

Year 4

Addition

$$\text{addend} + \text{addend} = \text{sum}$$

addend
+ addend
<hr/>
sum
<hr/>

Column addition

$$535 + 362 =$$

897	
whole	
535	362
part	part

<p>Step 1</p> <table style="width: 100%; text-align: center;"> <tr> <td>H</td> <td>T</td> <td>O</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	H	T	O							$\begin{array}{r} 535 \\ + 362 \\ \hline \end{array}$	$\begin{array}{r} \pounds 5.35 \\ \pounds 3.62 \\ \hline \end{array}$
H	T	O									
<p>Step 2</p> <table style="width: 100%; text-align: center;"> <tr> <td>H</td> <td>T</td> <td>O</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> <p>Push resources up</p>	H	T	O				$\begin{array}{r} 535 \\ + 362 \\ \hline 897 \end{array}$	$\begin{array}{r} \pounds 5.35 \\ \pounds 3.62 \\ \hline \pounds 8.97 \end{array}$			
H	T	O									

$$525 + 786 =$$

1311	
whole	
525	786
part	part

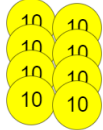
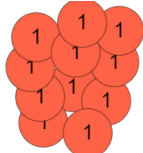
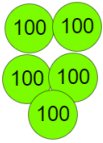
<p>Step 1</p> <table style="width: 100%; text-align: center;"> <tr> <td>H</td> <td>T</td> <td>O</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	H	T	O							$\begin{array}{r} 525 \\ + 786 \\ \hline \end{array}$	$\begin{array}{r} \pounds 5.25 \\ \pounds 7.86 \\ \hline \end{array}$
H	T	O									

Step 2

H

T

O



Push resources up

$$\begin{array}{r} 525 \\ + 786 \\ \hline \end{array}$$

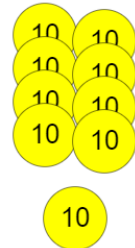
$$\begin{array}{r} £5.25 \\ £7.86 \\ \hline \end{array}$$

Step 3

H

T

O



$$\begin{array}{r} 525 \\ + 786 \\ \hline 1 \\ \hline 1 \end{array}$$

$$\begin{array}{r} £5.25 \\ £7.86 \\ \hline 1 \\ \hline 1 \end{array}$$

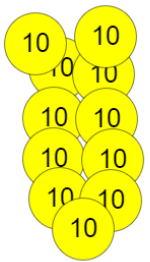
I can regroup 10 ones for 1 ten.

Step 4

H

T

O



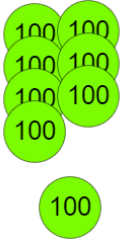
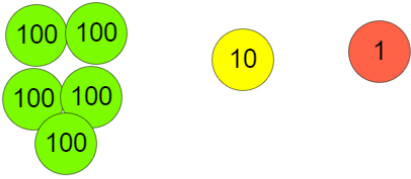
Push resources up

$$\begin{array}{r} 535 \\ + 786 \\ \hline 1 \\ \hline 1 \end{array}$$

$$\begin{array}{r} £5.35 \\ £7.86 \\ \hline 1 \\ \hline 1 \end{array}$$

Step 5

H T O



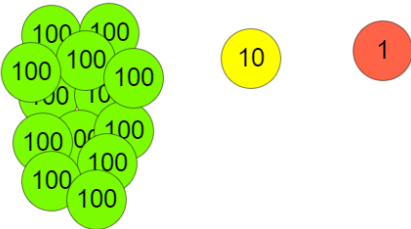
$$\begin{array}{r} 525 \\ + 786 \\ \hline 111 \\ \hline 11 \end{array}$$

I can regroup 10 tens for 1 hundred.

$$\begin{array}{r} £5.25 \\ + £7.86 \\ \hline \underline{.11} \\ 11 \end{array}$$

