

## YEAR 1 AUTUMN

	Number: Place Value (within 10)	Number: Addition and Subtraction (within 10)	Geometry: Shape	Number: Place Value (within 20)	Consolidation
	Week 1-4	Week 5-8	Week 9	Week 10-11	Week 12
<b>National Curriculum</b>	<ul style="list-style-type: none"> <li>Count to ten, forwards and backwards, beginning with 0 or 1, or from any given number.</li> <li>Count, read and write numbers to 10 in numerals and words.</li> <li>Given a number, identify one more or one less.</li> <li>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.</li> </ul>	<ul style="list-style-type: none"> <li>Represent and use number bonds and related subtraction facts within 10.</li> <li>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</li> <li>Add and subtract one digit numbers to 10, including zero.</li> <li>Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems.</li> </ul>	<ul style="list-style-type: none"> <li>Recognise and name common 2-D shapes, including: (e.g. rectangles (including squares), circles and triangles).</li> <li>Recognise and name common 3-D shapes, including: (e.g. cuboids (including cubes), pyramids and spheres).</li> </ul>	<ul style="list-style-type: none"> <li>Count to twenty, forwards and backwards, beginning with 0 or 1, from any given number.</li> <li>Count, read and write numbers to 20 in numerals and words.</li> <li>Given a number, identify one more or one less.</li> <li>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.</li> </ul>	All
<b>White Rose Small Steps</b>	<ul style="list-style-type: none"> <li>Sort objects.</li> <li>Count objects.</li> <li>Represent objects.</li> <li>Count, read and write forwards from any number 0 to 10.</li> <li>Count, read and writing backwards from any number 0 to 10.</li> <li>Count one more.</li> <li>Count one less.</li> <li>One to one correspondence to start to compare groups.</li> <li>Compare groups using language such as equal, more/greater, less/fewer.</li> <li>Introduce = , &gt; and &lt; symbols.</li> <li>Compare numbers.</li> <li>Order groups of objects.</li> <li>Order numbers.</li> <li>Ordinal numbers (1st, 2nd, 3rd ....).</li> <li>The number line.</li> </ul>	<ul style="list-style-type: none"> <li>Part whole model.</li> <li>Addition symbol..</li> <li>Fact families – Addition facts.</li> <li>Find number bonds for numbers within 10.</li> <li>Systematic methods for number bonds within 10.</li> <li>Number bonds to 10.</li> <li>Compare number bonds.</li> <li>Addition: Adding together.</li> <li>Addition: Adding more.</li> <li>Finding a part.</li> <li>Subtraction: Taking away, how many left? Crossing out.</li> <li>Subtraction: Taking away, how many left? Introducing the subtraction symbol.</li> <li>Subtraction: Finding a part, breaking apart.                             <ul style="list-style-type: none"> <li>Fact families – The 8 facts.</li> </ul> </li> <li>Subtraction: Counting back.</li> <li>Subtraction: Finding the difference.</li> <li>Comparing addition and subtraction statements <math>a + b &gt; c</math>.</li> <li>Comparing addition and subtraction statements <math>a + b &gt; c + d</math>.</li> </ul>	<ul style="list-style-type: none"> <li>Recognise and name 3D shapes.</li> <li>Sort 3D shapes.</li> <li>Recognise and name 2D shapes.</li> <li>Sort 2D shapes.</li> <li>Patterns with 3D and 2D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>Count forwards and backwards and write numbers to 20 in numerals and words.</li> <li>Numbers from 11 to 20.</li> <li>Tens and ones.</li> <li>Count one more and one less.</li> <li>Compare groups of objects.</li> <li>Compare numbers.</li> <li>Order groups of objects.</li> <li>Order numbers.</li> </ul>	All

<b>Teacher Assessment Framework</b>	<b>WT</b>	Read and write numbers in numerals (to 10).	<ul style="list-style-type: none"> <li>• Add and subtract (one digit numbers) explaining their method verbally in pictures or using apparatus.</li> <li>• Recall at least four of the six number bonds for 10 and reason about associated facts.</li> </ul>	<ul style="list-style-type: none"> <li>• Name some common 2D and 3D shapes from a group of shapes or from pictures of the shapes and describe some of their properties.</li> </ul>	<ul style="list-style-type: none"> <li>• Read and write numbers in numerals (to 20).</li> <li>• Partition a two-digit number into tens and ones and demonstrate and understanding of place value, though they may use structured resources to support them.</li> </ul>	All
	<b>WA</b>	<ul style="list-style-type: none"> <li>• Read scales in divisions (of ones).</li> </ul>	<ul style="list-style-type: none"> <li>• Recall all the number bonds to and within 10. and use these to reason with.</li> </ul>	<ul style="list-style-type: none"> <li>• Name and describe properties of 2D and 3D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Partition two digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus.</li> </ul>	All
	<b>EXS</b>	<ul style="list-style-type: none"> <li>• Read scales where not all numbers on the scale are given and estimate points in between.</li> <li>• Solve unfamiliar word problems that involves more than one step.</li> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking</li> </ul>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> <li>• Solve unfamiliar word problems that involves more than one step.</li> </ul>	<ul style="list-style-type: none"> <li>• Describe the similarities and differences of 2D and 3D shapes, using their properties.</li> </ul>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> <li>• Solve unfamiliar word problems that involve more than one step.</li> </ul>	All
<b>PS</b>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete and pictorial representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Begin to independently find a starting point to break into a problem</li> <li>• Use trial and improvement strategy</li> <li>• Independently find possibilities</li> <li>• With support (adult, peer) check work (e.g. look for other possibilities, repeats, missing answers and errors)</li> <li>• Independently pattern spot and copy and continue a pattern (objects, shapes, numbers, spatial) predicting what will come next</li> <li>• With support, investigate statements</li> </ul>					
<b>R</b>	<ul style="list-style-type: none"> <li>• Describe and explain with reasons</li> <li>• Listen to others' explanations and try to make sense of them</li> </ul>					

## YEAR 1 SPRING

	Number: Addition and Subtraction	Number: Place Value (within 50) (inc multiples of 2,5 and 10)	Measurement: Length & Height	Measurement: Weight & Volume	Consolidation
	Week 1-4	Week 5-7	Week 8-9	Week 10-11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>• Represent and use number bonds and related subtraction facts within 20.</li> <li>• Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</li> <li>• Add and subtract one-digit and two-digit numbers to 20, including zero.</li> <li>• Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as <math>7 = \square - 9</math>.</li> </ul>	<ul style="list-style-type: none"> <li>• Count to 50 forwards and backwards, beginning with 0 or 1, or from any number.</li> <li>• Count, read and write numbers to 50 in numerals.</li> <li>• Given a number, identify one more or one less.</li> <li>• Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.</li> <li>• Count in multiples of twos, fives and tens.</li> </ul>	<ul style="list-style-type: none"> <li>• Measurement: Length and Height Measure and begin to record lengths and heights.</li> <li>• Compare, describe and solve practical problems for: lengths and heights (for example, long/short, longer/shorter, tall/short, double/half).</li> </ul>	<ul style="list-style-type: none"> <li>• Measurement: Weight and Volume Measure and begin to record mass/weight, capacity and volume.</li> <li>• Compare, describe and solve practical problems for mass/weight: [for example, heavy/light, heavier than, lighter than]; capacity and volume [for example, full/empty, more than, less than, half, half full, quarter].</li> </ul>	All
White Rose Small Steps	<ul style="list-style-type: none"> <li>• Add by counting on.</li> <li>• Find and make number bonds.</li> <li>• Add by making 10.</li> <li>• Subtraction – Not crossing 10.</li> <li>• Subtraction – Crossing 10 (1).</li> <li>• Subtraction – Crossing 10 (2).</li> <li>• Related Facts.</li> <li>• Compare Number Sentences.</li> </ul>	<ul style="list-style-type: none"> <li>• Numbers to 50.</li> <li>• Tens and ones.</li> <li>• Represent numbers to 50.</li> <li>• One more one less.</li> <li>• Compare objects within 50</li> <li>• Compare numbers within 50.</li> <li>• Order numbers within 50.</li> <li>• Count in 2s.</li> <li>• Count in 5s</li> </ul>	<ul style="list-style-type: none"> <li>• Compare lengths and heights.</li> <li>• Measure length (1).</li> <li>• Measure length (2).</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce weight and mass.</li> <li>• Measure mass.</li> <li>• Compare mass.</li> <li>• Introduce capacity.</li> <li>• Measure capacity.</li> <li>• Compare capacity.</li> </ul>	All

<b>Teacher Assessment asks</b>	<b>WT</b>	<ul style="list-style-type: none"> <li>• Add and subtract (one digit numbers) explaining their method verbally in pictures or using apparatus.</li> <li>• Recall at least four of the six number bonds for 10 and reason about associated facts.</li> </ul>	<ul style="list-style-type: none"> <li>• Read and write numbers in numerals (to 50).</li> <li>• Partition a two-digit number into tens and ones and demonstrate and understanding of place value, though they may use structured resources to support them</li> </ul>	N/A	N/A	All
	<b>WA</b>	<ul style="list-style-type: none"> <li>• Recall all the number bonds to and within 10, and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships.</li> </ul>	<ul style="list-style-type: none"> <li>• Read scales in divisions of ones, twos, fives.</li> <li>• Partition two digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus.</li> </ul>	N/A	N/A	All
	<b>EXS</b>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems &amp; explain their thinking.</li> <li>• Solve unfamiliar word problems that involves more than one step.</li> </ul>	<ul style="list-style-type: none"> <li>• Read scales where not all numbers on the scale are given and estimate points in between.</li> <li>• Solve unfamiliar word problems that involve more than one step.</li> </ul>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> <li>• Solve unfamiliar word problems that involve more than one step.</li> </ul>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> <li>• Solve unfamiliar word problems that involve more than one step.</li> </ul>	All
<b>PS</b>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete and pictorial representations, if required.</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Use trial and improvement strategy.</li> <li>• Independently find possibilities.</li> <li>• With support (adult, peer) check work (e.g. look for other possibilities, repeats, missing answers and errors).</li> <li>• Independently pattern spot and copy and continue a pattern (objects, shapes, numbers, spatial) predicting what will come next.</li> <li>• With support, investigate statements.</li> </ul>					
<b>R</b>	<ul style="list-style-type: none"> <li>• Describe and explain with reasons.</li> <li>• Listen to others' explanations and try to make sense of them.</li> </ul>					

