Woolhampton Primary School Progression in Calculations

National Curriculum Calculation Requirements for Addition and Subtraction

Year 1

- read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including 0

Year 2

- solve addition problems using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including:

✓ a two-digit number and 1s
✓ a two-digit number and 10s
✓ 2 two-digit numbers
✓ adding 3 one-digit numbers

- show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot
- recognise and use the inverse relationship between addition and subtraction

NO REQUIREMENT TO INTRODUCE FORMAL COLUMN ADDITION.
Focus on Expanded & pictorial models

Year 3

- add and subtract numbers mentally, including:
- ✓ a three-digit number and 1s
- ✓ a three-digit number and 10s
- ✓ a three-digit number and 100s
- add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers
- solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

Pupils practise solving varied addition and subtraction questions. For mental calculations with two-digit numbers, the answers could exceed 100.

Year 4

- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- estimate and use inverse operations to check answers to a calculation
- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

Pupils continue to practise both mental methods and columnar addition and subtraction with increasingly large numbers to aid fluency

Year 5

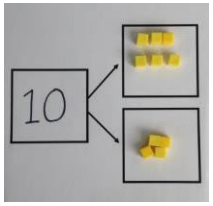
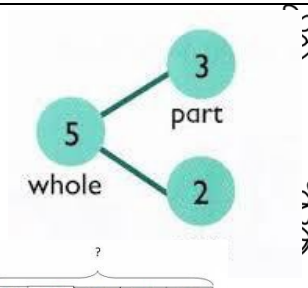
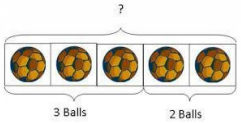
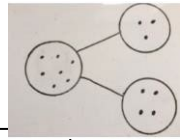
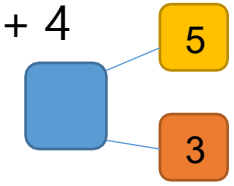
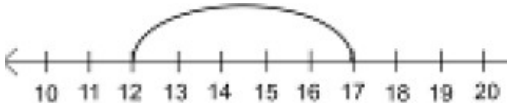
- add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- add and subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

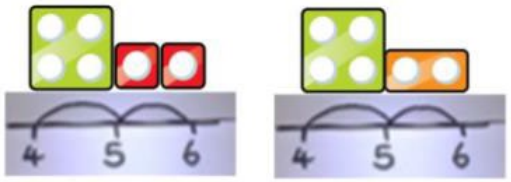
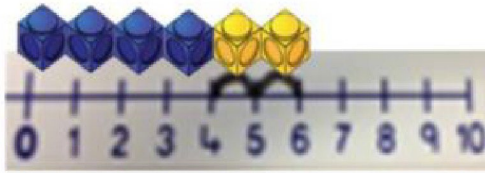
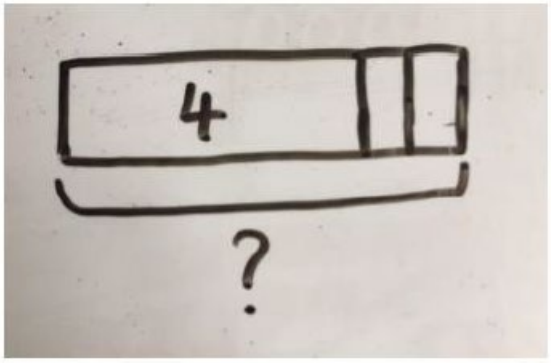
They practise mental calculations with increasingly large numbers to aid fluency (for example, 12,462 – 2,300 = 10,162).

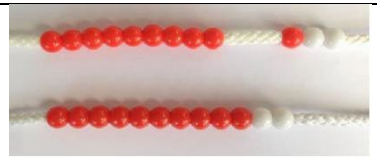
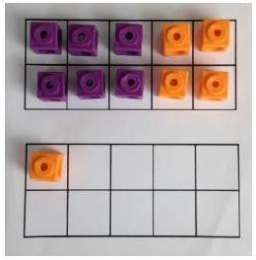
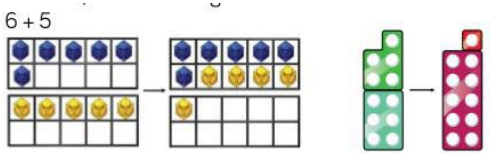
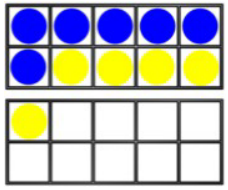
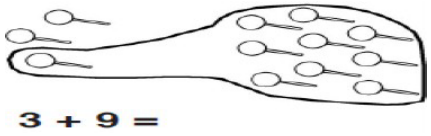
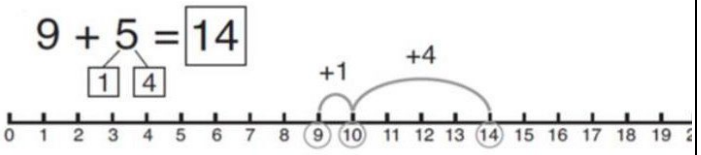
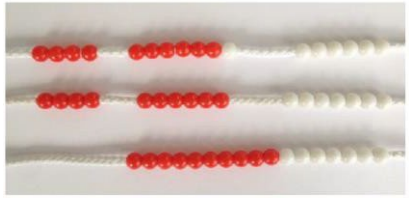
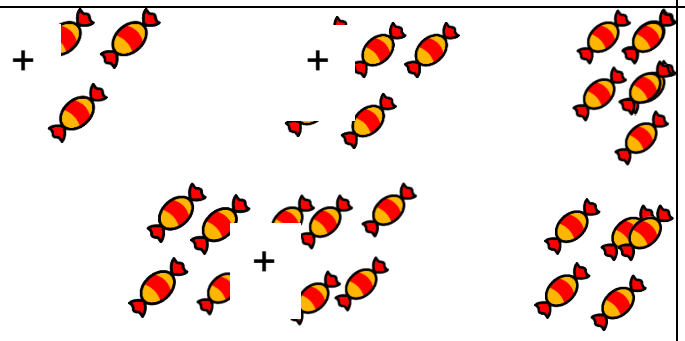
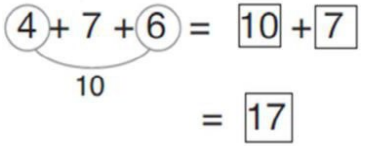
Year 6

