Year 6 Maths – Autumn Term

	Week 1-2 Block 1	Week 3-7 Block 2	Week 8-11 Block 4	Week 12 Block 4
	Number: Place Value	Number: Addition, Subtraction, Multiplication and Division	Number: Fractions	Geometry: Position and Direction
White Rose Small Steps	• Recap: Numbers to 10,000 • Recap: Numbers to 100,000 • Recap: Numbers to a million • Numbers to 10,000,000 • Read and write numbers to 10,000,000 • Compare and order any integer • Recap: Round numbers to 10, 100 and 1,000 • Round any number • Negative numbers	• Recap: Add/subtract whole numbers with more than 4 digits (column method) • Recap: Inverse Operations (addition and subtraction) • Recap: Multi-step addition and subtraction problems • Add and subtract integers • Recap: Multiply 4-digits by 1-digit • Recap: Multiply 2-digits by 2-digits • Recap: Multiply 3-digits by 2-digits • Multiple up to a 4-digit number by a 2-digit number (long multiplication) • Recap: Divide 4-digits by 1-digit • Recap: Divide with remainders • Short division method including dividing by a 2-digit number • Division using factors • Recap Factors • Common factors and multiples • Prime numbers to 100 • Squares and cubes • Order of operations (BIDMAS) • Mental calculations and estimates • Reasoning from known facts	• Recap: Equivalent Fractions • Simplify fractions • Recap: Improper fractions to mixed numbers • Recap: Mixed numbers to improper fractions • Fractions on a number line • Compare and order fractions (find lowest common multiple to find a common denominator) • Adding and subtracting fractions • Adding and subtracting fractions with mixed numbers • Multiply fractions by integers • Multiply fractions by fractions • Divide fractions by integers • Four operations with fractions • Finding fractions of amounts • Finding the whole amount (for example $\frac{2}{3}$ of ___ = 60)	• Co-ordinates in the first quadrant • Co-ordinates in four quadrants • Translations • Reflections
National Curriculum	• Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit • Round any whole number to a required degree of accuracy • Use negative numbers in context, and calculate intervals across zero • Solve number and practical problems that involve all of the above.	• Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context • Perform mental calculations, including with mixed operations and large numbers • Identify common factors, common multiples and prime numbers • Use their knowledge of the order of operations to carry out calculations involving the four operations • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Solve problems involving addition, subtraction, multiplication and division • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.	• Use common factors to simplify fractions; use common multiples to express fractions in the same denomination • Compare and order fractions, including fractions > 1 • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions • Multiply simple pairs of proper fractions, writing the answer in its simplest form: $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ • Divide proper fractions by whole numbers (for example $\frac{1}{3} \div 2 = \frac{1}{6}$ • Associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375) for a simple fraction (for example, $\frac{3}{8}$) • Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places • Multiply one-digit numbers with up to two decimal places by whole numbers • Use written division methods in cases where the answer has up to two decimal places • Solve problems which require answers to be rounded to specified degrees of accuracy • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	• Describe positions on the full coordinate grid (all four quadrants) • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Year 6 Maths – Spring Term

	Week 1-2 Block 1	Week 3-4 Block 2	Week 5-6 Block 3	Week 7 Block 4	Week 8 – 9 Block 5	Week 10 -11 Block 6	Week 12
	Number: Decimals	Number: Percentages	Number: Algebra	Measurement: Converting Units	Measurement: Perimeter, Area, Volume	Number: Ratio	Consolidation
White Rose Small Steps	• Three decimal places • Multiple by 10, 100 and 1000 • Divide by 10, 100 and 1000 • Multiple decimals by integers • Divide decimals by integers • Division to solve problems • Decimals as fractions • Fractions to decimals	• Fractions to percentages • Equivalent FDP • Percentage of an amount • Percentages – missing values (for example 20% of ____ = 900) • Percentage increase and decrease • Order FDP	• Find a rule (function machines) • Use an algebraic rule • Substitution • Simple formulae e.g. finding the perimeter of a rectangle $p = 2l + 2w$ • Word problems • Solve simple one step equations (for example $x + 5 = 12$) • Solve two step equations (for example $4y + 2 = 6$) • Find pairs of values for example $c \times d = 48$. • Find all the possible pairs of numbers that satisfy this equation	• Metric measure • Convert metric measures • Calculate with metric measures • Miles and kilometres • Imperial measures Covered in afternoon Maths	• Shape – same area • Area and Perimeter • Area of a triangle • Area of a parallelogram • Volume – counting cubes • Volume of a cuboid Covered in afternoon Maths	• Use ratio language • Ratio and fractions • Introducing the ratio symbol • Calculating ratio • Using scale factors • Ratio and proportion problems	All
National Curriculum	• Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places • Multiply one-digit numbers with up to two decimal places by whole numbers • Use written division methods in cases where the answer has up to two decimal places • Solve problems which require answers to be rounded to specified degrees of accuracy	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. • Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison	• Use simple formulae • Generate and describe linear number sequences • Express missing number problems algebraically • Find pairs of numbers that satisfy an equation with two unknowns • Enumerate possibilities of combinations of two variables.	• Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate • Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places • Convert between miles and kilometres	• Recognise that shapes with the same areas can have different perimeters and vice versa • Recognise when it is possible to use formulae for area and volume of shapes • Calculate the area of parallelograms and triangles • Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].	• Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts • Solve problems involving similar shapes where the scale factor is known or can be found • Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.	All

Year 6 Maths – Summer Term

	Week 1-2 Block 1	Week 3-5 Block 2	Week 6-12 Block 3
	Geometry: Properties of Shapes	Statistics	Consolidation Problem Solving, Investigations and Themed Projects
White Rose Small Steps	• Measure with a protractor • Introduce angles • Calculate angles • Vertically opposite angles • Angles in a triangle • Angles in a triangle – special cases (isosceles and right angled triangles) • Angles in a triangle – missing angles • Angles in special quadrilaterals • Angles in regular polygons • Draw shapes accurately • Nets of 3-D shapes Covered in afternoon Maths	• Read and interpret line graphs • Draw line graphs • Use line graphs to solve problems • Circles (Radius, Diameter and Circumference) • Read and interpret pie charts • Pie charts with percentages • Draw pie charts • The mean Covered in afternoon Maths Block to be completed before KS2 SATs	All
National Curriculum	• Draw 2-D shapes using given dimensions and angles • Recognise, describe and build simple 3-D shapes, including making nets • Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons • Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.	• Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius • Interpret and construct pie charts and line graphs and use these to solve problems Calculate and interpret the mean as an average.	All