## Year 1 – Summer

	<b>Number: Multiplication and Division (including multiples of 2,5 and 10)</b>	<b>Number: Fractions</b>	<b>Geometry: Position and Direction</b>	<b>Number: Place Value (within 100)</b>	<b>Measurement: Money</b>	<b>Measurement: Time</b>	<b>Consolidation</b>
	<b>Week 1-3</b>	<b>Week 4-5</b>	<b>Week 6</b>	<b>Week 7-8</b>	<b>Week 9</b>	<b>Week 10-11</b>	<b>Week 12</b>
<b>National Curriculum</b>	<ul style="list-style-type: none"> <li>• Count in multiples of twos, fives and tens.</li> <li>• Solve one step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise, find and name a half as one of two equal parts of an object, shape or quantity.</li> <li>• Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</li> <li>• Compare, describe and solve practical problems for: lengths and heights (for example, long/short, longer/shorter, tall/short, double/half)</li> <li>• Compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than]; capacity and volume [for example, full/empty, more than, less than, half, half full, quarter].</li> </ul>	<ul style="list-style-type: none"> <li>• Describe position, direction and movement, including whole, half, quarter and three quarter turns</li> </ul>	<ul style="list-style-type: none"> <li>• Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</li> <li>• Count, read and write numbers to 100 in numerals.</li> <li>• Given a number, identify one more and one less.</li> <li>• Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than, most, least.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise and know the value of different denominations of coins and notes.</li> </ul>	<ul style="list-style-type: none"> <li>• Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.</li> <li>• Recognise and use language relating to dates, including days of the week, weeks, months and years.</li> <li>• Tell the time to the hour &amp; half past the hour &amp; draw hands on a clock face to show these times.</li> <li>• Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later].</li> <li>• Measure and begin to record time (hours, minutes, seconds).</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

White Rose Small Steps	<ul style="list-style-type: none"> <li>Count in 10s.</li> <li>Make equal groups.</li> <li>Add equal groups.</li> <li>Make arrays.</li> <li>Make doubles.</li> <li>Make equal groups – grouping.</li> <li>Make equal groups – sharing.</li> </ul>	<ul style="list-style-type: none"> <li>Halving shapes or objects.</li> <li>Halving a quantity.</li> <li>Find a quarter of a shape or object.</li> <li>Find a quarter of a quantity.</li> </ul>	<ul style="list-style-type: none"> <li>Describe turns.</li> <li>Describe Position (1).</li> <li>Describe Position (2).</li> </ul>	<ul style="list-style-type: none"> <li>Counting to 100.</li> <li>Partitioning numbers.</li> <li>Comparing numbers (1).</li> <li>Comparing numbers (2).</li> <li>Ordering numbers.</li> <li>One more, one less.</li> </ul>	<ul style="list-style-type: none"> <li>Recognising coins.</li> <li>Recognising notes.</li> <li>Counting in coins</li> </ul>	<ul style="list-style-type: none"> <li>Before and after.</li> <li>Dates.</li> <li>Time to the hour.</li> <li>Time to the half hour.</li> <li>Writing time.</li> <li>Comparing time.</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>	
Teacher Assessment asks	WT	<ul style="list-style-type: none"> <li>Count in 2s, 5s and 10s from 0 and use this to solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Read and write numbers in numerals (to 50).</li> <li>Partition a two-digit number into tens and ones and demonstrate and understanding of place value, though they may use structured resources to support them.</li> </ul>	<ul style="list-style-type: none"> <li>Know the value of different coins.</li> </ul>	<ul style="list-style-type: none"> <li>Read the time on a clock</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>
	WA	<ul style="list-style-type: none"> <li>Recall multiplication and division facts for 2 and 10 and use them to solve simple problems, demonstrating and understanding of the commutativity as necessary.</li> </ul>	<ul style="list-style-type: none"> <li>Identify <math>\frac{1}{4}</math> of a number or shape and know that all the parts must be equal parts of the whole.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Read scales in divisions of ones, twos, fives.</li> <li>Partition two digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus.</li> </ul>	<ul style="list-style-type: none"> <li>Use different coins to make the same amount</li> </ul>	<ul style="list-style-type: none"> <li>Read the time on a clock (to half an hour)</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>

	<b>EXS</b>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> <li>• Solve unfamiliar word problems that involves more than one step.</li> </ul>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> <li>• Solve unfamiliar word problems that involves more than one step.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve unfamiliar word problems that involves more than one step.</li> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> </ul>	<ul style="list-style-type: none"> <li>• Read scales where not all numbers on the scale are given and estimate points in between. Solve unfamiliar word problems that involves more than one step.</li> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve unfamiliar word problems that involves more than one step.</li> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve unfamiliar word problems that involves more than one step.</li> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
<b>PS</b>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete and pictorial representations, if required.</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Use trial and improvement strategy.</li> <li>• Independently find possibilities.</li> <li>• With support (adult, peer) check work (e.g. look for other possibilities, repeats, missing answers and errors).</li> <li>• Independently pattern spot and copy and continue a pattern (objects, shapes, numbers, spatial) predicting what will come next.</li> <li>• With support, investigate statements.</li> </ul>							
<b>R</b>	<ul style="list-style-type: none"> <li>• Describe and explain with reasons.</li> <li>• Listen to others' explanations and try to make sense of them.</li> </ul>							

## YEAR 2 AUTUMN

	Number: Place Value	Number: Addition and Subtraction	Measurement: Money	Number: Multiplication and Division
	Week 1-3	Week 4-8	Week 9-10	Week 11-12
<b>National Curriculum</b>	<ul style="list-style-type: none"> <li>• Read and write numbers to at least 100 in numerals and in words.</li> <li>• Recognise the place value of each digit in a two digit number (tens, ones) Identify, represent and estimate numbers using different representations including the number line.</li> <li>• Compare and order numbers from 0 up to 100; use <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs.</li> <li>• Use place value and number facts to solve problems.</li> <li>• Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.</li> </ul>	<ul style="list-style-type: none"> <li>• Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</li> <li>• Add and 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.</li> <li>• Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</li> <li>• Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.</li> <li>• Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.</li> <li>• Find different combinations of coins that equal the same amounts of money.</li> <li>• Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</li> </ul>	<ul style="list-style-type: none"> <li>• Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.</li> <li>• 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>) sign.</li> <li>• Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.</li> <li>• Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</li> </ul>



White Rose Small Steps

- Count objects to 100 and read and write numbers in numerals and words.
- Represent numbers to 100.
- Tens and ones with a part whole model.
- Tens and ones using addition.
- Use a place value chart.
- Compare objects.
- Compare numbers.
- Order objects and numbers.
- Count in 2s, 5s and 10s.
- Count in 3s.

- Fact families – Addition and subtraction bonds to 20.
- Check calculations.
- Compare number sentences.
- Related facts.
- Bonds to 100 (tens).
- Add and subtract 1s.
- 10 more and 10 less.
- Add and subtract 10s.
- Add a 2-digit and 1-digit number – crossing ten.
- Subtract a 1-digit number from a 2-digit number – crossing 10.
- Add two 2-digit numbers – not crossing ten – add ones and add tens.
- Add two 2-digit numbers – crossing ten – add ones and add tens.
- Subtract a 2-digit number from a 2-digit number – not crossing ten.
- Subtract a 2-digit number from a 2-digit number – crossing ten – subtract ones and tens.
- Bonds to 100 (tens and ones).
- Add three 1-digit numbers.

- Count money – pence.
- Count money – pounds (notes and coins).
- Count money – notes and coins.
- Select money.
- Make the same amount.
- Compare money.
- Find the total.
- Find the difference.
- Find change.
- Two-step problems.

- Recognise equal groups.
- Make equal groups.
- Add equal groups.
- Multiplication sentences using the x symbol.
- Multiplication sentences from pictures.
- Use arrays.
- 2 times-table.
- 5 times-table.
- 10 times-table.

