



# Maths Coverage

## Year 4 2021-22

### AUTUMN Term



	Term 1								Term 2							
	Week 1 (2 days)	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7 (4 days)	
NC Focus	Number: Place Value				Number: Addition and Subtraction				Measurement: Length and perimeter	Number: Multiplication and Division						Consolidation
NC Objectives	<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 12 x 12.</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>						
Ready to Progress Criteria	<ul style="list-style-type: none"> <li><b>4NPV-1</b> Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.</li> <li><b>4NPV-2</b> Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning.</li> <li><b>4NPV-3</b> Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.</li> <li><b>4NPV-4</b> Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.</li> <li><b>4NF-3</b> Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100).</li> </ul>				<ul style="list-style-type: none"> <li>See Year 3</li> </ul>					<ul style="list-style-type: none"> <li><b>4NPV-4</b> Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.</li> <li><b>4NF-1</b> Recall multiplication and division facts up to 12x12, and recognise products in multiplication tables as multiples of the corresponding number.</li> <li><b>4NF-2</b> Solve division problems, with two-digit dividends and one-digit divisors that involve remainders, and interpret remainders appropriately according to the context.</li> <li><b>4MD-1</b> Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.</li> <li><b>4MD-2</b> Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.</li> <li><b>4MD-3</b> Understand and apply the distributive property of multiplication.</li> </ul>						
White Rose Small Steps	<ul style="list-style-type: none"> <li>Roman Numerals to 100.</li> <li>Round to the nearest 10.</li> <li><b>Round to the nearest 100.</b></li> <li>Count in 1000s.</li> <li><b>1000s, 100s, 10s and 1s.</b></li> <li><b>Partitioning.</b></li> <li><b>Number line to 10,000.</b></li> <li><b>1000 more or less.</b></li> <li>Compare 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> </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><b>Multiply by 10.</b></li> <li><b>Multiply by 100.</b></li> <li><b>Divide by 10.</b></li> <li><b>Divide by 100.</b></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> </ul>						

	<ul style="list-style-type: none"> <li>Order numbers.</li> <li><b>Round to the nearest 1000.</b></li> <li>Count in 25s.</li> <li>Negative numbers.</li> </ul>	<ul style="list-style-type: none"> <li>Checking strategies.</li> </ul>		<ul style="list-style-type: none"> <li>9 times-table and division facts.</li> <li>Multiply and divide by 7.</li> <li>7 times-table and division facts.</li> </ul>	
<b>Year 2/3 Revisit</b> (potential gaps in learning from previous years)	<ul style="list-style-type: none"> <li>Read and write numbers in words.</li> <li>Use a place value chart.</li> <li>Count in 3s.</li> </ul>	<ul style="list-style-type: none"> <li>Add two 2-digit numbers – crossing ten – add ones and add tens.</li> <li>Subtract a 2-digit number from a 2-digit number – crossing ten – subtract ones and tens.</li> <li>Bonds to 100 (tens and ones).</li> <li>Add three 1-digit numbers.</li> </ul>	<ul style="list-style-type: none"> <li>Year 3 – on GC.</li> <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>Make equal groups – grouping.</li> <li>Divide by 2 Odd &amp; even numbers.</li> <li>Divide by 5.</li> <li>Divide by 10.</li> </ul>	
<b>Consolidation Required</b> (based on current End of Block Assessments)	•	•	•	•	•



