Progression Map: Maths

Early Years	• **Subitising** – Finding equivalence (more or less) • **Counting skills** • **Comparison** – Measures • **Pattern recognition** • **Classification** • **Counting -** Including cardinality - To compare • **Spatial thinking** • **Magnitude** – Ordering and estimating • **Regrouping the whole** • **Regrouping parts to find the total** • **Finding the whole and missing parts** • **Ten and some more** • **Doubling and halving** • **Odd and even** • **Counting beyond twenty**
Year 1	• **Geometry** – Positional language (including ordinal numbers) • **Numbers to ten** - Finding patterns in numbers (including subitising) - Counting and comparison (more, less and fewer) - Estimating and ordering - Regrouping the whole - Part-whole addition and subtraction - Solving problems using part or whole unknown - Comparison (difference, more, less, fewer) - Equality and balance • **Numbers to twenty** - Making ten and some more - Estimating and ordering, one more one less - Doubling and halving - Odd and even numbers • **Geometry** – Names and properties of 2D and 3D shape • **Measures** – The language of comparing measures

	• **Sequencing events** – Days of the week and months of the year • **Numbers to twenty** – Adding using 'think 10' - Subtraction using 'think 10' - Equality and balance - Part or whole unknown - Language and problem solving (part or whole unknown) - Comparison including statistics • **Measures** – Coins and combinations to 20p, ordering and comparing • **Counting in 2s, 5s and 10s** • **Measures** – Non-standard measures and introducing simple standard measures • **Multiplication and division** – Equal or unequal groups and remainders • **Multiplication** - Repeated addition and arrays - Problem solving (identifying the number of groups and size of the group) - Scaling and counting in 2s to 24 • **Division** – Sharing and grouping problems • **Time** – Telling the time, o'clock and half past • **Fractions** - Sharing into equal groups - Equal or unequal parts of shapes - Of continuous quantities including capacity • **Numbers to One Hundred** – Place value and digits, making Ten and some more • **Place value** – Estimation, ordering and comparison
Year 2	• **Securing fluency to twenty** • **Place value** - Making Tens and some more - Regrouping two-digit numbers • **Counting on and back in Ones and Tens from any number** • **Representing, ordering and comparing numbers to 100 and quantities for measures** • **Estimation and magnitude** • **Numbers to twenty** – Mental addition and subtraction • **Finding complements of 10 and 100 including measures** • **Add and subtract numbers mentally using 1- and 2- digit numbers** • **Finding part or whole unknown** • **Money** – Making combinations and finding change • **Comparison** (difference, more, less, fewer) • **Measures** – Estimation and measure using different scales

	• **Statistics** – Totalling and comparing amounts in block graphs, pictograms, tables and tally charts • **Written addition method** • **Commutativity in addition but not in subtraction** • **Written subtraction method** • **Problem solving with addition and subtraction in a range of contexts** • **Time** - Telling the time to: o'clock, half past, quarter past and quarter to - Estimating, ordering and comparing time • **Double and halve one and two-digit number and amounts of money** • **Times tables** – 2s, 5s and 10s patterns and strategy (counting in 3s) • **Multiplication** - Multiples and repeated addition - Number of groups, group size and product - Problem solving • **Division** - Sharing and grouping - Sharing and regrouping problems including remainders • **Fractions** - Finding halves, quarters and thirds of amounts - Finding halves, quarters and thirds of shapes - Finding three-quarters of shapes an quantities - Equivalence - Of continuous quantities • **Time** – Telling the time to the nearest 5 minutes • **Problem solving for all operations, including fractions** • **Multiplication and division** – Equality and balance • **Geometry** - Properties of 2D and 3D shape, classifying and sorting - Symmetry - Sequencing - Rotation and angles • **Mental calculation**
Year 3	• **Place value and regrouping** • **Counting on and back in Ones, Tens and Hundreds** • **Estimation, magnitude and rounding** • **Measures** – Comparison, estimations and magnitude • **Mental fluency** - Addition - Subtraction • **Fact families and applying the inverse**