Teacher Assessment Framework	WT	<ul style="list-style-type: none"> <li>• Read and write numbers in numerals up to 100</li> <li>• Partition a two-digit number into tens and ones and demonstrate an understanding of place value, though they may use structures resources to support them</li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract (one digit numbers) explaining their method verbally in pictures or using apparatus</li> <li>• Recall at least four of the six number bonds for 10 and reason about associated facts</li> </ul>	<ul style="list-style-type: none"> <li>• Know the value of different coins</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
	WA	<ul style="list-style-type: none"> <li>• Read scales in divisions of ones, twos, fives and tens</li> <li>• Partition two digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus</li> </ul>	<ul style="list-style-type: none"> <li>• Recall all the number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships</li> </ul>	<ul style="list-style-type: none"> <li>• Use different coins to make the same amount</li> </ul>	<ul style="list-style-type: none"> <li>• Recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating and understanding the commutativity as necessary</li> </ul>
	EXS	<ul style="list-style-type: none"> <li>• Read scales where not all numbers on the scale are given and estimate points in between</li> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking</li> <li>• Solve unfamiliar word problems that involve more than one step</li> </ul>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking</li> <li>• Solve unfamiliar word problems that involve more than one step</li> </ul>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking</li> <li>• Solve unfamiliar word problems that involve more than one step</li> </ul>	<ul style="list-style-type: none"> <li>• Recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known numbers facts.</li> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking</li> <li>• Solve unfamiliar word problems that involve more than one step</li> </ul>
PS	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Independently find a starting point to break into a problem</li> <li>• With support work systematically</li> <li>• Independently find possibilities</li> <li>• Independently check work (e.g. look for other possibilities, repeats, missing answers and errors)</li> <li>• Pattern spot and predict what will come next in a pattern/sequence (numbers, shapes, spatial)</li> </ul>				
R	<ul style="list-style-type: none"> <li>• Explain with reasons and beginning to use given sentence stems and connectives to expand</li> <li>• Listen to others' explanations, make sense of them and compare and evaluate</li> <li>• Begin to edit and improve their own and a peer's explanation</li> <li>• With support, investigate statements and conjectures</li> <li>• Investigate 'what if?' questions</li> </ul>				

**YEAR 2 SPRING**

	<b>Number: Multiplication and Division</b>	<b>Statistics</b>	<b>Geometry: Properties of Shape</b>	<b>Number: Fractions</b>	<b>Measurement: Length and Height</b>	<b>Consolidation</b>
	<b>Week 1-2</b>	<b>Week 3-4</b>	<b>Week 5-7</b>	<b>Week 8-10</b>	<b>Week 11</b>	<b>Week 12</b>
<b>National Curriculum</b>	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.</li> <li>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 (=) signs.</li> <li>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.</li> <li>Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</li> </ul>	<ul style="list-style-type: none"> <li>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.</li> <li>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</li> <li>Ask and answer questions about totalling and comparing categorical data.</li> </ul>	<ul style="list-style-type: none"> <li>Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.</li> <li>Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.</li> <li>Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].</li> <li>Compare and sort common 2-D and 3-D shapes and everyday objects.</li> </ul>	<ul style="list-style-type: none"> <li>Recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity.</li> <li>Write simple fractions for example, <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math>.</li> </ul>	<ul style="list-style-type: none"> <li>Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (<math>^{\circ}</math>C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.</li> <li>Compare and order lengths, mass, volume/capacity and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math>.</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>

<b>White Rose Small Steps</b>	<ul style="list-style-type: none"> <li>• Make equal groups – sharing</li> <li>• Make equal groups – grouping</li> <li>• Divide by 2</li> <li>• Odd and even numbers</li> <li>• Divide by 5</li> <li>• Divide by 10</li> </ul>	<ul style="list-style-type: none"> <li>• Make tally charts</li> <li>• Draw pictograms (1-1)</li> <li>• Interpret pictograms (1-1)</li> <li>• Draw pictograms (2, 5 and 10)</li> <li>• Interpret pictograms (2, 5 and 10)</li> <li>• Block diagrams.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise 2D and 3D shapes</li> <li>• Count sides on 2D shapes</li> <li>• Count vertices on 2D shapes</li> <li>• Draw 2D shapes</li> <li>• Lines of symmetry</li> <li>• Sort 2D shapes</li> <li>• Make patterns with 2D shapes</li> <li>• Count faces on 3D shapes</li> <li>• Count edges on 3D shapes</li> <li>• Count vertices on 3D shapes</li> <li>• Sort 3D shapes</li> <li>• Make patterns with 3D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Make equal parts</li> <li>• Recognise half</li> <li>• Find half</li> <li>• Recognise quarter</li> <li>• Find a quarter</li> <li>• Recognise a third</li> <li>• Find a third</li> <li>• Unit fractions</li> <li>• NonUnit fractions.</li> <li>• Equivalence of <math>\frac{1}{2}</math> and <math>\frac{2}{4}</math></li> <li>• Find three quarters</li> <li>• Count in fractions</li> </ul>	<ul style="list-style-type: none"> <li>• Measure length (cm)</li> <li>• Measure length (m)</li> <li>• Compare lengths</li> <li>• Order lengths</li> <li>• Four operations with lengths.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>	
	<b>Teacher Assessment asks</b>	<b>WT</b>	<ul style="list-style-type: none"> <li>• Make equal groups – sharing</li> <li>• Make equal groups – grouping</li> <li>• Divide by 2</li> <li>• Odd and even numbers</li> <li>• Divide by 5</li> <li>• Divide by 10</li> </ul>	<ul style="list-style-type: none"> <li>• Make tally charts</li> <li>• Draw pictograms (1-1)</li> <li>• Interpret pictograms (1-1)</li> <li>• Draw pictograms (2, 5 and 10)</li> <li>• Interpret pictograms (2, 5 and 10)</li> <li>• Block diagrams.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise 2D and 3D shapes</li> <li>• Count sides on 2D shapes</li> <li>• Count vertices on 2D shapes</li> <li>• Draw 2D shapes</li> <li>• Lines of symmetry</li> <li>• Sort 2D shapes</li> <li>• Make patterns with 2D shapes</li> <li>• Count faces on 3D shapes</li> <li>• Count edges on 3D shapes</li> <li>• Count vertices on 3D shapes</li> <li>• Sort 3D shapes</li> <li>• Make patterns with 3D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Make equal parts</li> <li>• Recognise half</li> <li>• Find half</li> <li>• Recognise quarter</li> <li>• Find a quarter</li> <li>• Recognise a third</li> <li>• Find a third</li> <li>• Unit fractions</li> <li>• NonUnit fractions</li> <li>• Equivalence of <math>\frac{1}{2}</math> and <math>\frac{2}{4}</math></li> <li>• Find three quarters</li> <li>• Count in fractions</li> </ul>	<ul style="list-style-type: none"> <li>• Measure length (cm)</li> <li>• Measure length (m)</li> <li>• Compare lengths</li> <li>• Order lengths</li> <li>• Four operations with lengths.</li> </ul>

	WA	<ul style="list-style-type: none"> <li>• Make equal groups – sharing</li> <li>• Make equal groups – grouping</li> <li>• Divide by 2</li> <li>• Odd and even numbers</li> <li>• Divide by 5</li> <li>• Divide by 10</li> </ul>	<ul style="list-style-type: none"> <li>• Make tally charts</li> <li>• Draw pictograms (1-1)</li> <li>• Interpret pictograms (1-1)</li> <li>• Draw pictograms (2, 5 and 10)</li> <li>• Interpret pictograms (2, 5 and 10)</li> <li>• Block diagrams.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise 2D and 3D shapes</li> <li>• Count sides on 2D shapes</li> <li>• Count vertices on 2D shapes</li> <li>• Draw 2D shapes</li> <li>• Lines of symmetry</li> <li>• Sort 2D shapes</li> <li>• Make patterns with 2D shapes</li> <li>• Count faces on 3D shapes</li> <li>• Count edges on 3D shapes</li> <li>• Count vertices on 3D shapes</li> <li>• Sort 3D shapes</li> <li>• Make patterns with 3D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Make equal parts</li> <li>• Recognise half</li> <li>• Find half</li> <li>• Recognise quarter</li> <li>• Find a quarter</li> <li>• Recognise a third</li> <li>• Find a third</li> <li>• Unit fractions</li> <li>• NonUnit fractions</li> <li>• Equivalence of <math>\frac{1}{2}</math> and <math>\frac{2}{4}</math></li> <li>• Find three quarters.</li> <li>• Count in fractions</li> </ul>	<ul style="list-style-type: none"> <li>• Measure length (cm)</li> <li>• Measure length (m)</li> <li>• Compare lengths</li> <li>• Order lengths</li> <li>• Four operations with lengths.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
	EXS	<ul style="list-style-type: none"> <li>• Make equal groups – sharing</li> <li>• Make equal groups – grouping</li> <li>• Divide by 2</li> <li>• Odd and even numbers</li> <li>• Divide by 5</li> <li>• Divide by 10</li> </ul>	<ul style="list-style-type: none"> <li>• Make tally charts</li> <li>• Draw pictograms (1-1)</li> <li>• Interpret pictograms (1-1)</li> <li>• Draw pictograms (2, 5 and 10)</li> <li>• Interpret pictograms (2, 5 and 10)</li> <li>• Block diagrams.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise 2D and 3D shapes</li> <li>• Count sides on 2D shapes</li> <li>• Count vertices on 2D shapes</li> <li>• Draw 2D shapes</li> <li>• Lines of symmetry</li> <li>• Sort 2D shapes</li> <li>• Make patterns with 2D shapes.</li> <li>• Count faces on 3D shapes</li> <li>• Count edges on 3D shapes</li> <li>• Count vertices on 3D shapes</li> <li>• Sort 3D shapes</li> <li>• Make patterns with 3D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Make equal parts</li> <li>• Recognise half</li> <li>• Find half</li> <li>• Recognise quarter</li> <li>• Find a quarter</li> <li>• Recognise a third</li> <li>• Find a third</li> <li>• Unit fractions</li> <li>• NonUnit fractions</li> <li>• Equivalence of <math>\frac{1}{2}</math> and <math>\frac{2}{4}</math>.</li> <li>• Find three quarters</li> <li>• Count in fractions</li> </ul>	<ul style="list-style-type: none"> <li>• Measure length (cm)</li> <li>• Measure length (m)</li> <li>• Compare lengths</li> <li>• Order lengths</li> <li>• Four operations with lengths.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

