ICKFORD SCHOOL

CLASS 4

Numeracy Scheme of Work

Class 4 Autumn 1					
	Weeks 1-2	**Week 3**	**Week 4**	**Week 5**	**Weeks 6-7**
Topic	**Number and Place Value**	**Roman Numerals**	**Addition**	**Subtraction**	**Factors and multiples**
National Curriculum Link	Read, write, order and compare numbers to at least 1 000 000 Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 00 Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Add whole numbers with more than 4 digits. Add numbers mentally Use rounding to check answers to calculations Solve addition multi-step problems in context.	Subtract whole numbers with more than 4 digits. Subtract numbers mentally. Use rounding to check answers to calculations Solve subtraction multi-step problems in context.	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers Solve problems involving multiplication and division, including using their knowledge of factors and multiples
White Rose Maths Resource Link	Place Value	Roman Numerals	Addition and Subtraction	Addition and Subtraction	Factors and Multiples Steps 1-4

Class 4 Autumn 2				
	Weeks 1-2	**Week 3**	**Weeks 4-5**	**Weeks 6-7**
Topic	**Primes, squares, cubes.**	**Multiply and divide by 10, 100, 1000**	**Multiplication and division**	**Fractions**
National Curriculum Link	Recognise and use square (^{2}) numbers and cube (^{3}) numbers Solve problems using their knowledge of 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	Multiply and divide whole numbers and decimals by 10, 100 and 1000	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. 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	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. Compare and order fractions whose denominators are all multiples of the same number
White Rose Maths Resource Link	Primes, Squares, Cubes Steps 5-7	10, 100, 1000 Steps 8-10	Multiplication and Division Steps 1-3 and 7-8	Fractions Steps 1-8

Class 4 Spring 1					
	Weeks 1	**Weeks 2-3**	**Week 4**	**Week 5-6**	**Week 7**
Topic	**Scaling**	**Adding and Subtracting Fractions**	**Decimals**	**Percentages**	**Statistics**
National Curriculum Link	Solve multi step problems involving multiplication and division, including problems involving scaling and proportion.	Add and subtract fractions with the same denominator and multiples of the same number Add and subtract fractions with different denominators.	Read, write, order and compare numbers with up to three decimal places Solve problems involving number up to three decimal places. Round decimals with two decimal places to the nearest whole number and to one decimal place	Recognise the per cent symbol (%) and understand that per cent relates to “number of parts per hundred”. Calculate percentages of amounts, including problem solving.	Solve comparison, sum and difference problems using information presented in bar charts and pictograms.
White Rose Maths Resource Link	Multiplication and Division Steps 4-6 and 9-11	Fractions Steps 9-16	Decimals Steps 8-11	Decimals Step 12	Statistics

Class 4 Spring 2					
	Week 1	**Week 2**	**Weeks 3-4**	**Weeks 5**	**Week 6**
Topic	**Statistics**	**Perimeter**	**Area**	**Fractions**	**Fractions/decimals/percentages**
National Curriculum Link	Solve comparison, sum and difference problems using information presented in a line graph	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. Calculate the perimeter of polygons	Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes. Calculate the area of compound shapes	Calculate fractions of amounts with unit and non-unit fractions. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	Write percentages as a fraction with denominator hundred, and as a decimal fraction Write decimal numbers as fractions (e.g. 0.71 = 71/100) Solve problems which require knowing 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 Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
White Rose Maths Resource Link	Statistics	Perimeter Steps 1-3	Perimeter Steps 4-6	Fractions	Decimals Steps 1-7 and 13-15

Class 4 Summer 1					
	Weeks 1-2	**Week 3**	**Weeks 4-5**	**Week 6**	**Week 7**
Topic	**Shape (angles)**	**Shape (2D/3D)**	**Position and direction**	**Decimals**	**Decimals**
National Curriculum Link	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°	Identify 3D shapes, including cubes and other cuboids, from 2D representations. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Compare and classify geometric shapes based on their properties, including symmetry. Use the properties of rectangles and triangles to deduce related facts and find missing lengths and angles.	Read, write and plot coordinates. Solve problems with coordinates. 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.	Add and subtract decimals with up to 3 decimal places, including using formal written methods (columnar addition and subtraction) Solve problems involving number up to three decimal places.	Multiply and divide decimals, including multiplying and dividing by 10, 100 and 1000. Use all four operations to solve problems involving money using decimal notation
White Rose Maths Resource Link	Angles Steps 1-7	2D and 3D Shape Steps 8-10 2D Shape (Y4) Steps 4-8	Position and Direction	Decimals Steps 1-9	Decimals Steps 10-12

Class 4 Summer 2					
	Week 1	**Weeks 2-3**	**Week 4**	**Week 5**	**Weeks 6-7**
Topic	**Negative numbers**	**Converting units**	**Time and timetables**	**Volume**	**Assessment point/consolidation**
National Curriculum Link	interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero Solve number problems and practical problems that involve negative numbers	Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) Understand and use equivalences between metric units and common imperial units such as inches, pounds and pints. Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling.	Read, write and convert time between analogue and digital 12 and 24-hour clocks. Solve problems involving converting between units of time. Complete, read and interpret information in tables, including timetables	Estimate volume (e.g. using 1 cm3 blocks to build cubes and cuboids) and capacity (e.g. using water) Use all four operations to solve problems involving measure (e.g.volume).	
White Rose Maths Resource Link	Negative Numbers	Converting Units Steps 1-4	Time and Timetables Step 5-6 Time (Y4)	Volume	