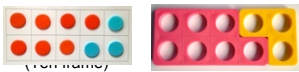



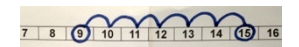
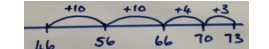
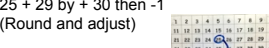
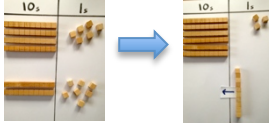

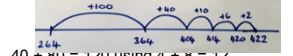


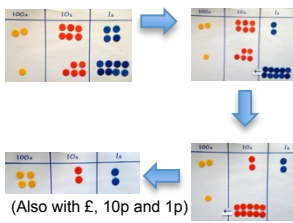


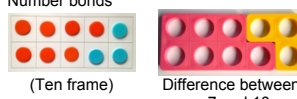



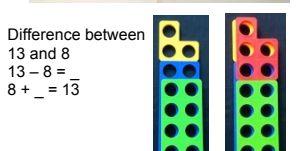


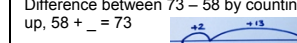
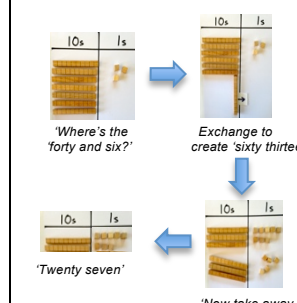
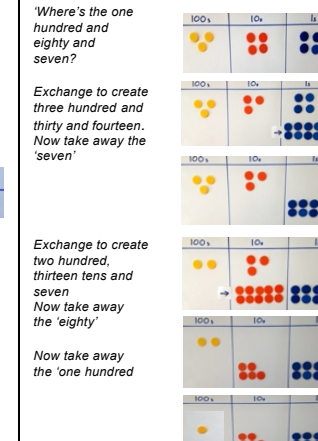


# Addition

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



## Subtraction

	<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> $\begin{array}{r} 231 \\ 84 \\ - 187 \\ \hline 157 \end{array}$	<p>Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition where appropriate</p> $\begin{array}{r} 1 \\ 231 \\ 2344 \\ - 187 \\ \hline 2157 \end{array}$	<p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p> $\begin{array}{r} 1 \\ 231 \\ 52344 \\ - 1187 \\ \hline 51157 \end{array}$	<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) Difference between 7 and 10</p> <p>6 less than 10 is 4</p>  <p>Count out, then count how many are left.</p> <p>7 − 4 = 3</p>  <p>Count back on a number track, then number line.</p> <p>15 − 6 = 9</p>  <p>Difference between 13 and 8</p> <p>13 − 8 =</p> <p>8 + = 13</p> 	<p>Number track / Number line – jumps of 1 then efficient jumps using number bonds</p> <p>23 − 5 = 18</p>  <p>Using a number line, 73 − 46 = 26</p>  <p>Difference between 73 − 58 by counting up, 58 + = 73</p>  <p>Taking away and exchanging, 73 − 46</p>  <p>'Where's the forty and six?'</p> <p>Exchange to create 'sixty thirteen'</p> <p>'Twenty seven'</p> <p>'Now take away the forty and six'</p>	<p>Taking away and exchanging, 344 − 187</p> <p>Place value counters</p> <p>'Where's the one hundred and eighty and seven?'</p>  <p>Exchange to create three hundred and thirty and fourteen. Now take away the 'seven'</p> <p>Exchange to create two hundred, thirteen tens and seven. Now take away the 'eighty'</p> <p>Now take away the 'one hundred'</p>			
<p><b>With jottings</b></p> <p>... or in your head</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>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</p>	<p>Add and subtract numbers mentally with increasingly large numbers</p>	
<p><b>Just know it!</b></p>	<p>Represent and 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 less</p>	<p>10 less</p> <p>Number bonds, subtraction: 20, 12, 13</p>	<p>Subtract multiples of 10 and 100</p>	<p>Subtract multiples of 10s , 100s, 1000s</p>	<p>Subtract multiples of 10s , 100s, 1000s, tenths,</p>	<p>Subtract multiples of 10s , 100s, 1000s, tenths, hundredths</p>
	<p>Number bonds, subtraction: 5, 6</p>	<p>Number bonds, subtraction: 14, 15</p> <p>Subtract 1 digit from 2 digit by bridging</p>	<p>Subtract single digit by bridging through boundaries</p>	<p>Fluency of 2 digit subtract 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>Count back</p> <p>Number bonds, subtraction: 7, 8</p>	<p>Partition second number, count back in 10s then 1s</p>	<p>Partition second number to subtract</p>	<p>Partition second number to subtract</p> <p>Decimal subtraction from 10 or 1</p>	<p>Partition second number to subtract</p>	<p>Partition second number to subtract</p>
	<p>Subtract 10.</p> <p>Number bonds, subtraction: 9, 10</p>	<p>Subtract 10 and multiples of 10</p> <p>Number bonds, subtraction: 16, 17</p>	<p>Difference between</p>	<p>Difference between</p>	<p>Difference between</p>	<p>Use number facts bridging and place value</p>
	<p>Teens subtract 10.</p>	<p>Subtract near multiples of 10</p>	<p>Subtract near multiples of 10 and 100 by rounding and adjusting</p>	<p>Subtract near multiples by rounding and adjusting</p>	<p>Adjust numbers to subtract</p>	<p>Adjust numbers to subtract</p>
	<p>Difference between</p>	<p>Difference between</p> <p>Number bonds, subtraction: 18, 19</p>	<p>Difference between</p>	<p>Difference between</p>	<p>Difference between</p>	<p>Difference between</p>