


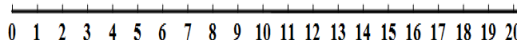
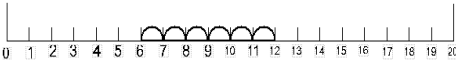

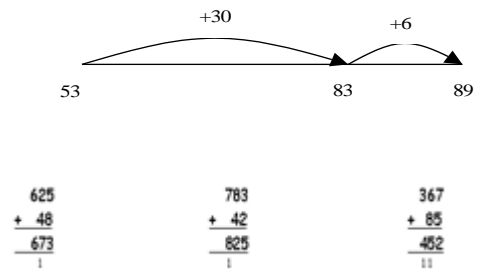


Addition

Year Group	Learning Intention	Strategy	Resources	End of year expectation															
<p>Early Years</p>	<p>1:1 correspondence with objects</p> <p>Recognising correct numbers</p> <p>Matching numbers to sets</p> <p>Counting</p> <p>Adding 2 sets together</p> <p>Counting on a number line - on or back in 1s</p> <p>Number bonds to 10</p> <p>Doubles to 10</p> <p>Recording as jottings</p> <p>Record as number sentence</p> <p>Problem solving - Using and applying</p>	<div style="text-align: center;">   </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center; margin-top: 20px;"> <table border="0"> <tr> <td>5+5=10</td> <td>2+8=10</td> <td>1+9=10</td> </tr> <tr> <td>6+4=10</td> <td>7+3=10</td> <td>4+6=10</td> </tr> <tr> <td>3+3=6</td> <td>6+6=12</td> <td>8+8=16</td> </tr> <tr> <td>4+4=8</td> <td>7+7=14</td> <td>9+9=18</td> </tr> <tr> <td>2+1=3</td> <td>5+3=8</td> <td>8+5=13</td> </tr> </table> </div> <p style="color: blue; font-size: small;">Can you show me <u>3</u> fingers? Can you add <u>5</u> more fingers? How many do you have now?</p>	5+5=10	2+8=10	1+9=10	6+4=10	7+3=10	4+6=10	3+3=6	6+6=12	8+8=16	4+4=8	7+7=14	9+9=18	2+1=3	5+3=8	8+5=13	<p>Real life objects found in the classroom</p> <p>Flash cards, IWB, T scribing, number cards</p> <p>Real objects, number cards</p> <p>Dice, role play, chanting, songs and rhymes, number games, puzzles</p> <p>Actions (arms), T modelling, fingers, I-board</p> <p>Display number line</p> <p>Fingers</p> <p>Fingers</p> <p>Numicon</p>	<p>Children count reliably with numbers from 1-20, place them in order and say which number is one more or one less than a given number.</p> <p>Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer.</p> <p>They solve problems, including doubling, halving and sharing.</p>
5+5=10	2+8=10	1+9=10																	
6+4=10	7+3=10	4+6=10																	
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<p>Year 1</p>	<p>Adding 2 sets together - counting on</p> <p>Number bonds to 20</p> <p>Introduce 100 square</p> <p>Recognise simple patterns E.g. adding 10</p> <p>Missing number - counting on</p> <p>Adding 1 digit numbers to 2 digit number by counting on.</p> <p>Bridging 10</p> <p>Problem solving - Using and applying</p>	 <p style="text-align: center;">$6 + 6 = 12$</p> <p>$4+6=10$ $14+6=20$ $8+2=10$ $18+2=20$ $10-6=4$ $20-6=14$ $10-2=8$ $20-2=18$</p> <table border="1" data-bbox="801 512 1010 671"> <tr><td>33</td><td>34</td><td>35</td><td>36</td></tr> <tr><td>43</td><td>44</td><td>45</td><td>46</td></tr> <tr><td>53</td><td>54</td><td>55</td><td>56</td></tr> <tr><td>63</td><td>64</td><td>65</td><td>66</td></tr> </table> <p>$5 + _ = 8$ $12 = _ + 8$</p> <p>$15+4$ $21+8$ $32+5$</p> <p>$8+6=14$ $17+5=22$</p> <p>Pirate Pete had <u>5</u> coins and he found <u>3</u> more. How many coins does he have <u>altogether</u>?</p> 	33	34	35	36	43	44	45	46	53	54	55	56	63	64	65	66	<p>Number line</p> <p>Multilink, numicon</p> <p>100sq</p> <p>Fingers, number line</p> <p>Count on in head/fingers, number line, 100sq</p> <p>100sq and number line</p>	<p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</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>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 - \square = 9$.</p>
33	34	35	36																	
43	44	45	46																	
53	54	55	56																	
63	64	65	66																	

