
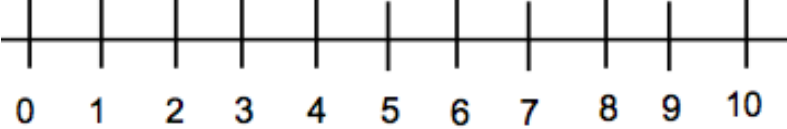




**The Manor School 2016/17**  
**Whole School Written Calculation Policy**  
**Pencil and paper procedures**  
**Key Stages 1 and 2**



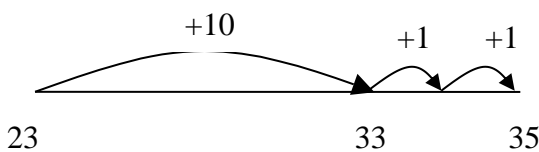
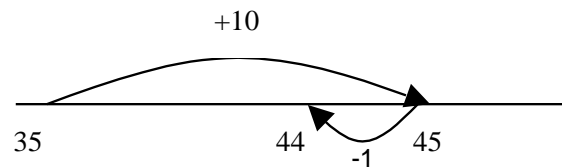
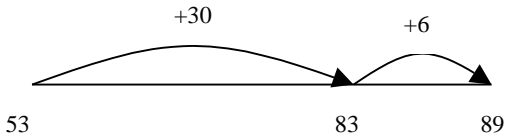
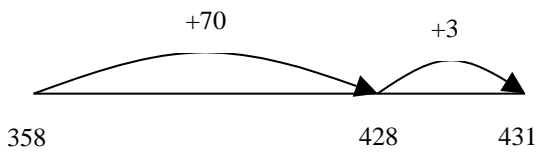


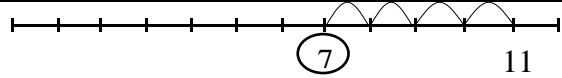
## PROGRESSION OF NUMBERLINES

<b>Number track</b>	Has the numbers inside the sections, rather than on the divisions	
<b>Calibrated, numbered numberline</b>	Equal divisions marked on the numberline and each division is numbered	
<b>Calibrated, unnumbered numberline</b>	Equal divisions are marked, but left unnumbered for children to add relevant numbers to	
<b>Blank numberline</b>	No divisions or numbers marked for the children	

Using Numicon to support the teaching and learning of mathematics.  
 Use Numicon to support the models and images for the 4 operations of number.

## Addition

Addition		
Stage 1 (Year 1)	Stage 2	Stage 3 (Year 2)
<p><b><u>+ = signs and missing numbers</u></b>  <b><u>Using concrete objects and pictorial representation.</u></b></p> <p> <math>3 + 4 = \square</math>      <math>\square = 3 + 4</math>  <math>3 + \square = 7</math>      <math>7 = \square + 4</math>  <math>\square + 4 = 7</math>      <math>7 = 3 + \square</math>  <math>\square + \nabla = 7</math>      <math>7 = \square + \nabla</math> </p> <p>3 + 4 is the same as 7 as modelled using Numicon</p>  <p>Use Numicon to further understand the equivalence in a number sentence.</p> <p>Promoting covering up of operations and numbers.</p>  <p><b><u>Number lines</u></b></p> <p>Using number lines</p> <p>(Teacher model number lines with missing numbers)</p> <p><math>7 + 4 = 11</math></p>	<p><b><u>+ = signs and missing numbers</u></b></p> <p>Extend to  <math>14 + 5 = 10 + \square</math>                      and adding three numbers  <math>32 + \square + \square = 100</math>    <math>35 = 1 + \square + 5</math> </p> <p><b><u>Partition into tens and ones and recombine</u></b></p>  <p> <math>12 + 23 = 10 + 2 + 20 + 3</math>  <math>= 30 + 5</math>  <math>= 35</math> </p> <p><b>refine to partitioning the second number only:</b></p> <p> <math>23 + 12 = 23 + 10 + 1 + 1</math>  <math>= 33 + 1 + 1</math>  <math>= 35</math> </p> <p><b><u>Mental Method</u></b></p> <p>Add 9 or 11 by adding 10 and adjusting by 1</p> <p><math>35 + 9 = 44</math></p> 	<p><b><u>Partition into tens and ones and recombine</u></b></p> <p>Partition both numbers and recombine. Refine to partitioning the second number only. Highest number to go first. e.g.</p> <p> <math>36 + 53 = 53 + 30 + 6</math>  <math>= 83 + 6</math>  <math>= 89</math> </p>  <p><b><u>Add a near multiple of 10 to a two-digit number</u></b></p> <p><b><u>Partition into hundreds, tens and ones and recombine</u></b></p> <p>Either partition both numbers and recombine or partition the second number only e.g.</p> <p> <math>358 + 73 = 358 + 70 + 3</math>  <math>= 428 + 3</math>  <math>= 431</math> </p> 



