

Maths Calculation Procedure

Addition and Subtraction		
Year		
1	<p>Can you use the + - and = symbols? Can you add and subtract one and twodigit numbers up to 20?</p>	<p style="text-align: center;">Addition</p> <p>The bottom of the cherry diagram are the two numbers we are combining together.</p> <p>When adding numbers that cross 10, children use their knowledge of number bonds to 10 to partition the number being added. 7 is partitioned into 2 and 5 because $8 + 2 = 10$ and then we add 5 more. We use bead string and 10s frames to support this understanding. <i>Continued into Year 2 to increase fluency.</i></p>
		<p style="text-align: center;">Subtraction</p> <p>When subtracting, the children can use their partitioning knowledge to partition the number into 2 groups. $7 = 3 + 4$ so $7 - 3 = 4$</p> <p>When subtracting numbers that cross 10, children use their knowledge of partitioning to subtract to 10 and then subtract the rest. $14 - 6 = 14 - 4 - 2$. We use 10s frames to support this understanding.</p> <p><i>Continued into Year 2 to increase fluency.</i></p>
2	<p>Can you add and subtract numbers (with concrete objects and pictorial representations) including; 2 digit and ones, 2 digit and tens, two 2 digit numbers, adding three 1 digit numbers?</p>	<p>Children will move from dienes (blocks of 1s and 10s) to place value counters to the column method. We use this to develop their conceptual understanding. They will practise regrouping 10 ones into 1 ten.</p>
		<p>Children will move from dienes (blocks of 1s and 10s) to place value counters to the column method. They will practise regrouping 1 ten into 10 ones.</p>
3	<p>Can you use the column method to add and subtract with numbers up to 3 digits?</p>	

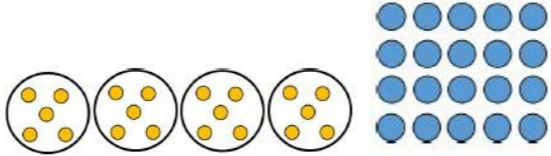
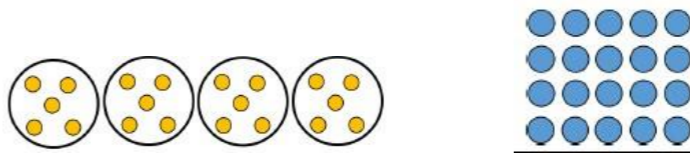
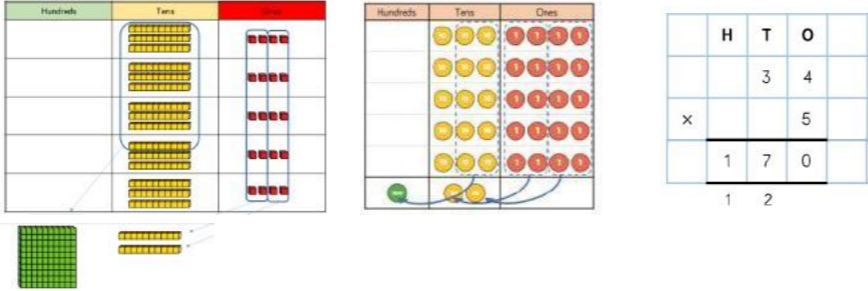
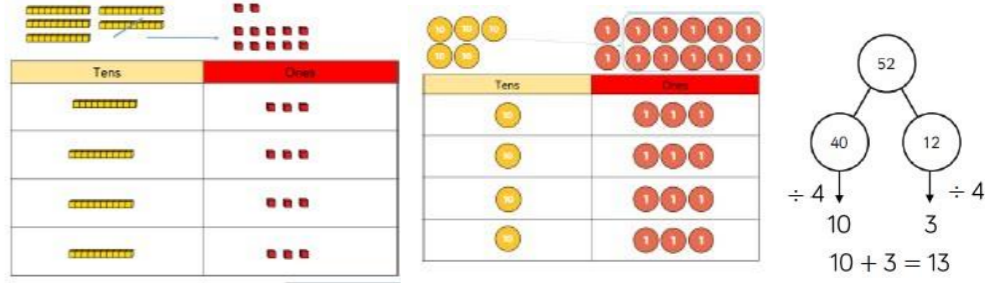
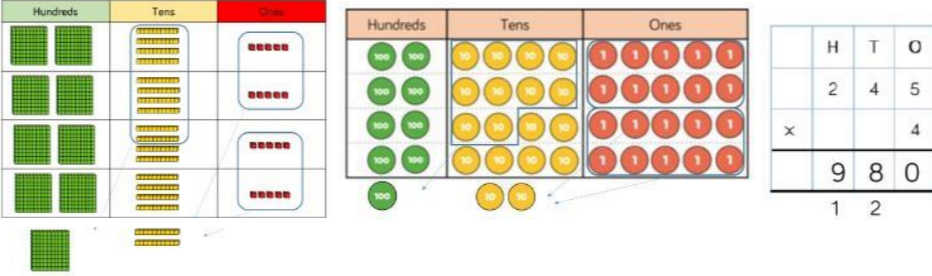
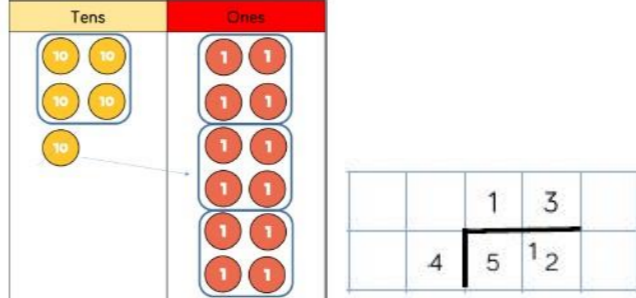


