Christ Church & St Peter's CE Primary School

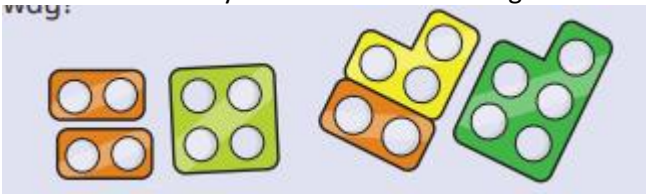
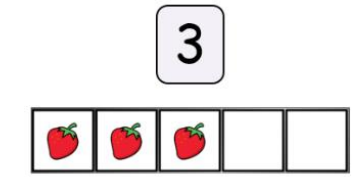
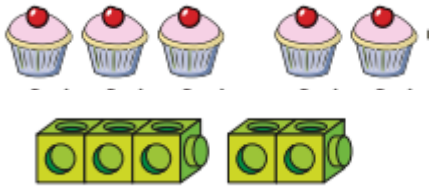
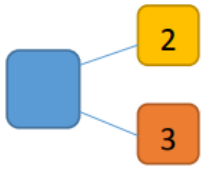
'Aiming High & Caring for Everyone'

Written Calculation Policy

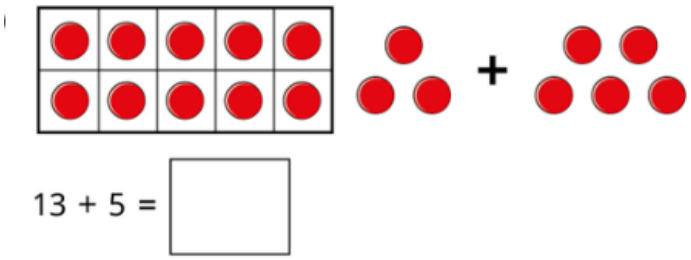
Written – Autumn 2023

Review Date: October 2025

Addition

	Concrete	Pictorial	Abstract
EYFS	Combining two sets of small number e.g using numicon. To understand they combine to make a larger number  Count objects of a number up to 10 and later to 20 Physically add one more and recount – 1 to 1 correspondence. By the end of EYFS children should be able to count,	Using pictorial representations in a tens frame. Count how many objects are shown  What is 1 more than 3? 	
Year 1	**<u>Addition by combining two groups</u>** **In Year 1 Children will use physical objects to combine two groups.**  They count two separate sets of numbers. Combine them together and count by tapping or moving each object. Developing their one to one correspondence. The two groups can also be placed on a blank part whole model and then moved across to combine them. E.g	**<u>Addition by combining two groups</u>** **In year 1, children, when they are confident counting physical objects they can then use visual representations to show regrouping** – using a variety of pictures of objects and mathematical equipment such as cubes, counters, numicon and bead strings.  Use bar models and part whole models and tens frames to represent problem.	**<u>Addition by combining two groups</u>** **By the end of year 1, children will be able to calculate in the abstract.** Using (partially completed or blank) part whole models and bar models, 2 + 3 = 5 3 + 2 = 5 5 = 3 + 2 5 = 2 + 3 

Or link the multi cubes together into a bar

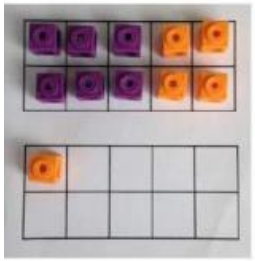


Addition using number bonds

Children in year 1 develop understanding of number bonds.

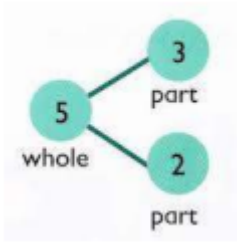
Using tens frames children are able to make the ten, and seeing how many are in the next ten after regrouping

9 + 3 =



6 + 5 = 11

Start with the bigger number and use the smaller number to make 10.



e.g

Sam has 12 sweets.

Max gives her 3 more sweets.

How many sweets does Sam have now?

Addition using number bonds

Children in year 1 use pictorial representation to demonstrate the grouping to ten using number bonds knowledge.

Addition using number bonds

Children, will be able to calculate mentally or using informal jottings by the end of Year 1 using their knowledge of number bonds. E.g

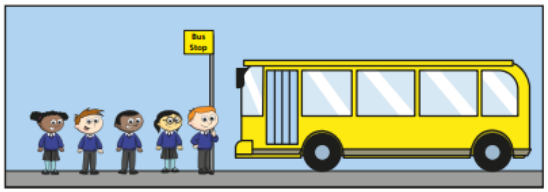
6 + 5 = 11

Knowing 6 + 4 = 10 and then add one more.

9 + 3 = 10 and 2 more.

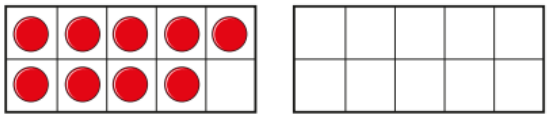
First, there are 9 children on the bus.

Then, 5 more children get on the bus.



How many children are on the bus now?

Complete the ten frames and the sentences.



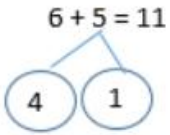
□ + □ = □

Addition by counting forward

In year 1, children are taught the skill of counting forward from the largest number for an efficient way of adding.

Start with the larger number on the bead string and then count on to the smaller number 1 by 1 to find the answer.

6 + 5 = 11



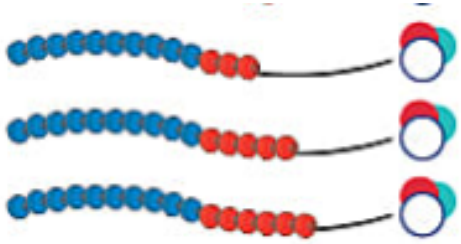
6 + 4 =10

10 + 1 = 11

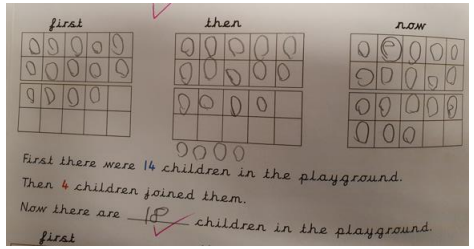
Using Pictorial representations of tens frames, children use them to identify first, then now – after combining two amounts.

Addition by counting forward

Having pictorial representations of bead strings for children to count forward from.

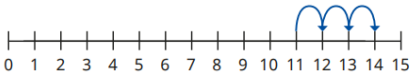


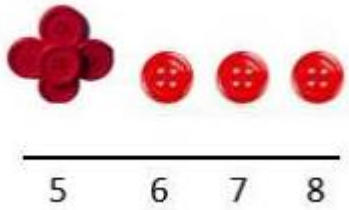
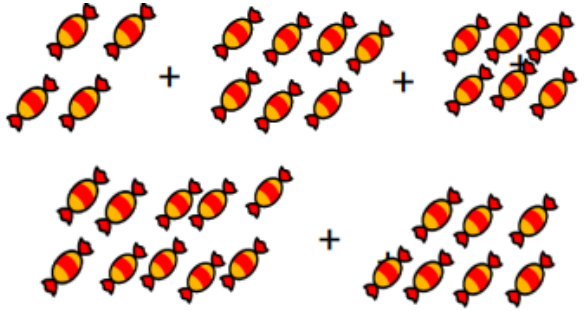
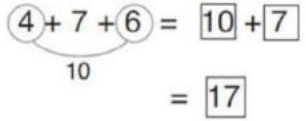
Using empty tens frames children solve addition problems using first, then and now.

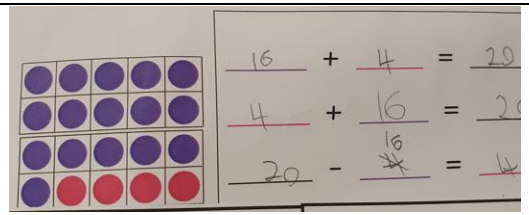


Addition by counting forward

By the end of year 1, children should be able annotate blank number lines or calculate mentally by putting largest number first and counting forward

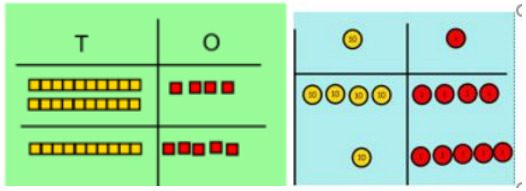


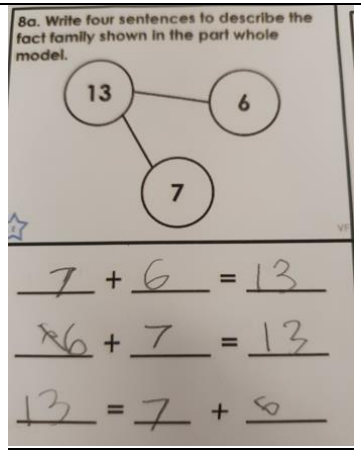
	Children can use physical objects to group the larger number together and using one to one correspondence count forward  		
Year 2	**<u>Adding three numbers</u>** In year 2 children using physical objects to aid them adding and combining three numbers. Using their knowledge of number bonds to calculate in an efficient way. Understanding is doesn't matter which numbers you add together first. 4 + 7 + 6= 17 Put 4 and 6 together to make 10. Add on 7.  Following on from making 10, make 10 with 2 of the digits (if possible) then add on the third digit. **<u>Addition using number lines and part whole models</u>** In year Two, children will use number line and part whole models to help them add numbers	**<u>Adding three numbers</u>** In Year 2, children will be able to use pictorial representations of three numbers to enable them to look for number bonds to make 10 to adding three numbers,  Add together three groups of objects. Draw a picture to recombine the groups to make 10. **<u>Addition using number lines and part whole models</u>** Children use part whole models to add two numbers or given numberlines	**<u>Adding three numbers</u>** In Year 2, children will be able to calculate in the abstract using informal jottings.  Combine the two numbers that make 10 and then add on the remainder. **<u>Addition using number lines and part whole models</u>**



Addition method without regrouping

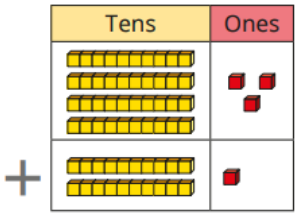
In year 2 – children are introduced to the first step of a written addition method without regrouping
using base ten first before using place value counters children physical represent number on a place value grid of tens and ones Children always begin with adding the ones column first followed by the tens.
How many ones? How many tens?