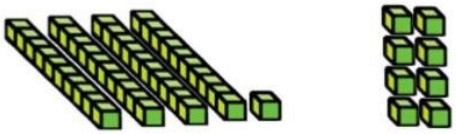
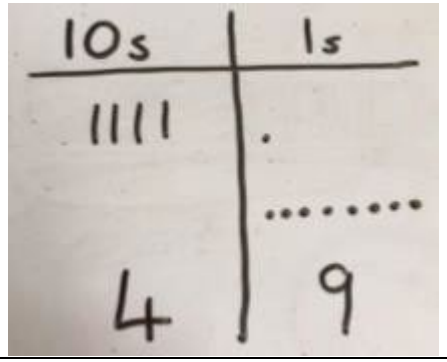
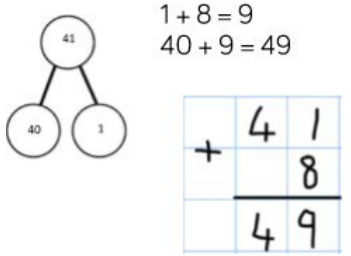
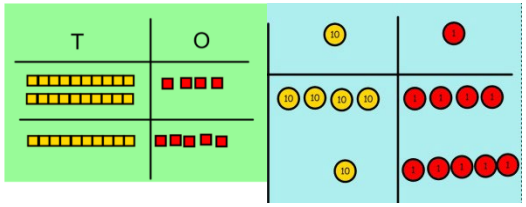
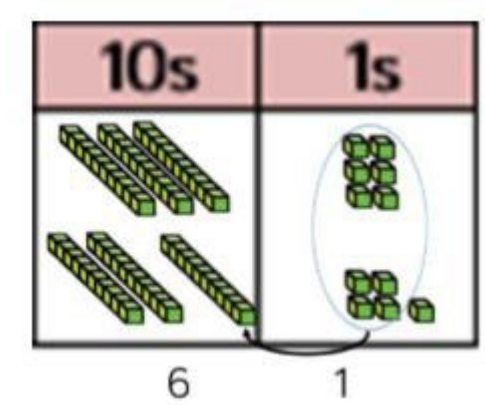
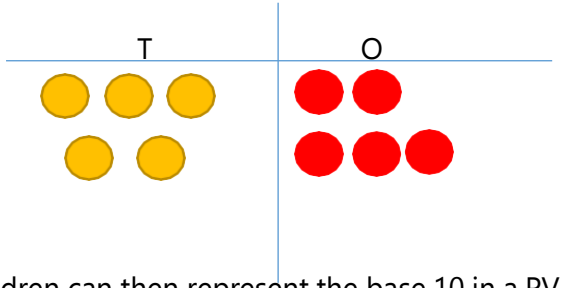
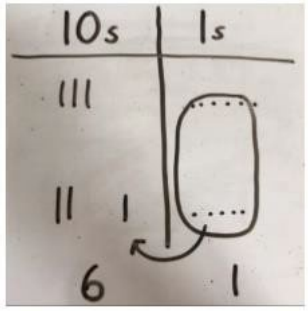
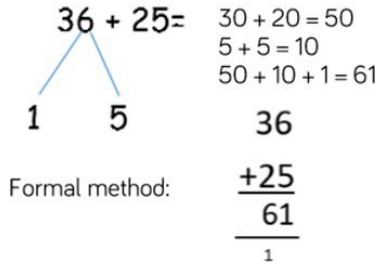
- perform mental calculations, including with mixed operations and large numbers
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

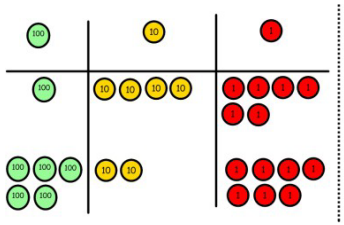
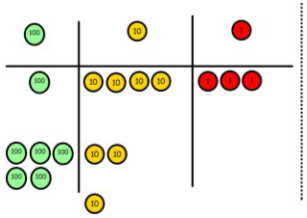
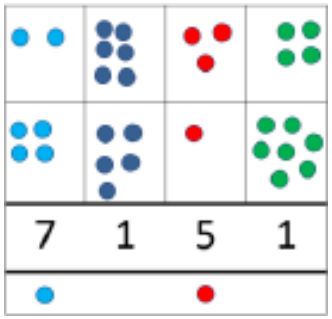
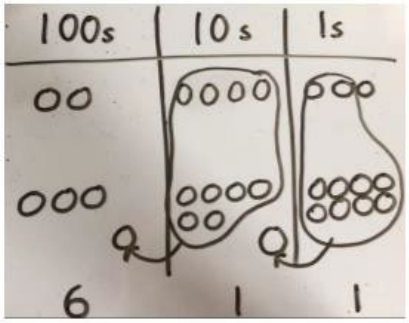
Addition

Objectives / small steps	Concrete	Pictorial	Abstract
Combining two parts to make a whole: part- whole model	   Use cubes to add two numbers together as a group or in a bar. 	   Use pictures to add two numbers together as a group or in a bar. 	4 + 3 = 7 10= 6 + 4  Use the part-part whole diagram as shown above to move into the abstract.
Starting at the bigger number and counting on	 Start with the larger number on the bead string and then count on to the smaller number 1 by 1 to find the answer.	**12 + 5 = 17**  Start at the larger number on the number line and count on in ones or in one jump to find the answer.	12 + 5 = 17 Place the larger number in your head and count on the smaller number to find your answer.

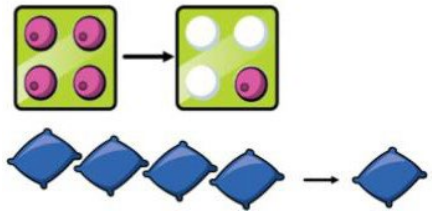
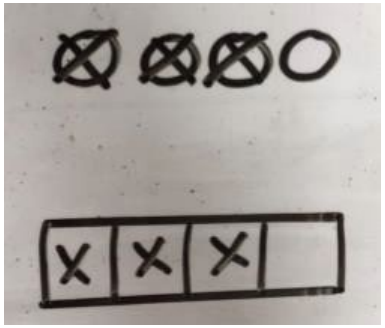
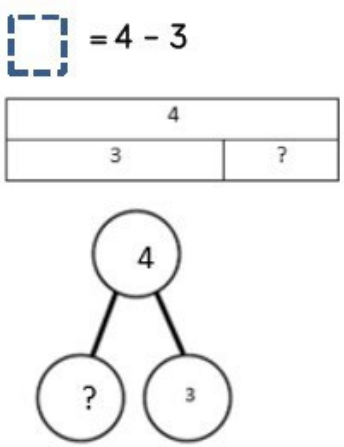
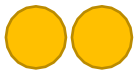
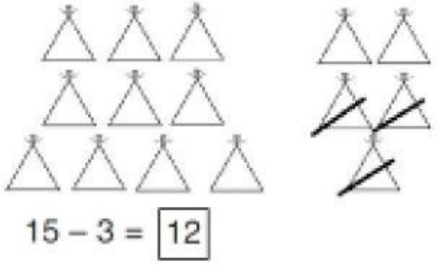
	 	 The bar model to encourage children to count on rather than count all.	 The abstract number line: What is 2 more than 4? What is the sum of 2 and 4? What is the total of 4 and 2? 4 + 2

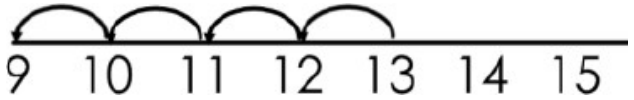
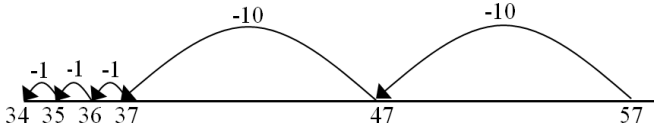
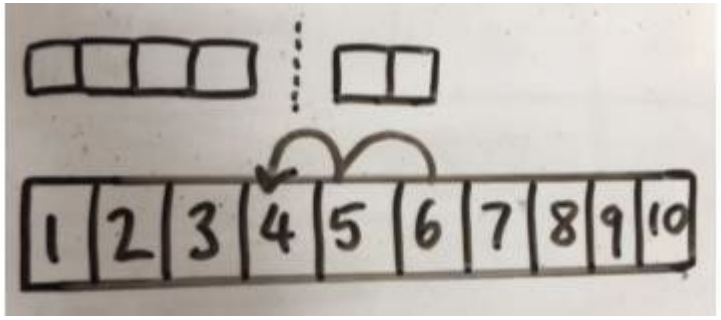
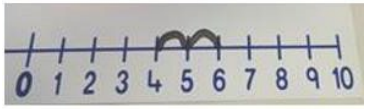
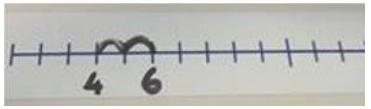
Regrouping to make 10.	 6 + 5 = 11  Start with the bigger number and use the smaller number to make 10. 	Use pictures, tens frame or a number line. Regroup or partition the smaller number to make 10.   	7 + 4= 11 If I am at seven, how many more do I need to make 10. How many more do I add on now? Children to develop an understandir of equality e.g. $6 + \square = 11$ $6 + 5 = 5 + \square$ $6 + 5 = \square + 4$
Adding three single digits	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.	 Add together three groups of objects. Draw a picture to recombine the groups to make 10.	 Combine the two numbers that make 10 and then add on the remainder.