PS	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Independently find a starting point to break into a problem</li> <li>• With support work systematically</li> <li>• Independently find possibilities</li> <li>• Independently check work (e.g. look for other possibilities, repeats, missing answers and errors)</li> <li>• Pattern spot and predict what will come next in a pattern/sequence (numbers, shapes, spatial</li> <li>• With support, investigate statements and conjectures</li> </ul>
R	<ul style="list-style-type: none"> <li>• connectives to expand</li> <li>• Listen to others' explanations, make sense of them and compare and evaluate</li> <li>• Begin to edit and improve their own and a peer's explanation</li> <li>• Investigate 'what if?' questions</li> </ul>

## Year 2 – Summer

		Geometry: Position and Direction	Problem Solving and Efficient Methods	Measurement: Time	Measurement: Mass, Capacity and Temperature	Investigations
		Week 1-3	Week 4-5	Week 6-7	Week 8-10	Week 11-12
Teacher Assessment Tasks	WT	• N/A	• All	• Read the time on a clock	• N/A	• All
	WA	• N/A	• All	• Read the time on a clock to the nearest 15 minutes	• N/A	• All
	EXS	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking</li> <li>• Solve unfamiliar word problems that involve more than one step</li> </ul>	• All	<ul style="list-style-type: none"> <li>• Read the time on a clock to the nearest 5 minutes</li> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking</li> <li>• Solve unfamiliar word problems that involve more than one step</li> </ul>	<ul style="list-style-type: none"> <li>• Use reasoning about numbers and relationships to solve more complex problems and explain their thinking</li> <li>• Solve unfamiliar word problems that involve more than one step</li> </ul>	• All
White Rose Small Steps		<ul style="list-style-type: none"> <li>• Describing movement</li> <li>• Describing turns</li> <li>• Describing movement and turns</li> <li>• Making patterns with shapes.</li> </ul>	• All	<ul style="list-style-type: none"> <li>• O'clock and half past</li> <li>• Quarter past and quarter to</li> <li>• Telling time to 5 minutes</li> <li>• Minutes in an hour, hours in a day</li> <li>• Find durations of time</li> <li>• Compare durations of time.</li> </ul>	<ul style="list-style-type: none"> <li>• Compare mass</li> <li>• Measure mass in grams</li> <li>• Measure mass in kilograms</li> <li>• Compare capacity</li> <li>• Millilitres</li> <li>• Litres</li> <li>• Temperature</li> </ul>	• All
National Curriculum		<ul style="list-style-type: none"> <li>• Use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).</li> <li>• Order and arrange combinations of mathematical objects in patterns and sequences.</li> </ul>	• All	<ul style="list-style-type: none"> <li>• Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.</li> <li>• Know the number of minutes in an hour and the number of hours in a day.</li> <li>• Compare and sequence intervals of time.</li> </ul>	<ul style="list-style-type: none"> <li>• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.</li> <li>• Compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =.</li> </ul>	• All

PS	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Independently find a starting point to break into a problem</li> <li>• With support work systematically</li> <li>• Independently find possibilities</li> <li>• Independently check work (e.g. look for other possibilities, repeats, missing answers and errors)</li> <li>• Pattern spot and predict what will come next in a pattern/sequence (numbers, shapes, spatial)</li> <li>• With support, investigate statements and conjectures</li> </ul>
R	<ul style="list-style-type: none"> <li>• Explain with reasons and beginning to use given sentence stems and connectives to expand</li> <li>• Listen to others' explanations, make sense of them and compare and evaluate</li> <li>• Begin to edit and improve their own and a peer's explanation</li> <li>• Investigate 'what if?' questions</li> </ul>



## Maths Year 3 - Autumn

	Number: Place Value	Number: Addition and Subtraction	Number: Multiplication and Division	Consolidation
	Week 1-3	Week 4-8	Week 9-11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>Identify, represent and estimate numbers using different representations.</li> <li>Find 10 or 100 more or less than a given number.</li> <li>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).</li> <li>Compare and order numbers up to 1000.</li> <li>Read and write numbers up to 1000 in numerals and in words.</li> <li>Solve number problems and practical problems involving these ideas.</li> <li>Count from 0 in multiples of 4, 8, 50 and 100.</li> </ul>	<ul style="list-style-type: none"> <li>Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens, a three digit number and hundreds.</li> <li>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.</li> <li>Estimate the answer to a calculation and use inverse operations to check answers.</li> <li>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</li> </ul>	<ul style="list-style-type: none"> <li>Count from 0 in multiples of 4, 8, 50 and 100.</li> <li>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</li> <li>Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</li> <li>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objectives.</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>
Whi White Rose Small Steps	<ul style="list-style-type: none"> <li>Hundreds</li> <li>Represent numbers to 1,000</li> <li>100s, 10s and 1s (1)</li> <li>100s, 10s and 1s (2)</li> <li>Number line to 1,000</li> <li>Find 1, 10, 100 more or less than a given number</li> <li>Compare objects to 1,000</li> <li>Compare numbers to 1,000</li> <li>Order numbers</li> <li>Count in 50s.</li> </ul>	<ul style="list-style-type: none"> <li>Add and subtract multiples of 100</li> <li>Add and subtract 3-digit numbers and ones – not crossing 10</li> <li>Add 3-digit and 1-digit numbers – crossing 10</li> <li>Subtract a 1-digit number from a 3-digit number – crossing 10</li> <li>Add and subtract 3-digit numbers and tens – not crossing 100</li> <li>Add a 3-digit number and tens – crossing 100</li> <li>Add and subtract 100s</li> <li>Spot the pattern – making it explicit</li> <li>Add and subtract a 2-digit and 3-digit number – not crossing 10 or 100</li> </ul>	<ul style="list-style-type: none"> <li>Multiplication – equal groups</li> <li>Multiplying by 3</li> <li>Dividing by 3</li> <li>The 3 times-table</li> <li>Multiplying by 4</li> <li>Dividing by 4</li> <li>The 4 times-table</li> <li>Multiplying by 8</li> <li>Dividing by 8</li> <li>The 8 times-table.</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>

		<ul style="list-style-type: none"> <li>• Add a 2-digit and 3-digit number – crossing 10 or 100</li> <li>• Subtract 2-digit number from a 3-digit number cross the 10 or 100</li> <li>• Add two 3-digit numbers – not crossing 10 or 100</li> <li>• Add two 3-digit numbers – crossing 10 or 100</li> <li>• Subtract a 3 –digit number from a 3-digit number – no exchange</li> <li>• Subtract a 3-digit number from a 3-digit number – exchange</li> <li>• Exchange answers to calculation</li> </ul>		
<b>PS</b>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Independently find an efficient way to solve a range of problems</li> <li>• Independently work systematically</li> <li>• Independently find possibilities using patterns spotted to support</li> <li>• Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve)</li> <li>• Pattern spot and predict what will come next in a pattern/sequence (numbers, shape or spatial)</li> <li>• Independently investigate conjectures and provide examples and counter-examples</li> <li>• When they have solved a problem, pose a similar problem for a peer</li> </ul>			
<b>R</b>	<ul style="list-style-type: none"> <li>• Provide a convinced argument</li> <li>• Reflect on others’ convinced explanations and use this to improve their work</li> <li>• Edit and improve their own and a peer’s convinced explanation</li> <li>• Investigate ‘what if?’ questions</li> <li>• Create ‘what if?’ questions</li> </ul>			

## Maths Year 3 - Spring

	Number: Multiplication and Division	Measurement: Money	Statistics	Measurement: Length and Perimeter	Fractions	Consolidation
	Week 1-3	Week 4	Week 5-6	Week 7-9	Week 10-11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</li> <li>Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</li> <li>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objectives.</li> </ul>	<ul style="list-style-type: none"> <li>Add and subtract amounts of money to give change, using both £ and p in practical contexts.</li> </ul>	<ul style="list-style-type: none"> <li>Interpret and present data using bar charts, pictograms and tables.</li> <li>Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.</li> </ul>	<ul style="list-style-type: none"> <li>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).</li> <li>Measure the perimeter of simple 2D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.</li> <li>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.</li> <li>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</li> <li>Solve problems that involve all of the above.</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>White Rose Small Steps</b></p>	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</li> <li>Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</li> <li>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objectives.</li> </ul>	<ul style="list-style-type: none"> <li>Add and subtract amounts of money to give change, using both £ and p in practical contexts.</li> </ul>	<ul style="list-style-type: none"> <li>Interpret and present data using bar charts, pictograms and tables.</li> <li>Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables</li> </ul>	<ul style="list-style-type: none"> <li>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).</li> <li>Measure the perimeter of simple 2D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.</li> <li>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.</li> <li>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</li> <li>Solve problems that involve all of the above.</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PS</b></p>	<ul style="list-style-type: none"> <li>Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>Independently find an efficient way to solve a range of problems</li> <li>Independently work systematically</li> <li>Independently find possibilities using patterns spotted to support</li> <li>Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve)</li> <li>Pattern spot and predict what will come next in a pattern/sequence (numbers, shape or spatial)</li> <li>Independently investigate conjectures and provide examples and counter-examples</li> <li>When they have solved a problem, pose a similar problem for a peer</li> </ul>					
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>R</b></p>	<ul style="list-style-type: none"> <li>Provide a convinced argument</li> <li>Reflect on others' convinced explanations and use this to improve their work</li> <li>Edit and improve their own and a peer's convinced explanation</li> <li>Investigate 'what if?' questions</li> <li>Create 'what if?' questions</li> </ul>					

