Year 5 – White Rose order of National Curriculum Progression

		National Curriculum Progression Statements	Ready to Progress Statements
Term 1 /2	Number: Place Value	I can read and write numbers to at least 1 000 000 and determine the value of each digit	**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. **Spring 3**
		I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals	
		I can order and compare numbers to at least 1 000 000	
		I can count forwards or backwards in steps of powers of 10 for any given number to 1 000 000	
		I can interpret negative numbers in context	
		I can count forwards and backwards with positive and negative whole numbers, including through zero	
		I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	**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 nonstandard partitioning. **Spring 3**
		I can solve number problems and practical problems that involve all the above	
	Number: Addition and Subtraction	I can add and subtract numbers mentally with increasingly large numbers	
		I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	
		I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	
		I can solve addition and subtraction multi-step problems in familiar contexts, deciding which operations and methods to use and why	**5NPV–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. **Spring 3**
		I can solve problems involving addition, subtraction, multiplication and division, and a combination of these, including understanding the meaning of the equals sign	
	Number: Multiplication and Division A	I can identify multiples and factors, including all factor pairs of a number, and common factors of 2 numbers	
		I can know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	**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. **Spring 3**
		I can establish whether a number up to 100 is prime and recall prime numbers up to 19	
		I can 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	
		I can multiply and divide numbers mentally drawing upon known facts	**5NPV–5** Convert between units of measure, including using common decimals and fractions. **Summer 5**
		I can divide numbers up to 4 digits by a one-digit number using formal written method of short division and interpret remainders appropriately for the context	
		I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	**5NF–1** Secure fluency in multiplication table facts, and corresponding division facts, through continued practice. **Autumn 3** **Spring 1 and 2**
		I can recognise and use square numbers and cube numbers and the notation for them	
		I can solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes	
		I can solve problems involving scaling by simple fractions and problems involving simple rates	**5NF–2** Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth). **Autumn 3**
	Number: Fractions A	I can compare and order fractions whose denominators are all multiples of the same number	
		I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	
		I can recognise mixed numbers and improper fractions and convert from one form to the other	**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. **Autumn 3** **Summer 3**
		I can write mathematical statements > 1 as a mixed number	
		I can add and subtract fractions with the same denominator and denominators that are multiples of the same number	
		I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
Term 2 /3	Number: Multiplication and Division B	I can multiply and divide numbers mentally drawing upon known facts	**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. **Autumn 3**
		I can 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	
		I can divide numbers up to 4 digits by a one-digit number using formal written method of short division and interpret remainders appropriately for the context	

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		I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	**5MD–3** Multiply any whole number with up to 4 digits by any one-digit number using a formal written method. **Spring 1**
		I can solve problems involving addition, subtraction, multiplication and division, and a combination of these, understanding of the meaning of the equals sign	
		I can solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes	
		I can solve problems involving scaling by simple fractions and problems involving simple rates	**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. **Spring 1**
	Number: Fractions B	I can add and subtract fractions with the same denominator and denominators that are multiples of the same number	
		I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
	Number: Decimals and Percentages	I can read, write, order and compare numbers with up to three decimal places	**5F–1** Find non-unit fractions of quantities. **Spring 2**
		I can recognise and use thousandths and relate them to tenths and hundredths and decimal equivalents	
		I can round decimals with two decimal places to the nearest whole number and to one decimal place	**5F–2** Find equivalent fractions and understand that they have the same value and the same position in the linear number system. **Autumn 4**
		I can solve problems involving addition and subtraction involving numbers up to three decimal places	
		I can recognise the per cent symbol (%) and understand that per cent relates to ''number of parts per hundred''	
		I can write percentages as a fraction with denominator hundred, and as a decimal	**5F–3** Recall decimal fraction equivalents for 1/2,1/4,1/5 and 1/10, and for multiples of these proper fractions. **Spring 3**
		I can read and write decimal numbers as fractions	
		I can know percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25	
		I can solve problems which require knowing key percentage and decimal equivalents	
	Measurement: Perimeter and Area	I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	**5G–1** Compare angles, estimate and measure angles in degrees (°) and draw angles of a given size. **Summer 1**
		I can calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres and square metres and estimate the area of irregular shapes	
		I can convert between different units of metric measure	**5G–2** Compare areas and calculate the area of rectangles (including squares) using standard units. **Spring 4**
		I can solve problems involving measure, using the four operations	
		I can understand and use approximate equivalences between metric units and common imperial units	
		I can estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water]	
	Statistics	I can solve comparison, sum and difference problems using information presented in a line graph	
		I can complete, read and interpret information in tables, including timetables	
Term 3/4	**Geometry: Property of Shape**	I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations	
		I can use the properties of rectangles to deduce related facts and find missing lengths and angles	
		I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles	
		I know that angles are measured in degrees: estimate and compare obtuse and reflex angles	
		I can draw given angles, and measure them in degrees	
		I can identify angles at a point and one whole turn, angles at a point on a straight line and ½ a turn and other multiples of 90º	
	Geometry: Position and Direction	I can 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.	
	Number: Decimals	I can solve problems involving numbers up to three decimal places	
		I can solve measurement problems using all four operations	
		I can read, write, order and compare numbers with up to three decimal places	
		I can read and write decimal numbers as fractions	
		I can round decimals with two decimal places to the nearest whole number and to one decimal place	
		I can recognise and use thousandths and relate them to tenths and hundredths and decimal equivalents	

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	Number: Negative numbers	I can count forwards or backwards in steps of powers of 10 for any given number to 1 000 000	
		I can count forwards and backwards with positive and negative whole numbers, including through zero	
	Measurement: Converting Units	I can convert between different units of metric measure	
		I can understand and use approximate equivalences between metric units and common imperial units	
		I can solve problems involving measure, using the four operations	
		I can solve problems involving converting between units of time	
	Measurement: Volume	I can convert between different units of metric measure	
		I can estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water]	
		I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	
		I can calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres and square metres and estimate the area of irregular shapes	
		I can understand and use approximate equivalences between metric units and common imperial units	
		I can solve measurement problems using all four operations	