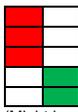
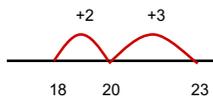
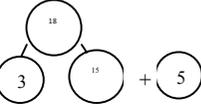
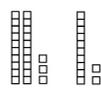
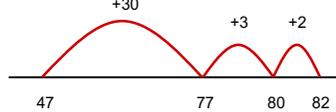
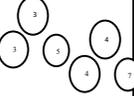
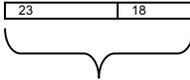
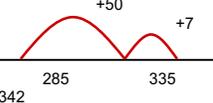
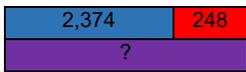
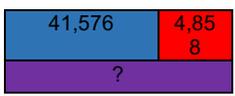
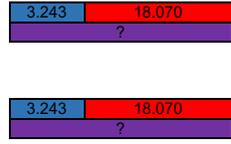


<p>YR</p>	<p>Addition as 'combining 2 groups'</p>	<p>Practical / recorded using ICT (eg digital photos / pictures on IWB)</p>	<p>Pictures / Objects I eat 2 cakes and my friend eats 3. How many cakes did we eat altogether? </p> <p>Might be recorded as: <math>2 + 3 = 5</math></p>	<p>Symbols 8 people are on the bus. 5 more get on at the next stop. How many people are on the bus now? </p> <p>Might be recorded as: <math>8 + 5 = 13</math></p>	<p>Tens frame  (Might be recorded as <math>3+2=5</math>)</p>	<p>1 more (nos up to 10)</p>	<p>Counting on</p>		
<p>KS1</p>	<p>Addition as 'counting on' <math>U + U</math> (bridging 10) <math>TU + U</math> (bridging 20)</p>	<p>Practical / recorded using ICT</p>	<p>Pictures / Symbols (see above)</p>	<p>Number track / Number line – jumps of 1 (modelled using bead strings) <math>18 + 5 = 23</math> </p>	<p>Number line (efficient jumps) <math>18 + 5</math> </p>	<p>No number line <math>18 + 5</math> <math>18 + 2 = 20</math> <math>20 + 3 = 23</math></p>	<p></p>	<p>Pairs to 10 and to 20 1 or 10 more than a number</p>	<p><math>U + TU</math> <math>U + \text{multiple of } 10</math> <math>TU + \text{multiple of } 10</math> <math>+9</math> (by <math>+10, -1</math>)</p>
<p>Lower KS2</p>	<p><math>TU + TU</math> (bridging 10s)</p>	<p>Pictures / Symbols <math>23 + 12 = 35</math> </p>	<p>Number line (efficient jumps) <math>35 + 47</math> </p>	<p>No number line <math>35 + 47</math> <math>47 + 30 = 77</math> <math>77 + 3 = 80</math> <math>80 + 2 = 82</math></p>	<p>Partitioning <math>35 + 47</math> <math>40 + 30 = 70</math> <math>7 + 5 = 12</math> </p>	<p>Expanded <math>35 + 47 =</math> <math>30 + 5</math> <math>40 + 7</math> <math>70 + 12 = 82</math></p>	<p>There are 23 marbles in a jar and Fred puts in 18 more. How many altogether?  <math>23 + 18 =</math> (See partitioning)</p>	<p>Pairs to 20 fluently Derive related facts to 100 Use multiples of 5 totalling 60 (time)</p>	<p><math>TU + U / \text{multiple of } 10</math> <math>U + U + U</math></p>
<p>Lower KS2</p>	<p><math>TU + TU</math> (bridging 100) <math>HTU + U</math> (incl bridging 100s) <math>HTU + TU</math> (not bridging 1000) <math>HTU + HTU</math> (not bridging 1000)</p>	<p>Number line <math>57 + 285 = 342</math> </p>	<p>No number line <math>57 + 285</math> <math>285 + 50 = 335</math> <math>335 + 7 = 342</math></p>	<p>Partitioning <math>57 + 285</math> <math>200 + 0 = 200</math> <math>80 + 50 = 130</math> <math>5 + 7 = 12</math></p>	<p>Expanded vertical <math>336 + 87 = 423</math> <math>300 \text{ and } 30 \text{ and } 6</math> <math>+ 80 \text{ and } 7</math> <math>300 \text{ and } 110 \text{ and } 13</math></p>	<p>Expanded vertical <math>336</math> <math>+ 87</math> <math>13</math> <math>110</math> <math>300</math> <math>423</math></p>	<p>Janet has 134 books. Bill has 76 books. How many altogether? <math>Janet = 134</math> <math>Bill = 76</math> <math>134 + 76 =</math></p>	<p>Addition facts to 100 (multiples of 5 and 10) Pairs of two-digit multiples of 10 Multiples of 50 that total 1000 Addition of fractions (see fractions)</p>	<p><math>TU + U / TU</math> <math>TU + \text{near multiple of } 10</math></p>