## Maths Year 3 - Summer

	Factions	Measurement: Time	Geometry: Property of Shape	Measurement: Mass, Capacity and Temperature	Investigations
	Week 1-3	Week 4-6	Week 7-8	Week 8-10	Week 11-12
National Curriculum	<ul style="list-style-type: none"> <li>• Recognise and show, using diagrams, equivalent fractions with small denominators.</li> <li>• Compare and order unit fractions, and fractions with the same denominators.</li> <li>• Add and subtract fractions with the same denominator within one whole [for example, <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>].</li> <li>• Solve problems that involve all of the above.</li> </ul>	<ul style="list-style-type: none"> <li>• Tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12-hour and 24-hour clocks.</li> <li>• Estimate and read time with increasing accuracy to the nearest minute.</li> <li>• Record and compare time in terms of seconds, minutes and hours.</li> <li>• Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon &amp; midnight.</li> <li>• Know the number of seconds in a minute and the number of days in each month, year and leap year.</li> <li>• Compare durations of events [for example to calculate the time taken by particular events or tasks].</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise angles as a property of shape or a description of a turn.</li> <li>• Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.</li> <li>• Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</li> <li>• Draw 2-D shapes and make 3-D shapes using modelling materials.</li> <li>• Recognise 3-D shapes in different orientations and describe them</li> </ul>	<ul style="list-style-type: none"> <li>• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
White Rose Small Steps	<ul style="list-style-type: none"> <li>• Equivalent fractions (1)</li> <li>• Equivalent fractions (2)</li> <li>• Equivalent fractions (3)</li> <li>• Compare fractions</li> <li>• Order fractions</li> <li>• Add fractions</li> <li>• Subtract fractions</li> </ul>	<ul style="list-style-type: none"> <li>• Months and years</li> <li>• Hours in a day</li> <li>• Telling the time to 5 minutes</li> <li>• Telling the time to the minute</li> <li>• AM and PM</li> <li>• 24 hour clock</li> <li>• Finding the duration</li> <li>• Comparing the duration</li> <li>• Start and end times</li> <li>• Measuring time in seconds</li> </ul>	<ul style="list-style-type: none"> <li>• Turns and angles</li> <li>• Right angles in shapes</li> <li>• Compare angles</li> <li>• Draw accurately</li> <li>• Horizontal and vertical</li> <li>• Parallel &amp; perpendicular.</li> <li>• Recognise &amp; describe 2D shapes</li> <li>• Recognise and describe 3D shapes</li> <li>• Make 3D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Measure mass (1)</li> <li>• Measure mass (2)</li> <li>• Compare mass</li> <li>• Add and subtract mass</li> <li>• Measure capacity (1)</li> <li>• Measure capacity (2)</li> <li>• Compare capacity</li> <li>• Add and subtract capacity</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

PS	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Independently find an efficient way to solve a range of problems</li> <li>• Independently work systematically</li> <li>• Independently find possibilities using patterns spotted to support</li> <li>• Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve)</li> <li>• Pattern spot and predict what will come next in a pattern/sequence (numbers, shape or spatial)</li> <li>• Independently investigate conjectures and provide examples and counter-examples</li> <li>• When they have solved a problem, pose a similar problem for a peer</li> </ul>
R	<ul style="list-style-type: none"> <li>• Provide a convinced argument</li> <li>• Reflect on others' convinced explanations and use this to improve their work</li> <li>• Edit and improve their own and a peer's convinced explanation</li> <li>• Investigate 'what if?' questions</li> <li>• Create 'what if?' questions</li> </ul>

## Maths Year 4 - Autumn

	Number: Place Value	Number: Addition and Subtraction	Measurement: Length and Perimeter	Number: Multiplication and Division	Consolidation
	Week 1-4	Week 5-7	Week 8	Week 9-11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>• Count in multiples of 6, 7, 9, 25 and 1000.</li> <li>• Find 1000 more or less than a given number.</li> <li>• Recognise the place value of each digit in a four digit number (thousands, hundreds, tens and ones).</li> <li>• Order and compare numbers beyond 1000.</li> <li>• Identify, represent and estimate numbers using different representations.</li> <li>• Round any number to the nearest 10, 100 or 1000.</li> <li>• Solve number and practical problems that involve all of the above and with increasingly large positive numbers.</li> <li>• Count backwards through zero to include negative numbers.</li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.</li> <li>• Estimate and use inverse operations to check answers to a calculation.</li> <li>• Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	<ul style="list-style-type: none"> <li>• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.</li> <li>• Convert between different units of measure [for example, kilometre to metre].</li> </ul>	<ul style="list-style-type: none"> <li>• Recall and use multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</li> <li>• Count in multiples of 6, 7, 9, 25 and 1000.</li> <li>• Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.</li> <li>• Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

<b>White Rose Small Steps</b>	<ul style="list-style-type: none"> <li>• Roman numerals to 100</li> <li>• Round to the nearest 10</li> <li>• Round to the nearest 100</li> <li>• Count in 1,000s</li> <li>• 1,000s, 100s, 10s and 1s</li> <li>• Partitioning</li> <li>• Number line to 10,000</li> <li>• 1,000 more or less</li> <li>• Compare numbers</li> <li>• Order numbers</li> <li>• Round to the nearest 1,000</li> <li>• Count in 25s</li> <li>• Negative numbers.</li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract 1s, 10s, 100s and 1000s</li> <li>• Add two 4-digit numbers – no exchange</li> <li>• Add two 4-digit numbers – one exchange</li> <li>• Add two 4-digit numbers – more than one exchange</li> <li>• Subtract two 4-digit numbers – no exchange</li> <li>• Subtract two 4-digit numbers – one exchange</li> <li>• Subtract two 4-digit numbers – more than one exchange.</li> <li>• Efficient subtraction</li> <li>• Estimate answers</li> <li>• Checking strategies.</li> </ul>	<ul style="list-style-type: none"> <li>• Kilometres</li> <li>• Perimeter on a grid</li> <li>• Perimeter of a rectangle</li> <li>• Perimeter of rectilinear shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Multiply by 10</li> <li>• Multiply by 100</li> <li>• Divide by 10</li> <li>• Divide by 100</li> <li>• Multiply by 1 and 0</li> <li>• Divide by 1</li> <li>• Multiply and divide by 6</li> <li>• 6 times-table and division facts</li> <li>• Multiply and divide by 9</li> <li>• 9 times-table and division facts</li> <li>• Multiply and divide by 7</li> <li>• 7 times-table and division facts.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
<b>PS</b>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Make suggestions of ways to solve a range of problems</li> <li>• Develop and apply a systematic approach</li> <li>• Find and predict possibilities that match the context using patterns spotted to support</li> <li>• Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve)</li> <li>• Pattern spot and with support, express generalisations/rules in words</li> <li>• Make and investigate conjectures and provide examples and counter-examples</li> <li>• When they have solved a problem, pose a similar problem for a peer</li> </ul>				
<b>R</b>	<ul style="list-style-type: none"> <li>• Provide a clear, correct, logical justification and with support, express generalisation/rules formed in words</li> <li>• Reflect on others' justifications and use this to improve their work</li> <li>• Edit and improve their own and a peer's justification</li> <li>• Investigate 'what if?' questions.</li> <li>• Create 'what if?' questions</li> </ul>				



## Maths Year 4 - Spring

	Number: Multiplication and Division	Measurement: Area	Number: Fractions	Number: Decimals	Consolidation
	Week 1-3	Week 4	Week 5-8	Week 9-11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</li> <li>Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.</li> <li>Recognise and use factor pairs and commutativity in mental calculations.</li> <li>Multiply two digit and three digit numbers by a one digit number using formal written layout.</li> <li>Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul>	<ul style="list-style-type: none"> <li>Find the area of rectilinear shapes by counting squares.</li> </ul>	<ul style="list-style-type: none"> <li>Recognise and show, using diagrams, families of common equivalent fractions.</li> <li>Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li> <li>Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.</li> <li>Add and subtract fractions with the same denominator.</li> </ul>	<ul style="list-style-type: none"> <li>Recognise and write decimal equivalents of any number of tenths or hundredths.</li> <li>Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths.</li> <li>Solve simple measure and money problems involving fractions and decimals to two decimal places.</li> <li>Convert between different units of measure [for example, kilometre to metre].</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>

<b>White Rose Small Steps</b>	<ul style="list-style-type: none"> <li>• 11 and 12 times-table.</li> <li>• Multiply 3 numbers.</li> <li>• Factor pairs.</li> <li>• Efficient multiplication.</li> <li>• Written methods.</li> <li>• Multiply 2-digits by 1 –digit.</li> <li>• Multiply 3-digits by 1-digit.</li> <li>• Divide 2-digits by 1-digit (1)</li> <li>• Divide 2-digits by 1-digit (2)</li> <li>• Correspondence problems.</li> </ul>	<ul style="list-style-type: none"> <li>• What is area?</li> <li>• Counting squares</li> <li>• Making shapes.</li> <li>• Comparing area.</li> </ul>	<ul style="list-style-type: none"> <li>• What is a fraction?</li> <li>• Equivalent fractions (1)</li> <li>• Equivalent fractions (2)</li> <li>• Fractions greater than 1</li> <li>• Count in fractions</li> <li>• Add 2 or more fractions</li> <li>• Subtract 2 fractions</li> <li>• Subtract from whole amounts</li> <li>• Calculate fractions of a quantity</li> <li>• Problem solving – calculate quantities.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise tenths and hundredths</li> <li>• Tenths as decimals</li> <li>• Tenths on a place value grid</li> <li>• Tenths on a number line</li> <li>• Divide 1 digit by 10</li> <li>• Divide 2 digits by 10</li> <li>• Hundredths</li> <li>• Hundredths as decimals</li> <li>• Hundredths on a place value grid</li> <li>• Divide 1 or 2 digits by 100.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
<b>PS</b>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Make suggestions of ways to solve a range of problems</li> <li>• Develop and apply a systematic approach</li> <li>• Find and predict possibilities that match the context using patterns spotted to support</li> <li>• Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve)</li> <li>• Pattern spot and with support, express generalisations/rules in words</li> <li>• Make and investigate conjectures and provide examples and counter-examples</li> <li>• When they have solved a problem, pose a similar problem for a peer</li> </ul>				
<b>R</b>	<ul style="list-style-type: none"> <li>• Provide a clear, correct, logical justification and with support, express generalisation/rules formed in words</li> <li>• Reflect on others' justifications and use this to improve their work</li> <li>• Edit and improve their own and a peer's justification</li> <li>• Investigate 'what if?' questions.</li> <li>• Create 'what if?' questions</li> </ul>				