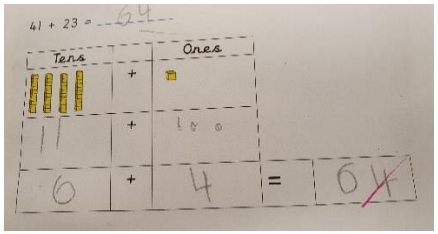


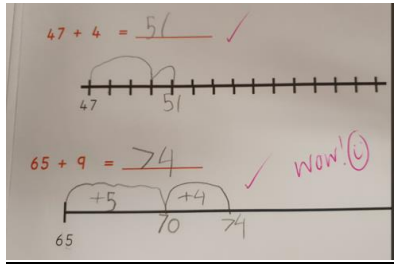


Addition method without regrouping

Children can then move into using pectoral representations and draw their own counters or base ten to help them solve additions





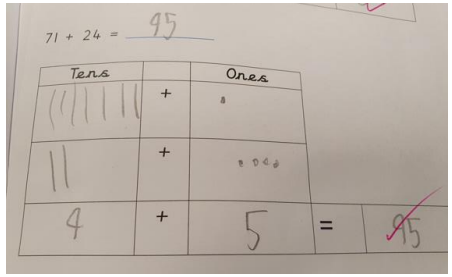


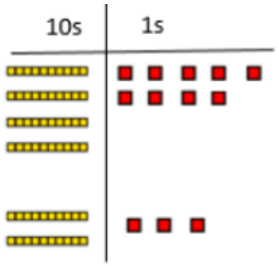
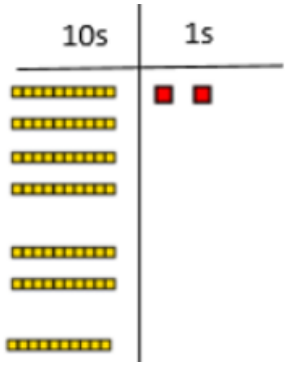
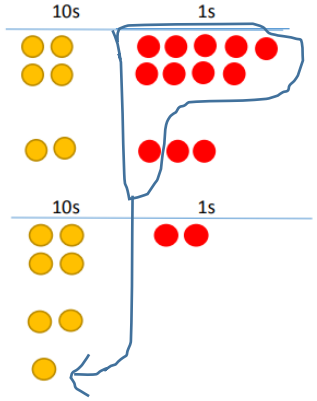
Addition method without regrouping

When children are secure in the method with pictorial representations children will be able to draw their own methods onto empty place value charts

24 + 15 = 39

$$\begin{array}{r} 24 \\ +\ 15 \\ \hline 39 \end{array}$$

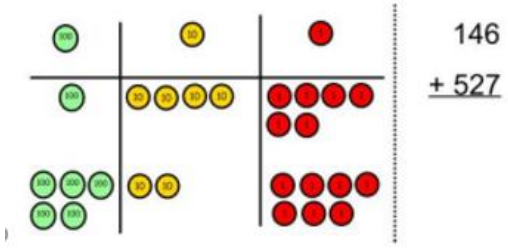


	Addition method with regrouping In year 2, children extend their knowledge the addition method where numbers require regrouping Physically using base ten and place value coins, children make given numbers on empty place value charts.  Children regroup the ones into another ten – leaving extra ones.  Begin with ones column How many ones? 2 How many groups of 10? 7 groups of 10 = 70 70 + 2 = 72	**Addition method with regrouping** Using pictorial representations of base ten and place value coins or children can draw their own representations  How many ones? 2 How many tens? 7 = 70 70+2 = 72	**Addition method with regrouping** **By the end of year 2**, children will be able to use a written method for adding two, two-digit numbers which do not cross the hundred boundary. 40 + 9 20 + 3 1 1 6 0 7 1 this may be set out using a frame
Year 3			

Addition written method without exchanging

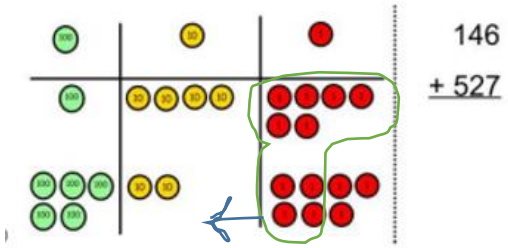
In year 3, children continue to develop their ability of using a written method but extending to 3-digit numbers.

Make both number using place value coins and base 10 – show the written calculation alongside.



Addition method with exchanging

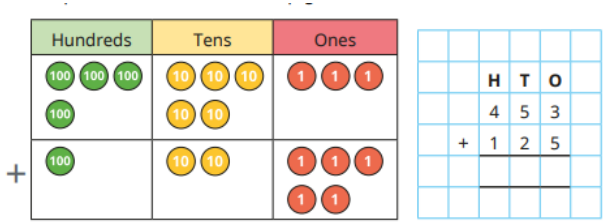
Regroup any columns which have more than 9



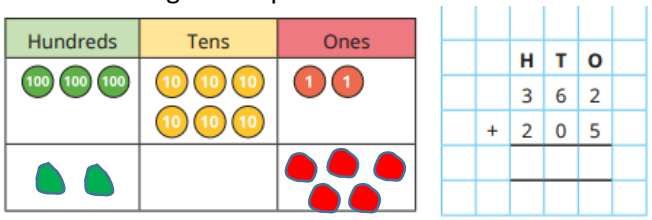
Add the ones colums first , then tens and hundreds. Writing out the totals vertically

Addition written method without exchanging – Children in year 3 will then begin to formally write ther method

using given pictoral reprsentations

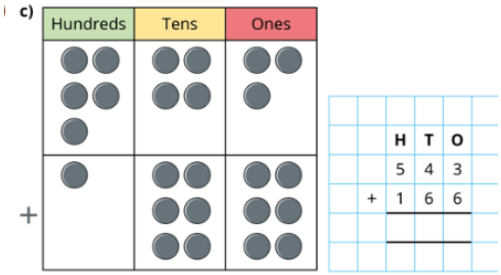


or drawing own representations



Addition method with exchanging

Using pictorial representation or given blank place value chart to represents their numbers themselves



Addition written method without exchanging –

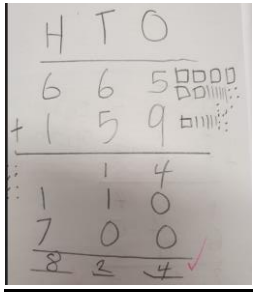
By the end of year 3, children are confident in using a method to add two three-digit numbers.

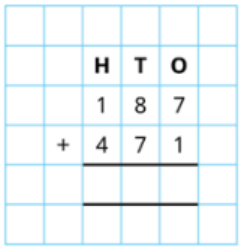
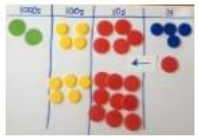
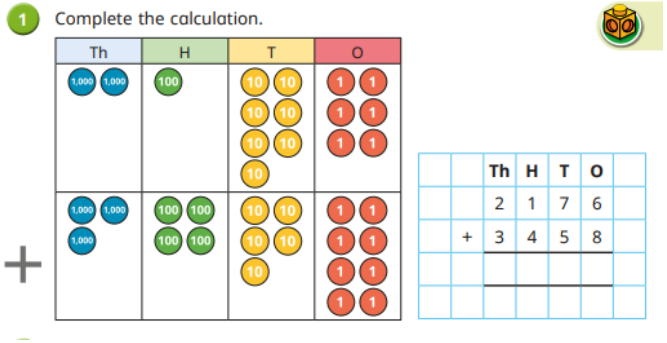
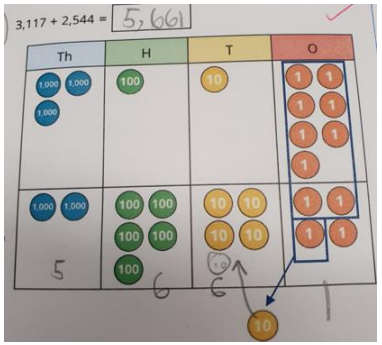
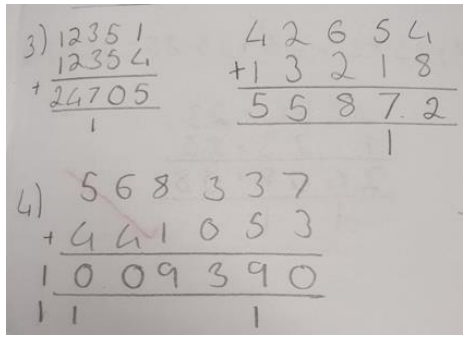
Without exchanging

