

St Augustine's Medium Term Plan

Maths is taught using the Hertfordshire 'Essential maths'. These enable a child to acquire new knowledge sequentially and deepen their understanding through mastery of new concepts. Through the teaching of the 'Essential maths' curriculum pupils will make rich connections across mathematical ideas to become fluent in the fundamentals of mathematics, reason mathematically and become competent in solving increasingly sophisticated problems. Teachers use a mastery approach to teaching. Children are taught altogether as a class with lessons carefully planned in small steps.



	Autumn	Spring	Summer
R	- Baseline completed for Maths in weeks 1-3. - Subitising - Subitising numbers up to 5; recognising the amount without counting. Recognising numbers to 5 and linking names to their values. - Counting skills - Counting reliably, using number names in order and one to one correspondence. - Comparison (Measure) - Comparing objects by length, thickness and weight/mass, using appropriate language to describe and order them. - Pattern Recognition - Noticing, describing and extending patterns, including thinking about what part is the repeating unit. - 2D and 3D shapes - Naming shapes and recognizing some of their properties e.g. number of sides, corners etc. - Classification - Classifying (grouping) objects using given criteria and their	- Counting to sort - Counting a set of items accurately, saying how many are in the set and comparing this to the amount in other sets. - Counting to compare - Using counting to compare and finding a precise numerical difference in sets of objects in varied contexts. - Spatial Thinking - Developing spatial thinking and spatial language linked to position and direction, in movements and using symbols. - Magnitude (ordering and estimating) - Knowing the position of numbers 0-10 and the relationship to other numbers, such as 0, 5 or 10. - Regrouping the whole - Developing a deeper understanding that numbers are made up of other numbers and beginning to rehearse number bonds. - Regrouping parts to find the total - Combining parts to make a whole and using the part, whole model to develop an	- Finding the whole and missing parts - Explores what to do when something is missing; initially the whole but moving on to working out a missing part. Different types of problems will be used to teach different strategies. - Ten and Some More - Understanding values to 20 (focusing on the numbers 10 - 20) by creating the unit of 10, for comparison and finding one more and one less than a number. - Doubling and Halving - Exploring doubling and halving, including solving problems involving doubling and halving. - Odd and Even - Understanding that numbers are either odd or even, looking at their 'composition' and whether they share fairly into two groups. - Counting Beyond 20 - Counting beyond 20, recognising the pattern of the counting system, exploring the value of tens and ones in numbers.

	own ideas and comparing the groups after classification	understanding of addition	
Y1	- 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 - 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 - 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 - Measures - Coins and Combinations to 20p, Ordering and Comparing - Counting in 2s, 5s 10s - Measures - Non-standard Measures and Introducing Simple Standard Measures	- 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 - 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
Y2	- Securing Fluency to Twenty - Place Value - Making Tens and Some More - Place Value and Regrouping Two-Digit Numbers	- Statistics - Totalling and Comparing Amounts in Block Graphs, Pictograms, Tables and Tally Charts - Written Addition Method	- Fractions - Finding Halves, Quarters and Thirds of Amounts - Fractions - Finding Halves, Quarters and Thirds of Shapes

	- 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	- 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 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
Y3	- 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	- 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	- 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 - Place Value and Decimals - Ten Times Bigger and Ten Times Smaller

	- 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	- 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	- 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 - Securing the Four Operations with Whole Number including Problem Solving
Y4	- 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) - 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 - Factor Pairs, Integer Scaling and Correspondence Problems - 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 - Decimal Numbers - Calculating With Decimals - Measure – Money - Problem Solving involving Decimals to Two Decimal Places - Add and Subtract Fractions with the Same Denominator - Finding Fractions of Quantities - Fractions in the Context of Measure - Equivalent Fractions, Ordering and Comparing	- Properties of Shape - Symmetry - 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 - 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 - Area

Y5	- 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 - Roman Numerals - 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 - Formal Methods for Division and Multiplication in Increasingly Complex Problems - Strategies for Multiplication and Division (Mental and Written) - Area - Equivalent Fractions - Compare and Order Fractions - Adding and Subtracting Fractions - Solving Problems involving Scaling by Simple Fractions and Rates - Problem Solving – All Four Operations - Multiply Fractions by Whole Numbers - Fraction Problem Solving - Percentages - Measure – Converting Units of Measure - Conversion of Imperial and Metric Units of Measure	- Volume and Capacity - Problem Solving – Percentages - 3-D Shapes from 2-D Representations - Reflection and Translation - Perimeter - Estimate, Compare, Measure and Draw Angles - Identify Unknown Angles - Reading Timetables and Calculating with Time - 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
Y6	- Place Value (Numbers to 10 million, Rounding, Negative Numbers) - Multiply and Divide by 10, 100 and 1,000 - Recognise and Find Angles - Choosing Effective Mental Calculation Strategies - Problem Solving with Four Operations - Application of Factors, Multiples and Primes - Equivalent Fractions - Comparing and Ordering Fractions - Reflection and Translation	- Adding and Subtracting Fractions - Multiplying Fractions - Dividing Fractions - Fraction and Decimal Equivalents - Fractions, Decimals and Percentages - Fraction Problem Solving - Calculating Percentages - Formal Written Method of Multiplication - Formal Written Method of Short Division - Area of Parallelograms and Triangles - Exploring Relationships Between Perimeter and Area - Volume	- Ratio and Proportion - Algebra and Sequences - Statistics – Interpret Line Graphs and Pie Charts - Statistics – Calculate and Interpret Mean Average - Constructing Pie Charts - SATs revision – Application of Previous Years' Learning - Financial Maths and Enterprise

		- Properties of Shape - Measures - Order of Operations and Algebra	
--	--	--	--