Step 6

H T O



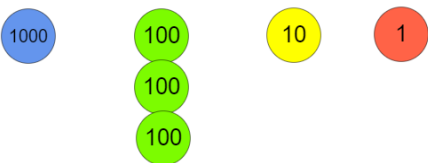
Push resources up

$$\begin{array}{r} 525 \\ + 786 \\ \hline 111 \\ \hline 11 \end{array}$$

$$\begin{array}{r} £5.25 \\ + £7.86 \\ \hline \underline{.11} \\ 11 \end{array}$$

Step 7

TH H T O



$$\begin{array}{r} 535 \\ + 786 \\ \hline 1311 \\ \hline 11 \end{array}$$

I can regroup 10 hundreds for 1 thousand.

$$\begin{array}{r} £5.35 \\ + £7.86 \\ \hline \underline{£13.11} \end{array}$$

Year 4

Subtraction

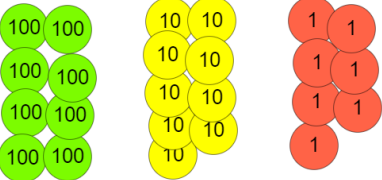
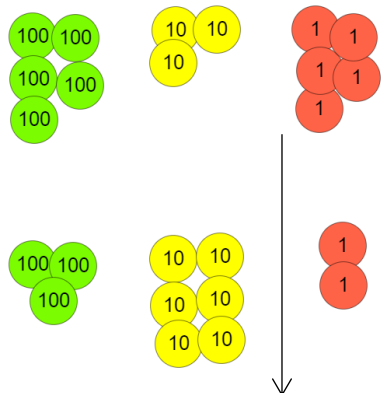
$$\text{minuend} - \text{subtrahend} = \text{difference}$$

minuend
- subtrahend
<u>difference</u>

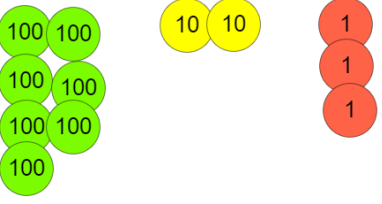
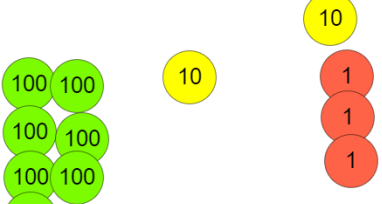

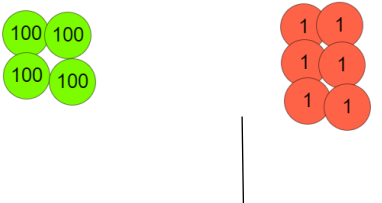
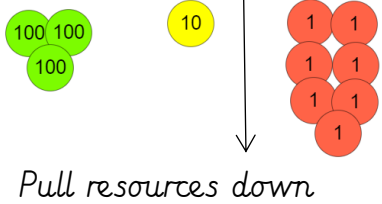
Column subtraction

$$897 - 362 =$$

897 whole	
535 part	362 part

<p>Step 1</p> <p>H T O</p> 	$\begin{array}{r} 897 \\ - 362 \\ \hline \end{array}$	$\begin{array}{r} £8.97 \\ - £3.62 \\ \hline \end{array}$
<p>Step 2</p> <p>H T O</p>  <p>Pull resources down</p>	$\begin{array}{r} 897 \\ - 362 \\ \hline 535 \end{array}$	$\begin{array}{r} £8.97 \\ - £3.62 \\ \hline £5.35 \end{array}$