<p>Lower KS2</p>	<p>Partitioning <math>2374 + 248</math> <math>2,000 + 0 = 2,000</math> <math>300 + 200 = 500</math> <math>70 + 40 = 110</math> <math>4 + 8 = 12</math> <math>2,622</math>  <math>Th \ H \ T \ U +</math> <math>Th \ H \ T \ U</math> (incl bridging 1000)  Decimals: money (£7.85 + £3.49)  Money-decimal notation; Measures Km-m</p>	<p>No number line (partition one number – leading to mental calculation) <math>2374 + 248</math> <math>2,374 + 200 = 2,574</math> <math>2,574 + 40 = 2,614</math> <math>2,614 + 8 = 2,622</math></p>	<p>Expanded vertical <math>2,374</math> <math>+ 248</math> <math>12</math> <math>110</math> <math>500</math> <math>2,000</math> <math>2,622</math></p>	<p>Compact vertical <math>2,374</math> <math>+ 248</math> <math>12</math> <math>110</math> <math>500</math> <math>2,622</math></p>	<p>Compact vertical <math>2,374</math> <math>+ 248</math> <math>12</math> <math>110</math> <math>500</math> <math>2,622</math></p>	<p>Bar Visualisation </p>	<p>Recall addition facts to 100 Recall addition facts for multiples of 10 / 100, totalling 1000 Derive &amp; use addition fact for 1 &amp; 10 inc decimals + Fractions see fraction progression sheet</p>	<p>Add 2 &amp; 3 digit numbers Add decimals to 1 D.P.</p>	
<p>Y5</p>	<p>Y5 <math>Tth \ Th \ H \ T \ U + Th \ H \ T \ U</math> (41,576 + 4,858)  Inc. Decimals up to 2dp (23.7 + 48.56)  Measures Km-m, m-cm, cm-mm, L-ml, Kg-g</p>	<p>Expanded vertical <math>41,576</math> <math>+ 4,858</math> <math>14</math> <math>120</math> <math>1,300</math> <math>5,000</math> <math>40,000</math> <math>46,434</math></p>	<p>Expanded vertical <math>23.70</math> <math>+ 48.56</math> <math>0.06</math> <math>1.20</math> <math>11.00</math> <math>60.00</math> <math>72.26</math></p>	<p>Compact vertical <math>41,576</math> <math>+ 4,858</math> <math>46,434</math> <math>111</math></p>	<p>Compact vertical <math>23.70</math> <math>+ 48.56</math> <math>72.26</math> <math>11</math></p>	<p>Bar Visualisation  </p>	<p>(derive) addition facts up to 1 (2dp)</p>	<p>Decimal + Decimal (eg <math>9.72 + 3.48</math>)</p>	

Estimation and checking

	Y6	Expanded vertical	Compact vertical		Bar Visualisation		Consolidate / extend
Y6	Consolidate / extend Y5 including: Three numbers Decimals up to 3dp (context: measures)  All Measures	$  \begin{array}{r}  3.243 \text{ k.g} \\  + 18.070 \text{ k.g} \\  \hline  0.003 \text{ k.g} \\  0.110 \text{ k.g} \\  0.200 \text{ k.g} \\  \hline  21.000 \text{ k.g} \\  \hline  21.313 \text{ k.g}  \end{array}  $	$  \begin{array}{r}  3.243 \text{ sec} \\  + 18.070 \text{ sec} \\  \hline  21.313 \text{ sec} \\  \hline  \phantom{21.313 \text{ sec}}  \end{array}  $		 <p>(as above)</p>	Larger: Decimal + Decimal (e.g. 12.439.7 + 343.4)	Y5 including: Three numbers Decimals up to 3dp (context: measures)  All Measures