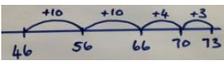
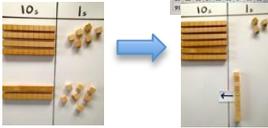
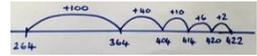
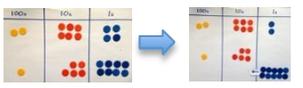


Addition Routeway

Written Methods	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs	Add two 2 digit or 3 digit numbers using concrete objects, pictorial representations and partitioning	Expanded addition. Adding the units first.	Add numbers with up to 4 digits using the formal written method of compact addition, where appropriate	Solve addition and multi-step problems in contexts, deciding which operations and methods to use and why	
Developing conceptual understanding	<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> $18 + 5 = 23$  <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> $46 + 27 = 73$  <p>$24 + 10$ $+10$ $+10 = 54$</p> 	<p>Number line: $264 + 158$ efficient jumps</p>  <p>$40 + 80 = 120$ using $4 + 8 = 12$ So $400 + 800 = 1200$</p> <p>$243 + 198$ by $+200$ then -2 (Round and adjust)</p> <p>Pairs that make 100</p> $23 + 77$  <p>Place value counters, 100s, 10s, 1s</p> $264 + 158$  <p>46 $+27$ 73 1</p> <p>(Also with £, 10p and 1p)</p>	 <p>Add and subtract numbers with up to 3 digits, using the formal written method of compact addition.</p> $\begin{array}{r} 46 \\ + 27 \\ \hline 73 \\ 1 \end{array}$	$\begin{array}{r} 2458 \\ + 596 \\ \hline 3054 \end{array}$ <p>The decimal point does not move</p> $\begin{array}{r} 3.68 \\ + 4.23 \\ \hline 7.91 \end{array}$	<p>Examples:</p> <p>Find two 3 digit numbers with a sum of 465.</p> <p>Find the different totals that you can make by using any three of these numbers: 1.07, 0.3, 37.03, 17.73, 31.7</p> <p>Beth has made a necklace with 123 pink beads and 238 purple beads. How many beads are on the necklace altogether?</p>
With jottings ... or in your head	Solve 1 step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = D - 9$	Add numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> * a 2 digit number and ones * a 2 digit number and tens * two 2 digit numbers * adding three 1 digit numbers http://www.st 	Add numbers mentally, including: <ul style="list-style-type: none"> * a 3 digit number and ones * a 3 digit number and tens * a 3 digit number and hundreds 	Solve addition 2 step problems in contexts, deciding which operations and methods to use and why	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. Derive and use related facts up to 100				
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	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



