



Year Three Autumn Term Arithmetic			Knowledge Organiser Vocabulary	Knowledge Organiser Visuals												
Week 1	National Curriculum	<p><b>Number Bonds</b></p> <p>Recall from Y2: recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</p> <p>Teach for Y3: N/A</p>														
Week 2	National Curriculum	<p><b>Addition Place Value</b></p> <p>Recall from Y2: N/A</p> <p>Teach for Y3: N/A</p> <p>e.g <math>200 + 70 =</math>  <math>600 + 300 =</math></p>														
Week 3	National Curriculum Statements	<p><b>Addition</b></p> <p>Recall from Y2: Recall from Y2: Recall and use addition facts to 20 fluently, and derive and use related facts up to 100. Add numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, adding three one-digit numbers. Show that addition of two numbers can be done in any order (commutative).</p> <p>Teach for Y3: Subtract numbers mentally, including: A three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds. Subtract numbers with up to three digits, using formal written methods of columnar and subtraction.</p> <p>Teach for Y3: add numbers with up to three digits, using formal written methods of columnar addition and subtraction.</p>		<table border="1"> <thead> <tr> <th>Written Calculations</th> <th>Addition</th> <th>Subtraction</th> </tr> </thead> <tbody> <tr> <td>Below Y3</td> <td> <p>Number lines with jumps of multiple jumps of tens and ones.</p> </td> <td> <p>Number lines with jumps of multiple jumps of tens and ones.</p> </td> </tr> <tr> <td>At Y3</td> <td> <p>Expanded column addition.</p> </td> <td> <p>Expanded column subtraction.</p> </td> </tr> <tr> <td>Above Y3</td> <td> <p>Column addition</p> </td> <td> <p>Column subtraction.</p> </td> </tr> </tbody> </table>	Written Calculations	Addition	Subtraction	Below Y3	<p>Number lines with jumps of multiple jumps of tens and ones.</p>	<p>Number lines with jumps of multiple jumps of tens and ones.</p>	At Y3	<p>Expanded column addition.</p>	<p>Expanded column subtraction.</p>	Above Y3	<p>Column addition</p>	<p>Column subtraction.</p>
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Above Y3	<p>Column addition</p>	<p>Column subtraction.</p>														
Week 4	National Curriculum Statements	<p><b>Subtraction</b></p> <p>Recall from Y2: Recall and use subtraction facts to 20 fluently, and derive and use related facts up to 100. Subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, adding three one-digit numbers. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p> <p>Teach for Y3: Subtract numbers mentally, including: A three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds. Subtract numbers with up to three digits, using formal written methods of columnar and subtraction.</p>														

Week 5	National Curriculum Statements	<p><b>Multiplication Tables</b></p> <p><b>Recall from Y2:</b> recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (<math>=</math>) signs.</p> <p><b>Teach for Y3:</b> count from 0 in multiples of 4, 8. recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know.</p>		
	Know Your Facts	<p><b>Chant the times tables. Mix them up!</b></p> <p><b>Call and Response Statements Multiplication Tables</b></p> <p>Anything multiplied by zero is ... <b>zero</b></p> <p>Anything multiplied by one ... <b>stays the same</b></p>		
Week 6	National Curriculum Statements	<p><b>Multiplication</b></p> <p><b>Recall from Y2:</b> Recall and use multiplication facts for the 2, 5 and 10 multiplication tables. Calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (<math>\times</math>) and equals (<math>=</math>) signs</p> <p><b>Teach for Y3:</b> Write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</p>		
	Know Your Facts	<p><b>Call and Response Statements Multiplication</b></p> <p>Anything multiplied by zero is ... <b>zero</b></p> <p>Anything multiplied by one ... <b>stays the same</b></p>		
Week 7	National Curriculum Statements	<p><b>Division</b></p> <p><b>Recall from Y2:</b> Recall and use division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers Calculate mathematical statements for division within the multiplication tables and write them using the division (<math>\div</math>) and equals (<math>=</math>) signs.</p> <p><b>Teach for Y3:</b> Write and calculate mathematical statements division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p>		

Written Calculations	Multiplication	Division
Below Y3	<p>Arrays</p> <p><math>3 \times 5 =</math></p> <p><math>14 \times 5 =</math></p>	<p>Grouping</p> <p><math>18 \div 3 =</math></p>
At Y3	<p>Expanded multiplication.</p> <p><math>13 \times 5 =</math></p>	<p>Number lines</p> <p><math>24 \div 3 =</math></p>
Above Y3	<p>Expanded multiplication.</p> <p><math>14 \times 8 =</math></p> <p>(with a number higher than 1 in the tens column)</p>	<p>Short division (bus stop) with no exchanging/carrying</p> <p><math>69 \div 3 =</math></p>



	<b>Know Your Facts</b>	<b>Call and Response Statements Division</b> Anything divided by zero is ... <b>zero</b> Anything divide by one ... <b>stays the same</b>		
<b>Week 8</b>	<b>National Curriculum</b>	<b><u>Inverse Addition and Subtraction</u></b> <b>Recall from Y2:</b> recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. <b>Teach for Y3:</b> use inverse operations		
<b>Week 9</b>		<b><u>Consolidation Week</u></b>		
<b>Week 10</b>		<b><u>Consolidation Week</u></b>		