Children go up in 1s

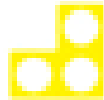
Secure Stage 1 – able to use a hundred square



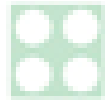
**1**  
one



**2**  
two



**3**  
three



**4**  
four



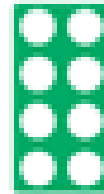
**5**  
five



**6**  
six



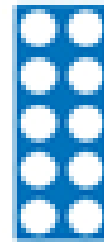
**7**  
seven



**8**  
eight



**9**  
nine



**10**  
ten

## Addition

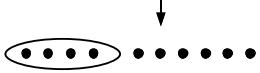
Addition		
Stage 4 (Year 3)	Stage 5	Stage 6 (Year 6)
<p><b>Pencil and paper procedures</b>  <math>36 + 43 = 79</math></p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: right; margin-right: 10px;"> <p style="color: red; font-size: small;">Partition both numbers</p> <p style="color: green; font-size: small;">Recombine to get the answer</p> </div> <div style="text-align: center;"> <math display="block">\begin{array}{r} 36 = 30 + 6 \\ 43 = 40 + 3 \\ \hline 79 = 70 + 9 \\ \quad \uparrow \quad \uparrow \\ \quad 30 + 40 \quad 6 + 3 \end{array}</math> </div> </div> <p>Leading to</p> <p>Adding 3 digit numbers using the expanded method</p>  $\begin{array}{r} 149 = 100 + 40 + 9 \\ 35 = \quad \quad 30 + 5 \\ \hline 184 = 100 + 70 + 14 \\ \quad \quad \quad \uparrow \\ \quad \quad \quad 100 + 0 \end{array}$ <p style="color: red; font-size: small; margin-left: 100px;">Make sure you line up the H, T &amp; U</p>	<p><b>Pencil and paper procedures</b>  <b>Leading to formal method, showing numbers carried underneath</b></p> <p><b>Column Addition</b></p> <p>Column Addition will be taught alongside the Expanded Method to encourage children to see how they relate.</p> <div style="display: flex; align-items: center; justify-content: center; margin: 10px 0;"> <math display="block">\begin{array}{r} 123 = 100 + 20 + 3 \\ + 45 = \quad \quad 40 + 5 \\ \hline 168 = 100 + 60 + 8 \end{array}</math> <div style="margin-left: 20px;"> <p style="color: green; font-size: small;">Remember to line up the HTU.</p> <p style="color: red; font-size: small;">Is the same as: + 45</p> </div> </div> <p style="text-align: right; color: red; font-weight: bold; font-size: small;">HTU</p> $\begin{array}{r} 123 \\ + 45 \\ \hline 168 \end{array}$ <p><b>Column Addition with carrying</b></p> <div style="display: flex; align-items: center; justify-content: center; margin: 10px 0;"> <math display="block">\begin{array}{r} \text{HTU} \\ 467 \\ + 215 \\ \hline 682 \\ \quad \quad \quad \uparrow \\ \quad \quad \quad 10 \end{array}</math> <div style="margin-left: 20px;"> <p style="color: red; font-size: small;">Because <math>7 + 5 = 12</math> we have to carry the 10.</p> </div> </div> <p>Extend to numbers with at least four digits  <math>3587 + 675 = 4262</math></p> $\begin{array}{r} 3587 \\ + 675 \\ \hline 4262 \\ \quad \quad \quad \uparrow \uparrow \uparrow \\ \quad \quad \quad 111 \end{array}$ <p>Extend to decimals (same number of decimal places) and adding several numbers (with different numbers of digits).  <b>Model negative numbers using a number line.</b></p>	<p><b>Column Addition.</b></p> <p>Children should be comfortable with using column addition to add 4 digit numbers and several numbers with different numbers of digits at the same time.</p> <div style="display: flex; align-items: center; justify-content: center; margin: 10px 0;"> <math display="block">\begin{array}{r} \text{Th H T U} \\ 5678 \\ \quad 468 \\ + \quad 72 \\ \hline 6218 \\ \hline 121 \end{array}</math> <div style="margin-left: 20px;"> <p style="color: green; font-size: small;">Ensure that the digits are lined up correctly.</p> <p style="color: red; font-size: small;">Carry below the line.</p> </div> </div> <p>Adding decimals using column addition.</p> <div style="display: flex; align-items: center; justify-content: center; margin: 10px 0;"> <math display="block">\begin{array}{r} \text{TU} \cdot \frac{1}{10} \\ 35.2 \\ + 16.0 \\ \hline 51.2 \\ \quad \quad \quad \uparrow \\ \quad \quad \quad 1 \end{array}</math> <div style="margin-left: 20px;"> <p style="color: green; font-size: small;">Carry below the line.</p> <p style="color: red; font-size: small;">Add '0' as a place holder</p> </div> </div>