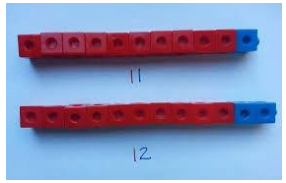
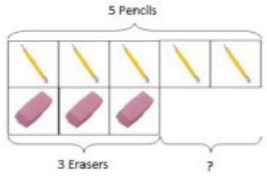
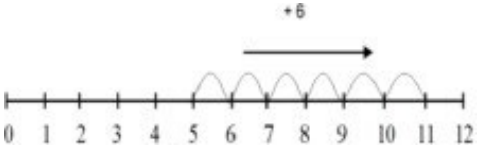
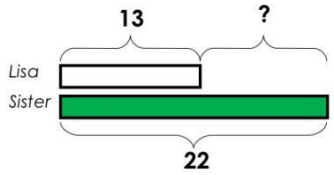
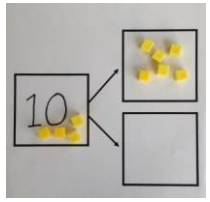
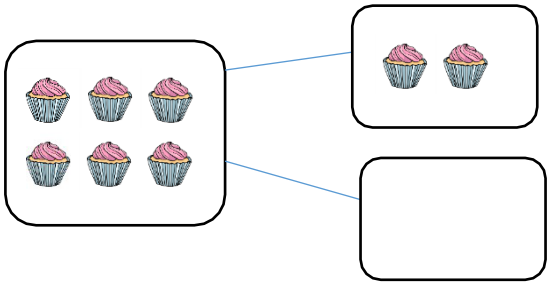
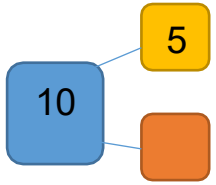
TO + O using base 10	Continue to develop understanding of partitioning and place value. **41 + 8** 	Chidlren to represent the base 10 in a place value chart. 	**41 + 8** 
Column method- no regrouping	24 + 15= Add together the ones first then add the tens. Use the Base 10 blocks first before moving onto place value counters.  **36 + 25** 	After practically using the base 10 blocks and place value counters, children can draw the counters to help them to solve additions.  Children can then represent the base 10 in a PV Chart 	EXPANDED method before FORMAL COLUMN method. **21 + 42** **20 + 1** **40 + 2** **60 + 3 = 63** Calculations 21 + 42 = 21 + 42 Looking for ways to make 10. 

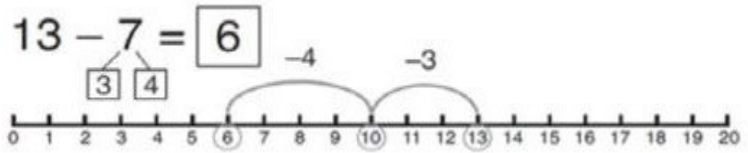
Column method- regrouping	Make both numbers on a place value grid.  146 + 527 Add up the units and exchange 10 ones for one 10.  146 + 527 Add up the rest of the columns, exchanging the 10 counters from one column for the next place value column until every column has been added. This can also be done with Base 10 to help children clearly see that 10 ones equal 1 ten and 10 tens equal 100. As children move on to decimals, money and decimal place value counters can be used to support learning.	Children can draw a pictoral representation of the columns and place value counters to further support their learning and understanding.  Chidren to represent the counters in a place value chart, circling when they make an exchange.  	<u>EXPANDED method before moving to FORMAL method</u> Start by partitioning the numbers before moving on to clearly show the exchange below the addition. 20 + 5 <u>40 + 8</u> 60 + 13 = 73 536 <u>+ 85</u> <u>621</u> 1 1 As the children move on, introduce decimals with the same number of decimal places and different. Money can be used here. 72.8 <u>+ 54.6</u> <u>127.4</u> 1 1 £ 2 3 . 5 9 + £ 7 . 5 5 £ 3 1 . 1 4 1 1 1

Subtraction

Objective and Strategies	Concrete	Pictorial	Abstract
Taking away and removing from a whole	Physically taking away and removing objects from a whole (ten frames, Numicon, cubes and other items such as beanbags could be used). **4 – 3 = 1** 	Children to draw the concrete resources they are using and cross out the correct amount. The bar model can also be used. 	4- 3 = 
Taking away ones	Use physical objects, counters, cubes etc to show how objects can be taken away.  6 – 2 = 4   	Cross out drawn objects to show what has been taken away. 	18 -3= 15 8 – 2 = 6

Counting back	Make the larger number in your subtraction. Move the beads along your bead string as you count  backwards in ones. 13 – 4 Use counters and move them away from the group as you take them away counting backwards as you go. 	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.  This can progress all the way to counting back using two 2 digit numbers. 	Put 13 in your head, count back 4. What number are you at? Use your fingers to help. Children to represent the calculation on a number line or number track and show their jumps. Encourage children to use an **empty number line.**  

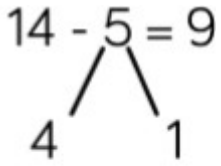
Find the difference	Compare amounts and objects to find the difference.  Use cubes to build towers or make bars to find the difference  Use basic bar models with items to find the difference	 Count on to find the difference. Draw bars to find the difference between 2 numbers. **Comparison Bar Models** *Lisa is 13 years old. Her sister is 22 years old. Find the difference in age between them.*  	Hannah has 23 sandwiches, Helen has 15 sandwiches. Find the difference between the number of sandwiches. Find the difference between 8 and 5. 8 – 5, the difference is ___ Children to explore why 9 - 6 = 8 – 5 = 7 – 4 have the same difference.
Part 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? 10 - 6 =	Use a pictorial representation of objects to show the part part whole model. 	 Move to using numbers within the part whole model.