100 40 2
200 30 6
8
7 0
3 0 0
3 7 8

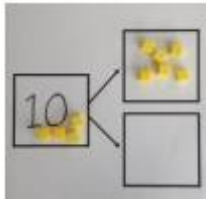
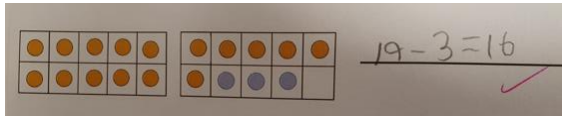
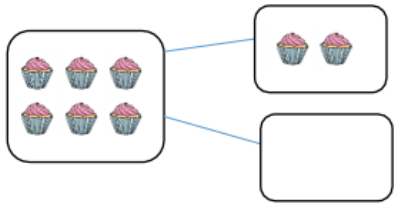
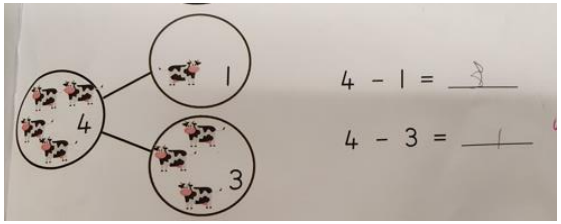
Addition method with exchanging

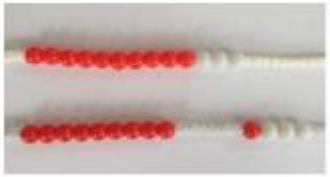
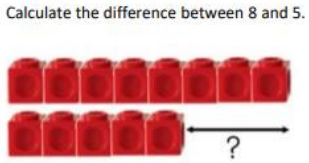
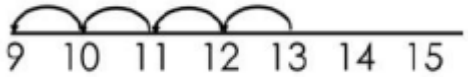
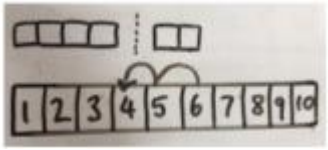
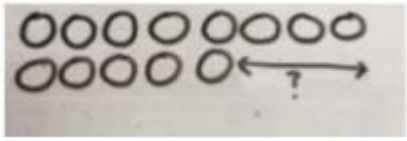
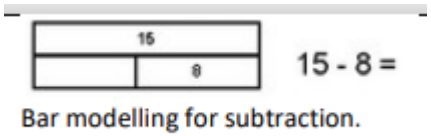
By the end of year 3, children are able to use an expanded written method of addition to add two three-digit numbers

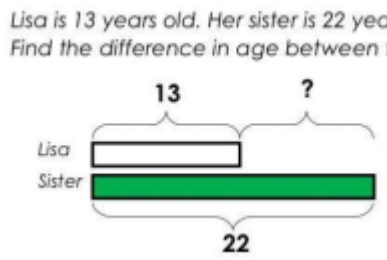
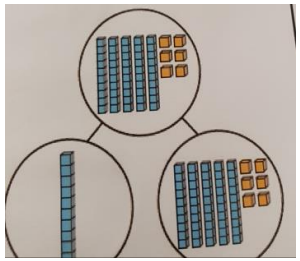
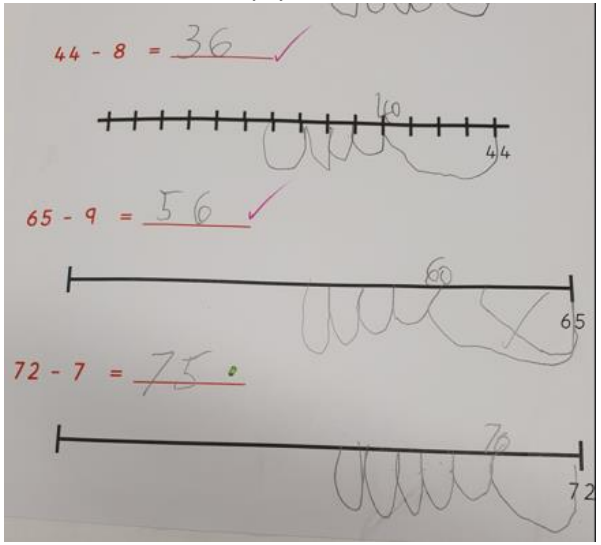


		d)  	
Year 4 Year 5 Year 6	**Formal written method of addition** In years 4, 5 and 6 children are introduced to the formal method of addition. (in increasingly larger numbers and more than one exchange) Using base ten and place value counters to physically exchanged. Place Value Counters 2458 + 596 Show 2458 and 596  Combine the 1s. Exchange ten 1s for a 10 counter.  Combine the 10s. Exchange ten 10s for a 100 counter. 	**Formal written method of addition** In years 4, 5 and 6, children draw their own representations to aid the formal method using blank place value grids. (in increasingly larger numbers and more than one exchange.)  	**Formal written method of addition** (in increasingly larger numbers and more than one exchange.)  As the children move on, introduce decimals with the same number of decimal places and different. Money can be used here. 2 3 . 3 6 1 9 . 0 8 0 5 9 . 7 7 0 + 1 . 3 0 0 9 3 . 5 1 1 2 1 2

Subtraction

EYFS			
Year 1	**Subtraction by taking away ones** Use physical objects, counters, cubes etc. to demonstrate how objects are being taken away by moving them away from the group.  **Subtraction using Part Whole model** Link to addition- use the part whole model to help explain the inverse between addition and subtraction.  If 10 is the whole and 6 is one of the parts. What is the other part? Extend to further number facts 4 = 10 – 6 6 = 10 – 4 10 – 6 = 4 10 – 4 = 6	**Subtraction by taking away ones** Cross out pictures of objects to show what has been taken away   **Subtraction using Part Whole model** Using a pictorial representation of objects, counters, cubes etc to show part whole model for subtraction. 6 – 2 =  And writing other known facts. 6 – 2 = 4 6 – 4 = 2 2 = 6 – 4 4 = 6 – 2	**Subtraction by taking away ones** 18 -3= 15 8 – 2 = 6 Although number sentences are recorded in the concrete and pictorial methods, children are introduced to them on their own while encouraging them to mentally take away ones or making jottings. **Subtraction using Part Whole model** Using blank or partially filled part whole models to complete problems containing numbers.   **Subtraction by counting back**

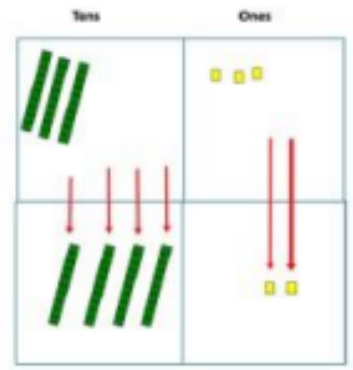
	<u>Subtraction by counting back</u> Children use bead strings to count backwards. Children make the larger number in your subtraction. Move the beads along your bead string as you count backwards in ones **13 – 4 =**  **<u>Subtraction by finding the difference</u>** Compare amounts and objects to find the difference. Use cubes to build towers or make bars to find the difference. Use basic bar models with items to find the difference. Physically snapping off the extra will support the children to understand how many more one group  has over another.	**<u>Subtraction by counting back</u>** Count back on a number line or number track Start at the bigger number and count back the smaller number, showing the jumps on the number line. 13 – 4 =  6 – 2 =  **<u>Subtraction by finding the difference</u>** Using pictorial representations of the cubes they have physically used before where each object is able to be counted. 10 – 3 = ?  Before using other pictorial representations.  Extending to bar model versions	Put 13 in your head, count back 4. What number are you at? Children use fingers to help if needed. **<u>Subtraction by finding the difference</u>** Children are given the problem and asked to draw the bars independently e.g. Hannah has 8 goldfish. Helen has 5 goldfish. Find the difference between the number of goldfish the girls have.  Or  Bar modelling for subtraction.

			
Year 2	**Subtraction by taking away ones** Using rekenrek or bead strings to take ones away. (as year 1 with larger numbers) **Part Whole models** (as year 1 with larger numbers) **Counting Back** (as year 1 but with larger numbers) **Finding the difference** (as year 1 but with larger numbers) – snapping off the cubes to see the difference	**Subtraction by taking away ones** Using visual representations of number lines to take ones away. (as year 1 with larger numbers) **Part Whole models**(as year 1 with larger numbers) 56 – 10 =  **Counting Back (as year 1 but with larger numbers)** **Finding the difference (as year 1 but with larger numbers)**	**Subtraction by taking away ones** Children draw their own number line to cross out or calculate mentally taking away ones **Part Whole models –** children will draw their own part whole **Counting Back by drawing number lines** Children use number lines that have intervals demarked or use empty number lines.  **Finding the difference**

Subtraction written method without exchanging

Use objects such a base 10 rods or bundles of straws to show partitioning of tens and ones to subtract a 2 digit number from another 2 digit number with no regrouping involved.

