Maths Coverage
Year 5
AUTUMN Term

	Term 1								Term 2						
	Week 1 (4 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		Multiplication and division			Statistics			Measure- Perimeter and Area		Geometry	
NC Objectives	• Recall and use multiplication and division facts for multiplication tables up to 12 x 12. • 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. • Recognise and use factor pairs and commutativity in mental calculations. • Multiply two and three digit numbers by a one digit number using formal written layout. • 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.			• Add and subtract numbers mentally with increasingly large numbers. • Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.		• Multiply and divide numbers mentally drawing upon known facts. • Multiply and divide whole numbers by 10, 100 and 1000. • Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. • Recognise and use square numbers and cube numbers and the notation for squared (^{2}) and cubed (^{3}) • Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. • Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. • Establish whether a number up to 100 is prime and recall prime numbers up to 19			• Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables including timetables.			• Measure and calculate the perimeter of composite rectilinear shapes in cm and m. • Calculate and compare the area of rectangles (including squares), and including using standard units, cm2, m2 estimate the area of irregular shapes.		• Acute and obtuse angles and compare and order angles up to two right angles by size. • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. • Identify lines of symmetry in 2-D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry.	
Ready to Progress Criteria	**5NF–2** Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).					**5NPV–4** Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts. **5NPV–5** Convert between units of measure, including using common decimals and fractions. **5NF–1** Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.						**5G–2** Compare areas and calculate the area of rectangles (including squares) using standard units. **5G–1** Compare angles, estimate and measure angles in degrees (°) and draw angles of a given size.		**5G–1** Compare angles, estimate and measure angles in degrees (°) and draw angles of a given size.	

			5MD–1 Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. 5MD–2 Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors.		
White Rose Small Steps	• **Number to 10,000** • Roman numerals to 1,000 • Round to the nearest 10, 100 and 1,000 • **Number to 100,000** • Compare and order numbers to 100,000 • Round numbers within 100,000 • **Numbers to a million** • **Counting in 10s, 100s, 1,000s, 10,000s and 100,000s** • Compare and order numbers to a million • Round numbers to a million • Negative numbers	• Add whole numbers with more than 4-digits (column method) • Subtract whole numbers with more than 4-digits (column method) • Round to estimate and approximate • Inverse operations (addition and subtraction) • Multi-step addition and subtraction problems	• **Multiples** • **Factors** • **Common factors** • Prime factors • Square numbers • Cube numbers • Inverse operations (multiplication and division) • **Multiply by 10, 100, 1000** • **Divide by 10, 100, 1000** • **Multiply and divide by 10, 100, 1000**	• Read and interpret line graphs • Draw line graphs • Use line graphs to solve problems • Read and interpret tables • Two way tables • Timetables	• **Measure perimeter** • Calculate perimeter • Find unknown lengths • **Area of rectangles** • Area of compound shapes • Estimate and approximate area	• **Identify angles** • **Compare and order angles** • Triangles • Quadrilaterals • Lines of symmetry Complete a symmetric figure
Year 4 Revisit	• Rounding – has been has been revisited multiple times during arithmetic but still needs consolidating. • Negative numbers.	• Exchanging with addition and subtract – has been revisited multiple times during arithmetic but still needs consolidating. • Estimating answers. • Rounding to estimate – most calculate exact amounts. • Problem solving – linked to selecting / using the four operations.	• General times tables facts – faster recall needed. • World problems / general problem solving skills involving multiplication and division need consolidation. • Rounding to estimate – most calculate exact amounts. • Problem solving – linked to selecting / using the four operations.			
Consolidation Required (based on End of Block Assessments)		•				