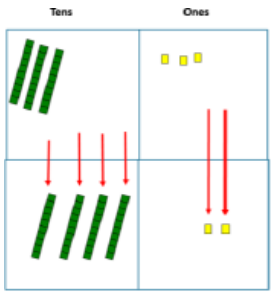
<table>
<tr>
<td>Make 10</td>
<td>14 – 9 =
 
Make 14 on the ten frame. Take away the four first to make 10 and then takeaway one more so you have taken away 5. You are left with the answer of 9.</td>
<td> 

Start at 13. Take away 3 to reach 10. Then take away the remaining 4 so you have taken away 7 altogether. You have reached your answer.</td>
<td>16 – 8=

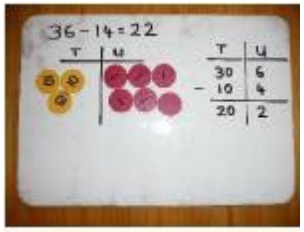
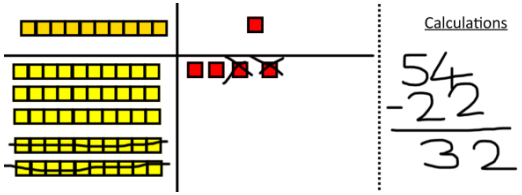
How many do we take off to reach the next 10?

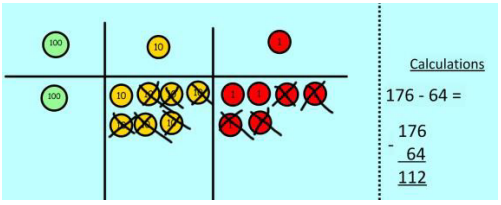
How many do we have left to take off?

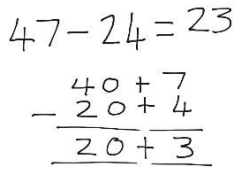
 

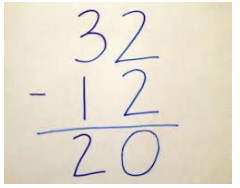
14 – 4 = 10
10 – 1 = 9</td>
</tr>
<tr>
<td>Column method without regrouping</td>
<td> 

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

Show how you partition numbers to subtract. Again make the larger number first.
 
</td>
<td> 

Draw the Base 10 or place value counters alongside the written calculation to help to show working.</td>
<td> 

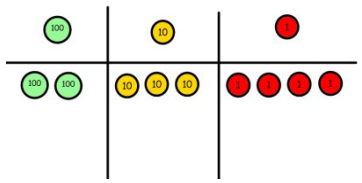
Expanded Method before Column Method
This will lead to a clear
 

written column subtraction.</td>
</tr>
</table>

Column method with regrouping

Use Base 10 to start with before moving on to place value counters. Start with one exchange before moving onto subtractions with 2 exchanges.

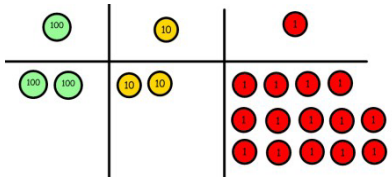
Make the larger number with the place value counters



Calculations

234
- 88

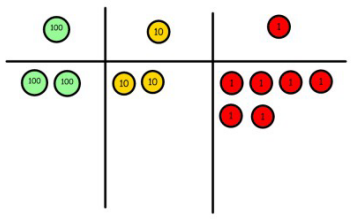
Start with the ones, can I take away 8 from 4 easily? I need to exchange one of my tens for ten ones.



Calculations

234
- 88

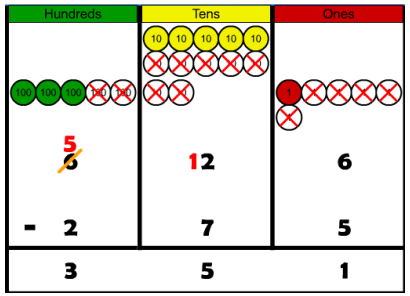
Now I can subtract my ones.



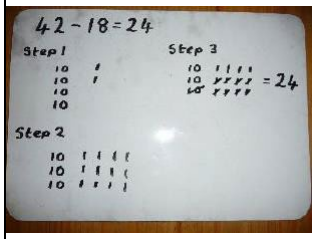
Calculations

234
- 88

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

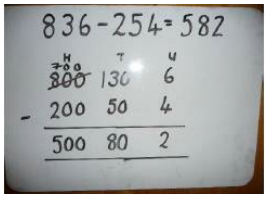


Draw the counters onto a place value grid and show what you have taken away by crossing the counters out as well as clearly showing the exchanges you make.

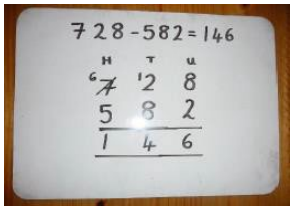


When confident, children can find their own way to record the exchange/regrouping.

Just writing the numbers as shown here shows that the child understands the method and knows when to exchange/regroup.



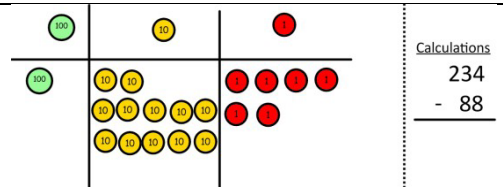
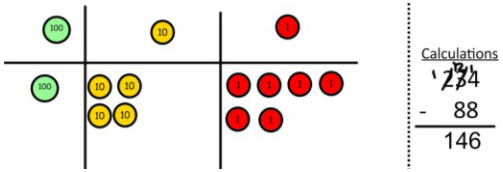
Children can start their formal written method by partitioning the number into clear place value columns.



Moving forward the children use a more compact method.

This will lead to an understanding of subtracting any number including decimals.

$$\begin{array}{r} \ 5\ \ 12\ \ \ 1 \\ 2\ \cancel{6}\ \cancel{3}\ .\ \mathbf{0} \\ -\ \ \ 2\ \ 6\ .\ \ 5 \\ \hline 2\ \ 3\ \ 6\ .\ \ 5 \end{array}$$

	 Now I can take away eight tens and complete my subtraction  Show children how the concrete method links to the written method alongside your working. Cross out the numbers when exchanging and show where we write our new amount.		

National Curriculum Calculation Requirements for Multiplication and Division

Year 1

- Through grouping and sharing small quantities, pupils begin to understand:
  - ✓ multiplication and division;
  - ✓ doubling numbers and quantities;
  - ✓ finding simple fractions of objects, numbers and quantities.

- They make connections between arrays, number patterns, and counting in 2s, 5s and 10s

Year 2

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- calculate multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
- show that multiplication of 2 numbers can be done in any order (**commutative**) and division of 1 number by another cannot
- solve problems involving:
  - ✓ multiplication and division,
  - ✓ using materials, arrays, repeated addition,
  - ✓ mental methods, and multiplication and division facts, including problems in contexts

Year 3

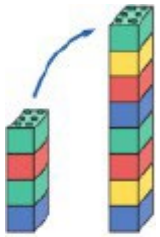
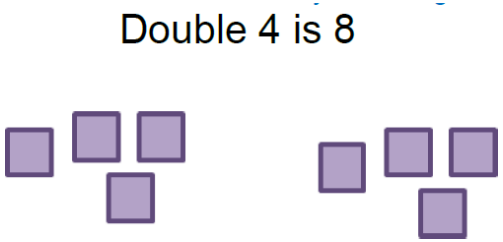
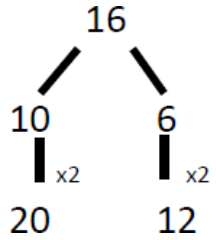
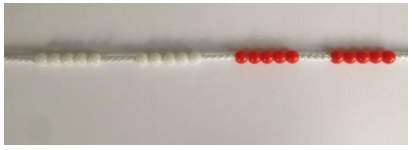
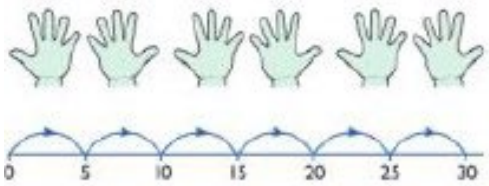
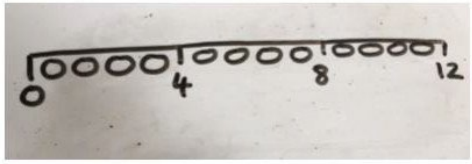
- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and **progressing to formal written methods**
- solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which **n** objects are connected to **m** objects

