Ashwell Primary School Maths Curriculum Overview

<u>Development Matters 2020 – Mathematics objectives throughout the year.</u>

- Fast recognition of up to 3 objects, without having to count them individually ('subitising').
- Recite numbers past 5.
- Say one number for each item in order: 1,2,3,4,5.
- Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
- Show 'finger numbers' up to 5.
- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
- Experiment with their own symbols and marks as well as numerals.
- Solve real world mathematical problems with numbers up to 5.
- Compare quantities using language: 'more than', 'fewer than'.

• Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.

- Understand position through words alone for example, "The bag is under the table," with no pointing.
- · Describe a familiar route.

Nursery

- Discuss routes and locations, using words like 'in front of' and 'behind'.
- · Make comparisons between objects relating to size, length, weight and capacity
- Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc.
- Combine shapes to make new ones an arch, a bigger triangle etc.
- Talk about and identify the patterns around them. E.g. stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.
- Extend and create ABAB patterns stick, leaf, stick, leaf.
- Notice and correct an error in a repeating pattern.
- Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	RLS1 Subitising RLS2 Counting Skills RLS3 Comparison – Measures	RLS4 Pattern Recognition RLS5 Classification RLS6 Counting the Sort (including cardinality)	RLS7 Using Counting to Compare RLS8 Spatial Thinking RLS9 Magnitude – Ordering and Estimating	RLS10 Regrouping the Whole RLS11 Regrouping parts to find the total (the whole) RLS12 Finding the whole and missing parts	RLS13 Ten and Some More RLS14 Doubling and Halving RLS15 Odd and Even RLS16 Counting Beyond 20	Consolidation

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	1LS1 Geometry – Positional Language Including Ordinal Numbers 1LS2 Numbers to Ten – Finding Patterns in Numbers (including subitising) 1LS3 Numbers to Ten – Counting and Comparison (more, less, fewer) 1LS4 Numbers to Ten – Estimating and Ordering 1LS5 Numbers to Ten – Regrouping the Whole 1LS6 Numbers to Ten – Part Whole Addition and Subtraction 1LS7 Numbers to Ten – Solving Problems Using Part or Whole Unknown	1LS8 Numbers to Ten – Comparison 1LS9 Numbers to Ten – Equality and Balance 1LS10 Numbers to Twenty – Making 10 and Some More 1LS11 Numbers to 20 – Estimating and Ordering, 1 More and 1 Less 1LS12 Numbers to Twenty – Doubling and Halving 1LS13 Numbers to Twenty – Odd and Even Numbers 1LS14 Geometry – Names and Properties of 2-D and 3-D Shape	1LS15 Measures – The Language of Comparing Length, Height, Mass and Speed 1LS16 Sequencing Events – Days of the Week and Months of the Year 1LS17 Numbers to Twenty – Adding using 'Think 10' 1LS18 Numbers to Twenty – Subtraction using 'Think 10' 1LS19 Numbers to Twenty – Equality and Balance 1LS20 Numbers to Twenty – Part or Whole Unknown	1LS21 Numbers to Twenty – Language and Problem Solving (part or whole unknown) 1LS22 Numbers to Twenty – Comparison (difference, more, less, fewer) including Statistics 1LS23 Measures – Coins and Combinations to 20p, Ordering and Comparing 1LS24 Counting in 2s, 5s 10 1LS25 Measures – Non- standard Measures and Introducing Simple Standard Measures	1LS26 Multiplication and Division – Equal or Unequal Groups and Remainders 1LS27 Multiplication – Repeated Addition and Arrays (number of groups and size of group) 1LS28 Multiplication – Problem Solving (identifying the number of groups and size of the group) 1LS29 Multiplication – Scaling and Counting in 2s to 24 1LS30 Division – Sharing and Grouping Problems 1LS31 Time – Telling the Time, O'clock and Half Past	1LS32 Fractions – Sharing Into Equal Groups 1LS33 Fractions – Equal or Unequal Parts of Shapes 1LS34 Fractions – Of Continuous Quantities Including Capacity 1LS35 Numbers to Twenty – Review 1LS36 Numbers to One Hundred – Place Value and Digits, Making Tens and Some More 1LS37 Place Value – Estimation, Ordering and Comparison
Year 2	2LS1 Securing Fluency to Twenty 2LS2 Place Value – Making Tens and Some More 2LS3 Place Value and Regrouping Two-Digit Numbers 2LS4 Counting On and Back in Ones and Tens from any Number 2LS5 Representing,	2LS8 Finding Complements of 10 and 100 Including Measures 2LS9 Add and Subtract Numbers Mentally Using 1- and 2-Digit Numbers 2LS10 Finding Part or Whole Unknown 2LS11 Money – Making Combinations and Finding Change 2LS12 Comparison	2LS14 Statistics – Totalling and Comparing Amounts in Block Graphs, Pictograms, Tables and Tally Charts 2LS15 Written Addition Method 2LS16 Commutativity in Addition but not in Subtraction 2LS17 Written Subtraction Method	2LS21 Double and Halve One and Two-digit Numbers and Amounts of Money 2LS22 Times Tables – 2s, 5s and 10s. Patterns and Strategy (counting in 3s) 2LS23 Multiplication – Multiples and Repeated Addition 2LS24 Multiplication – Number of Groups,	2LS28 Fractions – Finding Halves, Quarters and Thirds of Amounts 2LS29 Fractions – Finding Halves, Quarters and Thirds of Shapes 2LS30Fractions – Finding Three-Quarters of Shapes and Amounts 2LS31 Fractions – Equivalence 2LS32 Fractions – of	2LS35 Multiplication and Division – Equality and Balance 2LS36 Geometry – Properties of 2-D and 3-D Shape, Classifying and Sorting 2LS37 Geometry – Symmetry 2LS38 Mental Calculation Review 2LS39 Geometry –

