




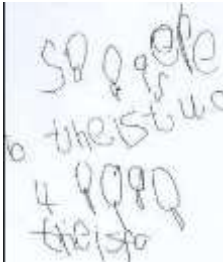


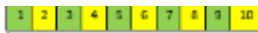


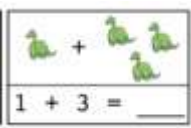
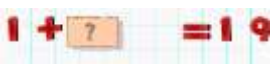

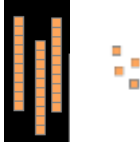
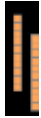

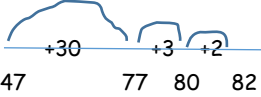
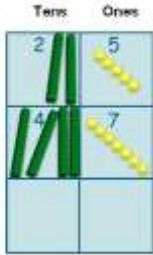
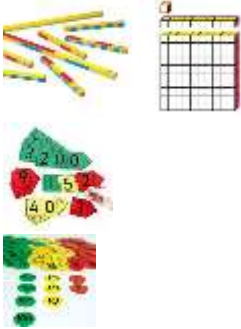
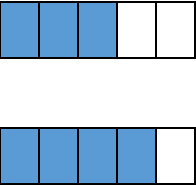



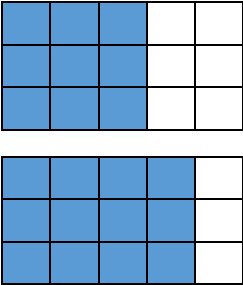
Simonside Primary School- Progression in Addition


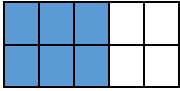
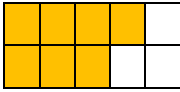
Year group	Foundation	Rapid Recall	Mental calculation	Objective	Method	Practical method	Pictorial/written methods	Vocabulary
EYFS		1 more numbers up to 10  Number bonds in the range of 10.		<p>Add one more to a group of objects 0-5 then 0-10, then 0-20</p> <p>Addition as 'combining 2 groups' using single digit numbers in range 0-5 then 0-10 then 0-20</p> <p>Addition as 'counting on' in range 0-5 then 0-10 then 0-20</p> <p>Real life problems in range 0-10</p>	<p>Practical / recorded using ICT (eg digital photos / pictures on IWB)</p>	<p>Range of Toys, Books, Beads, Rhymes, Counters, Number tiles, objects (stationary and moving) number lines, Numicon, stories, Role play.</p>    <p>Adding 1 more</p> <p>Combining 2 groups</p>  <p>Counting on</p>	<p>Drawings of problems.</p>  <p>Begin to record using marks.</p> 	<p>add, more than, equals, altogether, same as, plus, number bonds, number sentences,</p>


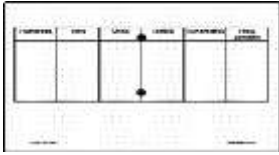


Year group	Foundation	Rapid Recall	Mental calculation	Objective	Method	Practical method	Pictorial/written methods	Vocabulary
<b>Y1</b>	<p>1 more</p> <p>Number bonds: 5, 6,7,8,9,10</p> <p>Largest number first.</p> <p>Add 10. Number</p> <p>Ten plus ones.</p> <p>Doubles up to 10</p> <p>Use number bonds of 10 to derive bonds of 11</p>	<p>Number bonds up to 10.</p> <p>1 or 10 more than a number</p> <p>Doubles up to 10 (double 5)</p>	<p>U + multiple of 10</p> <p>TU + multiple of 10</p>	<p>Consolidation of EYFS</p> <p>Read, write and interpret mathematical statements involving addition (+) and equals (=) signs</p> <p>Adding U+U (bridging 10)</p> <p>TU + U by counting on in range 0-20</p> <p>TU + U (bridging 20)</p> <p>Concept of addition in any order</p> <p>Concept of addition and subtraction as inverse operations</p> <p>Solve real life/missing number 1 step problems in range 0-20</p>	<p>Practical / recorded using ICT</p> <p>Informal written methods</p> <p>Horizontal recording</p>	<p>Objects, Number lines, numbertrack , 100 squares, Multilink, Numicon, Lego, beads, tape measures, bead strings, fingers, whiteboards, role play,</p>  <p>Counting on</p> <p>U+U</p>  <p>TU+U</p>	<p>Jumps along a number track.</p>  <p>Jumps along a number line.</p>  <p>Bigger jumps on a number line.</p>  <p>Horizontal layout.</p>  <p>Missing numbers.</p> 	<p>add, more than, equals, altogether, same as, plus, number bonds, number sentences,</p> <p>Total, equal to, most, least, put together, more than</p>

