Welwyn St. Mary's Curriculum Map for Maths

	Autumn	Spring	Summer
Reception	Baseline completed for Maths in weeks 1-3. Counting forwards and backwards Recite numbers past 5 Subitising – Fast recognition of up to 3 objects without having to count them Say one number name for each item in order 1,2,3,4,5 Cardinal principal – Know that the last number reached when counting a small set of objects tells you how many there are in total Show finger numbers up to 5 Link numerals and amounts up to 5 Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc Talk about and identify patterns around them Extend and create ABAB patterns Notice and correct an error in a repeating pattern Compare quantities using language 'more than', 'fewer than' Experiment with their own symbols and marks as well as numerals Solve real world mathematical problems with numbers up to 5 Number formation Talk about and explore 2D and 3D shapes – use informal and mathematical language; 'sides', 'corners', 'straight', 'flat', 'round' Understand position through words alone Describe a familiar route Discuss routes and locations, using words like 'in front of' and 'behind'	Count beyond 10 Subitise Compare numbers Link numerals with cardinal number value Understand the 'one more than/one less than' relationship between consecutive numbers Explore the composition of numbers to 10 Make comparisons between objects relating to size, length, weight and capacity Describe a sequence of events, real or fictional, using words such as 'first', 'then' Number formation Number bonds to 10 – Automatically recall number bonds for numbers 0-10 Exploring shape in greater detail - Combine shapes to make new ones – an arch, a bigger triangle etc Select, rotate and manipulate shapes in order to develop spatial reasoning skills (Rec) Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can (Rec) Measure – Compare length weight and capacity (Rec) Data handling Counting in 2s and 10s Subtraction	Number bonds to 10 – Automatically recall number bonds for numbers 0-10 Measure – Compare length weight and capacity (Rec) Patterns – Continue, copy and create repeating patterns (Rec) Data handling Counting in 2s and 10s Doubling, halving and sharing Money Number bonds to 10 – Automatically recall number bonds for numbers 0-10 Measure – Compare length weight and capacity (Rec) Doubles and halves Money Counting in 2s, 10s and 5s Odds and evens
Year 1	Geometry – Positional Language Including Ordinal Numbers Numbers to Ten – Finding Patterns in Numbers (including subitising) Numbers to Ten – Counting and Comparison (more, less, fewer) Numbers to Ten – Estimating and Ordering Numbers to Ten – Regrouping the Whole Numbers to Ten – Part Whole Addition and Subtraction Numbers to Ten – Solving Problems Using Part or Whole Unknown Numbers to Ten – Comparison Numbers to Ten – Equality and Balance	Measures – The Language of Comparing Length, Height, Mass and Speed Sequencing Events – Days of the Week and Months of the Year Numbers to Twenty – Adding using 'Think 10' Numbers to Twenty – Subtraction using 'Think 10' Numbers to Twenty – Equality and Balance Numbers to Twenty – Part or Whole Unknown Numbers to Twenty – Language and Problem Solving (part or whole unknown) Numbers to Twenty – Comparison (difference, more, less, fewer) including Statistics	Multiplication and Division – Equal or Unequal Groups and Remainders Multiplication – Repeated Addition and Arrays (number of groups and size of group) Multiplication – Problem Solving (identifying the number of groups and size of the group) Multiplication – Scaling and Counting in 2s to 24 Division – Sharing and Grouping Problems Geometry – Turns Time – Telling the Time, O'clock and Half Past Fractions – Sharing into Equal Groups Fractions – Equal or Unequal Parts of Shapes