## Maths Year 4 - Summer

	<b>Number: Decimals</b>	<b>Measurement: Money</b>	<b>Measurement: Time</b>	<b>Statistics</b>	<b>Geometry: Property of Shape</b>	<b>Geometry: Position and Direction</b>	<b>Consolidation</b>
	<b>Week 1-2</b>	<b>Week 3-4</b>	<b>Week 5</b>	<b>Week 6-7</b>	<b>Week 8-10</b>	<b>Week 11</b>	<b>Week 12</b>
<b>National Curriculum</b>	<ul style="list-style-type: none"> <li>• Compare numbers with the same number of decimal places up to two decimal places.</li> <li>• Round decimals with one decimal place to the nearest whole number.</li> <li>• Recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math> and <math>\frac{3}{4}</math>.</li> <li>• Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimate, compare and calculate different measures, including money in pounds and pence.</li> <li>• Solve simple measure and money problems involving fractions and decimals to two decimal places.</li> </ul>	<ul style="list-style-type: none"> <li>• Read, write and convert time between analogue and digital 12- and 24-hour clocks.</li> <li>• Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</li> </ul>	<ul style="list-style-type: none"> <li>• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</li> <li>• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify acute and obtuse angles and compare and order angles up to two right angles by size.</li> <li>• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</li> <li>• Identify lines of symmetry in 2-D shapes presented in different orientations.</li> <li>• Complete a simple symmetric figure with respect to a specific line of symmetry.</li> </ul>	<ul style="list-style-type: none"> <li>• Describe positions on a 2D grid as coordinates in the first quadrant.</li> <li>• Plot specified points and draw sides to complete a given polygon.</li> <li>• Describe movements between positions as translations of a given unit to the left/ right and up/ down.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
<b>White Rose Small Steps</b>	<ul style="list-style-type: none"> <li>• Make a whole</li> <li>• Write decimals</li> <li>• Compare decimals</li> <li>• Order decimals</li> <li>• Round decimals</li> <li>• Halves and quarters.</li> </ul>	<ul style="list-style-type: none"> <li>• Pounds and pence</li> <li>• Ordering amounts of money</li> <li>• Using rounding to estimate money</li> <li>• Four operations</li> </ul>	<ul style="list-style-type: none"> <li>• Hours, minutes and seconds</li> <li>• Years, months, weeks and days</li> <li>• Analogue to digital – 12 hour</li> <li>• Analogue to digital – 24 hour.</li> </ul>	<ul style="list-style-type: none"> <li>• Interpret charts.</li> <li>• Comparison, sum and difference.</li> <li>• Introducing line graphs</li> <li>• Line graphs.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify angles.</li> <li>• Compare and order angles.</li> <li>• Triangles</li> <li>• Quadrilaterals</li> <li>• Lines of symmetry</li> <li>• Complete a symmetric figure.</li> </ul>	<ul style="list-style-type: none"> <li>• Describe position</li> <li>• Draw on a grid</li> <li>• Move on a grid</li> <li>• Describe a movement on a grid</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

PS	<ul style="list-style-type: none"> <li>•Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>•Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>•Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>•Make suggestions of ways to solve a range of problems</li> <li>•Develop and apply a systematic approach</li> <li>•Find and predict possibilities that match the context using patterns spotted to support</li> <li>•Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve)</li> <li>•Pattern spot and with support, express generalisations/rules in words</li> <li>•Make and investigate conjectures and provide examples and counter-examples</li> <li>•When they have solved a problem, pose a similar problem for a peer</li> </ul>
R	<ul style="list-style-type: none"> <li>•Provide a clear, correct, logical justification and with support, express generalisation/rules formed in words</li> <li>•Reflect on others' justifications and use this to improve their work</li> <li>•Edit and improve their own and a peer's justification</li> <li>•Investigate 'what if?' questions.</li> <li>•Create 'what if?' questions</li> </ul>

## Maths Year 5 - Autumn

	Number: Place Value	Number: Addition and Subtraction	Statistics	Number: Multiplication and Division	Measurement: Perimeter and Area	Consolidation
	Week 1-3	Week 4-5	Week 6-7	Week 8-9	Week 10-11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>• Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.</li> <li>• Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.</li> <li>• Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.</li> <li>• Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000.</li> <li>• Solve number problems and practical problems that involve all of the above.</li> <li>• Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally with increasingly large numbers.</li> <li>• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).</li> <li>• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</li> <li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve comparison, sum and difference problems using information presented in a line graph.</li> <li>• Complete, read and interpret information in tables including timetables.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers.</li> <li>• Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</li> <li>• Establish whether a number up to 100 is prime and recall prime numbers up to 19.</li> <li>• 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.</li> <li>• Multiply and divide numbers mentally, drawing upon known facts.</li> <li>• 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.</li> <li>• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.</li> <li>• Recognise and use square numbers and cube numbers, and the notation for squared (<math>^2</math>) and cubed (<math>^3</math>).</li> <li>• Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes.</li> <li>• Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.</li> <li>• Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</li> </ul>	<ul style="list-style-type: none"> <li>• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.</li> <li>• Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (<math>\text{cm}^2</math>) and square metres (<math>\text{m}^2</math>), and estimate the area of irregular shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

<b>White Rose Small Steps</b>	<ul style="list-style-type: none"> <li>• Number to 10,000.</li> <li>• Roman numerals to 1,000.</li> <li>• Round to the nearest 10, 100 and 1000.</li> <li>• Number to 100,000.</li> <li>• Compare and order numbers to 100,000.</li> <li>• Round numbers within 100,000.</li> <li>• Numbers to a million</li> <li>• Counting in 10s, 100s, 1,000s, 10,000s and 100,000s.</li> <li>• Compare and order numbers to a million.</li> <li>• Round numbers to a million.</li> <li>• Negative numbers.</li> </ul>	<ul style="list-style-type: none"> <li>• Add whole numbers with more than 4 digits (column method).</li> <li>• Subtract whole numbers with more than 4-digits (column method).</li> <li>• Round to estimate and approximate.</li> <li>• Inverse operations (addition and subtraction).</li> <li>• Multi-step addition and subtraction problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Read and interpret line graphs.</li> <li>• Draw line graphs.</li> <li>• Use line graphs to solve problems.</li> <li>• Read and interpret tables.</li> <li>• Two way tables.</li> <li>• Timetables.</li> </ul>	<ul style="list-style-type: none"> <li>• Multiples</li> <li>• Factors.</li> <li>• Common factors.</li> <li>• Prime numbers.</li> <li>• Square numbers.</li> <li>• Cube numbers.</li> <li>• Multiplying by 10, 100 and 1000.</li> <li>• Dividing by 10, 100 and 1000.</li> <li>• Multiples of 10, 100 and 1000</li> </ul>	<ul style="list-style-type: none"> <li>• Measure perimeter.</li> <li>• Calculate perimeter.</li> <li>• Area of rectangles.</li> <li>• Area of compound shapes.</li> <li>• Area of irregular shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
<b>PS</b>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Make suggestions of ways to solve a range of problems</li> <li>• Organise work from the outset, looking for ways to record and work systematically</li> <li>• Find and predict possibilities that match the context using patterns spotted to support</li> <li>• Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve)</li> <li>• Pattern spot and independently express generalisations/rules in words</li> <li>• Make and investigate conjectures and provide examples and counter-examples</li> <li>• When they have solved a problem, pose a similar problem for a peer</li> </ul>					
<b>R</b>	<ul style="list-style-type: none"> <li>• Provide a clear, correct, logical justification, expressing generalisation/rules in words.</li> <li>• Reflect on others' justifications and use this to improve their work.</li> <li>• Edit and improve their own and a peer's justification.</li> <li>• Investigate 'what if?' questions.</li> <li>• Create 'what if?' questions</li> </ul>					