Maths Coverage
Year 5
SPRING Term

	Term 3						Term 4					Week 6 (4 days)
	Week 1 (4 days)	Week 2	Week 3	Week 4	Week 5	Week 6 (4 days)	Week 1	Week 2	Week 3	Week 4	Week 5	
NC Focus	Multiplication and division			Measurement			Fractions		Number-Decimals and Percentages	Decimals		
NC Objectives	• Multiply and divide numbers mentally drawing upon known facts. • 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. • 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. • Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.			• Convert between different units of metric measure [for example, km and m; cm and m; cm and mm; g and kg; l and ml] • Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. • Solve problems involving converting between units of time			• Compare and order fractions whose denominators are multiples of the same number. • Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths. • Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example 25 + 45 = 65 = 1 15] • Add and subtract fractions with the same denominator and denominators that are multiples of the same number. • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.		• Compare numbers with the same number of decimal places up to two decimal places. • Round decimals with one decimal place to the nearest whole number. • Recognise and write decimal equivalents to ¼ ½ ¾ • 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.	• Read, write, order and compare numbers with up to three decimal places. • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. • Round decimals with two decimal places to the nearest whole number and to one decimal place. • Solve problems involving numbers up to three decimal places. • 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. Solve problems which require knowing percentage and decimal equivalents of 12, 14, 15, 25, 45 and those fractions with a denominator of a multiple of 10 or 25		

			• Read and write decimal numbers as fractions [for example 0.71 = 71100] Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.		
Ready to Progress Criteria	**5MD–1** Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. **5MD–3** Multiply any whole number with up to 4 digits by any one-digit number using a formal written method. **5MD–4** Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.		**5NPV–4** Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts. **5F–1** Find non-unit fractions of quantities. **5F–2** Find equivalent fractions and understand that they have the same value and the same position in the linear number system. **5F–3** Recall decimal fraction equivalents for , , and , and for multiples of these proper fractions.	**5NPV–1** Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01. **5NPV–2** Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning.	**5NPV–2** Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. **5NPV–4** Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts. **5NPV–5** Convert between units of measure, including using common decimals and fractions.	
White Rose Small Steps	• **Multiply 4-digits by 1-digit** • Multiply 2-digits (area model) • Multiply 2-digits by 2-digits • Multiply 3-digits by 2-digits • Multiply 4-digits by 2-digits • **Divide 4-digits by 1-digit** • **Divide with remainders**	• Kilograms and kilometres • Milligrams and millilitres • Metric units • Imperial units • Converting units of time • Timetables Hours, minutes and seconds. • Years, months, weeks and days. • Analogue to digital – 12 hour. • Analogue to digital – 24 hour • What is volume? • Compare volume	• **Equivalent fractions** • Improper fractions to mixed numbers • Mixed numbers to improper fractions • **Number sequences** • **Compare and order fractions less than 1** • Compare and order fractions greater than 1 • Add and subtract fractions	• **Decimals up to 2 d.p.** • **Decimals as fractions (1)** • **Decimals as fractions (2)** • **Understand thousandths** • **Thousands as decimals** • Rounding decimals • Order and compare decimals • Understand percentages • Percentages as fractions and decimals • **Equivalent F.D.P**	

			Estimate volume Estimate capacity	**Add fractions within 1** Add 3 or more fractions **Add fractions** Add mixed numbers **Subtract fractions** Subtract mixed numbers Subtract – breaking the whole Subtract 2 mixed numbers Multiply unit fractions by an integer Multiply non-unit fractions by an integer Multiply mixed numbers by integers **Fraction of an amount Using fractions as operators**	
Year 4 Revisit	• General times tables facts – faster recall needed. • World problems / general problem solving skills involving multiplication and division need consolidation.	• Hours, minutes and seconds. • Years, months, weeks and days. • Analogue to digital – 12 hour. • Analogue to digital – 24 hour • Converting between km and m	• Covered during lockdown – would be beneficial to revisit key steps (R2P criteria). • Factor pairs and multiplying 3 number definitely needs consolidating but other steps have been consolidated through arithmetic questions.	• Fractions of an amount e.g. when a hundred grid represents one – identifying which fraction of the grid is shaded. • Different representations of fractions e.g. words / fractions / decimals.	
Consolidation Required (based on End of Block Assessments)	•	•		•	