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	Ordering and Comparing Numbers to 100 and Quantities for Measures 2LS6 Estimation and Magnitude 2LS7 Numbers to 20 – Mental Addition and Subtraction	(difference, more, less, fewer) 2LS13 Measures – Estimation and Measure Using Different Scales	2LS18 Problem Solving with Addition and Subtraction in a Range of Contexts 2LS19 Time – Telling the Time: O'clock, Half Past, Quarter Past and Quarter To 2LS20 Time – Estimating, Ordering and Comparing Time	Group Size and Product 2LS25 Multiplication Problem Solving 2LS26 Division – Sharing and Grouping 2LS27 Division – Sharing and Grouping Problems including Remainders	Continuous Quantities 2LS33 Time – Telling the Time to the Nearest 5 Minutes 2LS34 Problem Solving for all Operations (including Fractions)	Sequencing 2LS40 Geometry – Rotation and Right Angles 2LS41 Place Value and Written Calculation Review
Year 3	3LS1 Place Value and Regrouping 3LS2 Counting On and Back in Ones, Tens and Hundreds 3LS3 Estimation, Magnitude and Rounding 3LS4 Measures – Comparison, Estimation and Magnitude 3LS5 Mental Fluency – Addition 3LS6 Mental Fluency – Subtraction 3LS7 Fact Families and Applying the Inverse 3LS8 Written Addition	3LS9 Written Subtraction 3LS10 Problem Solving – Worded Problems 3LS11 Statistics – Interpreting Bar Charts and Tables 3LS12 Angles, Right Angles and Estimation 3LS13 Perpendicular and Parallel Lines, Vertical and Horizontal Lines 3LS14 2-D Shape – Properties and Drawing 3LS15 Perimeter Including Problem Solving Using Written and Mental Methods	3LS16 Multiplication – 3, 4 and 8 Times Tables including Counting 3LS17 Division – 1, 2, 3, 5, 4 and 8 Times Tables 3LS18 Multiplication – Strategy, Associative and Distributive Laws 3LS19 Statistics – Pictograms and Scaled Bar Charts 3LS20 Multiplication and Division Worded Problems	3LS21 Fractions – Finding Fractions of Discrete and Continuous Quantities 3LS22 Ordering and Comparing Fractions 3LS23 Adding and Subtracting Fractions with the Same Denominators 3LS24 Fractions – Problem Solving with Unit and Non-Unit Fractions 3LS25 Multiplication – Multiplying Multiples of Ten 3LS26 Multiplication – Formal Written Multiplication	3LS27 Division Problem Solving – Sharing and Grouping 3LS28 Division – Two and Three-Digit Numbers by One-Digit Numbers including Halving 3LS29 Multiplication, Division and Fractions – Scaling and Correspondence Problems 3LS30 Division – Long Division 3LS31 Time – Hours, Minutes, Seconds, Days, Weeks, Months, Years 3LS32 Time – Telling the Time (Analogue and Digital) and Estimation 3LS33 Time – Duration	3LS34 Securing the Four Operations with Whole Number including Problem Solving 3LS35 Place Value and Decimals – Ten Times Greater and Ten Times Smaller 3LS36 Place Value and Decimals – Regrouping Place Value and Dec 3LS37 Decimals – Estimation, Comparing and Rounding 3LS38 Measures – Measuring and Problem Solving 3LS39 3-D Shape – Building and Identifying Properties