Use Base 10 to make the bigger number then take the smaller number away

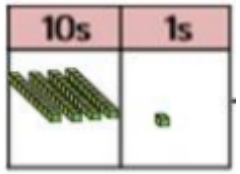


Begin with subtracting the ones first before moving to tens column

Written method with exchanges

Using base ten children make the number they are subtracting from using partitioning.

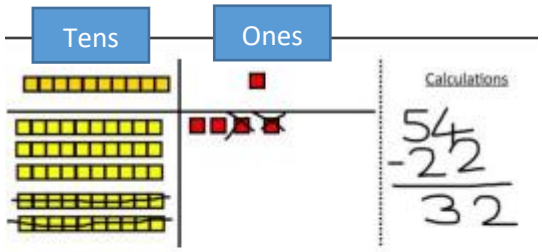
e.g 41 - 26

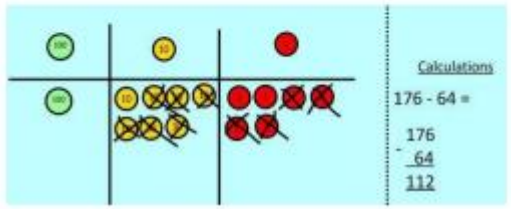


Step 2: physically exchange a ten into ten ones.

Subtraction written method without exchanging

Using pictorial representations of base 10 to cross out the number they are subtracting



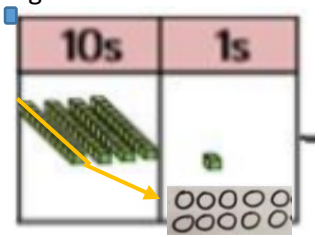


Begin with subtracting the ones first before moving to tens column.

Written method with exchanges

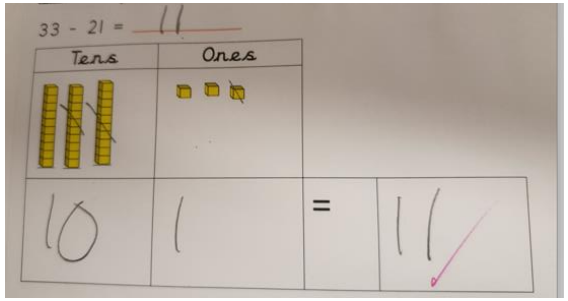
Using a visual representation of the base ten method. Children are given initial number. They are then encouraged to exchange and draw the ten represented in the ones column.

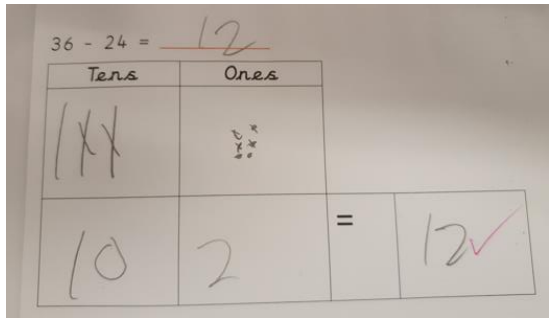
e.g. 41 - 26



Subtraction written method without exchanging

Children encouraged to draw their own tens and ones. Beginning with the ones column first before subtracting the tens column.

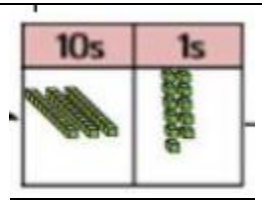
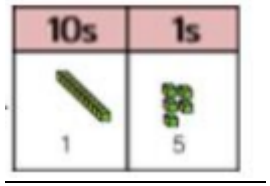
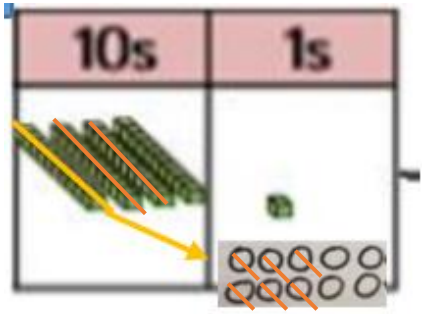
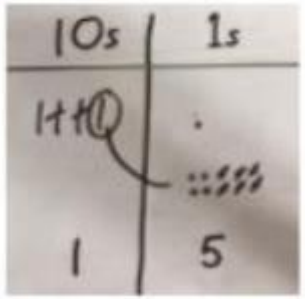
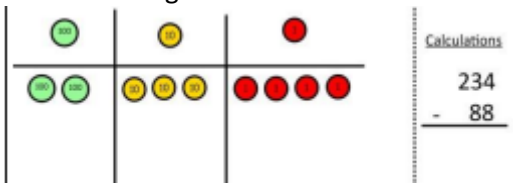
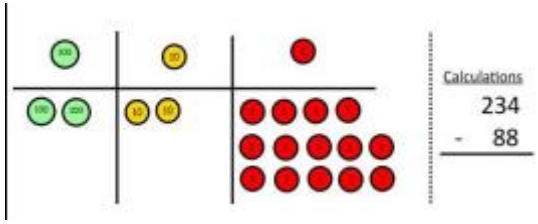
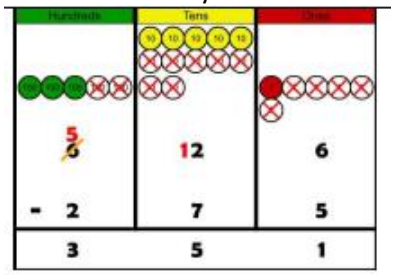


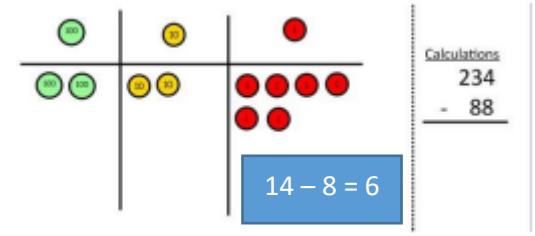


Written method with exchanges

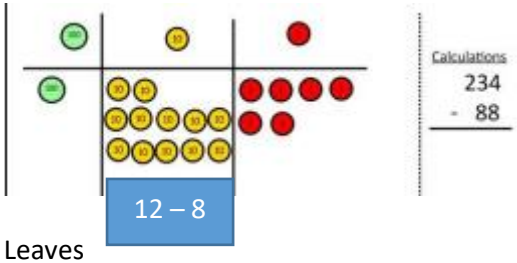
Children draw their own representations of base 10 to show method. Crossing out the tens to exchange and drawing the additional ones.

41 - 26

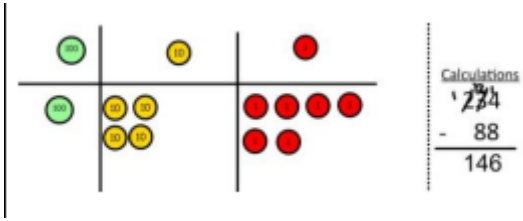
	 **Step 3: physically take away the number they are subtracting starting with the ones column.**  	Then they are able to subtract by crossing out.  Total what is left 10 + 5 = 15	
Year 3	**Subtractions written Method 2 and 3 digit numbers.** Column method using place value counters. 234-88 Use Base 10 to start with before moving on to place value counters. Make the larger number with the place value counters alongside calculation  Start with the ones, can I take away 8 from 4 easily? I need to exchange one of my tens for ten ones  Now I can subtract my ones.	**Subtraction written Method 2 and 3 digit numbers** Using visual representations of partitioning. .	**Written method 2 and 3 digit numbers** Children writing out expanded method Draw the counters onto a place value grid and show what you have taken away by crossing the counters out as well as clearly showing the exchanges you make individually.  When confident, children can find their own way to record the exchange/regrouping. Just writing the numbers as shown here shows that the child understands the method and knows when to exchange/regroup



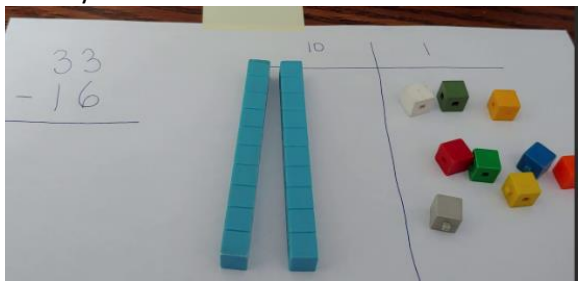
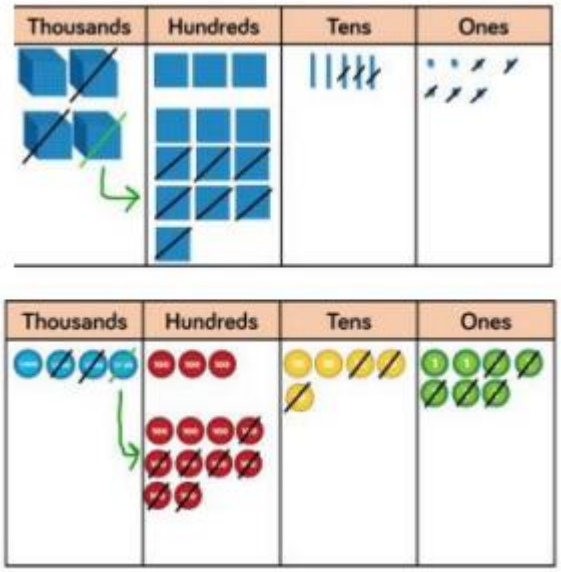
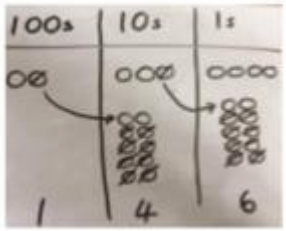
Now look at the tens, can I take away 8 tens easily? I need to exchange one hundred for ten tens.