# Subtraction

## Stage 1 (Year 1)

### Pictures / marks

Sam spent 4p. What was his change from 10p?



### - = signs and missing numbers

$$7 - 3 = \square \quad \square = 7 - 3$$

$$7 - \square = 4 \quad 4 = \square - 3$$

$$\square - 3 = 4 \quad 4 = 7 - \square$$

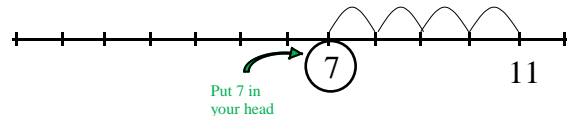
$$\square - \nabla = 4 \quad 4 = \square - \nabla$$

### Visual / practical activities

#### Number lines

The difference between 7 and 11  
(Counting on)

To reinforce concept. Practical strategies essential to see 'difference'.



Recording by - drawing jumps on prepared lines  
- constructing own lines, if appropriate

(Teachers model jottings appropriate for larger numbers)

## Stage 2

### - = signs and missing numbers

Continue using a range of equations as in Stage 1 but with appropriate numbers.

Using a Hundred Square:

Let's solve...

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

So...

$$37 - 23 = 14$$

How to use a hundred square...

When children are ready to subtract larger numbers they will do so on a hundred square.

They will be encouraged to up in jumps of 10s and back in jumps of units.

Children are encouraged to then record this as a sum.

Leading to:

$$47 - 32 =$$



$$40 - 30 = 10$$

$$7 - 2 = 5$$

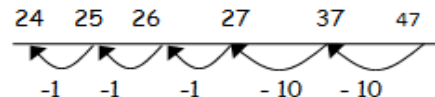
$$10 + 5 = 15$$

Children will begin to use blank number lines to support calculations.

### Counting back

First counting back in tens and then in ones.

$$47 - 23 = 24$$



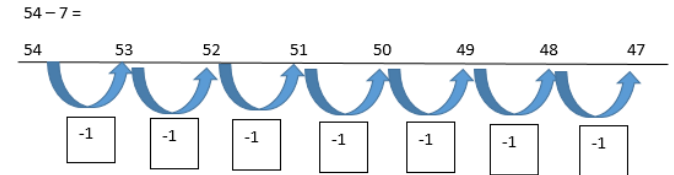
## Stage 3 (Year 2)

### Find a small difference by counting on

Continue as in Stage 2 but with appropriate numbers e.g.  $102 - 97 = 5$

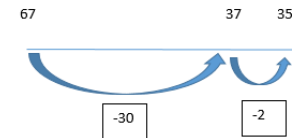
### Counting back using a number line.