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<p>4</p>	<p>Can you add and subtract numbers with up to 4 digits using the column method when it is necessary?</p>		
<p>5</p>	<p>Can you add and subtract numbers with more than 4 digits using the column method, including with exchanging/regrouping? Can you add and subtract decimal numbers?</p>	<p>Methods for adding larger numbers the same as previous methods.</p>	<p>Methods for adding larger numbers the same as previous methods.</p>
<p>6</p>		<p>Methods the same as Year 5</p>	<p>Methods the same as Year 5</p>

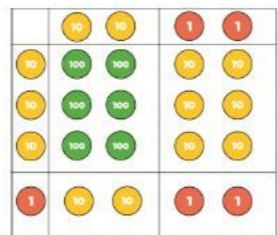


Maths Calculation Policy

Multiplication and Division		
Year		
1		
2	<p>Can you use \times \div and $=$ to write multiplication and division calculations?</p>  <p>$5 + 5 + 5 + 5 = 20$ $4 \times 5 = 20$ $5 \times 4 = 20$</p> <p>Children will use concrete resources and then arrays to see that multiplication is about repeated addition.</p>	 <p>$20 \div 5 = 4$</p> <p>Division needs to be seen as both sharing and grouping. $20 \div 5 =$ Can be seen as sharing 20 into 5 groups or determining how many groups of 5 are in 20. Children will be encouraged to use their known multiplication facts to help with division.</p>
3	<p>Can you write multiplication statements (using your times tables knowledge)? Can you write division statements (using your times tables knowledge)?</p>  <p>Children will move from dienes (blocks of 1s, 10s and 100s) to place value counters to the column method.</p>	 <p>Remainders are also introduced in Year 3. Children will move from dienes (blocks of 1s, 10s and 100s) to place value counters to jottings. Children will use their known multiplication facts to help them to divide larger numbers. $52 \div 4 =$ Children know that $40 \div 4 = 10$ and $12 \div 4 = 3$ Using their knowledge of grouping (from year 2) they can see that there are 13 groups of 4 in 52.</p>
4	<p>Can you multiply 2 and 3 digit numbers by a 1 digit number using the column method? Can you divide 3 digit numbers by 1 digit?</p> 	



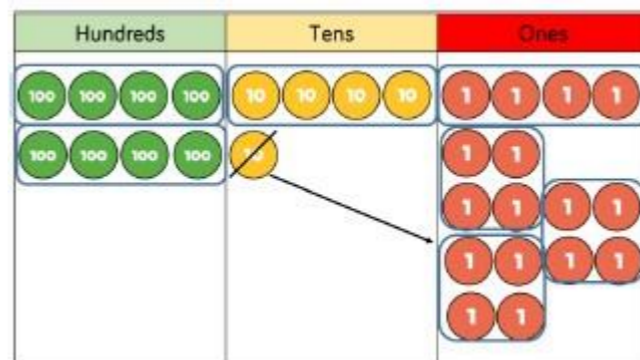
5 Can you multiply up to 4 digit by 1 or 2 digit numbers using a formal method?
 Can you use long multiplication to multiply a number by a 2 digit number?
 Can you divide up to a 4 digit number by a 1 digit number using a formal method? (including with remainders)



x	20	2
30	600	60
1	20	2

	H	T	O
		2	2
x		3	1
		2	2
	6	6	0
	6	8	2

The grid method is used here as children are multiplying 2 two-digit numbers together.



		2	1	4
	4	8	5	16



BEECHFIELD SCHOOL

Maths Calculation Policy

6	Can you multiply 4 digit numbers by 2 digit numbers using the column method? Can you divide 4 digit numbers by 2 digit numbers? Can you interpret remainders as whole number remainders, decimals and fractions? Can you divide 4 digit numbers by 2 digit numbers using short division and interpret remainders? Can you multiply one-digit numbers with up to two decimal places by whole numbers?	Methods the same as Year 5	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block;">$7,335 \div 15 = 489$</div> <table border="1" style="margin-left: 20px;"><tr><td></td><td>0</td><td>4</td><td>8</td><td>9</td></tr><tr><td>15</td><td>7</td><td>7₃</td><td>13₃</td><td>13₅</td></tr></table> <table border="1" style="margin-left: 20px;"><tr><td>15</td><td>30</td><td>45</td><td>60</td><td>75</td><td>90</td><td>105</td><td>120</td><td>135</td><td>150</td></tr></table> <p>A friendly number box to list the multiples of larger numbers will be used. Children are not expected to have times-tables beyond 12 memorised.</p>		0	4	8	9	15	7	7 ₃	13 ₃	13 ₅	15	30	45	60	75	90	105	120	135	150
	0	4	8	9																			
15	7	7 ₃	13 ₃	13 ₅																			
15	30	45	60	75	90	105	120	135	150														