

Year Six Autumn Term Arithmetic		Knowledge Organiser Vocabulary	Knowledge Organiser Visuals
Week 1	National Curriculum Statements	<p>Addition Recall from Y5: add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Teach for Y6: use their knowledge of the order of operations to carry out calculations involving the 4 operations</p>	<p>Addition Add Regroup</p>
	National Curriculum Statements	<p>Subtraction Recall from Y5: add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Teach for Y6: use their knowledge of the order of operations to carry out calculations involving the 4 operations</p>	<p>Subtraction Subtract Exchange</p>
Week 2	National Curriculum Statements	<p>Multiplication Recall from Y5: multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers Teach for Y6: multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. multiply one-digit numbers with up to 2 decimal places by whole numbers</p>	<p>Multiply Multiplication Regroup</p>
	Know Your	<p>Call and Response Statements Multiplication Anything multiplied by zero is ... zero Anything multiplied by one ... stays the same</p>	<p>Long multiplication and Long division for At Y6.</p>
Week 3	National Curriculum Statements	<p>Division Recall from Y5: divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context Teach for Y6: divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context</p>	<p>Divide Division Exchange</p>
	National Curriculum Statements	<p>Anything multiplied by zero is ... zero Anything multiplied by one ... stays the same</p>	<p>Long multiplication and Long division for At Y6, and a dash for Above Y6.</p>
Week 4	National Curriculum Statements	<p>Anything multiplied by zero is ... zero Anything multiplied by one ... stays the same</p>	<p>Long multiplication and Long division for At Y6, and a dash for Above Y6.</p>

	Know Your Facts	Call and Response Statements Division Anything divided by zero is ... zero Anything divide by one ... stays the same																				
Week 5	National Curriculum	Multiply and Divide by 10, 100 and 1000 Recall from Y5: multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 Teach for Y6: identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places	Multiply Divide Place Value Digits MLDR Multiply Left Divide Right	<p style="text-align: center;">Multiplying and Dividing by 10, 100 and 1000</p> <table border="1" style="margin: auto;"> <tr> <td>10 000</td> <td>1000</td> <td>100</td> <td>10</td> <td>1</td> <td>●</td> <td>$\frac{1}{10}$</td> <td>$\frac{1}{100}$</td> <td>$\frac{1}{1000}$</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> </tr> </table> <p style="text-align: center;"> Multiplying Dividing <small>X 10 digits move LEFT 1 space</small> <small>+ 10 digits move RIGHT 1 space</small> <small>X 100 digits move LEFT 2 spaces</small> <small>+ 100 digits move RIGHT 2 spaces</small> <small>X 1000 digits move LEFT 3 spaces</small> <small>+ 1000 digits move RIGHT 3 spaces</small> </p> <p style="text-align: center;"> ← → </p>	10 000	1000	100	10	1	●	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$						●			
	10 000	1000	100	10	1	●	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$													
					●																	
	Know Your Facts	Call and Response Statements Multiply and Divide by 10, 100 and 1000 MLDR stands for ... Multiply Left Divide Right When I multiply by a whole number it gets ... bigger When I divide by a whole number it gets ... smaller																				
Week 6	National Curriculum Statements	Add Fractions Recall from Y5: add fractions with the same denominator and denominators that are multiples of the same number Teach for Y6: add fractions with different denominators and mixed numbers, using the concept of equivalent fractions	Equivalent Numerator Denominator Equivalent Arrows Whole Common Denominator																			
Week 7	National Curriculum Statements	Multiply Fractions Recall from Y5: multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams Teach for Y6: multiply simple pairs of proper fractions, writing the answer in its simplest form for example $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$	Numerator Denominator Mixed Number Improper Fractions	<p style="text-align: center;">multiply the numerators, multiply the denominators</p> <p>$\frac{4}{7} \times 3 =$ Every whole number has a one as a denominator</p>																		
	Know Your Facts	Call and Response Statements To multiply fractions I ... multiply the numerators and multiply the denominators.																				
Week 8	National Curriculum	BIDMAS Recall from Y5: - Teach for Y6: use their knowledge of the order of operations to carry out calculations involving the four operations	Brackets Indices Division Multiplication Addition	<div style="border: 2px solid black; padding: 10px; text-align: center;"> <p style="color: red; font-weight: bold; font-size: 1.2em;">BODMAS / BIDMAS</p> <p style="color: white; font-weight: bold; font-size: 0.8em;">Remember, it must be used like this:</p> <p>First do any: (B) rackets</p> <p>Followed by any: Indices</p> <p>Left to right do any: Division & Multiplication</p> <p>Lastly, left to right: Addition & Subtraction</p> </div>																		



	Know Your Facts	Call and Response Statements BIDMAS stands for ... brackets, indices, division, multiplication, addition and subtraction.	Subtraction Left to right	
Week 9	National Curriculum Statements	Inverse Addition and Subtraction Recall from Y5 Notes and Guidance Pupils use multiplication and division as inverses to support the introduction of ratio in year 6, Teach for Y6 -	Addition Subtraction Bar model	