

	Block 1	Block 2	Block 3	Block 4
	Place Value	Addition and Subtraction	Multiplication and Division A	Fractions A
White Rose Maths Small Steps	<ul style="list-style-type: none"> - Number to 10,000. - Roman numerals to 1,000. - Round to the nearest 10, 100 and 1000. - 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. 	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> - Multiples. - Factors. - Common factors. - Prime numbers. - Square numbers. - Cube numbers. - Multiplying by 10, 100 and 1000. - Dividing by 10, 100 and 1000. - Multiples of 10, 100 and 1000. 	<ul style="list-style-type: none"> - Find fractions equivalent to a unit fraction - Find fractions equivalent to a non-unit fraction - Recognise equivalent fractions - Convert improper fractions to mixed numbers - Convert mixed numbers to improper fractions - Compare fractions less than 1 - Order fractions less than 1 - Compare and order fractions greater than 1 Add and subtract fractions with the same denominator - Add fractions within 1 - Add fractions with total greater than 1 - Add to a mixed number - Add two mixed numbers - Subtract fractions - Subtract from a mixed number - Subtract from a mixed number – breaking the whole - Subtract two mixed numbers
National Curriculum Links	<p>Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.</p> <ul style="list-style-type: none"> • Count forwards or backwards in steps of powers of 10 for any given number up to 1000000. • 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. 	<p>Add and subtract numbers mentally with increasingly large numbers.</p> <ul style="list-style-type: none"> • 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. 	<p>Identify multiples and factors, including finding all factor pairs of a number, and common factors.</p> <ul style="list-style-type: none"> • 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. • Multiply and divide numbers mentally, drawing upon known facts. • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed. 	<p>Compare and order fractions whose denominators are multiples of the same number.</p> <ul style="list-style-type: none"> • 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 $\frac{3}{5} + \frac{1}{5} = \frac{6}{5} = 1\frac{1}{5}$]. • Add and subtract fractions with the same denominator and denominators that are multiples of the same number.

	Block 1	Block 2	Block 3	Block 4	Block 5
	Multiplication and Division B	Fractions B	Decimals and Percentages	Perimeter and Area	Statistics
White Rose Maths	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Measure perimeter. • Calculate perimeter. • Area of rectangles. • Area of compound shapes. • Area of irregular shapes. 	<ul style="list-style-type: none"> • Read and interpret line graphs. • Draw line graphs. • Use line graphs to solve problems. • Read and interpret tables. • Two way tables. • Timetables.
National Curriculum Links	<p>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.</p> <ul style="list-style-type: none"> • 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, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. • Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. 	<p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</p> <ul style="list-style-type: none"> • Read and write decimal numbers as fractions [for example $0.71 = \frac{71}{100}$]. • Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. 	<p>Read, write, order and compare numbers with up to three dp.</p> <ul style="list-style-type: none"> • 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 dp. • Solve problems involving number up to three dp. • 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 $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$ and those fractions with a denominator of a multiple of 10 or 25. 	<ul style="list-style-type: none"> • Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. • Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm²) and square metres (m²), and estimate the area of irregular shapes. 	<ul style="list-style-type: none"> • Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables including timetables.

	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
	Shape	Position and Direction	Decimals	Negative Numbers	Converting Units	Volume
White Rose Maths Small Steps	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Position in the first quadrant. Reflection. Reflection with coordinates. Translation. Translation with coordinates. 	<ul style="list-style-type: none"> Adding decimals within 1. Subtracting decimals within 1. Complements to 1. Adding decimals – crossing the whole. Adding decimals with the same number of dps. Subtracting decimals with the same number of dps. Adding decimals with a different number of dps. Subtracting decimals with a different number of decimal places. Adding and subtracting whole and decimals. Decimal sequences. Multiplying decimals by 10, 100 and 1000. Dividing decimals by 10, 100 and 1,000 	<ul style="list-style-type: none"> Negative numbers. 	<ul style="list-style-type: none"> Kilograms and kilometres. Milligrams and millilitres. Metric units. Imperial units. Converting units of time. Timetables. 	<ul style="list-style-type: none"> What is volume? Compare volume. Estimate volume. Estimate capacity.
National Curriculum Links	<ul style="list-style-type: none"> 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°. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Estimate volume [for example using 1cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water]. Use all four operations to solve problems involving measure.