Year group	Foundation	Rapid Recall	Mental calculation	Objective	Method	Practical method	Pictorial/written methods	Vocabulary
<b>Y2</b>	<p>10 more</p> <p>Number bonds: 20,</p> <p>Number bonds: 12,13,14,15, 16,17,18,19</p> <p>Add 1 digit to 2 digit by bridging.</p> <p>Partition second number, add tens then ones</p> <p>Add 10 and multiples.</p> <p>Doubles up to 20</p> <p>Multiples of 5</p> <p>Add near multiples of 10</p> <p>Partition and recombine</p>	<p>Number bonds to 20</p> <p>Pairs to 100 (using multiples of 10)</p>	<p>TU+U</p> <p>TU+ multiple of 10</p> <p>U+U+U</p> <p>+9 (by +10-1)</p>	<p>Consolidation of Y1</p> <p>TU+T</p> <p>TU + TU (bridging 10s / 100)</p> <p>U + U + U</p> <p>Add 9 and 11 by adding 10, then one less or one more</p> <p>Recognise addition and use in problem solving including numbers, quantities and measures</p>	<p>Practical</p> <p>Informal written methods</p> <p>Horizontal recording</p>	<p>Bead strings, number lines, 100 squares, Dienes, place value cards.</p>    <p>34+20=54</p> 	<p>Number line progressing to efficient jumps.</p> <p>35+47=</p>  <p>47            77   80   82</p> <p>Partitioning</p> <p>33 + 42</p> <p>30 + 40 = 70</p> <p>3 + 2 = 5</p> <p>70 + 5 = 75</p> <p>Move onto column addition IF READY (CARRYING)</p> <p>34</p> <p><u>45</u></p> <p>79</p> <p>Beginning to record in columns</p> 	<p>add, more than, equals, altogether, same as, plus, number bonds, number sentences, Total, equal to, most, least, put together, more than</p> <p>inverse, sum, partition</p>

Year group	Foundation	Rapid Recall	Mental calculation	Objective	Method	Practical method	Pictorial/written methods	Vocabulary
<b>y3</b>	<p>Add multiples of 10, 100</p> <p>Add single digit bridging through boundaries</p> <p>Partition second number to add Pairs of 100</p> <p>Use near doubles to add</p> <p>Add near multiples of 10 and 100 by rounding and adjusting</p> <p>Partition and recombine</p>	<p>Number bonds to 20/100/1000</p> <p>Pairs of two-digit multiples of 5 and 10 that total 100</p> <p>Multiples of 50 and 100 that total 1000</p>	<p>TU+U</p> <p>TU+TU</p> <p>TU+ near multiple of 10</p>	<p>Consolidation of Y2</p> <p>Add up to 3 digit numbers using formal written methods (column with carrying)</p> <p>Add up to 3-digit numbers including bridging</p> <p>Add fractions with the same denominator within one whole</p> <p>Estimate answers using approximation</p> <p>Using inverse to check</p> <p>Application into problem solving TU + TU HTU + TU HTU + HTU</p>	<p>Practical</p> <p>Informal written methods</p> <p>Horizontal recording</p> <p>Formal written method (with carrying)</p>	<p>Counting sticks, dienes, number lines, hundred square, tape measures, place value cards, place value counters.</p> 	<p>Partitioning</p> <p>57 + 285</p> <p>0+200=200 50+80=130 7+5=12 200+130+12=342</p> <p>Column addition (with carrying)</p> $\begin{array}{r} 243 \\ +179 \\ \hline 422 \\ 11 \end{array}$ <p>Adding fractions</p> $\frac{3}{5} + \frac{1}{5} = \frac{4}{5}$ 	<p>add, more than, equals, altogether, same as, plus, number bonds, number sentences, Total, equal to, most, least, put together, more than, inverse, sum, partition</p> <p><b>column addition</b></p>

Year group	Foundation	Rapid Recall	Mental calculation	Objective	Method	Practical method	Pictorial/written methods	Vocabulary
<b>Y4</b>	Add multiples of 10s, 100s, 1000s  Fluency of 2 digit + 2 digit  Partition second number to add  Decimal pairs of 10 and 1  Use near doubles to add  Adjust both numbers before adding  Add near multiples  Partition and recombine	Bonds to 1000  Derive sums of pairs of multiples of 10/100/1000  10/100/1000  Multiples of 50 that total 1000.  Pairs of fractions to 1 whole	TU+TU  Pairs of multiples of 10/100/1000  Three, 2 digit multiples of 10 (40+50+30)  Two, 3 digit multiples of 10 (320+150)	Consolidation of Y3  Add 4 digit numbers using formal written methods including bridging 1000  Add fractions with the same denominator  Add decimals in the context of money  Estimate using rounding  Use rounding to check answers  Recognise addition as the inverse of subtraction  Solve 2 step problems including money and fractions	Practical  Informal written methods  Horizontal recording  Formal written method (carrying)	Place value counters and cards, dienes, coins, fraction cards and pictures.  	Partitioning  $1234 + 3472$ $1000 + 3000 = 4000$ $200 + 400 = 600$ $30 + 70 = 100$ $4 + 2 = 6$  $4000 + 600 + 100 + 6 = 4706$  Column addition (with carrying)  $\begin{array}{r} 2358 \\ +1874 \\ \hline 4232 \end{array}$ $\begin{array}{r} \pounds 3.48 \\ + \pounds 2.41 \\ \hline \pounds 5.89 \end{array}$ <small>111</small>  Adding fractions $3/5 + 1/5 = 4/5$  	add, more than, equals, altogether, same as, plus, number bonds, number sentences, Total, equal to, most, least, put together, more than, inverse, sum, partition, column addition  <b>Increase, decimal point, denominator, numerator</b>

