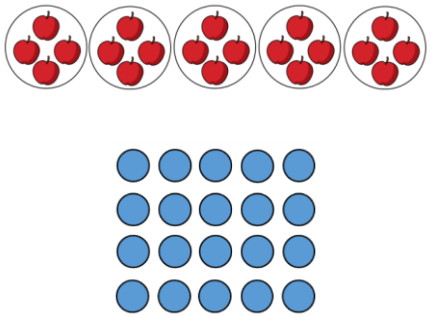
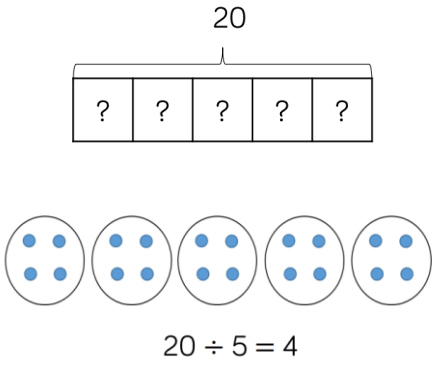
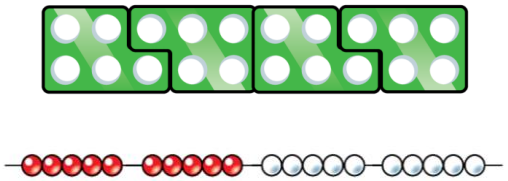
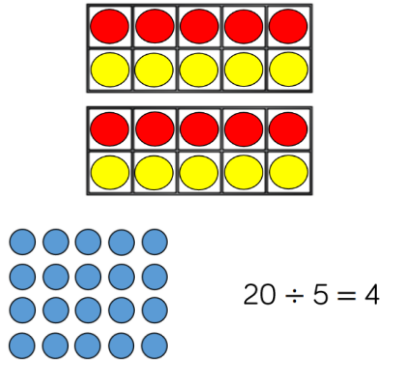
Objective / Strategy	Concrete	Pictorial	Abstract
Solve 1 step problems using multiplication	One bag holds 5 apples. How many apples do 4 bags hold? A range of concrete resources should be used to represent repeated addition: 	One bag holds 5 apples. How many apples do 4 bags hold? Represent pictorially:  $5 + 5 + 5 + 5 = 20$ $4 \times 5 = 20$ $5 \times 4 = 20$	One bag holds 5 apples. How many apples do 4 bags hold? Children are introduced to the multiplication symbol and are not expected to record multiplication formally. $4 \times 5 = 20$ $5 \times 4 = 20$

Multiplcation Tables: Children in Year 2 are expected to learn their 2, 5 and 10 times tables.

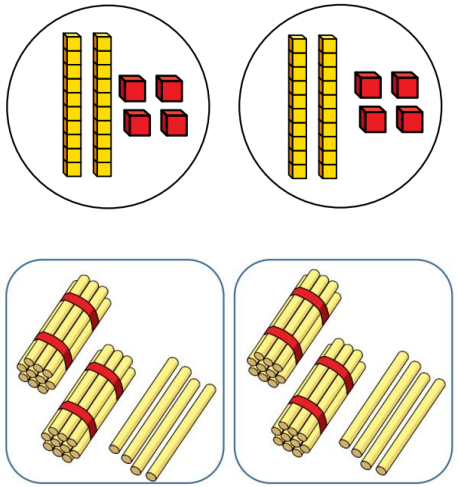
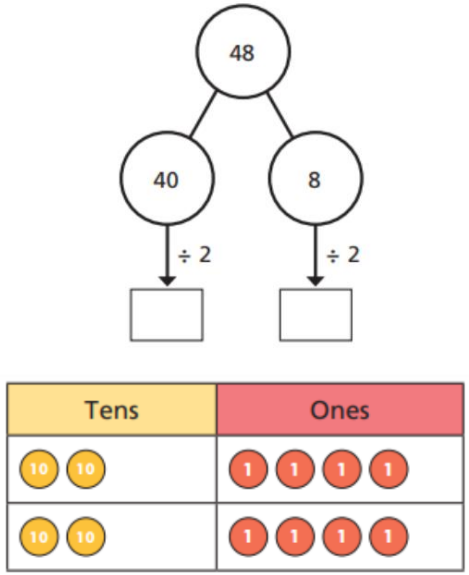
Encourge children to count in multiples both forwards and backwards and to notice patterns, a range of concrete maniplulatives can also be used.

Key Vocabulary: double, times, multiplied by, the product of, groups of, lots of, equal groups.

Year 2 Division

Objective / Strategy	Concrete	Pictorial	Abstract
Solve 1 step problems using multiplication (sharing)	There are 20 apples altogether. They are shared equally between 5 bags. How many apples are in each bag? A range of concrete resources should be used to represent sharing equal groups: 	There are 20 apples altogether. They are shared equally between 5 bags. How many apples are in each bag? Represent pictorially: 	There are 20 apples altogether. They are shared equally between 5 bags. How many apples are in each bag? ÷ Children are introduced to the division symbol and are not expected to record division formally. 20 ÷ 5 = 4
Solve 1 step problems using division (grouping)	There are 20 apples altogether. They are put in bags of 5. How many bags are there? A range of concrete resources should be used to represent fixed groups: 	There are 20 apples altogether. They are put in bags of 5. How many bags are there? Represent pictorially: 	There are 20 apples altogether. They are put in bags of 5. How many bags are there? ÷ Children are introduced to the division symbol and are not expected to record division formally. 20 ÷ 5 = 4

Year 2 Division

Objective / Strategy	Concrete	Pictorial	Abstract
Divide 2-digits by 1 digit (sharing with no exchange)	$48 \div 2 = 24$ A range of concrete resources should be used to represent sharing groups: 	$48 \div 2 = 24$ Represent pictorially:  	$48 \div 2 = 24$ $\div$ Children are introduced to the division symbol and are not expected to record division formally. $48 \div 2 = 24$

Key Vocabulary: share, group, divide, divided by, half.