Continue as in Stage 2 but with appropriate numbers e.g.  $102 - 97 = 5$ . The different when we are subtracting is that we will be with jumping back underneath the number line.



We will then use a number line to count back from the biggest number using partitioning to help.

$$67 - 32 = 35$$



**Note:** Counting back is not always the most efficient method when the numbers are closer together.

# Subtraction

## Stage 4 (Year 3)

The Expanded Method of Subtraction.

Partitioning both numbers leads to the opportunity to use more formal methods of subtraction.

Partition both numbers.  $67 - 32 = 35$

$67 = 60 + 7$       *line up the tens and units.*

$-32 = 30 + 2$

---

$35 = 30 + 5$       *Recombine to get the answer.*

$60 - 30$        $7 - 2$

The Expanded Method of Subtraction with carrying.

$62 = 50 + 12$       *We exchange 1 ten for 10 units.*

$62 = \cancel{60} + \cancel{2}$

Write these numbers above.  $-35 = 30 + 5$

---

$27 = 20 + 7$

## Stage 5

Pencil and paper procedures

$$\begin{array}{r} 8 \phantom{0} 1 \\ 92 \\ - 38 \\ \hline 54 \end{array}$$

Develop the stages of decomposition introducing 'zero'

$$\begin{array}{r} 2 \phantom{0} 4 \phantom{0} 1 \\ 352 \\ - 178 \\ \hline 174 \end{array} \qquad \begin{array}{r} 4 \phantom{0} 9 \phantom{0} 9 \phantom{0} 1 \\ 5000 \\ - 457 \\ \hline 4543 \end{array}$$

## Stage 6 (year 6)

Column Subtraction.

Children will move on to using Column Subtraction on its own and with larger numbers.

*Exchange with the next digit.*

$$\begin{array}{r} 4 \phantom{0} 15 \\ 357 \\ - 363 \\ \hline 3194 \end{array}$$

*Start subtracting from the units*

$3000 - 0$        $150 - 60 = 90$

Subtracting decimals using Column Subtraction.

*Exchange with the next digit.*

$$\begin{array}{r} 2 \\ 316.5 \\ - 17.0 \\ \hline 19.5 \end{array}$$

*line up the H, T &  $\frac{1}{10}$*

*Add '0' as a place holder.*

$2 - 1$        $16 - 9$

Develop the use of decomposition

extend to up to 2 decimal places

$$\begin{array}{r} 48.42 - 37.61 = \\ 4 \phantom{0} 8 \phantom{0} . \phantom{0} 4 \phantom{0} 2 \\ 3 \phantom{0} 7 \phantom{0} . \phantom{0} 6 \phantom{0} 1 \\ \hline 1 \phantom{0} 0 \phantom{0} . \phantom{0} 8 \phantom{0} 1 \end{array}$$

extend to up to 3 decimal places if appropriate

$302.63 - 178.124 =$

$$\begin{array}{r} 2 \phantom{0} 9 \phantom{0} 1 \\ 302.6310 \\ - 178.124 \\ \hline 124.506 \end{array}$$

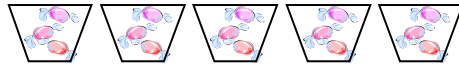


# Multiplication

## Stage 1

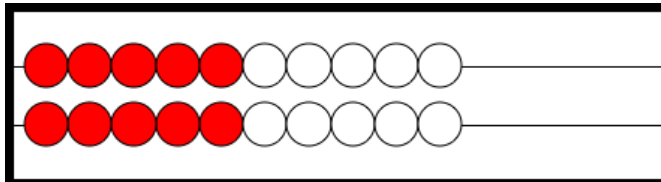
### Pictures and symbols

There are 3 sweets in one bag.  
How many sweets are there in 5 bags?



*(Recording on a number line modelled by the teacher when solving problems)*

Use of bead strings to model groups of.



Use cubes and pegs. Begin to learn 2, 5 and 10 times tables.