$723 - 317 =$

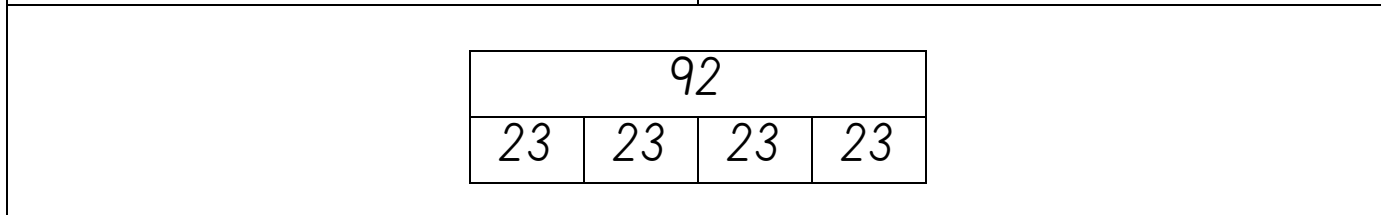
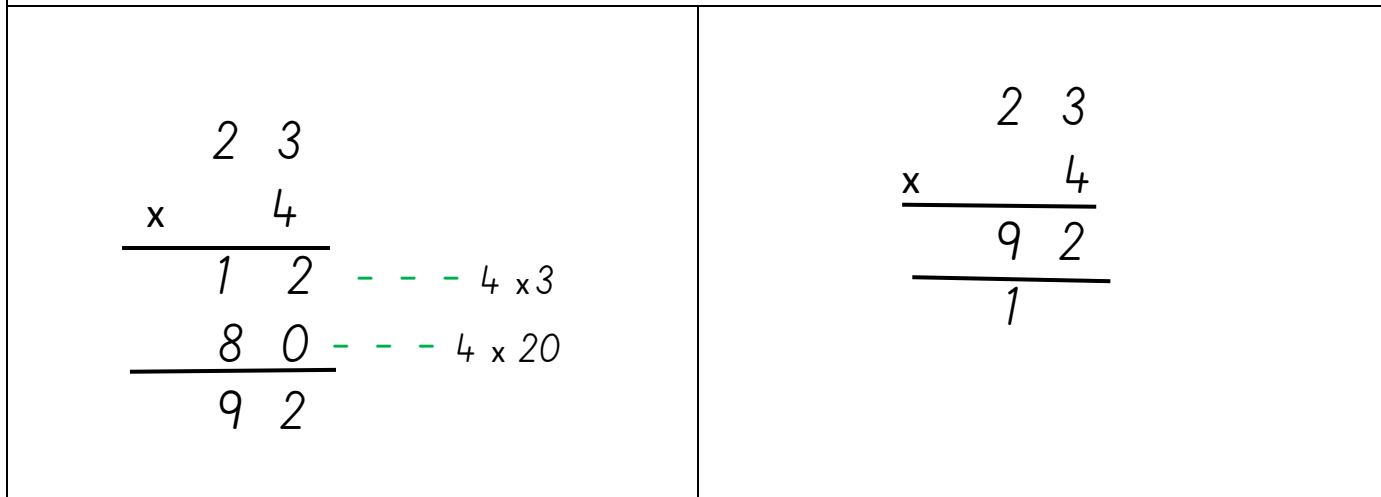
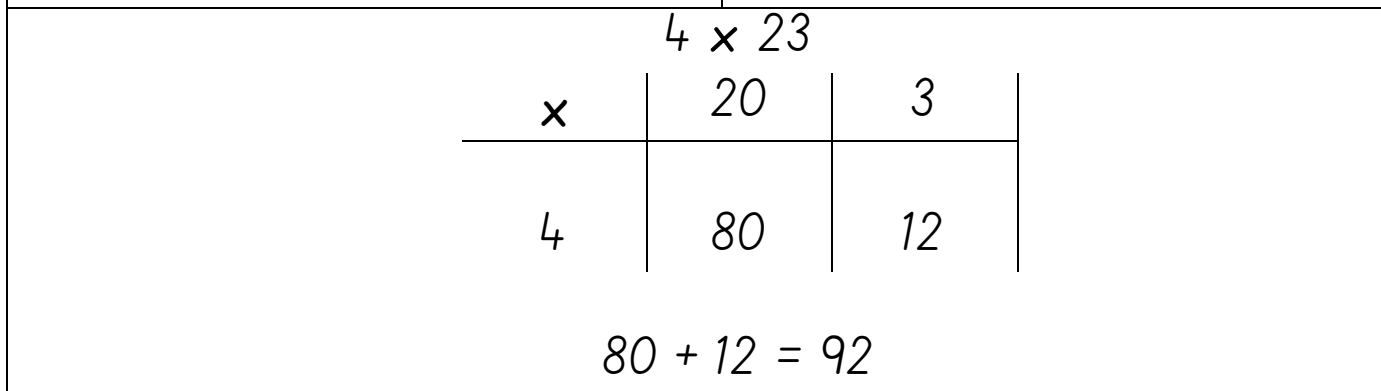
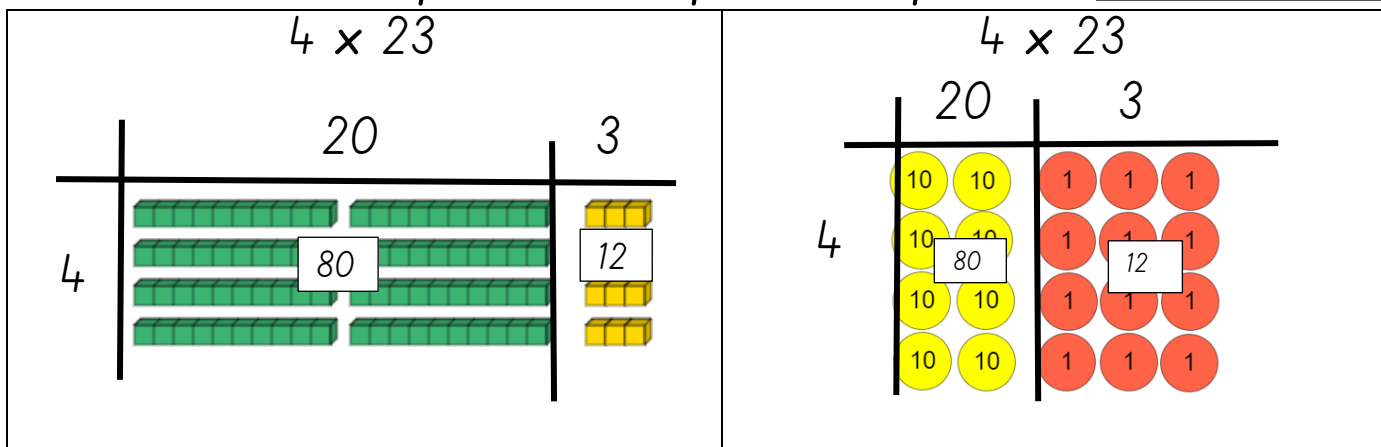
<p>Step 1</p> <p>H T O</p> 	$\begin{array}{r} 723 \\ - 317 \\ \hline \end{array}$	$\begin{array}{r} £7.23 \\ -£3.17 \\ \hline \end{array}$
<p>Step 2</p> <p>H T O</p> 	$\begin{array}{r} 723 \\ - 317 \\ \hline \end{array}$	$\begin{array}{r} £7.23 \\ -£3.17 \\ \hline \end{array}$
<p>Step 3</p> <p>H T O</p> 	<p>I can regroup 1 ten for 10 ones.</p> $\begin{array}{r} 11 \\ 11 \\ 723 \\ - 317 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ £7.23 \\ -£3.17 \\ \hline \end{array}$
<p>Step 3</p> <p>H T O</p>  <p style="text-align: center;">↓</p>  <p>Pull resources down</p>	$\begin{array}{r} 11 \\ 723 \\ - 317 \\ \hline 406 \end{array}$	$\begin{array}{r} 11 \\ £7.23 \\ -£3.17 \\ \hline £4.06 \end{array}$