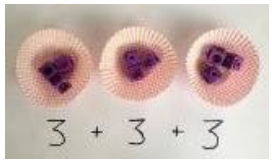
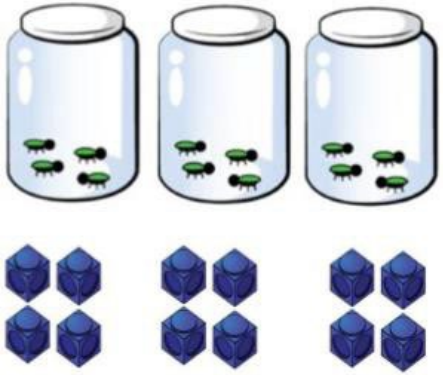
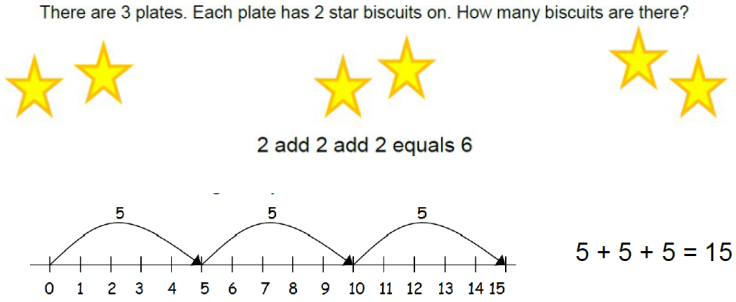
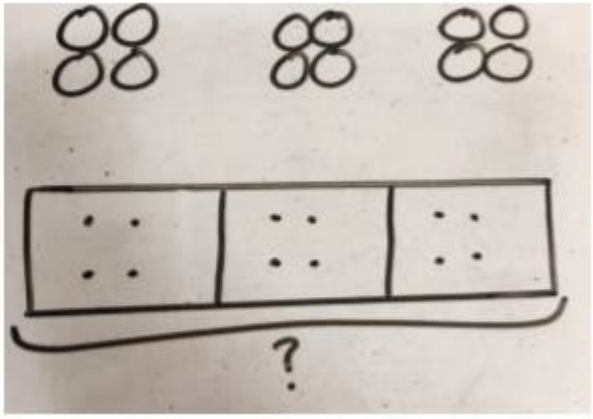
Year 4

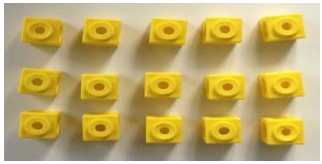
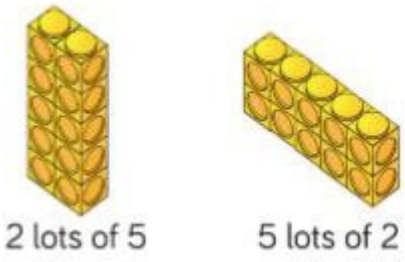
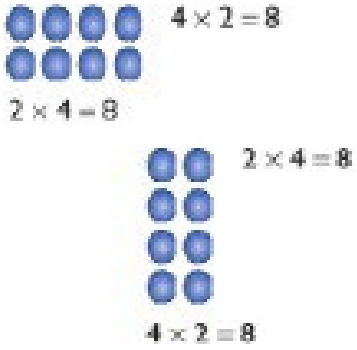
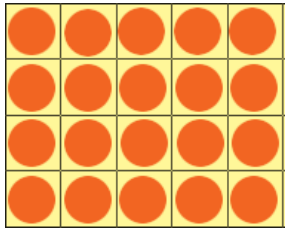
- recall multiplication and division facts for multiplication tables up to 12 × 12
- use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers
- recognise and use factor pairs and commutativity in mental calculations
- multiply two-digit and three-digit numbers by a one-digit number using **formal written layout**
- solve problems involving multiplying and adding, including using the **distributive law** to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects

Pupils develop efficient mental methods, for example, using commutativity and associativity (for example, 4 × 12 × 5 = 4 × 5 × 12 = 20 × 12 = 240) and multiplication and division facts (for example, using 3 × 2 = 6, 6 ÷ 3 = 2 and 2 = 6 ÷ 3) to derive related facts (30 × 2 = 60, 60 ÷ 3 = 20 and 20 = 60 ÷ 3).	Pupils practise mental methods and extend this to 3-digit numbers to derive facts, (for example 600 ÷ 3 = 200 can be derived from 2 x 3 = 6). Pupils write statements about the equality of expressions (for example, use the distributive law 39 × 7 = 30 × 7 + 9 × 7 and associative law (2 ×3) × 4 = 2 × (3 × 4)). They combine their knowledge of number facts and rules of arithmetic to solve mental and written calculations for example, 2 x 6 x 5 = 10 x 6 = 60.
Year 5 • multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • multiply and divide numbers mentally, drawing upon known facts • divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 • solve problems involving multiplication and division	**Year 6** • multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context • perform mental calculations, including with mixed operations and large numbers

Multiplication

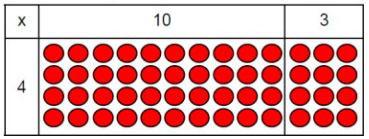
Objective and Strategies	Concrete	Pictorial	Abstract
Doubling	Use practical activities to show how to double a number.  double 4 is 8 4 × 2 = 8	Draw pictures to show how to double a number.  	 Partition a number and then double each part before recombining it back together.
Counting in multiples	  Count in multiples supported by concrete objects in equal groups. 	 Use a number line or pictures to continue support in counting in multiples.  	Count in multiples of a number aloud. Write sequences with multiples of numbers. 2, 4, 6, 8, 10 5, 10, 15, 20, 25 , 30 Abstract number line showing three jumps of four. 3 × 4 = 12 

Repeated addition	  Use different objects to add equal groups.  Repeated grouping/repeated addition 3 × 4 4 + 4 + 4 There are 3 equal groups, with 4 in each group. 	 Children to represent the practical resources in a picture and use a bar model.  	Write addition sentences to describe objects and pictures.  **3 x 4 = 12** **4 + 4 + 4 = 12**

Arrays- showing commutative multiplication	Create arrays using counters/ cubes to show multiplication sentences. Use arrays to illustrate commutativity counters and other objects can also be used. 2 × 5 = 5 × 2    	Draw arrays in different rotations to find **commutative** multiplication sentences.  Link arrays to area of rectangles. 	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

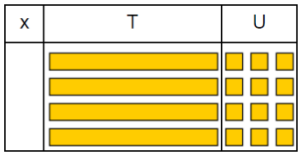
Grid Method

Show the link with arrays to first introduce the grid method.



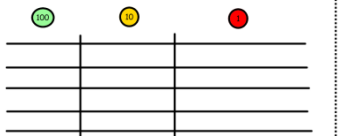
4 rows of 10
4 rows of 3

Move on to using Base 10 to move towards a more compact method.