## Maths Year 5 - Spring

	Number: Multiplication and Division	Number: Fractions	Number: Decimals and Percentages	Consolidation
	Week 1-3	Week 4-9	Week 10-11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>• Multiply and divide numbers mentally drawing upon known facts.</li> <li>• Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for 2 digit numbers.</li> <li>• 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.</li> <li>• Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign</li> </ul>	<ul style="list-style-type: none"> <li>• Compare and order fractions whose denominators are multiples of the same number.</li> <li>• Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.</li> <li>• Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt;1</math> as a mixed number [for example <math>\frac{7}{5} + \frac{4}{5} = \frac{11}{5} = 2\frac{1}{5}</math>].</li> <li>• Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</li> <li>• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</li> <li>• Read and write decimal numbers as fractions [ for example <math>0.71 = \frac{71}{100}</math> ].</li> <li>• Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</li> </ul>	<ul style="list-style-type: none"> <li>• Read, write, order and compare numbers with up to three decimal places.</li> <li>• Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</li> <li>• Round decimals with two decimal places to the nearest whole number and to one decimal place.</li> <li>• Solve problems involving number up to three decimal places.</li> <li>• Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.</li> <li>• Solve problems which require knowing percentage and decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{3}{5}</math>, <math>\frac{4}{5}</math> and those fractions with a denominator of a multiple of 10 or 25</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">White Rose Small Steps</p>	<ul style="list-style-type: none"> <li>• Multiply 4-digits by 1-digit.</li> <li>• Multiply 2-digits (area model).</li> <li>• Multiply 2-digits by 2-digits.</li> <li>• Multiply 3-digits by 2-digits.</li> <li>• Multiply 4-digits by 2-digits.</li> <li>• Divide 4-digits by 1-digit.</li> <li>• Divide with remainders.</li> </ul>	<ul style="list-style-type: none"> <li>• Equivalent fractions.</li> <li>• Improper fractions to mixed numbers.</li> <li>• Mixed numbers to improper fractions.</li> <li>• Number sequences.</li> <li>• Compare and order fractions less than 1.</li> <li>• Compare and order fractions greater than 1.</li> <li>• Add and subtract fractions.</li> <li>• Add fractions within 1.</li> <li>• Add 3 or more fractions.</li> <li>• Add fractions.</li> <li>• Add mixed numbers.</li> <li>• Subtract fractions.</li> <li>• Subtract mixed numbers.</li> <li>• Subtract – breaking the whole.</li> <li>• Subtract 2 mixed numbers.</li> <li>• Multiply unit fractions by an integer.</li> <li>• Multiply non-unit fractions by an integer.</li> <li>• Multiply mixed numbers by integers.</li> <li>• Fraction of an amount.</li> <li>• Using fractions as operators.</li> </ul>	<ul style="list-style-type: none"> <li>• Decimals up to 2 d.p.</li> <li>• Decimals as fractions (1).</li> <li>• Decimals as fractions (2).</li> <li>• Understand thousandths.</li> <li>• Thousands as decimals.</li> <li>• Rounding decimals.</li> <li>• Order and compare decimals.</li> <li>• Understand percentages.</li> <li>• Percentages as fractions and decimals.</li> <li>• Equivalent F.D.P.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">PS</p>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Make suggestions of ways to solve a range of problems</li> <li>• Organise work from the outset, looking for ways to record and work systematically</li> <li>• Find and predict possibilities that match the context using patterns spotted to support</li> <li>• Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve)</li> <li>• Pattern spot and independently express generalisations/rules in words</li> <li>• Make and investigate conjectures and provide examples and counter-examples</li> <li>• When they have solved a problem, pose a similar problem for a peer</li> </ul>			
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">R</p>	<ul style="list-style-type: none"> <li>• Provide a clear, correct, logical justification, expressing generalisation/rules in words.</li> <li>• Reflect on others' justifications and use this to improve their work.</li> <li>• Edit and improve their own and a peer's justification.</li> <li>• Investigate 'what if?' questions.</li> <li>• Create 'what if?' questions</li> </ul>			



## Maths Year 5 - Summer

	Number: Decimals	Geometry: Property of Shape	Geometry: Position and Direction	Measurements: Converting Units	Measurement: Volume	Consolidation
	Week 1-4	Week 5-7	Week 8	Week 9-10	Week 11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>• Solve problems involving number up to three decimal places.</li> <li>• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</li> <li>• Use all four operations to solve problems involving measure [ for example, length, mass, volume, money] using decimal notation, including scaling.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify 3D shapes, including cubes and other cuboids, from 2D representations.</li> <li>• Use the properties of rectangles to deduce related facts and find missing lengths and angles.</li> <li>• Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</li> <li>• Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</li> <li>• Draw given angles, and measure them in degrees.</li> <li>• Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and ½ a turn (total 180°) other multiples of 90°.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.</li> </ul>	<ul style="list-style-type: none"> <li>• Convert between different units of metric measure [for example, km and m; cm and m; cm and mm; g and kg; l and ml].</li> <li>• Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.</li> <li>• Solve problems involving converting between units of time.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimate volume [for example using 1cm<sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water].</li> <li>• Use all four operations to solve problems involving measure.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
White Rose Small Steps	<ul style="list-style-type: none"> <li>• Adding decimals within 1.</li> <li>• Subtracting decimals within 1.</li> <li>• Complements to 1.</li> <li>• Adding decimals – crossing the whole.</li> <li>• Adding decimals with the same number of decimal places.</li> <li>• Subtracting decimals with the same number of decimal places.</li> </ul>	<ul style="list-style-type: none"> <li>• Measuring angles in degrees.</li> <li>• Measuring with a protractor (1).</li> <li>• Measuring with a protractor (2)</li> <li>• Drawing lines and angles accurately.</li> <li>• Calculating angles on a straight line.</li> <li>• Calculating angles around a point.</li> <li>• Calculating lengths and angles in shapes.</li> <li>• Regular and irregular polygons.</li> <li>• Reasoning about 3D shapes</li> </ul>	<ul style="list-style-type: none"> <li>• Position in the first quadrant.</li> <li>• Reflection.</li> <li>• Reflection with coordinates.</li> <li>• Translation.</li> <li>• Translation with coordinates.</li> </ul>	<ul style="list-style-type: none"> <li>• Kilograms and kilometres.</li> <li>• Milligrams and millilitres.</li> <li>• Metric units.</li> <li>• Imperial units.</li> <li>• Converting units of time.</li> <li>• Timetables.</li> </ul>	<ul style="list-style-type: none"> <li>• What is volume?</li> <li>• Compare volume.</li> <li>• Estimate volume.</li> <li>• Estimate capacity.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

<ul style="list-style-type: none"> <li>• Adding decimals with a different number of decimal places.</li> <li>• Subtracting decimals with a different number of decimal places.</li> <li>• Adding and subtracting whole and decimals.</li> <li>• Decimal sequences.</li> <li>• Multiplying decimals by 10, 100 and 1000.</li> <li>• Dividing decimals by 10, 100 and 1,000.</li> </ul>					
<b>PS</b>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate</li> <li>• Make suggestions of ways to solve a range of problems</li> <li>• Organise work from the outset, looking for ways to record and work systematically</li> <li>• Find and predict possibilities that match the context using patterns spotted to support</li> <li>• Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve)</li> <li>• Pattern spot and independently express generalisations/rules in words</li> <li>• Make and investigate conjectures and provide examples and counter-examples</li> <li>• When they have solved a problem, pose a similar problem for a peer</li> </ul>				
<b>R</b>	<ul style="list-style-type: none"> <li>• Provide a clear, correct, logical justification, expressing generalisation/rules in words.</li> <li>• Reflect on others' justifications and use this to improve their work.</li> <li>• Edit and improve their own and a peer's justification.</li> <li>• Investigate 'what if?' questions.</li> <li>• Create 'what if?' questions</li> </ul>				

## Maths Year 6 - Autumn

	Number: Place Value	Number: Addition, Subtraction, Multiplication and Division	Number: Fractions	Geometry: Position and Direction	Consolidation
	Week 1-2	Week 3-6	Week 7-10	Week 11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.</li> <li>• Round any whole number to a required degree of accuracy.</li> <li>• Use negative numbers in context, and calculate intervals across zero.</li> <li>• Solve number and practical problems that involve all of the above.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why.</li> <li>• Multiply multi-digit number up to 4 digits by a 2-digit number using the formal written method of long multiplication.</li> <li>• Divide numbers up to 4 digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding as appropriate for the context.</li> <li>• Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division, interpreting remainders according to the context.</li> <li>• Perform mental calculations, including with mixed operations and large numbers.</li> <li>• Identify common factors, common multiples and prime numbers.</li> <li>• Use their knowledge of the order of operations to carry out calculations involving the four operations.</li> <li>• Solve problems involving addition, subtraction, multiplication and division.</li> </ul>	<ul style="list-style-type: none"> <li>• Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.</li> <li>• Compare and order fractions, including fractions <math>&gt;1</math>.</li> <li>• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</li> <li>• Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. <math>1/4 \times 1/2 = 1/8</math>).</li> <li>• Divide proper fractions by whole numbers (e.g. <math>1/3 \div 2 = 1/6</math>).</li> <li>• Associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. <math>3/8</math>).</li> <li>• Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places.</li> <li>• Multiply one digit numbers with up to two decimal places by whole numbers.</li> <li>• Use written division methods in cases where the answer has up to two decimal places.</li> <li>• Solve problems which require answers to be rounded to specified degrees of accuracy.</li> <li>• Recall and use equivalences between</li> </ul>	<ul style="list-style-type: none"> <li>• Describe positions on the full coordinate grid (all four quadrants).</li> <li>• Draw and translate simple shapes on the coordinate plane, and reflect t</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