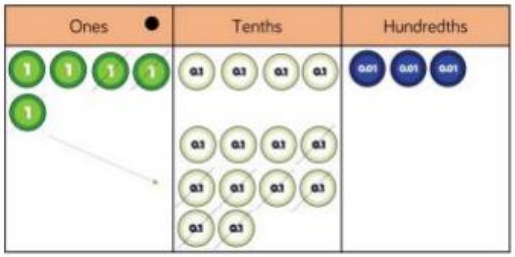
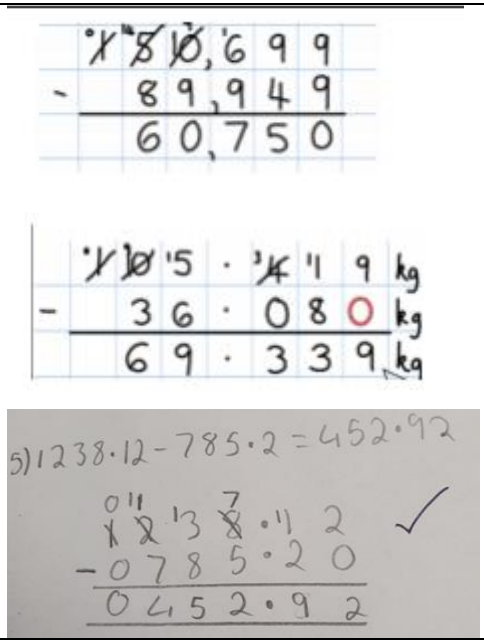


Leaves

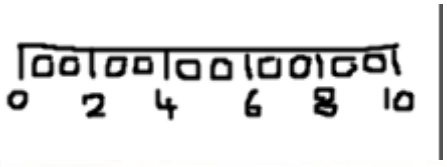
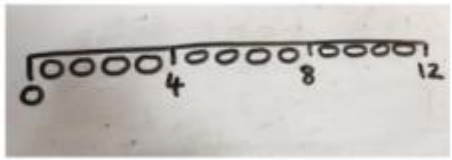


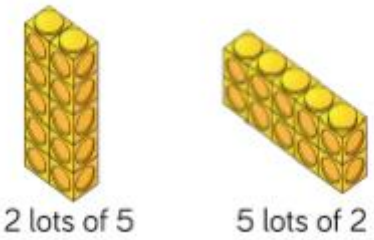
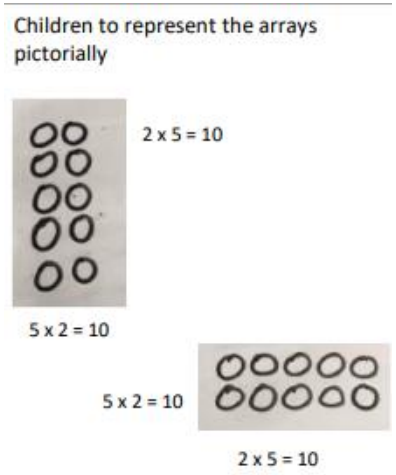
Show concrete alongside written calculation

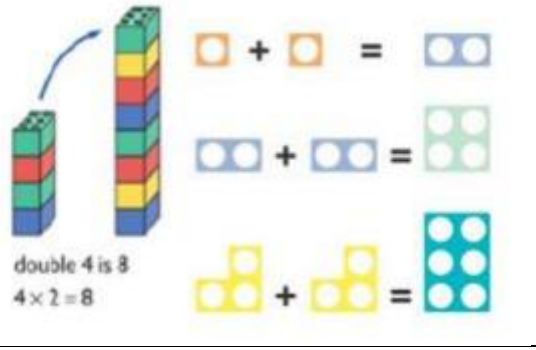
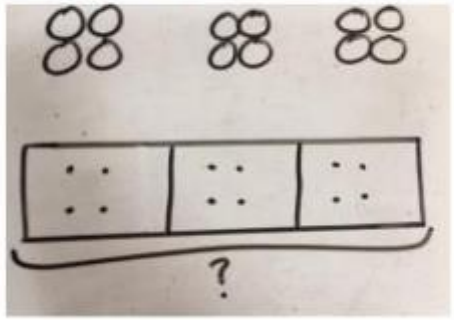
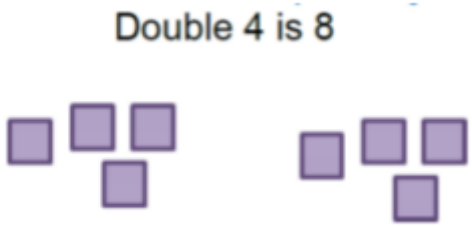
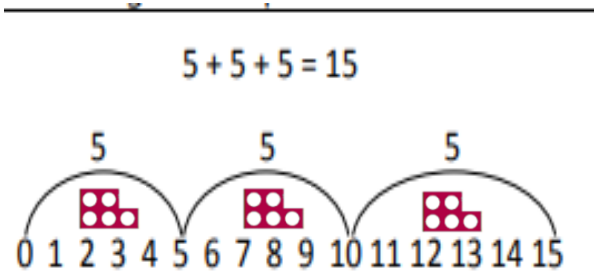
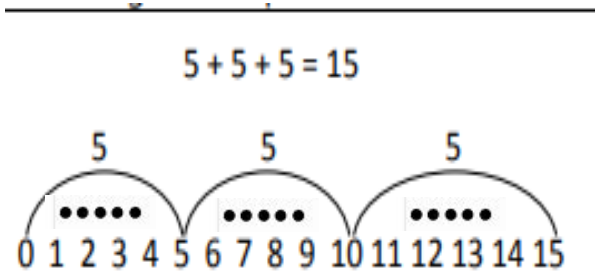
Year 4 Year 5 Year 6	**Formal Written method of Subtraction** Using base 10 and place value counters to demonstrate exchanging in whole numbers initially.  	**Formal Written method of Subtraction** Using pictorial representations for children to mark to show exchanges  Children drawing own representations  	**Formal Written method of Subtraction** Formal Method for Subtraction Formal column method. Children must understand what has happened when they have crossed out digits 3 1 ~~4~~357 − 2735 1622 Formal column method (extend understanding of 0s for place holders) ~~3~~ ~~1~~ ~~0~~ ~~8~~ 6 − 2 1 2 8 2 8, 9 2 8 Formal column method, aligning decimal point accurately 4 1 ~~5~~.43 −2.7 2.73 Extending to larger numbers and decimals with different PV places

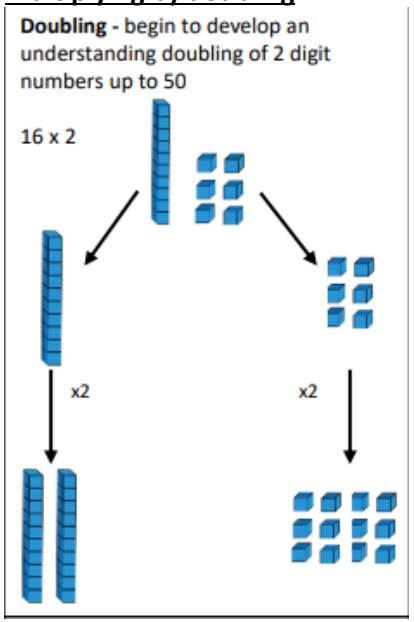
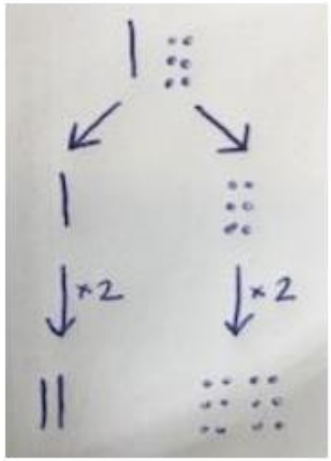
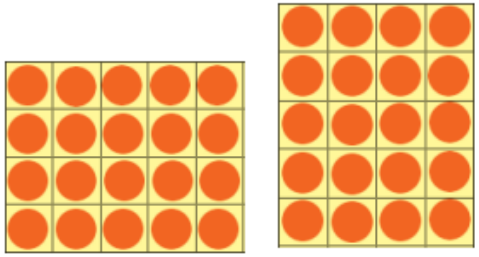
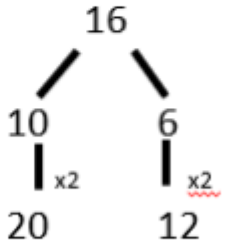
		 Ones Tenths Hundredths	