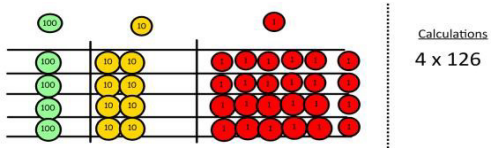


4 rows of 13

Move on to place value counters to show how we are finding groups of a number.We are multiplying by 4 so we need 4 rows.



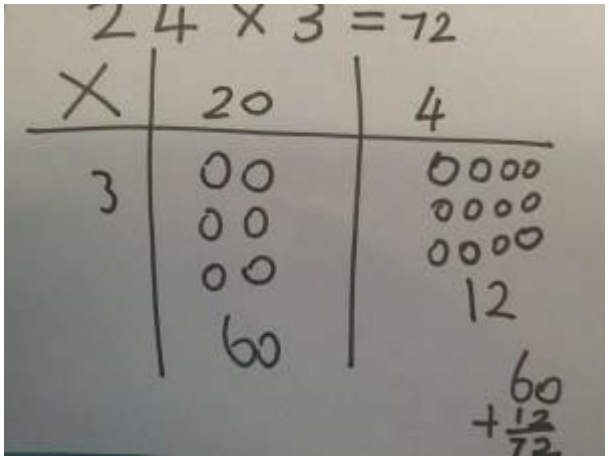
Fill each row with 126.



Add up each column, starting with the ones making any exchanges needed.

Children can represent the work they have done with place value counters in a way that they understand.

They can draw the counters, using colours to show different amounts or just use circles in the different columns to show their thinking as shown below.

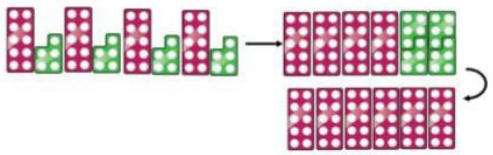
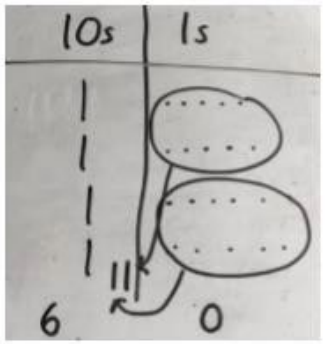
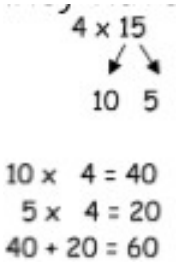
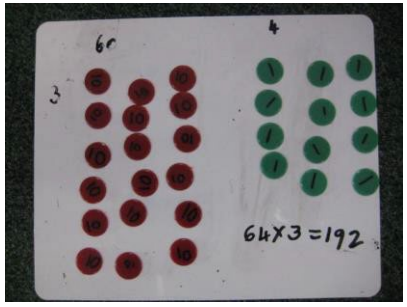
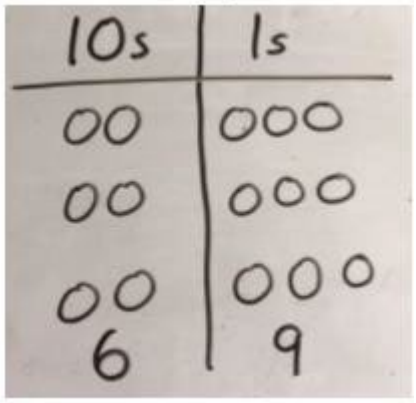
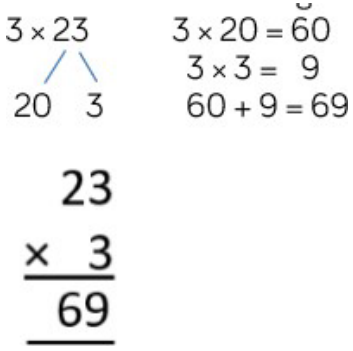


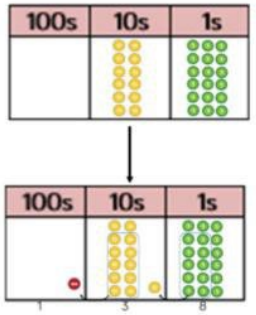
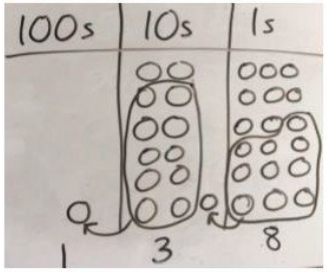
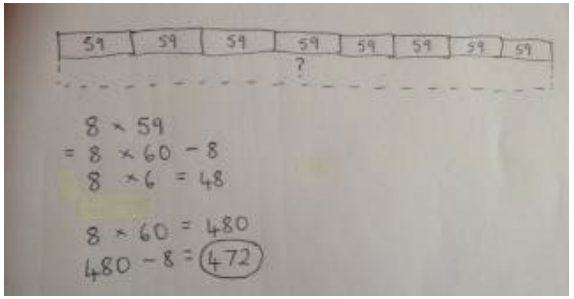
Start with multiplying by one digit numbers and showing the clear addition alongside the grid.

×	30	5
7	210	35

210 + 35 = 245

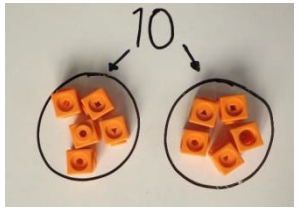
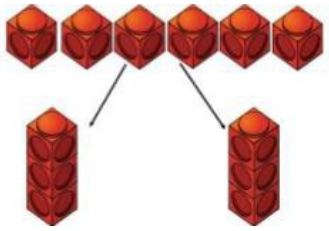
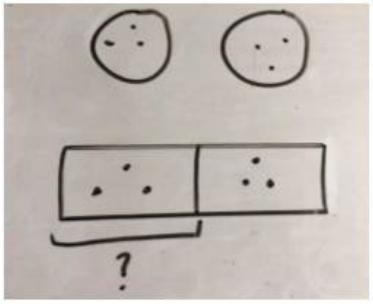
WE WILL NOT TEACH GRID METHOD FOR TO x TO or HTO x TO – move stright to expanded method.

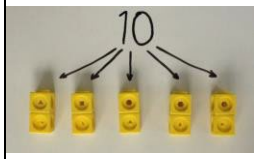
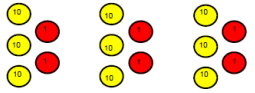
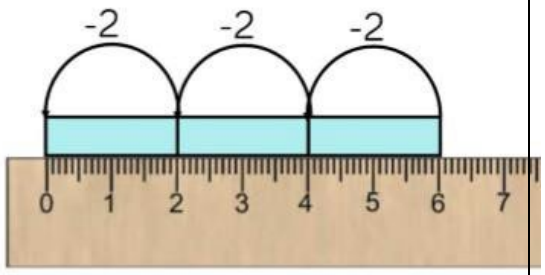
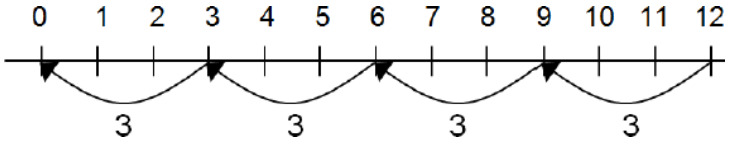
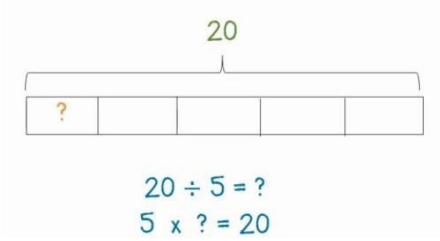
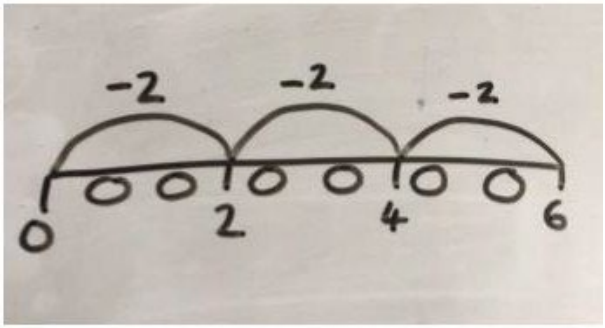
Partition to multiply	Partition to multiply using Numicon, base 10 or Cuisenaire rods. 4 × 15 	Children to represent the concrete manipulatives pictorially. 	Children to be encouraged to show the steps they have taken. 
Formal Column multiplication	Children can continue to be supported by place value counters at the stage of multiplication.  **23 x 3** 		