Year group	Foundation	Rapid Recall	Mental calculation	Objective	Method	Practical method	Pictorial/written methods	Vocabulary																																				
<b>Y5</b>	<p>Add multiples of 10s, 100s, 1000s, tenths,</p> <p>Fluency of 2 digit + 2 digit including with decimals</p> <p>Partition second number to add</p> <p>Use number facts, bridging and place value</p> <p>Adjust numbers to add</p> <p>Partition and recombine</p>	<p>Derive bonds up to 1 (1 dp)</p> <p>Derive bonds up to 10 (1 dp)</p>	<p>Integer + decimal e.g. <math>19 + 3.4</math></p>	<p>Consolidation of Y4</p> <p>Add numbers of more than 4 digits using column addition</p> <p>Addition of numbers with up to 3 decimal places</p> <p>Add fractions with the same denominator, and denominators that are multiples of the same number where answer exceeds 1</p> <p>Solve multi-step problems deciding on appropriate operation</p>	<p>Practical</p> <p>Informal written methods</p> <p>Horizontal recording</p> <p>Formal written method</p>	<p>Place value counters and cards, coins, fraction cards/pictures</p>  <p>6214 +</p> <table border="1" data-bbox="1240 719 1554 1114"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>u</th> </tr> </thead> <tbody> <tr> <td>●●</td> <td>●●</td> <td>●</td> <td>●●</td> </tr> <tr> <td>●●</td> <td></td> <td></td> <td>●●</td> </tr> <tr> <td>●●</td> <td></td> <td></td> <td></td> </tr> <tr> <td>●●</td> <td>●●</td> <td>●●</td> <td>●●</td> </tr> <tr> <td></td> <td>●●</td> <td>●●</td> <td>●●</td> </tr> <tr> <td></td> <td>●●</td> <td>●●</td> <td>●●</td> </tr> <tr> <td></td> <td>●●</td> <td>●●</td> <td>●●</td> </tr> <tr> <td></td> <td>●</td> <td>●●</td> <td>●●</td> </tr> </tbody> </table> <p>2786</p>	Th	H	T	u	●●	●●	●	●●	●●			●●	●●				●●	●●	●●	●●		●●	●●	●●		●●	●●	●●		●●	●●	●●		●	●●	●●	<p>Column addition (with carrying)</p> $\begin{array}{r} 5.761 \\ +3.725 \\ \hline 9.486 \\ 1 \end{array}$ <p>Adding fractions</p> $\frac{3}{5} + \frac{7}{10} = \frac{13}{10} = 1 \frac{3}{10}$  <p>+</p> 	<p>add, more than, equals, altogether, same as, plus, number bonds, number sentences, Total, equal to, most, least, put together, more than, inverse, sum, partition, column addition, increase, decimal point, denominator, numerator</p> <p>tenths, hundredths, thousandths, partition, near multiples, denominator</p>
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<b>Y6</b>	<p>Add multiples of 10s, 100s, 1000s, tenths, hundredths.</p> <p>Fluency of 2 digit + 2 digit including with decimals</p> <p>Partition second number to add</p> <p>Use number facts, bridging and place value</p> <p>Adjust numbers to add</p> <p>Partition and recombine</p>	<p>Derive bonds up to 1 (2 dp)</p> <p>Derive bonds up to 10 (2 dp)</p>	<p>Decimal + decimal e.g. 19.7+3.4</p>	<p>Consolidation of Y5</p> <p>Application of all prior skills learnt to increase fluency</p> <p>Solve multi-step problems deciding on appropriate operation</p> <p>Explore the order of operations using brackets</p> <p>Add fractions with different denominators/ mixed numbers</p>	<p>Practical</p> <p>Informal written methods</p> <p>Formal written method</p>	<p>Place value counters, fraction cards/cubes, decimal place value cards</p>  <table border="1" data-bbox="1240 568 1554 963"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>u</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>  	Th	H	T	u									<p><math>\frac{3}{4} + \frac{2}{3}</math></p> <p></p> <p><math>\frac{9}{12} + \frac{8}{12} = \frac{17}{12} = 1 \frac{5}{12}</math></p> $\begin{array}{r} 46214 \\ + 25787 \\ \hline 72001 \\ 111 \end{array}$ <p>Column addition with decimals</p> $\begin{array}{r} 26.37 + \\ \underline{28.09} \\ 54.46 \\ 11 \end{array}$	<p>add, more than, equals, altogether, same as, plus, number bonds, number sentences, Total, equal to, most, least, put together, more than, inverse, sum, partition, column addition, increase, decimal point, denominator, numerator, tenths, hundredths, thousandths, partition, near multiples, denominator</p> <p><b>Common denominator</b></p>
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