		<ul style="list-style-type: none"> <li>•Use estimation to check answers to calculations and determine in the context of a problem, an appropriate degree of accuracy.</li> </ul>	<p>simple fractions, decimals and percentages, including in different contexts.</p>		
<b>White Rose Small Steps</b>	<ul style="list-style-type: none"> <li>•Numbers to ten million.</li> <li>•Compare an order any number.</li> <li>•Round any numbers.</li> <li>•Negative numbers.</li> </ul>	<ul style="list-style-type: none"> <li>•Add and subtract whole numbers.</li> <li>•Multiply up to 4-digit by 1-digit number.</li> <li>•Short division.</li> <li>•Division using factors.</li> <li>•Long division (1).</li> <li>•Long division (2).</li> <li>•Long division (3).</li> <li>•Long division (4).</li> <li>•Common factors.</li> <li>•Common multiples.</li> <li>•Primes.</li> <li>•Squares and cubes.</li> <li>•Order of operations.</li> <li>•Mental calculations and estimation.</li> <li>•Reasoning from known facts.</li> </ul>	<ul style="list-style-type: none"> <li>•Simplify fractions.</li> <li>•Fractions on a number line.</li> <li>•Compare &amp; order (denominator).</li> <li>•Compare &amp; order (numerator).</li> <li>•Add &amp; subtract fractions (1).</li> <li>•Add &amp; subtract fractions (2).</li> <li>•Adding fractions.</li> <li>•Subtracting fractions.</li> <li>•Mixed addition and subtraction.</li> <li>•Multiply fractions by integers.</li> <li>•Multiply fractions by fractions.</li> <li>•Divide fractions by integers (1).</li> <li>•Divide fractions by integers (2).</li> <li>•Four rules with fractions.</li> <li>•Fraction of an amount.</li> <li>•Finding the whole</li> </ul>	<ul style="list-style-type: none"> <li>•Coordinates in the first quadrant.</li> <li>•Coordinate in four quadrants.</li> <li>•Translations.</li> <li>•Reflections.</li> </ul>	<ul style="list-style-type: none"> <li>•All</li> </ul>
<b>PS</b>	<ul style="list-style-type: none"> <li>•Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>•Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required.</li> <li>•Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate.</li> <li>•Make suggestions of ways to solve a range of problems.</li> <li>•Organise work from the outset, looking for ways to record and work systematically.</li> <li>•Find and predict possibilities that match the context using patterns spotted to support.</li> <li>•Independently check and improve their work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve).</li> <li>•Pattern spot and begin to express generalisations/proof using words and symbolic notation.</li> <li>•Make and investigate conjectures and provide examples and counter-examples.</li> <li>•When they have solved a problem, pose a similar problem for a peer.</li> </ul>				
<b>R</b>	<ul style="list-style-type: none"> <li>•Provide proof of reasoning, expressing generalisations in words and symbolic notation.</li> <li>•Reflect on others' proof and use this to improve their own work.</li> <li>•Edit and improve their own and a peer's proof.</li> <li>•Investigate 'what if?' questions.</li> <li>•Create 'what if?' questions.</li> </ul>				

## Maths Year 6 - Spring

	Number: Decimals	Number: Percentages	Number: Algebra	Measurement: Converting Units	Measurement: Perimeter, Area and Volume	Number: Ratio	Consolidation
	Week 1-2	Week 3-4	Week 5-6	Week 7	Week 8-9	Week 10-11	Week 12
National Curriculum	<ul style="list-style-type: none"> <li>Identify the value of each digit in numbers given to 3 decimal places and multiply numbers by 10, 100 and 1,000 giving answers up to 3 decimal places.</li> <li>Multiply one-digit numbers with up to 2 decimal places by whole numbers.</li> <li>Use written division methods in cases where the answer has up to 2 decimal places.</li> <li>Solve problems which require answers to be rounded to specified degrees of accuracy.</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison.</li> <li>Recall and use equivalences between simple fractions, decimals and percentages including in different contexts</li> </ul>	<ul style="list-style-type: none"> <li>Use simple formulae.</li> <li>Generate and describe linear number sequences.</li> <li>Express missing number problems algebraically.</li> <li>Find pairs of numbers that satisfy an equation with two unknowns.</li> <li>Enumerate possibilities of combinations of two variables.</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</li> <li>Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 d.p.</li> <li>Convert between miles and kilometres.</li> </ul>	<ul style="list-style-type: none"> <li>Recognise that shapes with the same areas can have different perimeters and vice versa.</li> <li>Recognise when it is possible to use formulae for area and volume of shapes.</li> <li>Calculate the area of parallelograms and triangles.</li> <li>Calculate, estimate and compare volume of cubes and cuboids using standard units, including cm<sup>3</sup>, m<sup>3</sup> and extending to other units (mm<sup>3</sup>, km<sup>3</sup>).</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.</li> <li>Solve problems involving similar shapes where the scale factor is known or can be found.</li> <li>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</li> </ul>	<ul style="list-style-type: none"> <li>All</li> </ul>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>White Rose Small Steps</b></p>	<ul style="list-style-type: none"> <li>• Three decimal places.</li> <li>• Multiply by 10, 100 and 1,000.</li> <li>• Divide by 10, 100 and 1,000.</li> <li>• Multiply decimals by integers.</li> <li>• Divide decimals by integers.</li> <li>• Division to solve problems.</li> <li>• Decimals as fractions.</li> <li>• Fractions to decimals (1).</li> <li>• Fractions to decimals (2).</li> </ul>	<ul style="list-style-type: none"> <li>• Fractions to percentages.</li> <li>• Equivalent FDP.</li> <li>• Percentage of an amount (1).</li> <li>• Percentage of an amount (2).</li> <li>• Percentages – missing values.</li> <li>• Percentage increase and decrease.</li> <li>• Order FDP.</li> </ul>	<ul style="list-style-type: none"> <li>• Find a rule – one step.</li> <li>• Find a rule – two step.</li> <li>• Use an algebraic rule.</li> <li>• Substitution.</li> <li>• Formulae.</li> <li>• Word problems.</li> <li>• Solve simple one step equations.</li> <li>• Solve two step equations.</li> <li>• Find pairs of values.</li> <li>• Enumerate possibilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Metric measures.</li> <li>• Convert metric measures.</li> <li>• Calculate with metric measures.</li> <li>• Miles and kilometres.</li> <li>• Imperial measures.</li> </ul>	<ul style="list-style-type: none"> <li>• Shapes – same area.</li> <li>• Area and perimeter.</li> <li>• Area of a triangle (1).</li> <li>• Area of a triangle (2).</li> <li>• Area of a triangle (3).</li> <li>• Area of a parallelogram.</li> <li>• Volume – counting cubes.</li> <li>• Volume of a cuboid</li> </ul>	<ul style="list-style-type: none"> <li>• Use ratio language.</li> <li>• Ratio and fractions.</li> <li>• Introducing the ratio symbol.</li> <li>• Calculating ratio.</li> <li>• Using scale factors.</li> <li>• Calculating scale factors.</li> <li>• Ratio and proportion problems</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PS</b></p>	<ul style="list-style-type: none"> <li>• Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>• Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required.</li> <li>• Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate.</li> <li>• Make suggestions of ways to solve a range of problems.</li> <li>• Organise work from the outset, looking for ways to record and work systematically.</li> <li>• Find and predict possibilities that match the context using patterns spotted to support.</li> <li>• Independently check and improve their work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve).</li> <li>• Pattern spot and begin to express generalisations/proof using words and symbolic notation.</li> <li>• Make and investigate conjectures and provide examples and counter-examples.</li> <li>• When they have solved a problem, pose a similar problem for a peer.</li> </ul>						
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>R</b></p>	<ul style="list-style-type: none"> <li>• Provide proof of reasoning, expressing generalisations in words and symbolic notation.</li> <li>• Reflect on others' proof and use this to improve their own work.</li> <li>• Edit and improve their own and a peer's proof.</li> <li>• Investigate 'what if?' questions.</li> <li>• Create 'what if?' questions.</li> </ul>						

## Maths Year 6 - Summer

	Geometry: Properties of Shapes	Problem Solving	Statistics	Investigations	Consolidation
	Week 1-2	Week 3-5	Week 6-7	Week 8-11	Week 12
<b>National Curriculum</b>	<ul style="list-style-type: none"> <li>• Draw 2-D shapes using given dimensions and angles.</li> <li>• Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.</li> <li>• Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.</li> <li>• Interpret and construct pie charts and line graphs and use these to solve problems.</li> <li>• Calculate the mean as an average.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>
<b>White Rose Small Steps</b>	<ul style="list-style-type: none"> <li>• Measure with a protractor.</li> <li>• Introduce angles.</li> <li>• Calculate angles.</li> <li>• Vertically opposite angles.</li> <li>• Angles in a triangle.</li> <li>• Angles in a triangle – special cases.</li> <li>• Angles in a triangle – missing angles.</li> <li>• Angles in special quadrilaterals.</li> <li>• Angles in regular polygons.</li> <li>• Draw shapes accurately.</li> <li>• Nets of 3D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• Read and interpret line graphs.</li> <li>• Draw line graphs.</li> <li>• Use line graphs to solve problems.</li> <li>• Circles.</li> <li>• Read and interpret pie charts.</li> <li>• Pie charts with percentages.</li> <li>• Draw pie charts.</li> <li>• The mean.</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• All</li> </ul>

PS	<ul style="list-style-type: none"> <li>•Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract)</li> <li>•Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required.</li> <li>•Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate.</li> <li>•Make suggestions of ways to solve a range of problems.</li> <li>•Organise work from the outset, looking for ways to record and work systematically.</li> <li>•Find and predict possibilities that match the context using patterns spotted to support.</li> <li>•Independently check and improve their work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve).</li> <li>•Pattern spot and begin to express generalisations/proof using words and symbolic notation.</li> <li>•Make and investigate conjectures and provide examples and counter-examples.</li> <li>•When they have solved a problem, pose a similar problem for a peer.</li> </ul>
R	<ul style="list-style-type: none"> <li>•Provide proof of reasoning, expressing generalisations in words and symbolic notation.</li> <li>•Reflect on others' proof and use this to improve their own work.</li> <li>•Edit and improve their own and a peer's proof.</li> <li>•Investigate 'what if?' questions.</li> <li>•Create 'what if?' questions.</li> </ul>