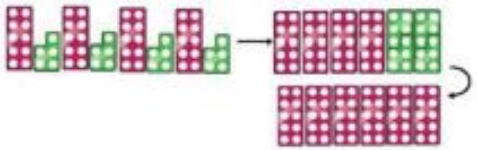
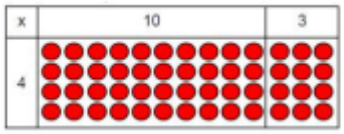
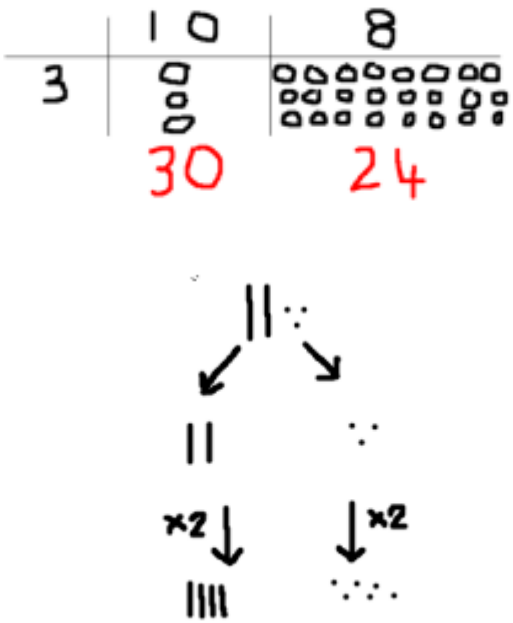
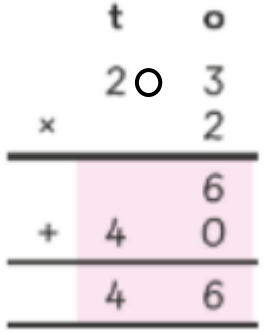
Multiplication

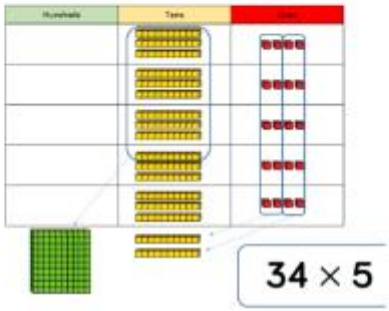
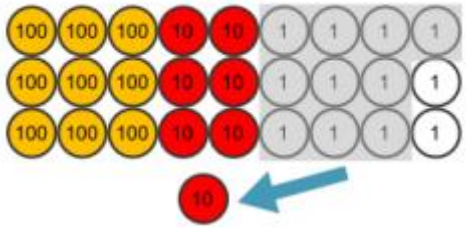
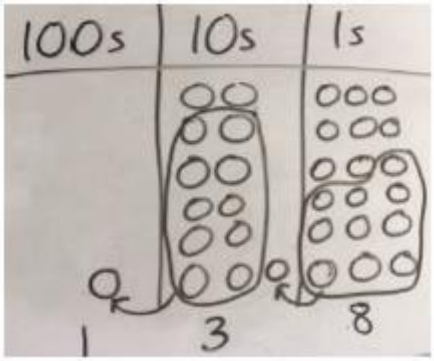
EYFS			
Year 1	**Multiplying by counting groups** Using objects to help them count in groups of a number. To see the link between multiplication and repeated addition.  	**Multiplying by counting groups** Using pictorial representations to enable children to count in multiples.     	**Multiplying by counting groups** 2 x 5 = 10 2 + 2 + 2 + 2 + 2 = 10 2 multiplied by 5 = 2 pairs 5 Or 5 jumps of 2 Abstract number line showing 5 jumps of 2 2 x 5 = 10 5 x 2 = 10 10 = 2 x 5 10 = 5 x 2 2 + 2 + 2 + 2 + 2 = 10 5 + 5 = 10

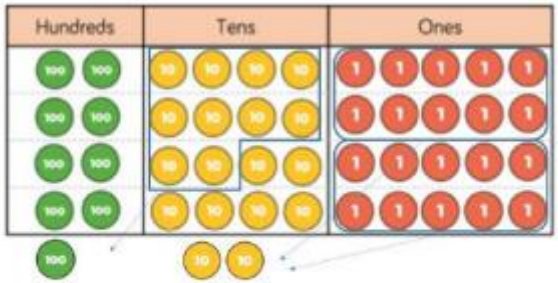
	Multiplying by using arrays Arranging objects in to group and then arrange them into arrays	**Multiplying by using arrays** $2 \times 5 = 5 \times 2$  2 lots of 5 5 lots of 2 Extending to children drawing their own arrays.  Children to represent the arrays pictorially 2 x 5 = 10 5 x 2 = 10 5 x 2 = 10 2 x 5 = 10 Linking problem into a bar model	**Multiplying by using arrays**

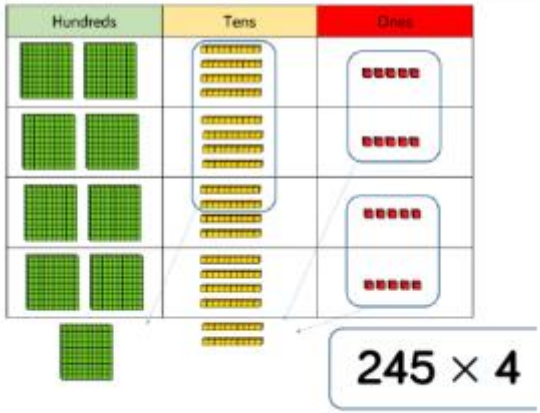
	Multiplication by doubling Using numicon and cubes to see the relationship in doubles  	Represent practical resources in a picture and use a bar model  **Multiplication by doubling** Using pictorial representations to aid calculations – leading to children drawing own representations  	**Multiplication by doubling** Double 4 = 8
Year 2	**Multiplying by Counting in groups** On a number line  	**Multiplying by Counting in groups** On a number line  	**Multiplying by Counting in groups** Children drawing own jumps on a number line with given number track in intervals.

	Multiplying by doubling  **Multiplying using arrays** **Using arrays** to demonstrate communicate law of multiplications 4 x 6 = 24  for example, 5 x 3 = 15 and 3 x 5 = 15	**Multiplying by doubling** Children **may** start to represent the materials pictorially  **Multiplying using arrays** Using Arrays in different rotations  for example, 5 x 3 = 15 and 3 x 5 = 15	**Multiplying by doubling** Begin to use jottings **towards** recording the written method  **Multiplying using arrays** Use an array to write multiplication sentences and reinforce repeated addition. 5 + 5 + 5 = 15 3 + 3 + 3 + 3 + 3 = 15 5 x 3 = 15 3 x 5 = 15

Year 3	**<u>To multiply using partitioning</u>** Using base ten or place value counters to represent numbers in a grid Partition numbers first. **Partition to multiply** using Numicon, base 10 or Cuisenaire rods 4 × 15  Formal Method Begin with place value coins 4 x 13  4 rows of 10 4 rows of 3 Extend to base ten **Being to use expanded column method (long multiplication)** using place value counters or base 10 23x2 	**<u>To multiply using partitioning</u>**  	**<u>To multiply using partitioning</u>** Use a partitioned expanded method. 

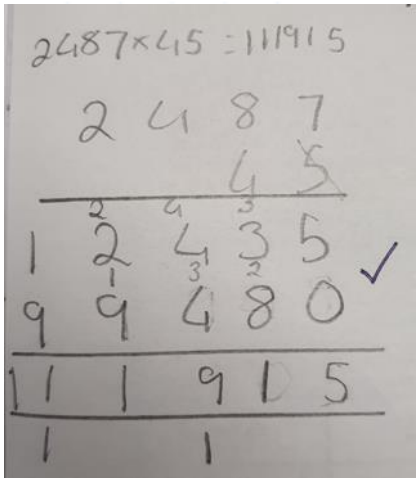
Year 4 **Year 5** **Year 6**	**Formal Method for Multiplication** In Year 4 children are introduced to the formal method for multiplication. Using black templates, children physically use place value coins or base 10 to manipulate Children use place value counters and Base 10 to multiply practically   	**Formal Method for Multiplication** **Using Pictorial representations of the formal method.** 3 x 324  Children can draw their own representations  	**Formal Method for Multiplication** Children use an expanded method at the start of year 4 – and when secure in understand begin the more compact method For 38 x 7 38 X 7 56 8 x 7 210 30 x 7 266 **Extend to a more compact method.** For 38 x 7 38 X 7 266 5 **Long Multiplication** For Long Multiplication – begin with expanded and extend to compact. For 56 x 27 56 x 27 392 56 x 7 1120 56 x 20 1512 1