## Stage 2

### x = signs and missing numbers

$$7 \times 2 = \square \qquad \square = 2 \times 7$$

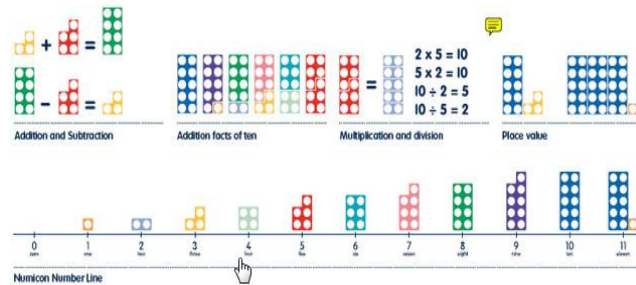
$$7 \times \square = 14 \qquad 14 = \square \times 7$$

$$\square \times 2 = 14 \qquad 14 = 2 \times \square$$

$$\square \times \nabla = 14 \qquad 14 = \square \times \nabla$$

### Arrays and repeated addition

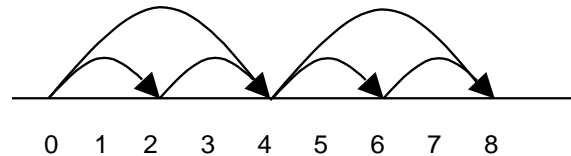
$$\begin{array}{cccc} \bullet & \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet & \bullet \end{array} \quad 4 \times 2 \text{ or } 4 + 4$$



$$2 \times 4$$

or repeated addition

$$2 + 2 + 2 + 2$$



### Doubling multiples of 5 up to 50

$$15 \times 2 = 30$$

Partition

$$(10 \times 2) + (5 \times 2)$$

$$20 + 10 = 30$$

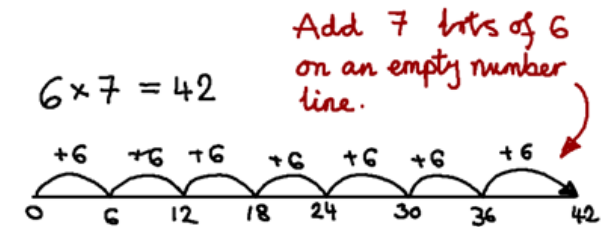
## Stage 3

### x = signs and missing numbers

Continue using a range of equations as in Stage 2 but with appropriate numbers.

### Repeated addition using a number line.

Understanding multiplication as repeated addition is key to understanding formal methods of multiplication.



$$35 \times 2 = 70$$



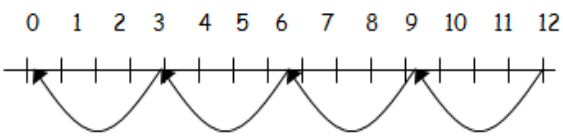
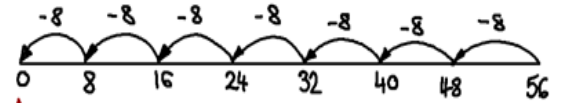
Partition using Grid Method when multiplying by two.

