
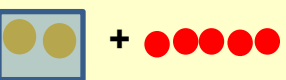




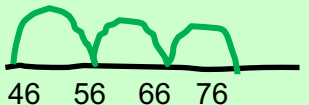






<p><b>EYFS to Year 1</b></p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero</p>	<p><math>2 + 5 =</math></p>  <p>Count out each set then find the total</p>	<p><math>2 + 5 =</math></p>  <p>Count on from first number (Cover first number or display as numeral )</p>	<p><math>2 + 5</math> Leading to</p> <p><math>5 +</math>   <math>5 + 2</math> (without counters)</p> <p>Recognise the biggest number in the calculation and count on from it (using objects for smaller number if necessary)</p>	<p><math>2 + 5</math>  <math>5 + 8</math>  <math>4 + 13</math>  <math>11 + 7</math></p>  <p>Recognise the biggest number in the calculation and count on from it mentally or using number line</p>	<p><math>6 + 8</math> becomes  <math>8 + 2 + 4</math></p>  <p>Partitioning the smaller number and use the tens number to bridge calculation</p> <p><math>5 + 17</math> becomes  <math>17 + 3 + 2</math></p>
<p><b>Year 2</b></p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <ul style="list-style-type: none"> <li>a two-digit number and ones</li> <li>a two-digit number and tens</li> <li>two two-digit numbers</li> <li>adding three one-digit numbers</li> </ul>	<p><b><math>6 + 18</math></b> By counting on from the largest number</p>  <p><b><math>30 + 46</math></b> By counting on in tens</p> 	<p><b><math>6 + 58</math></b> By partitioning the smaller number through the multiple of 10</p> <p><math>58 + 2 + 4</math></p>  <p>58 60 64</p> <p><b><math>22 + 50</math></b> By counting in groups of ten and one from largest number</p>  <p>50 70 72</p>	<p>TO + TO within 100</p> <p><b><math>37 + 44</math></b></p>  <p>44 74 80 81</p> <p>or</p> <p><math>40 + 30 = 70</math>  <math>7 + 4 = 11</math>  <math>70 + 11 = 81</math></p> <p>Or</p> <p><math>44 + 40 - 3 = 81</math></p> <p><b>Recall of facts to 20 and by recall of adding multiples of 10 will support this thinking</b></p>	<p>Addition of three single digits – look for bonds you know and doubles</p> <p><b><math>6 + 9 + 3</math></b>  <math>6 + 3 = 9</math>  Double 9 = 18</p>	<p><b>Special cases + 9</b></p> <p><b><math>9 + 33</math></b></p>  <p>33 42 43</p> <p><b>Using Doubles</b>  <b><math>29 + 30</math></b> is the same as  <math>30 + 30 - 1</math></p>