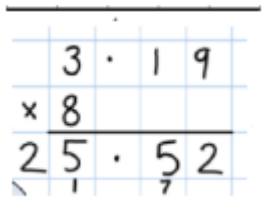


multiplying the ones first

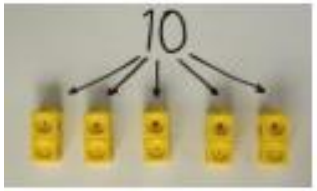
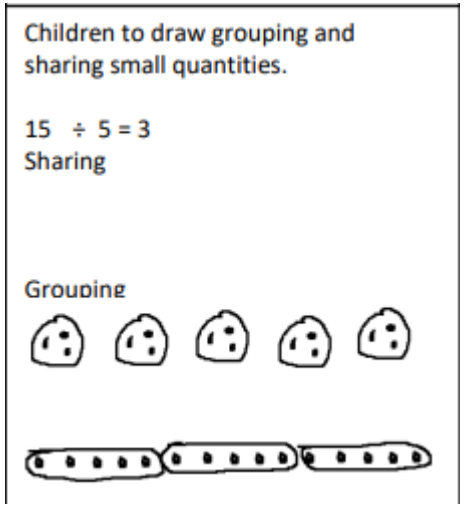
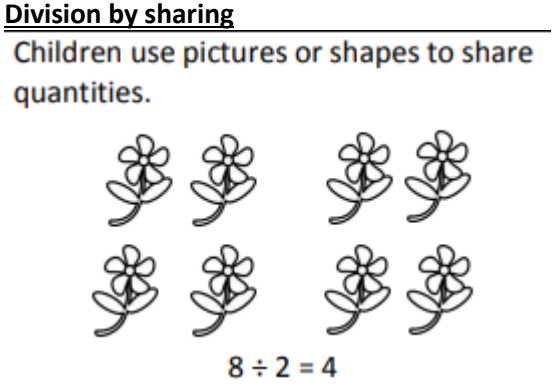
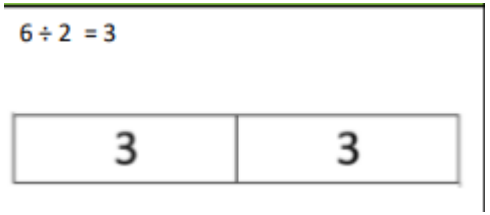
TTh	Th	H	T	O
	2	7	3	9
×			2	8
2	1	9	1	2
5	4	7	8	0
7	6	6	9	2

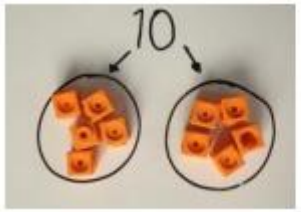


Year 6 – use compact method to multiply decimals.



Division

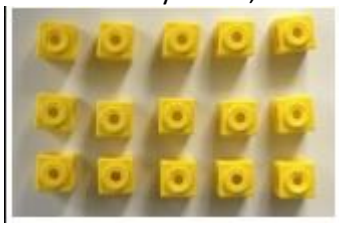
	Concrete	Pictorial	Abstract
EYFS			
Year 1	**Dividing by grouping** Using objects, physically sharing them into equal groups Use cubes, counters, objects or place value counters to aid understanding.     using numicon to see how many groups of 2 make 6 – leading to understanding of arrays **Division by sharing** Using cubes, coins, counters etc to share the amount equally.	**Dividing by grouping**  **Division by sharing**  	**Dividing by grouping** Children should also be encouraged to use their 2 times table facts.  There are 3 groups of 2 in 6 Count in multiples of twos, fives and tens to identify how many groups. **Division by sharing** Using knowledge of times tables.



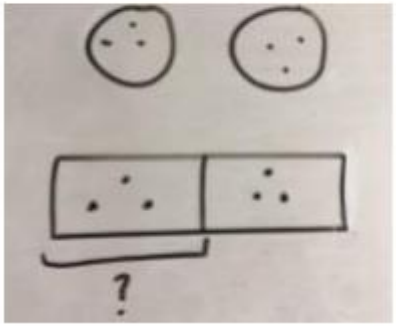
I have 10 cubes, can you share them equally in 2 groups?

Division using arrays

Children array cubes, counts into rows to create arrays

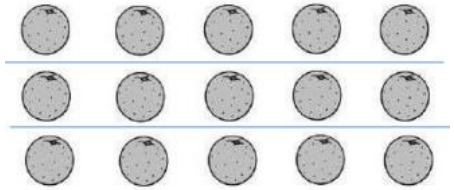


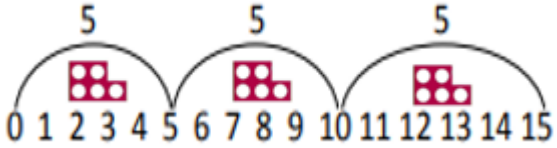
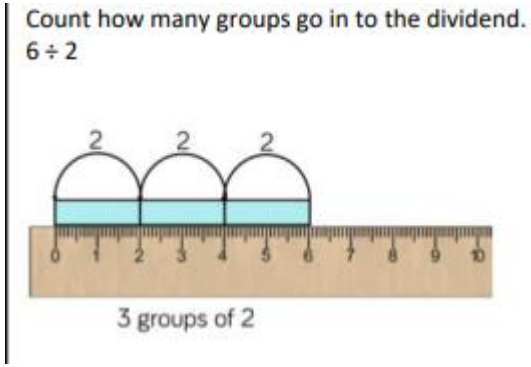
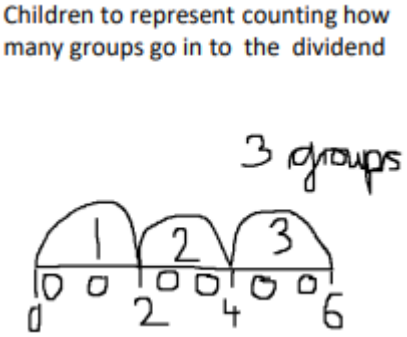
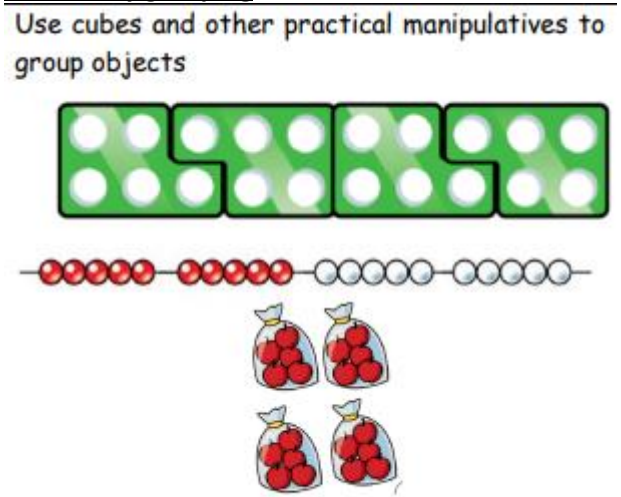
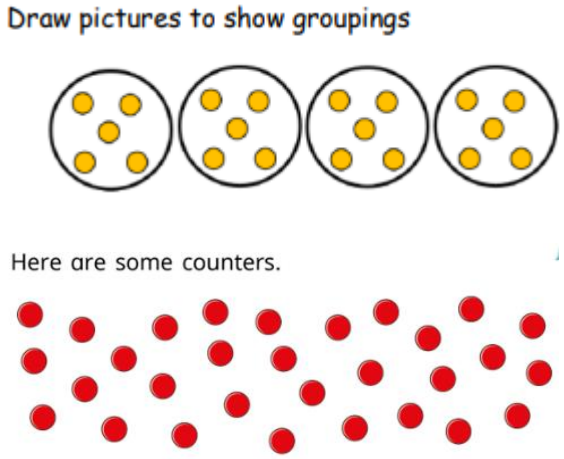
Represent the sharing pictorially.

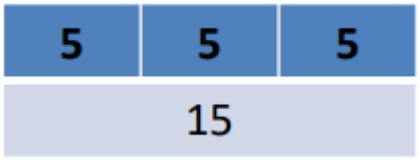


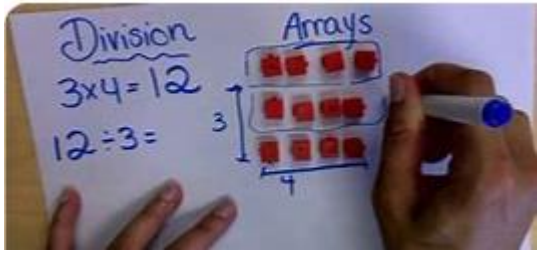
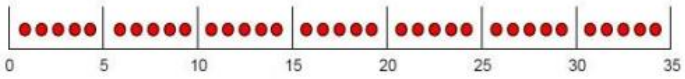
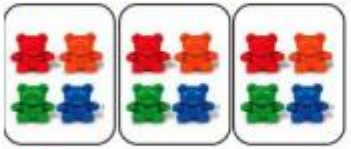
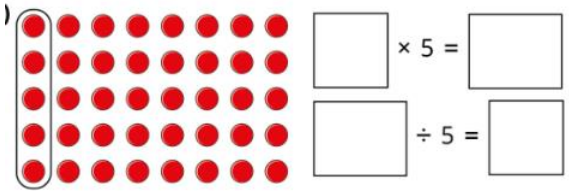
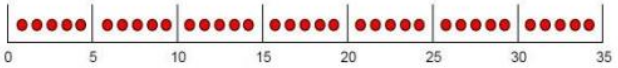
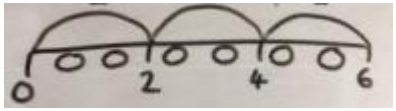
Division by using arrays