	Numbers to Twenty – Making 10 and Some More Numbers to 20 – Estimating and Ordering, 1 More and 1 Less Numbers to Twenty – Doubling and Halving Numbers to Twenty – Odd and Even Numbers Geometry – Names and Properties of 2-D and 3-D Shape	Measures – Coins and Combinations to 20p, Ordering and Comparing Counting in 2s, 5s 10s Measures – Non-standard Measures and Introducing Simple Standard Measures	Fractions – of Continuous Quantities including Capacity Numbers to Twenty – Review Numbers to One Hundred – Place Value and Digits, Making Tens and Some More Place Value – Estimation, Ordering and Comparison
Year 2	Securing Fluency to Twenty Place Value – Making Tens and Some More Place Value and 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 20 – 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: O'clock, Half Past, Quarter Past and Quarter To Time – Estimating, Ordering and Comparing Time Double and Halve One and Two-digit Numbers and Amounts of Money Times Tables – 2s, 5s and 10s. Patterns and Strategy (counting in 3s) Multiplication – Multiples and Repeated Addition Multiplication – Number of Groups, Group Size and Product Multiplication Problem Solving Division – Sharing and Grouping Division – Sharing and Grouping Problems including Remainders	Fractions – Finding Halves, Quarters and Thirds of Amounts Fractions – Finding Halves, Quarters and Thirds of Shapes Fractions – Finding Three-quarters of Shapes and Quantities Fractions – Equivalence Fractions – of Continuous Quantities Time – Telling the Time to the Nearest 5 Minutes Multiplication, Division and Fractions – Scaling Multiplication, Division and Fractions – Problem Solving Multiplication and Division – Equality and Balance Geometry – Properties of 2-D and 3-D Shape, Classifying and Sorting Geometry – Symmetry Mental Calculation Review Geometry – Sequencing Geometry – Rotation and Right Angles Place Value and Written Calculation Review
Year 3	Place Value and Regrouping Counting On and Back in Ones, Tens and Hundreds Estimation, Magnitude and Rounding Measures – Comparison, Estimation and Magnitude Mental Fluency – Addition Mental Fluency – 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, Vertical and Horizontal Lines 2-D 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 Fractions – Problem Solving with Unit and Non-Unit Fractions Multiplication – Multiplying Multiples of Ten Multiplication – Formal Written Multiplication	Division Problem Solving – Sharing and Grouping Division – Two and Three-Digit Numbers by One-Digit Numbers including Halving Multiplication, Division and Fractions – Scaling and Correspondence Problems Division – Long Division Time – Days, Weeks, Months, Years Time – Telling the Time (analogue and digital) and Estimation Time – Duration Securing the Four Operations with Whole Number including Problem Solving Place Value and Decimals – Ten Times Bigger and Ten Times Smaller Place Value and Decimals – Partitioning Place Value and Decimals – Estimation, Comparing and Rounding Measures – Measuring and Problem Solving 3-D 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 Formal Written Addition and Subtraction Fluency Counting in Multiples of 6, 7, 9, 25 and 1000 Multiplication and Division Facts (Times Tables) Factor Pairs, Integer Scaling and Correspondence Problems	Properties of Shape Symmetry Decimal Numbers Calculating With Decimals Measure – Money Problem Solving involving Decimals to Two Decimal Places Add and Subtract Fractions with the Same Denominator	Time – Read, Write Calculate and Convert Time on Analogue and Digital 12- and 24-Hour Clocks Statistics – Interpret and Present Continuous and Discrete Data, Solve Problems incorporating Measures Roman Numerals to 100 and Zero Negative Numbers – Counting through Zero and Calculating in Context

	Problem Solving Including Measures to Apply Place Value, Mental Strategies and Arithmetic Laws Multiply and Divide a One or Two-digit Number by 10 and 100 Measure – Conversion of Units Measures – Compare, Estimate and Calculate Discrete and Continuous Data (Time Graphs), Including Application of Scales and Division Perimeter	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	Geometry – Angles Geometry – Properties of Triangles Geometry – Coordinates in the First Quadrant and Translations Geometry – Position and Direction, incorporating Angles and Plotting Points of a Shape Multiplication and Division Review Area Fractions Review Application and Problem Solving – Developing Operation Sense
Year 5	Place Value and Rounding of Large Numbers Interpret Negative Numbers Place Value of Numbers with up to Three Decimal Places Multiply and Divide by 10, 100 and 1,000 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 Add and Subtract Using Formal Written Methods Formal Written Method of Multiplication Formal Written Method of Short Division Equivalent Fractions Compare and Order Fractions Adding and Subtracting Fractions	Problem Solving – All Four Operations Multiply Fractions by Whole Numbers Fraction Problem Solving Measure – Converting Units of Measure Area Volume and Capacity Percentages Problem Solving – Percentages 3-D Shapes from 2-D Representations Reflection and Translation Perimeter Estimate, Compare, Measure and Draw Angles Identify Unknown Angles	Formal Methods for Division and Multiplication in Increasingly Complex Problems Strategies for Multiplication and Division (Mental and Written) Solving Problems involving Scaling by Simple Fractions and Rates Conversion of Imperial and Metric Units of Measure Fractions, Decimals and Percentages Problem Solving Reading Timetables and Calculating with Time Solve Problems involving the Four Operations Distinguish between Regular and Irregular Polygons Use Properties of Rectangles Statistics – Solve Comparison, Sum and Difference Problems using Information in a Line Graph Statistics – Interpreting and Evaluating Information Presented in Charts and Tables Roman Numerals
Year 6	Place Value Multiply and Divide by 10, 100 and 1,000 Choosing Effective Mental Calculation Strategies Problem Solving with Four Operations Application of Factors, Multiples and Primes Equivalent Fractions Comparing and Ordering Fractions Adding and Subtracting Fractions Fraction and Decimal Equivalents Fractions, Decimals and Percentages Calculating Percentages Formal Written Method of Multiplication Area of Parallelograms and Triangles Formal Written Method of Short Division Properties of Shape	Order of Operations and Algebra Formal Written Method for Long Division Exploring Relationships Between Perimeter and Area Recognise and Find Angles Reflection and Translation Multiplying Fractions Dividing Fractions Fraction Problem Solving Ratio and Proportion Volume Measures Statistics – Interpret Line Graphs and Pie Charts Algebra and Sequences	Statistics – Calculate and Interpret Mean Average Constructing Pie Charts SATs revision – Application of Previous Years' Learning Financial Maths and Enterprise