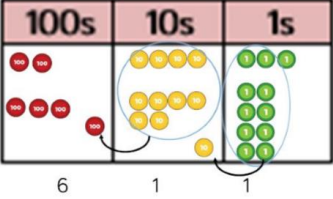
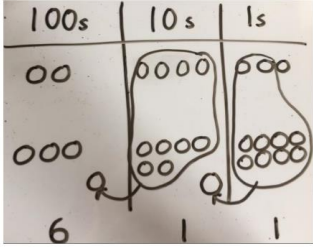
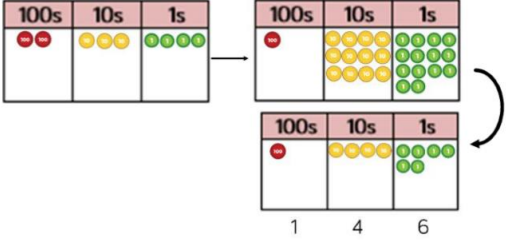
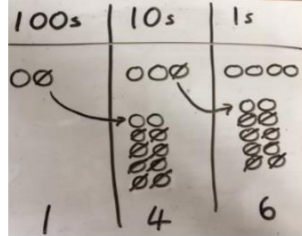
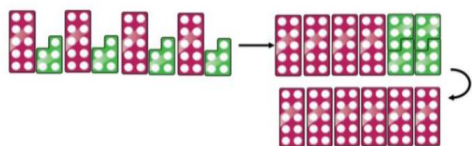


<p>Year 4</p>	<p>Addition column method- regrouping (up to 4 digits).</p>	<p>Use of place value counters to add HTO + TO, HTO + HTO etc. When there are 10 ones in the 1s column- we exchange for 1 ten, when there are 10 tens in the 10s column- we exchange for 1 hundred.</p>  <p>Place value counters or dienes can be used to show the place value of each column.</p>	<p>Children to represent the counters in a place value chart, circling when they make an exchange.</p>  <p>Ensure children start from the 1s to show how to carry correctly.</p>	$\begin{array}{r} 243 \\ +368 \\ \hline 611 \\ 11 \end{array}$ <p>Children are required to carry underneath the calculation</p>
<p>Year 4</p>	<p>Subtraction column method- regrouping (up to 4 digits).</p>	<p>Column method using place value counters. 234 - 88</p>  <p>Remind children that they need to go to the next column when they cannot subtract anymore.</p>	<p>Represent the place value counters pictorially; remembering to show what has been exchanged.</p>  <p>Number lines can also be used to subtract.</p>	<p>Formal column method. Children must understand what has happened when they have crossed out digits.</p> $\begin{array}{r} 234 \\ - 88 \\ \hline 6 \end{array}$ <p>Make sure children exchange above in the biggest number.</p>

Year
4

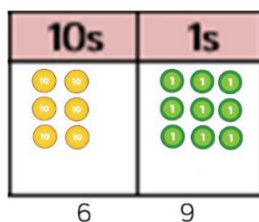
Column
multiplication-
2 and 3 digits
multiplied by
1 digit

Partition to multiply using Numicon, base 10 or Cuisenaire rods.
 4×15

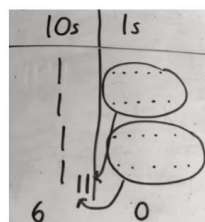


Explain to children we often refer to this as repeated addition as we are repeating the 15, 4 times and then adding the answers.

Formal column method with place value counters (base 10 can also be used.) 3×23

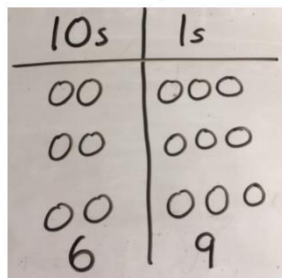


Children to represent the concrete manipulatives pictorially.



Showing each multiple by repeated addition- when a place value goes more than ten it must be moved into the next column along.

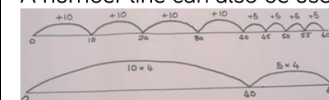
Children to represent the counters pictorially.



Children to be encouraged to show the steps they have taken.

$$\begin{array}{r}
 4 \times 15 \\
 \swarrow \searrow \\
 10 \quad 5 \\
 10 \times 4 = 40 \\
 5 \times 4 = 20 \\
 40 + 20 = 60
 \end{array}$$

A number line can also be used



Make sure children can explain what they are doing by showing the process expanded out.

Children to record what it is they are doing to show understanding.

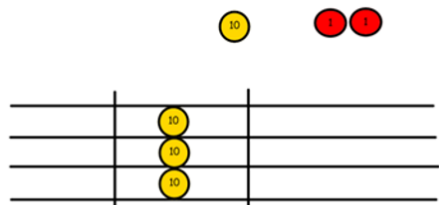
$$\begin{array}{r}
 3 \times 23 \\
 \swarrow \searrow \\
 20 \quad 3 \\
 3 \times 20 = 60 \\
 3 \times 3 = 9 \\
 60 + 9 = 69
 \end{array}$$

$$\begin{array}{r}
 23 \\
 \times 3 \\
 \hline
 69
 \end{array}$$

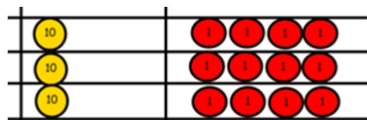
Year 4
Short division
– up to 3
digits by 1
digit

$$42 \div 3 =$$

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.

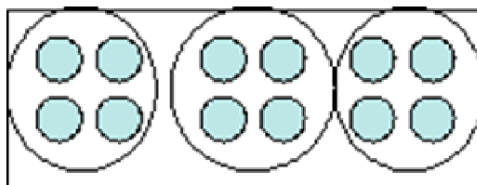


We exchange this ten for ten ones and then share the ones equally among the groups.



We look how much in 1 group so the answer is 14.

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.