<p><b>Year 3</b></p> <p>Add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> <li>a three-digit number and ones</li> <li>a three-digit number and tens</li> <li>a three-digit number and hundreds</li> </ul> <p>Two 2-digit numbers across 100 (non-statutory guidance)</p> <p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p>	<p><b>Partitioning the numbers for TO + TO across 100</b></p> <p><b>55 + 78</b>  <math>70 + 50 = 120</math>  <math>8 + 5 = 13</math>  <math>120 + 13 = 133</math></p> <p><b>55 + 78</b>  <math>78 + 50 = 128</math>  <math>128 + 2 + 3 = 133</math></p> <p>Recall of facts to 20 and by adding multiples of 10 will support this thinking</p>	<p><b>Special cases</b></p> <p><b>66 + 79</b>  <math>80 + 66 - 1 = 145</math></p> <p><b>Using doubles</b></p> <p><b>76 + 78</b>  Double 70 + double 6 + 2  Double 70 + double 8 - 2</p> <p>Recall of facts to 20 and by adding multiples of 10 will support this thinking</p>	<p><b>Partitioning</b>  Adding ones and tens to a 3digit number</p> <p><b>356 + 8</b>  <math>356 + 4 + 4 = 364</math></p> <p><b>356 + 70</b>  <math>350 + 70 + 6 = 426</math></p> <p><b>356 + 600</b>  <math>300 + 600 + 56 = 956</math></p>	<p><b>Addition of three digit + 2 digit numbers and 3-digit + 3 digit</b></p> $\begin{array}{r} 268 \\ + 79 \\ \hline 200 \\ 130 \\ + 17 \\ \hline 347 \end{array}$ $\begin{array}{r} 268 \\ + 179 \\ \hline 17 \\ 130 \\ + 300 \\ \hline 447 \end{array}$	<p><b>Introduction of formal written method of columnar addition</b></p> $\begin{array}{r} 576 \\ + 69 \\ \hline 645 \\ \hline \end{array}$
<p><b>Year 4</b></p> <p>Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</p>	<p><b>Using mental strategy where appropriate</b></p> <p><b>1460 + 499</b>  <math>1460 + 500 - 1 = 1959</math></p> <p><b>2560 + 3570</b>  <math>6000 + 130 = 6130</math></p>	<p><b>Addition of four digit + four digit numbers</b></p> $\begin{array}{r} 7268 \\ 5179 \\ \hline 12447 \\ \hline \end{array}$	<p>Addition of numbers with decimal places</p> <p><b>1.5 + 1.5</b>  Double 1 and double 0.5</p> <p><b>1.6 + 1.7</b>  <math>1.7 + 0.3 + 1.3 = 3.3</math></p>		

<p><b>Year 5</b></p> <p>Add and subtract numbers mentally with increasingly large numbers e.g. 5-digit – 4-digit multiple of 10</p> <p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p>	<p><b>Using mental calculation by counting on</b></p> <p><b><math>45678 + 3500 = 49178</math></b>  <math>45678 + 3000 = 48678</math>  <math>42678 + 500 = 49178</math></p> <p><b><math>5.78 + 2.45 = 8.23</math></b>  <math>5.78 + 2 = 7.78</math>  <math>5.73 + 0.4 = 8.18</math>  <math>5.33 + 0.05 = 8.23</math></p>	<p><b>Column addition</b></p> $\begin{array}{r} 5\ 8\ 7\ 6\ 5 \\ 2\ 1\ 9\ 1\ 6\ 1\ 4\ 1\ 8\ + \\ \hline 8\ 8\ 4\ 1\ 3 \end{array}$	<p><b>Addition of numbers to 2 decimal places</b></p> $\begin{array}{r} 4.45 \\ + 3.55 \\ \hline 8.00 \\ \text{1 1} \end{array}$ $\begin{array}{r} 57.89 \\ 46.67 \\ \hline 104.56 \end{array}$	<p><b>Mixed decimals</b></p> <p><b><math>57.89 + 46.6 + 23.785</math></b></p> $\begin{array}{r} 23.785 \\ 57.89 \\ + 46.6 \\ \hline 128.275 \\ \text{1 1 2 1} \end{array}$	
<p><b>Year 6</b></p> <p>Perform mental calculations, including with mixed operations and large numbers</p>	<p><b>Partitioning</b></p> <p><b><math>4.578 + 0.008 = 4.586</math></b>  <math>6.568 + 0.079 = 6.647</math>  <math>6.568 + 0.07 = 6.638</math>  <math>6.638 + 0.009 = 6.647</math></p>	<p><b>Column addition with 5 or 6 digits</b></p> $\begin{array}{r} 5\ 8\ 7\ 6\ 5 \\ 2\ 1\ 9\ 1\ 6\ 1\ 4\ 1\ 8\ + \\ \hline 8\ 8\ 4\ 1\ 3 \end{array}$	<p><b>Using all 4 operations</b></p> <p><b><math>6 + 7 \times 8 = 62</math></b>  because multiplication first then addition when there are no brackets</p> <p><b><math>2780 - 910 + 1220</math></b> can be reordered to <math>2780 + 1220 - 910 = 3090</math> as long as the symbol moves with the number</p>		