x	30	5
2	60	10

## Multiplication

Stage 4	Stage 5	Stage 6																																																																																												
<p><b><u>Pencil and paper procedures</u></b></p> <p>Grid method TU x U 23 x 7 is approximately 20 x 10 = 200 23 x 7 = 161</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">T</td> <td style="text-align: center;">U</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px;">x</td> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; text-align: center;">20</td> <td style="border-bottom: 1px solid black; padding: 5px; text-align: center;">3</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">7</td> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">140</td> <td style="padding: 5px; text-align: center;">21</td> <td></td> </tr> </table> <p style="margin-top: 20px;">HTU x U 123 x 3 = 369</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">H</td> <td style="text-align: center;">T</td> <td style="text-align: center;">U</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px;">x</td> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; text-align: center;">100</td> <td style="border-bottom: 1px solid black; padding: 5px; text-align: center;">20</td> <td style="border-bottom: 1px solid black; padding: 5px; text-align: center;">3</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">3</td> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">300</td> <td style="padding: 5px; text-align: center;">60</td> <td style="padding: 5px; text-align: center;">9</td> <td></td> </tr> </table>		T	U		x	20	3		7	140	21			H	T	U		x	100	20	3		3	300	60	9		<p><b><u>x = signs and missing numbers</u></b></p> <p><b><u>Pencil and paper procedures</u></b></p> <p>Grid method 72 x 38 is approximately 70 x 40 = 2800</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px;">x</td> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; text-align: center;">70</td> <td style="border-bottom: 1px solid black; padding: 5px; text-align: center;">2</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">30</td> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">2100</td> <td style="padding: 5px; text-align: center;">60</td> <td style="padding: 5px;">= 2160</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">8</td> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">560</td> <td style="padding: 5px; text-align: center;">16</td> <td style="padding: 5px;">= 576 +</td> </tr> <tr> <td></td> <td></td> <td style="padding: 5px; text-align: center;">2736</td> <td style="padding: 5px;">1</td> </tr> </table> <p>Estimate and check</p> <p>Moving on to formal method when appropriate. 'Carried' numbers to sit on top line of answer box</p> <p>1125 x 7 = 7875</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">Th</td> <td style="text-align: center;">H</td> <td style="text-align: center;">T</td> <td style="text-align: center;">U</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px;">x</td> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; text-align: center;">1000</td> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; text-align: center;">100</td> <td style="border-bottom: 1px solid black; padding: 5px; text-align: center;">20</td> <td style="border-bottom: 1px solid black; padding: 5px; text-align: center;">5</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">7</td> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">7000</td> <td style="padding: 5px; text-align: center;">700</td> <td style="padding: 5px; text-align: center;">140</td> <td style="padding: 5px; text-align: center;">35</td> <td></td> </tr> </table> <p>Accept formal compact method for the individual pupils that it works for</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">7</td> <td style="text-align: center;">2</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px;">x</td> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; text-align: center;">3</td> <td style="border-bottom: 1px solid black; padding: 5px; text-align: center;">8</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">2</td> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">1</td> <td style="padding: 5px; text-align: center;">6</td> <td style="padding: 5px; text-align: center;">0</td> </tr> <tr> <td></td> <td style="padding: 5px; text-align: center;">5<sub>1</sub></td> <td style="padding: 5px; text-align: center;">7</td> <td style="padding: 5px; text-align: center;">6</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">2</td> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">7<sub>1</sub></td> <td style="padding: 5px; text-align: center;">3</td> <td style="padding: 5px; text-align: center;">6</td> </tr> </table>	x	70	2		30	2100	60	= 2160	8	560	16	= 576 +			2736	1		Th	H	T	U		x	1000	100	20	5		7	7000	700	140	35			7	2		x	3	8		2	1	6	0		5 <sub>1</sub>	7	6	2	7 <sub>1</sub>	3	6	<p><b><u>x = signs and missing numbers</u></b></p> <p>Pencil and paper procedures</p> <p>Grid method for decimals Multiplying <b>decimal numbers</b> using the grid method.</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px;">x</td> <td style="border-bottom: 1px solid black; padding: 5px; text-align: center;">5 + 0.2</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">6</td> <td style="padding: 5px; text-align: center;">30 + 1.2 = 31.20</td> <td rowspan="2" style="padding: 5px; vertical-align: middle;"><i>Take care to line up the digits. Adding a place holder will help.</i></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">0.3</td> <td style="padding: 5px; text-align: center;">1.5 + 0.06 = 1.56</td> </tr> <tr> <td></td> <td style="padding: 5px; text-align: center;">32.76</td> <td></td> </tr> </table> <p style="text-align: center; margin-top: 5px;"><i>0.3 x 0.2</i> →</p>	x	5 + 0.2		6	30 + 1.2 = 31.20	<i>Take care to line up the digits. Adding a place holder will help.</i>	0.3	1.5 + 0.06 = 1.56		32.76	
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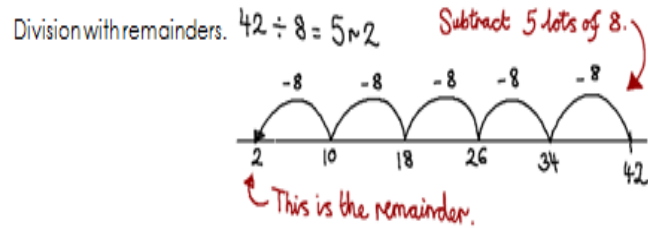
## Division