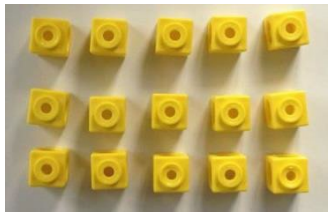
	Formal column method with place value counters. 6 x 23 	 Bar modelling and number lines can support learners when solving problems with multiplication alongside the formal written methods. 	Start with long multiplication, reminding the children about lining up their numbers clearly in columns. **EXPANDED METHOD** If it helps, children can write out what they are solving next to their answer. **2 3** **x 6** **1 8 (3 x 6)** **1 2 0 (20 x 6)** **1 3 8** 6 x 23 = 23 × 6 138 1 1

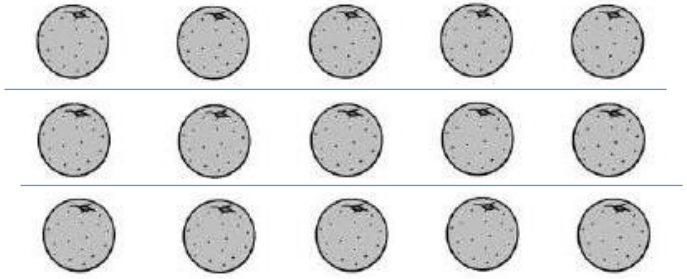
			32 x 24 8 (4 x 2) 120 (4 x 30) 40 (20 x 2) 600 (20 x 30) 768 1342 x 18 13420 10736 24156 1 This moves to the more compact method.

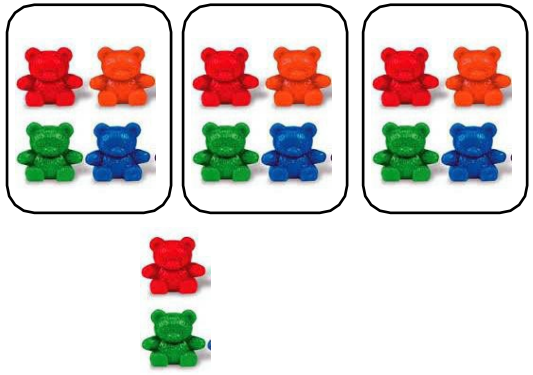
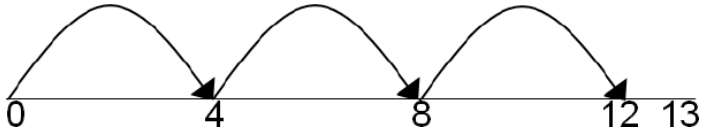
DIVISION

Objective and Strategies	Concrete	Pictorial	Abstract
Sharing objects into groups	 I have 10 cubes, can you share them equally in 2 groups?  	Children use pictures or shapes to share quantities.   8 ÷ 2 = 4	6 ÷ 2 = 3  Children should also be encouraged to use their 2 times tables facts. Share 9 buns between three people. 9 ÷ 3 = 3

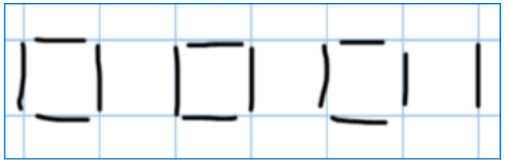
Division as grouping and repeated subtraction	Divide quantities into equal groups. Use cubes, counters, objects or place value counters to aid understanding.   96 ÷ 3 = 32    3 groups of 2	Use a number line to show jumps in groups. The number of jumps equals the number of groups.  Think of the bar as a whole. Split it into the number of groups you are dividing by and work out how many would be within each group.   	28 ÷ 7 = 4 Divide 28 into 7 groups. How many are in each group?

<table>
<tr>
<td>Division within arrays</td>
<td> 
Link division to multiplication by creating an array and thinking about the number sentences that can be created.

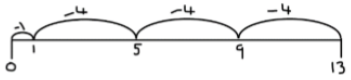
Eg 15 ÷ 3 = 5 5 x 3 = 15
15 ÷ 5 = 3 3 x 5 = 15</td>
<td> 
Draw an array and use lines to split the array into groups to make multiplication and division sentences.</td>
<td>Find the inverse of multiplication and division sentences by creating four linking number sentences.

7 x 4 = 28
4 x 7 = 28
28 ÷ 7 = 4
28 ÷ 4 = 7</td>
</tr>
<tr>
<td>Division with a remainder</td>
<td>14 ÷ 3 =
Divide objects between groups and see how much is left over
 
Use of lollipop sticks to form wholes- squares are made because we are dividing by 4.
 
There are 3 whole squares, with 1 left over.</td>
<td>Jump forward in equal jumps on a number line then see how many more you need to jump to find a remainder.
 

Draw dots and group them to divide an amount and clearly show a remainder.
 

 
There are 3 whole squares, with 1 left over.</td>
<td>Complete written divisions and show the remainder using r.
 

Children should be encouraged to use their times table facts; they could also represent repeated addition on a number line.

'3 groups of 4, with 1 left over'
 
