

# Addition



<p><b>Written Methods</b></p>	<p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</p>		<p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p> $\begin{array}{r} 423 \\ + 88 \\ \hline 511 \end{array}$		<p><b>Year 3</b> 3-digit numbers – partitioning</p> <p>274 + 163</p> <p>Partition the hundreds, tens and ones to add.</p> <p>4 + 3 = 7</p> <p>70 + 60 = 130</p> <p>200 + 100 = 300</p> <p>Then mentally add the answers.</p> <p>437</p> <p><b>Year 4</b> Up to 4-digit numbers – expanded method</p> <p>327 + 254</p> $\begin{array}{r} 300 & 20 & 7 \\ + & 200 & 50 & 4 \\ \hline 500 & 70 & 11 & = 581 \end{array}$	<p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p> $\begin{array}{r} 23454 \\ + 596 \\ \hline 24050 \end{array}$	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p>					
<p><b>Developing conceptual understanding</b></p>	<p>Number bonds</p> <p>(Ten frame) Numicon</p> <p>Use bonds of 10 to calculate bonds of 20</p> <p>Count all</p> <p>Count on</p> <p>Count on, on number track, in 1s</p>		<p>Number track / Number line – jumps of 1 then efficient jumps using number bonds</p> <p>18 + 5 = 23</p> <p>46 + 27 = 73 Count in tens then bridge.</p> <p>25 + 29 by +30 then -1 (Round and adjust)</p> <p>Partition and recombine</p> <p>46 + 27 = 60 + 13 = 73</p> <p>24 + 10</p> <p>+10</p> <p>+10 = 54</p>		<p>Number line: 264 + 158 efficient jumps</p> <p>40 + 80 = 120 using 4 + 8 = 12</p> <p>So 400 + 800 = 1200</p> <p>243 + 198 by +200 then -2 (Round and adjust)</p> <p>Pairs that make 100</p> <p>23 + 77</p> <p>Place value counters, 100s, 10s, 1s</p> <p>264 + 158</p> <p>(Also with £, 10p and 1p)</p>	<p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</p> $\begin{array}{r} 2458 \\ + 596 \\ \hline 3054 \end{array}$	<p>Add and subtract numbers mentally with increasingly large numbers</p> <p>Perform mental calculations, including with mixed operations and large numbers</p>					
<p><b>With jottings ... or in your head</b></p>	<p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ - 9</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>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>Add and subtract numbers mentally with increasingly large numbers</p>	<p>Perform mental calculations, including with mixed operations and large numbers</p>					
<p><b>Just know it!</b></p>	<p>Represent &amp; use number bonds and related subtraction facts within 20</p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero</p>		<p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p>									
<p><b>Year</b></p>	<p><b>1</b></p>		<p><b>2</b></p>		<p><b>3</b></p>		<p><b>4</b></p>		<p><b>5</b></p>		<p><b>6</b></p>	
<p><b>Foundations</b></p>	<p>1 more</p>		<p>10 more</p> <p>Number bonds: 20, 12, 13</p>		<p>Add multiples of 10, 100</p>		<p>Add multiples of 10s, 100s, 1000s</p>		<p>Add multiples of 10s, 100s, 1000s, tenths.</p>		<p>Add multiples of 10s, 100s, 1000s, tenths, hundredths</p>	
	<p>Number bonds: 5, 6</p>		<p>Number bonds: 14, 15</p> <p>Add 1 digit to 2 digit by bridging</p>		<p>Add single digit bridging through boundaries</p>		<p>Fluency of 2 digit + 2 digit</p>		<p>Fluency of 2 digit + 2 digit including with decimals</p>		<p>Fluency of 2 digit + 2 digit including with decimals</p>	
	<p>Largest number first. Number bonds: 7, 8</p>		<p>Partition second number, add tens then ones</p>		<p>Partition second number to add Pairs of 100</p>		<p>Partition second number to add Decimal pairs of 10 and 1</p>		<p>Partition second number to add</p>		<p>Partition second number to add</p>	
	<p>Add 10. Number bonds: 9, 10</p>		<p>Add 10 and multiples. Number bonds: 16 and 17</p>		<p>Use near doubles to add</p>		<p>Use near doubles to add</p>		<p>Use number facts, bridging and place value</p>		<p>Use number facts, bridging and place value</p>	
	<p>Ten plus ones. Doubles up to 10</p>		<p>Doubles up to 20 and multiples of 5</p> <p>Add near multiples of 10.</p>		<p>Add near multiples of 10 and 100 by rounding and adjusting</p>		<p>Adjust both numbers before adding</p> <p>Add near multiples</p>		<p>Adjust numbers to add</p>		<p>Adjust numbers to add</p>	
	<p>Use number bonds of 10 to derive bonds of 11</p>		<p>Number bonds: 18, 19</p> <p>Partition and recombine</p>		<p>Partition and recombine</p>		<p>Partition and recombine</p>		<p>Partition and recombine</p>		<p>Partition and recombine</p>	