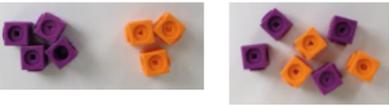
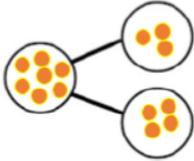
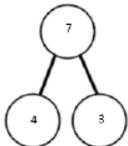
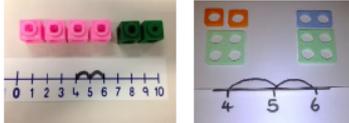
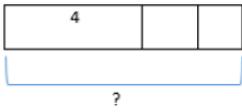
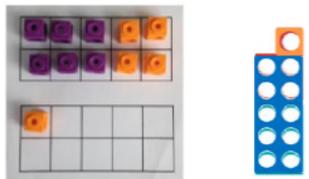
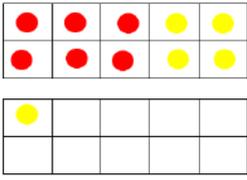


Year 1

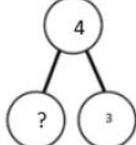
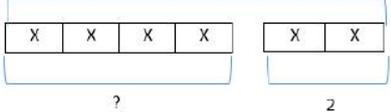
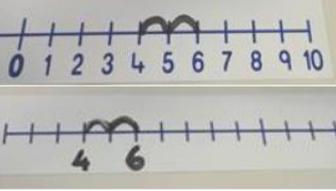
Addition

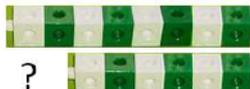
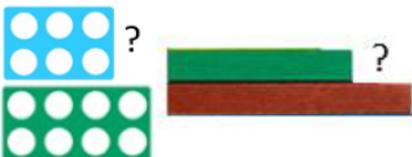
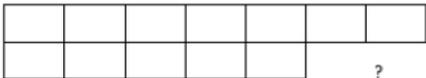
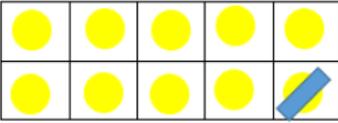
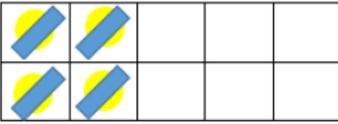
addend + addend = sum

Concrete	Pictorial	Abstract
<p>Combining two parts to make a whole (use other resources too e.g. eggs, shells, teddy bears etc)</p> 		<p>$4 + 3 = 7$ (four is a part, 3 is a part and the whole is seven)</p> 
<p>Counting on using number lines by using cubes or numicon</p> 	<p>A bar model which encourages the children to count on</p> 	<p>The abstract number line: What is 2 more than 4? What is the sum of 4 and 4? What's the total of 4 and 2? $4 + 2$</p> 
<p>Regrouping to make 10 by using ten frames and counters/cubes or using numicon: $6 + 5$</p> 	<p>Children to draw the ten frame and counters/cubes</p> 	<p>Children to develop an understanding of equality e.g $6 + \square = 11$ and</p> <p>$6 + 5 = 5 + \square$ $6 + 5 = \square + 4$</p>

Year 1

Minuend - subtrahend = difference

Concrete	Pictorial	Abstract
<p>Physically taking away and removing objects from a whole (use various objects too) rather than crossing out - children will physically remove the objects</p> <p>$4 - 3 = 1$</p> 	<p>Children to draw the concrete resources they are using and cross out.</p>  <p>Use of the bar model:</p> 	<p>$4 - 3 =$</p> <p>$\square = 4 - 3$</p>  
<p>Counting back (using number lines or number tracks)</p> 	<p>Children to represent what they see pictorially e.g.</p> <p>6</p> 	

<p>Finding the difference (using cubes, numicon or Cuisenaire rods, other objects can also be used)</p>  	<p>Children to draw the cubes/other concrete objects which they have used</p> <p>XXXXXXXXXX XXXXXXX</p> <p>Use of the bar model</p> 	<p>Find the difference between 8 and 6.</p> <p>$8 - 6$, the difference is ?</p> <p>Children to also explore why $9 - 7 = 8 - 6$ (the difference, of each digit, has changed by 1 do the difference is the same- this will help when solving 10000-9987)</p>
<p>Making 10 (using numicon or ten frames)</p> <p>$14 - 5$</p>  <p>Children could also do this by subtracting a 5 from the 10.</p> 	<p>Children to present the ten frame pictorially</p>  	<p>$14 - 5 = 9$ You also want children to see related facts e.g. $15 - 9 = 5$</p> <p>Children to represent how they have solved it e.g.</p> <p>$14 - 5 = 9$ 14 is made up of 5, 5 and 4 so I can subtract one 5 to be left with 4 and 5</p>  <p>$14 - 5 = 9$ 5 is made up of 4 and 1 so I can subtract 4 to make 10 and then 1 to get to 9</p> 

Year 1

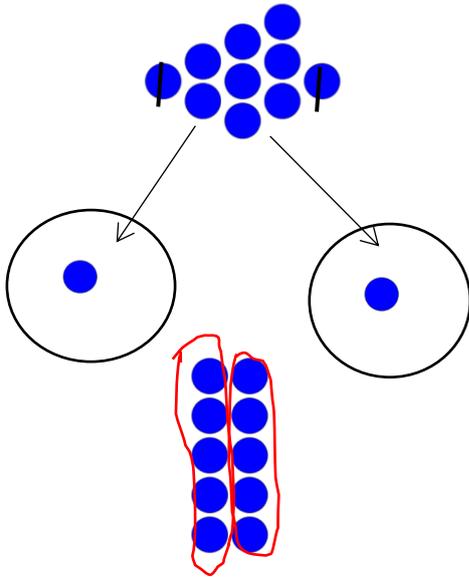
Division

dividend \div divisor = quotient

Sharing

$$10 \div 2 = 5$$

10 shared between 2



There are 10 cakes to be shared between 2 children. How many cakes each?



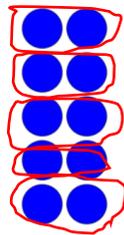
There are 2 groups.
There are 5 in each group.

Grouping

$$10 \div 2 = 5$$

How many groups of 2 make 10?

Put 10 into groups of 2.



There are 10 cakes to be put into boxes, with 2 cakes in each box. How many boxes are needed?



$$5 \times 2 = 10$$

so

$$10 \div 2 = 5$$

-2 -2 -2 -2 -2

0 2 4 6 8 10

There are 5 groups.
There are 2 in each group.