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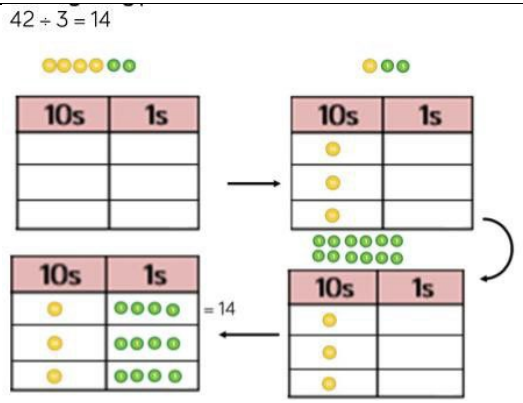
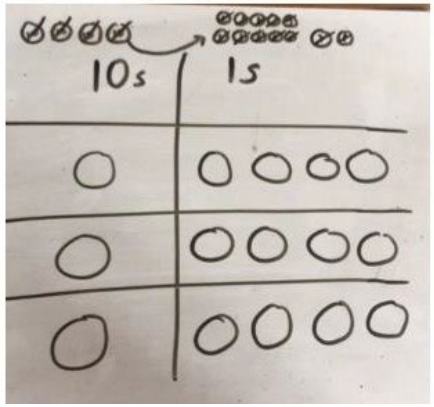
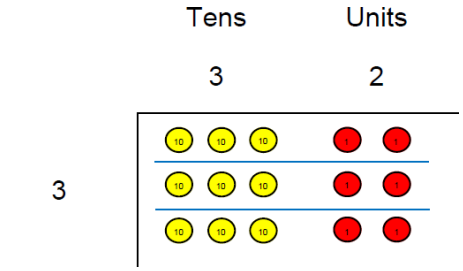
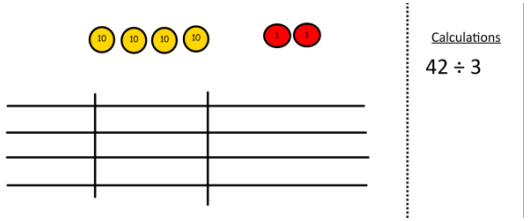
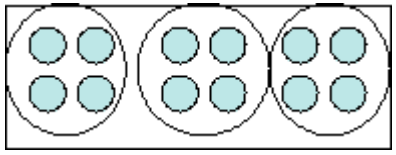
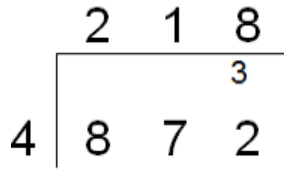
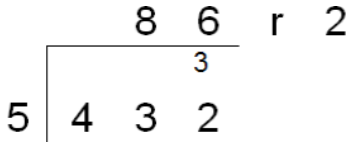
Sharing using place value counters			Children to be able to make sense of the place value counters and write calculations to show the process. **42 ÷ 3** **42 = 30 + 12** **30 ÷ 3 = 10** **12 ÷ 3 = 4** **10 + 4 = 14**
Short division	 Use place value counters to divide using the bus stop method alongside  42 ÷ 3= Start with the biggest place value, we are sharing 40 into three groups. We can put 1 ten in each group and we have 1 ten left over.	Students can continue to use drawn diagrams with dots or circles to help them divide numbers into equal groups.  Encourage them to move towards counting in multiples to divide more efficiently.	Begin with divisions that divide equally with no remainder.  Move onto divisions with a remainder. 

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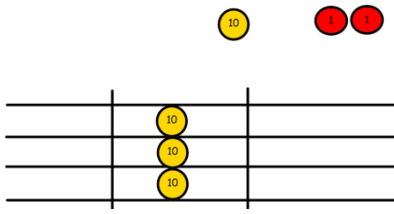
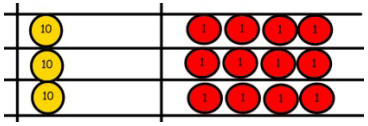
<td> 

We exchange this ten for ten ones and then share the ones equally among the groups.

</td>
<td></td>
<td>Finally move into decimal places to divide the total accurately.
<table>
<tr><td></td><td></td><td></td><td>1</td><td>4</td><td>.</td><td>6</td></tr>
<tr><td></td><td></td><td></td><td></td><td>16</td><td></td><td>21</td></tr>
<tr><td>3</td><td>5</td><td>5</td><td>1</td><td>1</td><td>.</td><td>0</td></tr>
</table></td>
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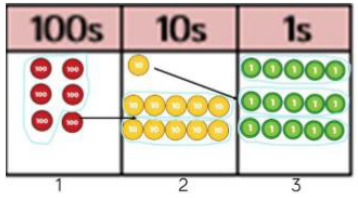
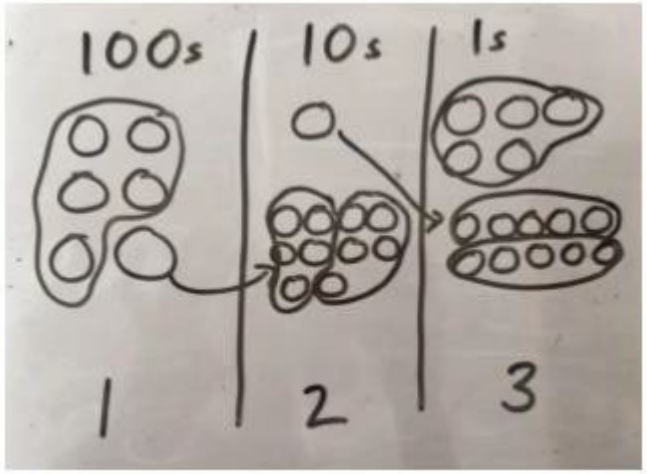
<tr>
<td></td>
<td>We look how much in 1 group so the answer is 14.
615 ÷ 5


1. Make 615 with place value counters.
2. How many groups of 5 hundreds can you make with 6 hundred counters?
3. Exchange 1 hundred for 10 tens.
4. How many groups of 5 tens can you make with 11 ten counters?
5. Exchange 1 ten for 10 ones.
6. How many groups of 5 ones can you make with 15 ones?</td>
<td> 
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<tr><td></td><td></td><td>5</td><td>6</td><td>1</td><td>5</td></tr>
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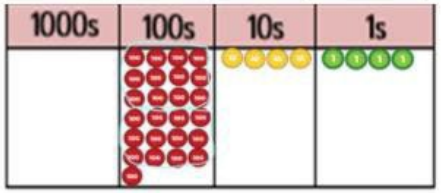
Long Division

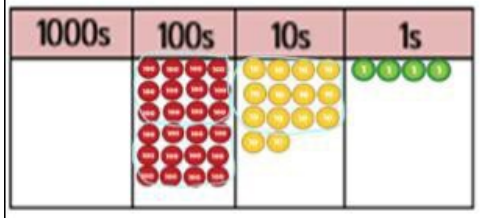
Long division using place value counters
2544 ÷ 12

We can't group 2 thousands into groups of 12 so will exchange them.



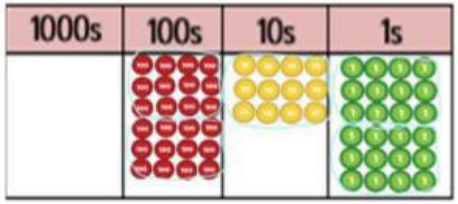
We can group 24 hundreds into groups of 12 which leaves with 1 hundred.

$$\begin{array}{r} 02 \\ 12\overline{)2544} \\ 24 \\ \hline 1 \end{array}$$



After exchanging the hundred, we have 14 tens. We can group 12 tens into a group of 12, which leaves 2 tens.

$$\begin{array}{r} 021 \\ 12\overline{)2544} \\ 24 \\ \hline 14 \\ 12 \\ \hline 2 \end{array}$$



After exchanging the 2 tens, we have 24 ones. We can group 24 ones into 2 group of 12, which leaves no remainder.

$$\begin{array}{r} 0212 \\ 12\overline{)2544} \\ 24 \\ \hline 14 \\ 12 \\ \hline 24 \\ 24 \\ \hline 0 \end{array}$$

Some children prefer to do long division using the bus stop method.

Most children find long division easier when the write out the multiplication table for the divisor:

e.g 2364 ÷ 24

1 x 24 = 24
2 x 24 = 48
3 x 24 = 72
4 x 24 = 96
5 x 24 = 120
6 x 24 = 144
7 x 24 = 168
8 x 24 = 192
9 x 24 = 216
10 x 24 = 240