Year 4

Multiplication

$$\text{multiplier} \times \text{multiplicand} = \text{product}$$

multiplicand
$\times \text{ multiplier}$
<hr/>
product



Year 4

Division

$$\text{dividend} \div \text{divisor} = \text{quotient}$$

$$\begin{array}{r} \text{quotient} \\ \text{divisor} \overline{) \text{dividend}} \end{array} \leftarrow \text{This is the division bracket.}$$

$18 \div 3 = 6$

6

3 $\overline{) 18}$

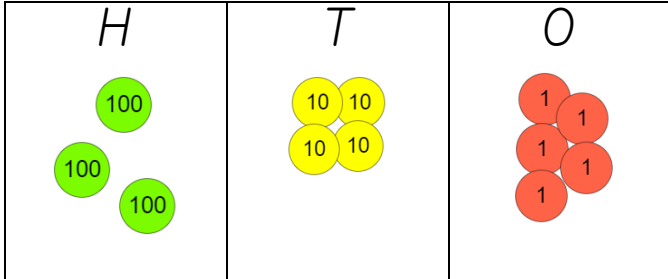
18

Step 1	$363 \div 3 =$	Step 2	$363 \div 3 =$												
	$3 \overline{) 363}$	$\begin{array}{r} 121 \\ 3 \overline{) 363} \end{array}$													
<table border="1"><thead><tr><th>H</th><th>T</th><th>O</th></tr></thead><tbody><tr><td></td><td></td><td></td></tr></tbody></table>	H	T	O					<table border="1"><thead><tr><th>H</th><th>T</th><th>O</th></tr></thead><tbody><tr><td></td><td></td><td></td></tr></tbody></table>	H	T	O				
H	T	O													
H	T	O													
		<p>How many groups of 3 can I make with 3 hundreds?</p> <p>How many groups of 3 can I make with 6 tens?</p> <p>How many groups of 3 can I make with 3 ones?</p>													

Step 1

$$345 \div 3 =$$

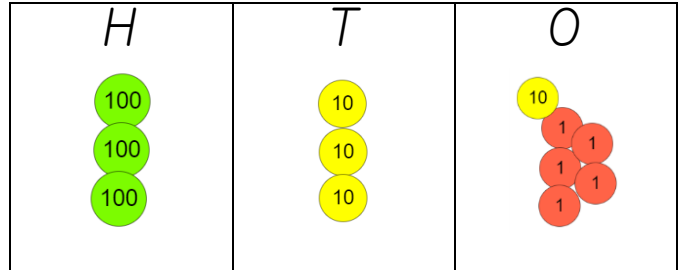
$$3 \overline{)345}$$



Step 2

$$345 \div 3 =$$

$$\begin{array}{r} 11 \\ 3 \overline{)345} \end{array}$$



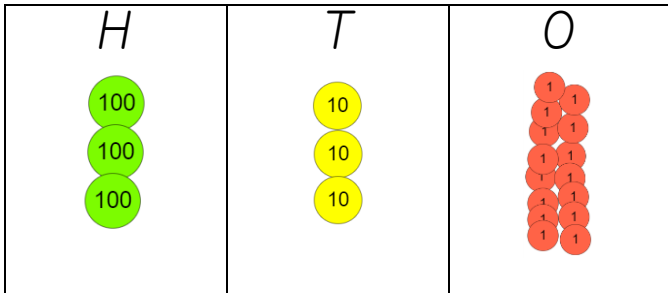
How many groups of 3 can I make with 3 hundreds?

How many groups of 3 can I make with 4 tens?

Step 3

$$345 \div 3 =$$

$$\begin{array}{r} 11 \\ 3 \overline{)345} \end{array}$$



I can regroup 1 ten for 10 ones.

Step 4

$$345 \div 3 =$$

$$\begin{array}{r} 115 \\ 3 \overline{)345} \end{array}$$