	• **Written addition** • **Written subtraction** • **Problem solving** – Worded problems • **Statistics** – Interpreting bar charts and tables • **Angles, right angles and estimation** • **Perpendicular and parallel lines, horizontal and vertical lines** • **2D shape** – Properties and drawing • **Perimeter including problem solving using written and mental methods** • **Multiplication** – 3, 4 and 8 times tables including counting • **Division** – 1, 2, 3, 5, 4 and 8 times tables • **Multiplication** – Strategy, associative and distributive laws • **Statistics** – Pictograms and scaled bar charts • **Multiplication and division worded problems** • **Fractions** - Finding fractions of discrete and continuous quantities - Ordering and comparing fractions - Adding and subtracting fractions with the same denominators - Problem solving with unit an non-unit fractions • **Multiplication** - Multiplying multiples of Ten - Formal written multiplication • **Division** - Problem solving - Two and three-digit numbers by one-digit numbers, including halving - Long division • **Multiplication, division and fractions** – Scaling and correspondence problems • **Time** - Hours, minutes, seconds, days, weeks, months, years - Telling the time (analogue and digital) and estimation - Duration • **Securing the four operations with whole number including problem solving** • **Place value and decimals** -Ten times bigger and ten times smaller - Partitioning - Estimation, comparing and rounding • **Measures** – Measuring and problem solving • **3D shape** – Building and identifying properties

Year 4	• **Place value** – Order and compare numbers beyond 1000 • **Rounding** - estimation and magnitude • **Securing addition and subtraction mental fluency** • **Securing addition and subtraction written fluency** • **Counting in multiples of 6, 7, 9, 25 and 1000** • **Multiplication and division facts** • **Factor pairs, integer scaling and correspondence problems** • **Problem solving including measures, mental strategies and arithmetic laws** • **Multiply and divide a one or two-digit by 10 and 100** • **Measure** - Conversion of units - Compare, estimate and calculate • **Discrete and continuous data, including application of scales and division** • **Perimeter** • **Properties of shape** • **Symmetry** • **Decimal numbers** - Calculating with decimals - Problem solving involving decimals to two decimal places • **Measure** – Money • **Fractions** - Add and subtract fractions with the same denominator - Finding fractions of quantities - Fractions in the context of measure - Equivalent fractions, ordering and comparing • **Multiply two and three-digit numbers by a one-digit number using a formal written layout** • **Divide two and three-digit numbers by a one-digit number using a formal written layout** • **Time** – Read, write, calculate and convert time • **Statistics** – Interpret and present continuous and discrete data • **Roman numerals** – to 100 and zero • **Negative numbers** – Counting through zero and calculating in context • **Geometry** - Angles - Properties of triangles - Coordinated in the first quadrant and translations - Position and direction, incorporating angles and plotting points of a shape • **Area**

Year 5	• **Place value** - Rounding large numbers - Interpret negative numbers - Numbers with up to three decimal places • **Multiply and divide by 10, 100 and 1000** • **Properties of number** – Multiples, factors and common factors • **Prime and composite numbers** • **Multiply and divide mentally** • **Solve problems involving knowledge of key facts** • **Add and subtract using a range of strategies** • **Formal written methods** - Addition - Subtraction - Multiplication - Division • **Fractions** - Equivalent fractions - Compare and order fractions - Adding and subtracting fractions - Multiplying fractions by whole numbers - Fraction problem solving • **Problem solving** – All four operations • **Measurement** - Converting units of measure • - Conversion of imperial and metric units of measure • **Area** • **Volume and capacity** • **Percentages** – Problem solving • **Shape** - 3D shapes from 2D representations - Distinguish between regular and irregular polygons - Use properties of rectangles • **Reflection and translation** • **Perimeter** • **Angles** - Estimate, compare, measure and draw angles - Identify unknown angles • **Multiplication and division** - Formal methods with increasingly complex problems

	- Different strategies used (mental and written) • **Problem solving** - Fractions, decimals and percentages - Scaling by simple fractions and rates • **Reading timetables and calculating with time** • **Statistics** - Solve comparison, sum and difference problems using information in a line graph - Interpreting and evaluating information presented in charts and tables • **Roman numerals**
Year 6	• **Place value** • **Multiply and divide by 10, 100 and 1000** • **Choosing effective mental calculation strategies** • **Problem solving with four operations** • **Application of factors, multiples and primes** • **Fractions** - Simplifying - Comparing and ordering - Adding and subtracting - Fraction and decimal equivalents - Fraction, decimal and percentages - Multiplying fractions - Dividing fractions - Problem solving involving fractions • **Calculating percentages** • **Formal written methods** - Multiplication - Short division - Long division • **Area** - Calculating - Exploring the relationship between perimeter and area • **Properties of shape** • **Order of operations** • **Algebra** – Including sequences • **Recognise and find angles** • **Reflection and translation** • **Ratio and proportion** • **Volume**

	• **Measures** - Converting measurements - Solving problems • **Statistics** – Interpret line graphs and pie charts - Calculate and interpret mean average - Constructing pie charts