Maths Coverage
Year 5
SUMMER Term

	Term 5						Term 6						
	Week 1	**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			Decimals			Consolidation Four operations (Year 4 Multiplication and division)	Consolidation Four operations (Year 4 Multiplication and division)	Geometry- Position and Direction		Geometry: Properties of Shape		
NC Objectives	- Read, write, order and compare numbers with up to three decimal places. - Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. - Round decimals with two decimal places to the nearest whole number and to one decimal place. - Solve problems involving numbers up to three decimal places. - 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. - Solve problems which require knowing percentage and decimal equivalents of 12, 14, 15, 25, 45 and those fractions with a denominator of a multiple of 10 or 25			- Solve problems involving number up to three decimal places. - Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. - Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.			- Estimate, compare and calculate different measures including money in pounds and pence. - Solve simple measure and money problems involving fractions and decimals to two decimal places.		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		- Geometry- Properties of Shapes and Angles - Identify 3D shapes, including cubes and other cuboids, from 2D representations. - Use the properties of rectangles to deduce related facts and find missing lengths and angles. - Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. - Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. - Draw given angles, and measure them in degrees ($°$) - 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 $90°$		

Ready to Progress Criteria	**5NPV–5** Convert between units of measure, including using common decimals and fractions. **5NPV–4** Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts. **5F–1** Find non-unit fractions of quantities. **5F–2** Find equivalent fractions and understand that they have the same value and the same position in the linear number system. **5F–3** Recall decimal fraction equivalents for , , and , and for multiples of these proper fractions. **5NPV–2** Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. **NPV- 3** Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. **5NPV–4** Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts. **5NPV–5** Convert between units of measure, including using common decimals and fractions.	**5NPV–2** Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. **NPV- 3** Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. **5NPV–4** Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts. **5NPV–5** Convert between units of measure, including using common decimals and fractions.	**5MD–1** Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. **5MD–3** Multiply any whole number with up to 4 digits by any one-digit number using a formal written method. **5MD–4** Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.	**5NPV–5** Convert between units of measure, including using common decimals and fractions. **5NPV–2** Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning.		
White Rose Small Steps	• Adding decimals within 1 • Subtracting decimals within 1 • Complements to 1 • Adding decimals – crossing the whole • Adding decimals with the same number of decimal places • Subtracting decimals with the same number of decimal places • Adding decimals with a different number of decimal places • Subtracting decimals with a different number of decimal places • Adding and subtracting wholes and decimals • Decimal sequences • Multiplying decimals by 10, 100 and 1,000 • Dividing decimals by 10, 100 and 1,000	• Decimals up to 2 d.p. • Decimals as fractions (1) • Decimals as fractions (2) • Understand thousandths • Thousands as decimals • Rounding decimals • Order and compare decimals • Understand percentages • Percentages as fractions and decimals • Equivalent F.D.P			• Measuring angles in degrees • Measuring with a protractor (1) • Measuring with a protractor (2) • **Drawing lines and angles accurately** • Calculating angles on a straight line • Calculating angles around a point • Calculating lengths and angles in shapes • Regular and irregular polygons • Reasoning about 3D shapes	• Position in the first quadrant • **Reflection** • **Reflection with coordinates** • **Translation** • **Translation with coordinates** **below**

Year 4 Revisit	• Part-whole models with decimals – making a whole. o Comparing / ordering decimals.				• Ordering angles. • Properties of quadrilaterals. • Properties of triangles. • Completing a symmetric figure (using a ruler to draw straight lines).	• Describe positions on a 2-D grid as coordinates in the first quadrant. • Plot specified points and draw sides to complete a given polygon. • Describe movements between positions as translations of a given unit to the left/right and up/down • Translating shapes. • Drawing sides to complete a polygon.
Consolidation Required (based on End of Block Assessments)	•					