<p>Year 2</p>	<p>2 digit number add 2 digit number - Partitioning T and U</p> <p>Finding the difference by counting on</p> <p>Inverse operations</p> <p>Problem solving - Using and applying</p> <p>2 step word problems</p>	<table border="1" data-bbox="801 240 1010 400"> <tr><td>34</td><td>35</td><td>36</td><td>37</td></tr> <tr><td>44</td><td>45</td><td>46</td><td>47</td></tr> <tr><td>54</td><td>55</td><td>56</td><td>57</td></tr> <tr><td>64</td><td>65</td><td>66</td><td>67</td></tr> </table> <p>$34 + 23 = 57$ (34+20=54) (54+3=57)</p> <p>Not as a written method - this is each step on the 100 sq.</p> <p>7+3=10 10-3=7 10-7=3</p> <p>I had <u>39</u> ducks. Daddy gave me <u>7</u> more. How many ducks have I got now?</p> <p>I counted <u>41</u> birds. Daddy saw <u>12</u>. Mummy saw <u>2</u> more. How many birds did we see altogether?</p>	34	35	36	37	44	45	46	47	54	55	56	57	64	65	66	67	<p>100 sq, Dienes rods</p> <p>Arrow cards</p> <p>100sq, Pencil and paper method</p> <p>200sq for bigger numbers Pencil and paper method</p>	<p>Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures.</p> <p>Applying their increasing knowledge of mental and written methods.</p> <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <ul style="list-style-type: none"> - a two-digit number and ones - a two-digit number and tens - two two-digit numbers - adding three one-digit numbers <p>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</p> <p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>
34	35	36	37																	
44	45	46	47																	
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<p>Year 3</p>	<p>Partitioning TU</p> <p>Partitioning HTU</p>	<p>34 + 58 = 92 30 + 50 = 80 4 + 8 = 12 80 + 12 = 92</p> <p>562 + 148 = 710 500 + 100 = 600 60 + 40 = 100 8 + 2 = 10</p>	<p>Paper method, mental strategies</p>	<p>Add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds <p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.</p> <p>Estimate the answer to a calculation and use inverse operations to check answers.</p> <p>Solve problems, including missing number problems, using</p>																

	<p>Addition on an empty number line.</p> <p>Introduce 2 and 3 digit column addition (bridging 10 and 100)</p> <p>Problem solving - Using and applying.</p>	<p>$53 + 36 = 89$</p>  <p>There are <u>26</u> people <u>on</u> the bus. <u>45</u> people get <u>on</u> at the next stop. How many people are <u>on</u> the bus now?</p>	<p>Dienes rods, mental strategies</p> <p>Mental strategies</p>	<p>number facts, place value, and more complex addition and subtraction.</p>						
<p>Year 4</p>	<p>Written method - column addition (Understanding of place value) 4 digit numbers bridging 10s and 100s.</p> <p>Adding decimals - context of money.</p> <p>Adding decimals to make a whole or less.</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right; padding-right: 20px;"> $\begin{array}{r} 587 \\ + 475 \\ \hline 1062 \\ 11 \end{array}$ </td> <td style="text-align: right;"> $\begin{array}{r} 3587 \\ + 675 \\ \hline 4262 \\ 111 \end{array}$ </td> </tr> <tr> <td style="text-align: right; padding-right: 20px;"> $\begin{array}{r} 7648 \\ + 1486 \\ \hline 9134 \\ 111 \end{array}$ </td> <td style="text-align: right;"> $\begin{array}{r} 6584 \\ + 5848 \\ \hline 12432 \\ 111 \end{array}$ </td> </tr> <tr> <td colspan="2" style="text-align: center; padding-top: 20px;"> $\begin{array}{r} \pounds 32.64 \\ \pounds 14.10 \\ \hline \pounds 46.74 \end{array}$ </td> </tr> </table>	$\begin{array}{r} 587 \\ + 475 \\ \hline 1062 \\ 11 \end{array}$	$\begin{array}{r} 3587 \\ + 675 \\ \hline 4262 \\ 111 \end{array}$	$\begin{array}{r} 7648 \\ + 1486 \\ \hline 9134 \\ 111 \end{array}$	$\begin{array}{r} 6584 \\ + 5848 \\ \hline 12432 \\ 111 \end{array}$	$\begin{array}{r} \pounds 32.64 \\ \pounds 14.10 \\ \hline \pounds 46.74 \end{array}$		<p>100 sq Dienes rods Multilink Arrow cards Place value fans</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>Estimate and use inverse operations to check answers to a calculation.</p> <p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>
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	<p>Problem solving - Using and applying</p>	<p>Emma has <u>232</u> comics. Sally gives her <u>108 more</u>. How many does she have <u>altogether</u>?</p>		
<p>Year 5</p>	<p>Written method - Column addition of more than 4 digits including decimals</p> <p>Add or subtract mentally.</p> <p>Problem solving - Using and applying. Multi step word problems.</p>	$\begin{array}{r} 86.950 \\ + 9.847 \\ \hline 96.797 \\ 11 \end{array}$ <p>Mr Brown has <u>£4762</u> in his building society and <u>£2247</u> in his bank. How much does he have <u>altogether</u>? He wants to spend £10,000. How much more does he need to save?</p>	<p>Mental strategies</p>	<p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).</p> <p>Add and subtract numbers mentally with increasingly large numbers.</p> <p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</p> <p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p>
<p>Year 6</p>	<p>Estimate answer, select suitable method - check answers by using inverse</p> <p>Problem solving - Using and applying</p>	<p>Continue to use formal written methods for larger numbers and decimals.</p> <p>Leon won <u>£363.67</u>, Kurt won <u>£860.65</u> and Razia won <u>£206.45</u>. How much was the <u>total</u> winnings? Show your workings. How much more did Kurt win than Leon?</p>	<p>Mental strategies</p>	<p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Identify common factors, common multiples and prime numbers.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p> <p>Solve problems involving addition, subtraction, multiplication and division.</p> <p>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</p>

