
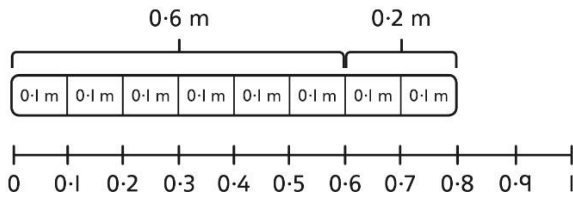
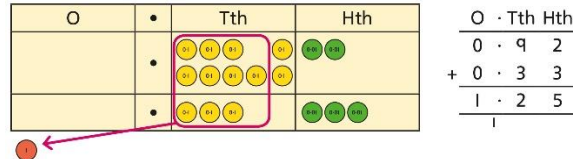



Year 5

	Concrete	Pictorial	Abstract																																																																														
Year 5 Addition																																																																																	
Column addition with whole numbers	<p>Use place value equipment to represent additions.</p> <p><i>Add a row of counters onto the place value grid to show $15,735 + 4,012$.</i></p> <table border="1"> <thead> <tr> <th>TTh</th> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>●</td> <td>●●●●●</td> <td>●●●●●</td> <td>●●●●●</td> <td>●●●●●</td> </tr> </tbody> </table>	TTh	Th	H	T	O	●	●●●●●	●●●●●	●●●●●	●●●●●	<p>Represent additions, using place value equipment on a place value grid alongside written methods.</p> <table border="1"> <thead> <tr> <th>TTh</th> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>●●</td> <td></td> <td>●</td> <td>●●●●●</td> <td>●●●●●</td> </tr> <tr> <td>●</td> <td>●●●●●</td> <td>●</td> <td>●●●●●</td> <td>●●●●●</td> </tr> </tbody> </table> <p><i>I need to exchange 10 tens for a 100.</i></p> <table border="1"> <thead> <tr> <th>TTh</th> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>0</td> <td>1</td> <td>5</td> <td>3</td> </tr> <tr> <td>+</td> <td>1</td> <td>9</td> <td>1</td> <td>7</td> </tr> <tr> <td>3</td> <td>9</td> <td>3</td> <td>2</td> <td>8</td> </tr> </tbody> </table>	TTh	Th	H	T	O	●●		●	●●●●●	●●●●●	●	●●●●●	●	●●●●●	●●●●●	TTh	Th	H	T	O	2	0	1	5	3	+	1	9	1	7	3	9	3	2	8	<p>Use column addition, including exchanges.</p> <table border="1"> <thead> <tr> <th>TTh</th> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>9</td> <td>1</td> <td>7</td> <td>5</td> </tr> <tr> <td>+</td> <td>1</td> <td>8</td> <td>4</td> <td>1</td> </tr> <tr> <td>3</td> <td>7</td> <td>5</td> <td>9</td> <td>2</td> </tr> </tbody> </table>	TTh	Th	H	T	O	1	9	1	7	5	+	1	8	4	1	3	7	5	9	2													
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Representing additions		<p>Bar models represent addition of two or more numbers in the context of problem solving.</p> <table border="1"> <tr> <td colspan="3" style="text-align: center;">?</td> </tr> <tr> <td>£19,579</td> <td>£28,370</td> <td>£16,725</td> </tr> </table> <p>Jen: £2,600</p> <p>Holly: £2,600 + £1,450</p> <p style="text-align: center;">£4,050</p> <table border="1"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>6</td> <td>0</td> <td>0</td> </tr> <tr> <td>+</td> <td>1</td> <td>4</td> <td>5</td> </tr> <tr> <td>4</td> <td>0</td> <td>5</td> <td>0</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>6</td> <td>0</td> <td>0</td> </tr> <tr> <td>+</td> <td>4</td> <td>0</td> <td>5</td> </tr> <tr> <td>6</td> <td>6</td> <td>5</td> <td>0</td> </tr> </tbody> </table>	?			£19,579	£28,370	£16,725	Th	H	T	O	2	6	0	0	+	1	4	5	4	0	5	0	Th	H	T	O	2	6	0	0	+	4	0	5	6	6	5	0	<p>Use approximation to check whether answers are reasonable.</p> <table border="1"> <thead> <tr> <th>TTh</th> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>3</td> <td>4</td> <td>0</td> <td>5</td> </tr> <tr> <td>+</td> <td>7</td> <td>8</td> <td>9</td> <td>2</td> </tr> <tr> <td>2</td> <td>0</td> <td>2</td> <td>9</td> <td>7</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>TTh</th> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>3</td> <td>4</td> <td>0</td> <td>5</td> </tr> <tr> <td>+</td> <td>7</td> <td>8</td> <td>9</td> <td>2</td> </tr> <tr> <td>3</td> <td>1</td> <td>2</td> <td>9</td> <td>7</td> </tr> </tbody> </table> <p><i>I will use $23,000 + 8,000$ to check.</i></p>	TTh	Th	H	T	O	2	3	4	0	5	+	7	8	9	2	2	0	2	9	7	TTh	Th	H	T	O	2	3	4	0	5	+	7	8	9	2	3	1	2	9	7
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<p>Adding tenths</p>	<p>Link measure with addition of decimals.</p> <p><i>Two lengths of fencing are 0.6 m and 0.2 m. How long are they when added together?</i></p> 	<p>Use a bar model with a number line to add tenths.</p>  <p>$0.6 + 0.2 = 0.8$ $6 \text{ tenths} + 2 \text{ tenths} = 8 \text{ tenths}$</p>	<p>Understand the link with adding fractions.</p> $\frac{6}{10} + \frac{2}{10} = \frac{8}{10}$ <p>$6 \text{ tenths} + 2 \text{ tenths} = 8 \text{ tenths}$ $0.6 + 0.2 = 0.8$</p>
<p>Adding decimals using column addition</p>	<p>Use place value equipment to represent additions.</p> <p><i>Show $0.23 + 0.45$ using place value counters.</i></p>	<p>Use place value equipment on a place value grid to represent additions.</p> <p>Represent exchange where necessary.</p>  <p>Include examples where the numbers of decimal places are different.</p> 	<p>Add using a column method, ensuring that children understand the link with place value.</p> $\begin{array}{r} \text{O} \cdot \text{Tth} \text{ Hth} \\ 0 \cdot 2 \quad 3 \\ + 0 \cdot 4 \quad 5 \\ \hline 0 \cdot 6 \quad 8 \end{array}$ <p>Include exchange where required, alongside an understanding of place value.</p> $\begin{array}{r} \text{O} \cdot \text{Tth} \text{ Hth} \\ 0 \cdot 9 \quad 2 \\ + 0 \cdot 3 \quad 3 \\ \hline 1 \cdot 2 \quad 5 \end{array}$ <p>Include additions where the numbers of decimal places are different.</p> $3.4 + 0.65 = ?$ $\begin{array}{r} \text{O} \cdot \text{Tth} \text{ Hth} \\ 3 \cdot 4 \quad 0 \\ + 0 \cdot 6 \quad 5 \\ \hline \end{array}$