# Maths Coverage

## Year 4

### SPRING Term

	Term 3						Term 4							
	Week 1 (3 days)	Week 2	Week 3	Week 4	Week 5	Week 6	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		
NC Focus	Number: Multiplication and Division			Measurement: Area	Fractions			Fractions			Decimals			Consolidation
NC Objectives	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for multiplication tables up to 12 x 12.</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 and three digit numbers by a one digit number using formal written layout.</li> <li>Solve problems involving multiplying and adding, including those 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. Add and subtract fractions with the same denominator.</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. 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><b>Solve simple measure and money problems involving fractions and decimals to two decimal places.</b></li> <li>Convert between different units of measure (for example, kilometre to metre).</li> </ul>			
Ready to Progress Criteria	<ul style="list-style-type: none"> <li><b>4NPV-4</b> Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.</li> <li><b>4NF-1</b> Recall multiplication and division facts up to 12x12, and recognise products in multiplication tables as multiples of the corresponding number.</li> <li><b>4NF-2</b> Solve division problems, with two-digit dividends and one-digit divisors that involve remainders, and interpret remainders appropriately according to the context.</li> <li><b>4MD-1</b> Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.</li> <li><b>4MD-2</b> Manipulate multiplication and division equations, and understand and</li> </ul>				<ul style="list-style-type: none"> <li><b>4F-1</b> Reason about the location of mixed numbers in the linear number system.</li> <li><b>4F-2</b> Convert mixed numbers to improper fractions and vice versa.</li> <li><b>4F-3</b> Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.</li> </ul>									

	<p>apply the commutative property of multiplication.</p> <ul style="list-style-type: none"> <li>• <b>4MD-3</b> Understand and apply the distributive property of multiplication.</li> </ul>					
<b>White Rose Small Steps</b>	<ul style="list-style-type: none"> <li>• <b>11 and 12 times tables.</b></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>• <b>Divide 2-digits by 1-digit (1).</b></li> <li>• <b>Divide 2-digits by 1-digit (2).</b></li> <li>• <b>Correspondence problems.</b></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>• <b>Add 2 or more fractions.</b></li> <li>• <b>Subtract 2 fractions.</b></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>• 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>	
<b>Year 2/3 Revisit</b> (potential gaps in learning from previous years)	<ul style="list-style-type: none"> <li>• See previous.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Unit fractions.</li> <li>• Non-unit 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>			
<b>Consolidation Required</b> (based on current End of Block Assessments)	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	



## Maths Coverage Year 4 SUMMER Term

	Term 5						Term 6						
	Week 1 (4 days)	Week 2	Week 3 4 days	Week 4	Week 5	Week 6	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7 (3 days)
NC Focus	Decimals		Measurement: Money		Time		Statistics		Geometry: Properties of Shape			Geometry: Position and Direction	Consolidation
NC Objectives	<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> <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 or 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 2-D 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>	
Ready to Progress Criteria									<ul style="list-style-type: none"> <li><b>4G-1</b> Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.</li> <li><b>4G-2</b> Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.</li> <li><b>4G-3</b> Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.</li> </ul>				
White Rose Small Steps	<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><b>Triangles</b></li> <li>Quadrilaterals</li> <li><b>Lines of symmetry</b></li> <li><b>Complete a symmetric figure.</b></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>	
Year 2/3	<ul style="list-style-type: none"> <li></li> </ul>		<ul style="list-style-type: none"> <li>Year 3 – on GC.</li> <li>Count money – notes</li> </ul>		<ul style="list-style-type: none"> <li>Quarter to.</li> <li>Telling time to 5 minutes.</li> </ul>		<ul style="list-style-type: none"> <li>Year 3 – on GC.</li> <li>Make tally charts.</li> </ul>					<ul style="list-style-type: none"> <li>Describing</li> </ul>	

<p><b>Revisit</b> (potential gaps in learning from previous years)</p>		<p>and coins.</p> <ul style="list-style-type: none"> <li>• Find the difference.</li> <li>• Find change.</li> <li>• Two-step problems.</li> <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>• Compare durations of time.</li> </ul>	<ul style="list-style-type: none"> <li>• Draw pictograms (2, 5 and 10).</li> <li>• Interpret pictograms (2, 5 and 10).</li> <li>• Interpret and present data using bar charts, pictograms and tables.</li> <li>• Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables.</li> </ul>		<p>movement and turns.</p>	
<p><b>Consolidation Required</b> (based on current End of Block Assessments)</p>	•	•	•	•	•		