In Minet Junior School we use the content overviews from White Rose Maths Hub to base our long term plans. To suit our community and reflect our children, we have edited the White Rose Hub schemes to include progression targets from NCTEM and in addition we use resources and text books from Power Maths.

Objectives in red show targets that are taken from the NCTEM progression maps. Words underlined are mathematical key vocabulary that may be new to children or that they need to learn the meaning of.

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AUTUMN		
Number : Place Value	Week 1 Week 2 Week 3	• Read, write, order and compare numbers up to 1 000 000 and determine the value of each digit. • Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. • Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero. • Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000 • Solve number problems and practical problems that involve all of the above. • Read Roman numerals to 1000 (M) and recognise years written in Roman numerals
Calculation: addition and subtraction	Week 4 Week 5	• 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.
Calculation: multiplication and division	Week 6 Week 7 Week 8 Week 9	• Multiply and divide whole numbers and decimals by 10, 100 and 1000. 5MD-1 • Multiply and divide numbers mentally drawing upon known facts. • Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. 5MD-2 • 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
Fractions	Week 10 Week 11	• 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. 5F-2 • Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number • Add and subtract fractions with the same denominator, and denominators that are multiples of the same number

SPRING		
Calculation: multiplication and division	Week 1 Week 2 Week 3	• 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. 5MD-3 • 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. 5MD-4 • Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.
Fractions	Week 4	• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

Decimals and Percentages	Week 5 Week 6 Week 7	• Read, write, order and compare numbers with up to three decimal places. 5NPV-1 • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. 5NPV-2 • Round decimals with two decimal places to the nearest whole number and to one decimal place. • Read and write decimal numbers as fractions • 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 a quarters, fifths and those fractions with a denominator of a multiple of 10 or 25. • Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths. • Solve problems involving number up to three decimal places.
Measurement: Perimeter and Area	Week 8 Week 9	• 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. 5G-2
Statistics	Week 10 Week 11	• Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables including timetables.

SUMMER

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Geometry: properties of shape	Week 1 Week 2 Week 3 Week 4	• 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. 5G-1 • Draw given angles, and measure them in degrees (°) 5G-1 • Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) other multiples of 90°
Geometry: position and direction	Week 5 Week 6	• 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	Week 7 Week 8	• Solve problems involving number up to three decimal places. • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (through adding and subtracting).
Measurement: Converting units	Week 9 Week 10	• Convert between different units of metric measure (for example, km and m; cm and m; cm and mm; g and kg; l and ml) 5NPV-5 • 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
Measurement: Volume	Week 11	• Estimate volume [for example using 1cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water] • Use all four operations to solve problems involving measure

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	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number **Place value**			Number **Addition and subtraction**		Number **Multiplication and division A**			Number **Fractions A**			
Spring	Number **Multiplication and division B**			Number **Fractions B**		Number **Decimals and percentages**			Measurement **Perimeter and area**		Statistics	
Summer	Geometry **Shape**			Geometry **Position and direction**		Number **Decimals**			Number **Negative numbers**	Measurement **Converting units**		Measurement **Volume**

*BASED ON CONTENT OVERVIEW – negative numbers is to be complete in place value unit – not stand alone.