Stage 1	Stage 2	Stage 3
<p><b>Pictures / marks</b> 12 children get into teams of 4 to play a game. How many teams are there?</p> <div style="display: flex; justify-content: space-around; align-items: center;">  </div> <p><b>Use practical resources – cubes, counters, children etc</b></p>	<p><b>÷ = signs and missing numbers</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: left;"> <math>6 \div 2 = \square</math>  <math>6 \div \square = 3</math>  <math>\square \div 2 = 3</math>  <math>\square \div \nabla = 3</math> </div> <div style="text-align: left;"> <math>\square = 6 \div 2</math>  <math>3 = 6 \div \square</math>  <math>3 = \square \div 2</math>  <math>3 = \square \div \nabla</math> </div> </div> <p><b>Understand division as sharing and grouping</b></p> <p><b>Grouping or repeated subtraction</b></p> <p>There are 6 sweets, how many people can have 2 sweets each?</p> <div style="text-align: center;">  </div> <p><b>Repeated subtraction using a number line and bead bar</b></p> <p><math>12 \div 3 = 4</math></p> <div style="text-align: center;">  </div>	<p><b>÷ = signs and missing numbers</b> Continue using a range of equations as in Stage 2 but with appropriate numbers.</p> <p><b>Understand division as sharing and grouping</b></p> <p>Understanding division as repeated subtraction is key to understanding formal methods of division.</p> <div style="text-align: center;"> <p><math>56 \div 8 = 7</math> <span style="color: red; font-style: italic;">Repeatedly subtract 8.</span></p>  <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="color: red; font-style: italic;"> <p>Subtract until it is no longer possible.</p> </div> <div style="color: green; font-style: italic;"> <p>7 lots of 8 have been taken away.</p> </div> </div> </div>

## Division

### Stage 4

$\div$  = signs and missing numbers



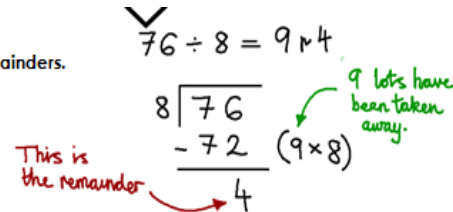
### Stage 5

$\div$  = signs and missing numbers

#### Remainders

Next Steps:

Chunking with remainders.



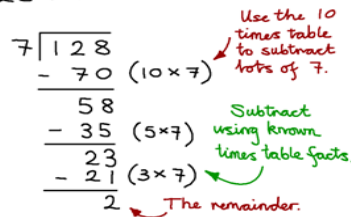
#### Remainders

Quotients expressed as fractions or decimal fractions  
 $676 \div 8 = 84.5$

Chunking using times table facts.

Children will continue to explore division as repeated subtraction. They will use their increasing knowledge of times tables to subtract in larger chunks.

$128 \div 7 = 18 \text{ r } 2$

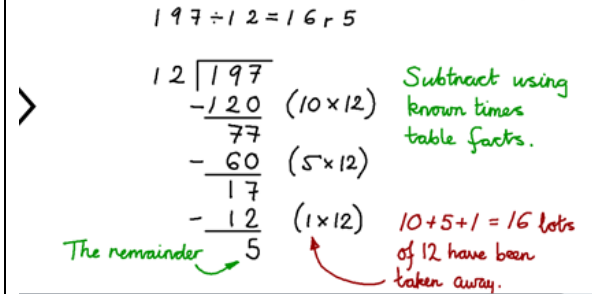


### Stage 6

$\div$  = signs and missing numbers

Chunking using times table facts and multiples of 10.

Using their knowledge of the 10 times table will allow children to divide larger numbers by two-digit numbers while reducing the number of steps.



Expressing the remainder as a fraction.

$50 \div 4 = 12 \text{ r } 2$  The remainder.  
 $= 12 \frac{2}{4}$  The divisor.  
 This can then be converted into a decimal.