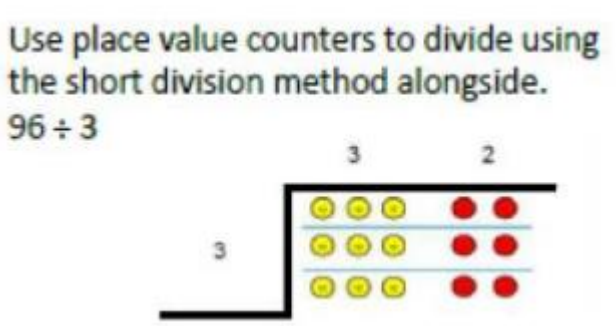
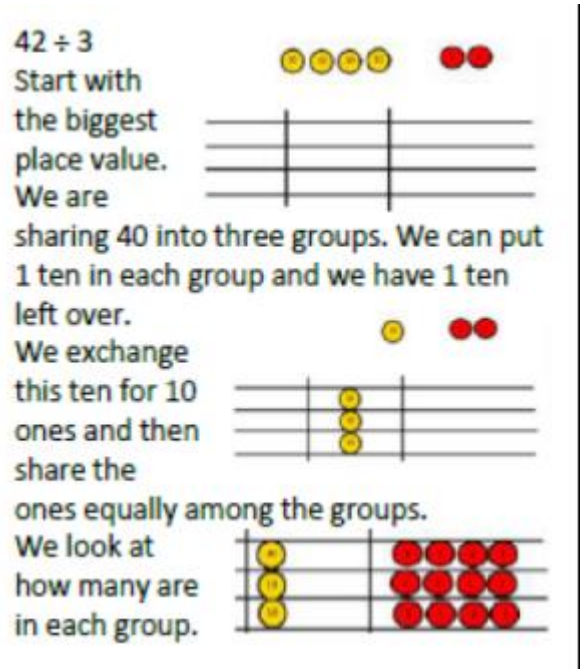
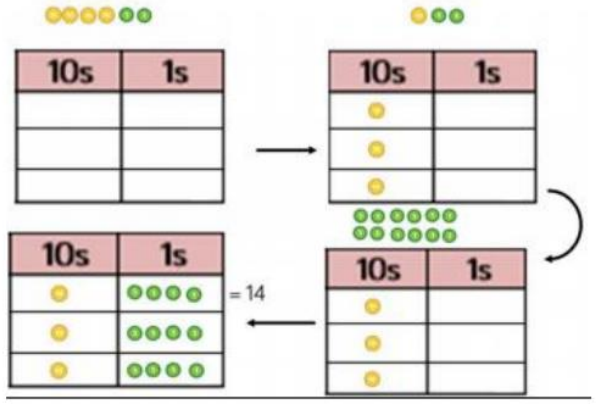
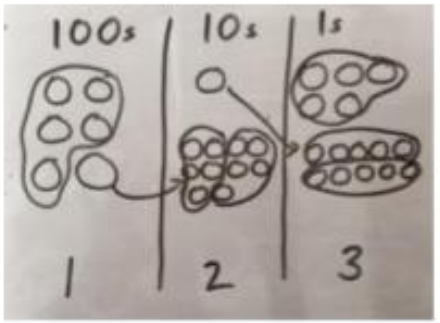
Using pictures of arrays /numicon for children to identify groups.

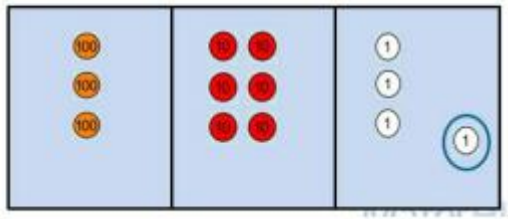
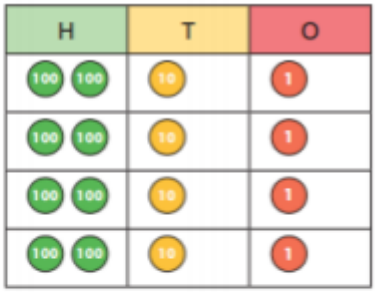
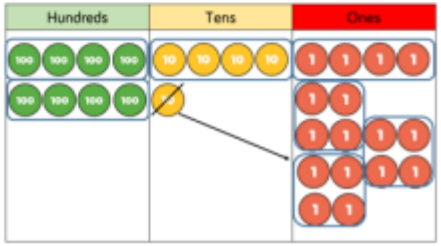
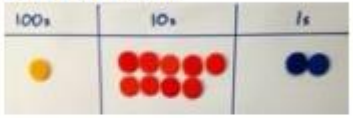
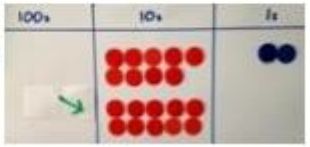


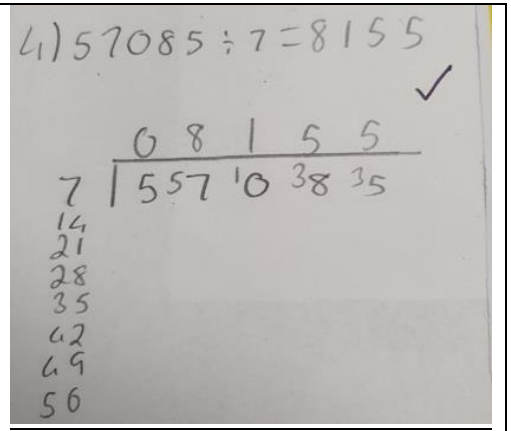
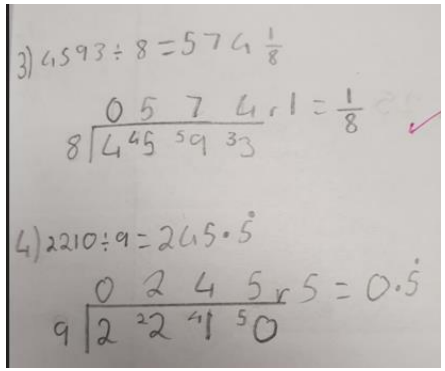
	Division using Number lines Using a number line to jump  6 ÷ 2 = 3 I can get 3 groups of 2 from 6 15 ÷ 5 = 3 	**Division using Number lines** **Using pictorial representations, children use number lines to divide** 	**Division using Number lines** 
Year 2	**Division by grouping** 	**Division by grouping** Children use pictorial representations of groupings or to group numbers themselves 	**Division by grouping** Use knowledge of times tables 20 ÷ 5 = 4 (children are introduced to the division symbol in Year 2)

	Using Bar models to divide Use of cubes to illustrate the whole- and parts of division.  **Division using arrays** Children link division to multiplication by making arrays practically and creating number sentences 15 ÷ 5 = 3 15 ÷ 3 = 5 3 x 5 = 15 5 x 3 = 15 	**Using Bar models to divide** Representing grouping on bar models   10 ÷ 5 = ? 5 x ? = 10 **Division using arrays** Children use pictorial representations of arrays to help them solve division problems and write 4 number facts from it..  4 x 5 = 20 5 x 4 = 20 20 ÷ 5 = 4 20 ÷ 4 = 5	**Using Bar models to divide** Children draw their own bar models to help them calculate division problems **Division using arrays** Children drawing own arrays to solve problems.

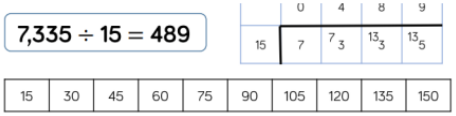
	 **Division Using Numberlines** Using number lines – Children physically put counters / cubes inside number line where not all increments shown.  **Dividing with remainders** Divide practical objects into groups and see how many are left over ('remainders'). Cubes, lollipop sticks etc can be used  14 ÷ 4 = 3 r 2 	 **Division Using Numberlines** Using pictorial representations of number lines to show groupings.  **Dividing with remainders** Children draw pictures to show remainders when dividing  14 ÷ 3 = 4 r 2	**Division Using Numberlines** Children solve problems by drawing number lines  **Dividing with remainders** Children understand that not all numbers divide perfectly (links to times tables) 12 ÷ 3 = 4 (no remainder) 13 ÷ 3 = 4 r 1

Year 3	**Written Method for Division**  Children begin with no remainders. Extend to physically moving the counters and exchanging  Using place value coins or base ten to show remainders	**Written Method for Division** Children given pictorial representations of place value counters to aid division by annotating 	**Written Method for Division** Represent the place value counters pictorially. 

	364 ÷ 3 = 1 2 1 rem 1 3 | 3 6 4 		
Year 4 Year 5 Year 6	**Formal written method for division** Children continue to use Base 10 and place value counters to share 3-digit numbers into equal groups. Start with the equipment outside the place value grid before sharing the hundreds, tens and ones equally between the rows. Exchange can also be used 844 ÷ 4 = 211 *sharing*  856 ÷ 4 = 214 *grouping*  	**Formal written method for division** 192 ÷ 6 using place value counters to support written method  Exchange one 100 for ten 10s  19 tens into groups of 6  3 groups so that is 30 x 6, exchange remaining 10 for ten 1s  	**Formal written method for division** Children use the bus stop method (with and without exchange) writing a help box of multiples for them to refer to when needed. Begin with divisions that divide equally with no remainder. 2 1 8 3 4 | 8 7 2 Move onto divisions with a remainder. Once children understand remainders, begin to express as a fraction or decimal according to the context. 8 6 r 2 3 5 | 4 3 2 1 8 6 1/5 5 | 9 ³3 ¹1

			  **<u>Year 6</u>** Division by a two-digit number using bus stop method. Writing out a help box of multiples to support.

12 × 1 = 12
12 × 2 = 24
12 × 3 = 36
12 × 4 = 48
12 × 5 = 60
12 × 6 = 72
12 × 7 = 84
12 × 8 = 96
12 × 7 = 108
12 × 10 = 120



Remainders given as fractions and decimals.