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Year 4	4LS1 Place Value – Order and Compare Numbers Beyond 1000 4LS2 Rounding, Estimation and Magnitude 4LS3 Securing Addition and Subtraction Mental Fluency 4LS4 Securing Formal Written Addition and Subtraction Fluency 4LS5 Counting in Multiples of 6, 7, 9, 25 and 1000 4LS6 Multiplication and Division Facts (Times Tables) 4LS7 Factor Pairs, Integer Scaling and Correspondence Problems	4LS8 Problem Solving Including Measures to Apply Place Value, Mental Strategies and Arithmetic Laws 4LS9 Multiply and Divide a One or Two-digit Number by 10 and 100 4LS10 Measure – Conversion of Units 4LS11 Measures – Compare, Estimate and Calculate 4LS12 Discrete and Continuous Data (Time Graphs), Including Application of Scales and Division 4LS13 Perimeter	4LS14 Properties of Shape 4LS15 Symmetry 4LS16 Decimal Numbers 4LS17 Calculating With Decimals 4LS18 Measure – Money 4LS19 Problem Solving involving Decimals to Two Decimal Places	4LS20 Add and Subtract Fractions with the Same Denominator 4LS21 Finding Fractions of Quantities 4LS22 Fractions in the Context of Measure 4LS23 Equivalent Fractions, Ordering and Comparing 4LS24 Multiply Two and Three-digit Numbers by a One-digit Number Using a Formal Written Layout 4LS25 Divide Two and Three-digit Numbers by a One-digit Number Using a Formal Written Layout	4LS26 Time – Read, Write Calculate and Convert Time on Analogue and Digital 12- and 24-Hour Clocks 4LS27 Statistics – Interpret and Present Continuous and Discrete Data, Solve Problems incorporating Measures 4LS28 Roman Numerals to 100 and Zero 4LS29 Negative Numbers – Counting through Zero and Calculating in Context 4LS30 Geometry – Angles 4LS31 Geometry – Properties of Triangles	4LS32 Geometry – Coordinates in the First Quadrant and Translations 4LS33 Geometry – Position and Direction, incorporating Angles and Plotting Points of a Shape 4LS34 Multiplication and Division Review 4LS35 Area 4LS36 Fractions Review 4LS37 Application and Problem Solving – Developing Operation Sense
Year 5	5LS1 Place Value and Rounding of Large Numbers 5LS2 Interpret Negative Numbers 5LS3 Place Value of Numbers with up to Three Decimal Places 5LS4 Multiply and Divide by 10, 100 and 1,000 5LS5 Properties of Number – Multiples, Factors and	5LS9 Add and Subtract Using a Range of Strategies 5L10 Add and Subtract Using Formal Written Methods 5LS11 Formal Written Method for Multiplication 5LS12 Formal Written Method of Short Division 5LS13 Equivalent Fractions	5LS16 Problem Solving – All Four Operations 5LS17 Multiply Fractions by Whole Numbers 5LS18 Fraction Problem Solving 5LS19 Measure – Converting Units of Measure 5LS20 Area 5LS21 Volume and	5LS22 Percentages 5LS23 Problem Solving — Percentages 5LS24 3-D Shapes from 2-D Representations 5LS25 Reflection and Translation 5LS26 Perimeter 5LS27 Estimate, Compare, Measure and Draw Angles	5LS29 Formal Methods for Division and Multiplication in Increasingly Complex Problems 5LS30 Strategies for Multiplication and Division (Mental and Written) 5LS31 Solving Problems involving Scaling by Simple Fractions and Rates 5LS32 Conversion of	5LS35 Solve Problems involving the Four Operations 5LS36 Distinguish between Regular and Irregular Polygons 5LS37 Use Properties of Rectangles 5LS38 Statistics – Solve Comparison, Sum and Difference Problems using Information in a Line Graph

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	Common Factors 5LS6 Prime and Composite Numbers 5LS7 Multiply and Divide Mentally 5LS8 Solve Problems Involving Knowledge of Key Facts	5LS14 Compare and Order Fractions 5LS15 Adding and Subtracting Fractions	Capacity	5LS28 Identify Unknown Angles	Imperial and Metric Units of Measure 5LS33 Fractions, Decimals and Percentages Problem Solving 5LS34 Reading Timetables and Calculating with Time	5LS39 Statistics – Interpreting and Evaluating Information Presented in Charts and Tables 5LS40 Roman Numerals
Year 6	6LS1 Place Value 6LS2 Multiply and Divide by 10, 100 and 1,000 6LS3 Choosing Effective Mental Calculation Strategies 6LS4 Problem Solving with Four Operations 6LS5 Application of Factors, Multiples and Primes 6LS6 Equivalent Fractions 6LS7 Comparing and Ordering Fractions 6LS8 Adding and Subtracting Fractions	6LS9 Fraction and Decimal Equivalents 6LS10 Fractions, Decimals and Percentages 6LS11 Calculating Percentages 6LS12 Formal Written Method of Multiplication 6LS13 Area of Parallelograms and Triangles 6LS14 Formal Written Method of Short Division 6LS15 Properties of Shape	6LS17 Formal Written Method for Long Division 6LS18 Exploring Relationships Between Perimeter and Area 6LS19 Recognise and Find Angles 6LS20 Reflection and Translation 6LS21 Multiplying Fractions 6LS22 Dividing Fractions 6LS23 Fraction Problem Solving	6LS16 Order of Operations and Algebra 6LS24 Ratio and Proportion 6LS25 Volume 6LS26 Measures 6LS27 Statistics – Interpret Line Graphs and Pie Charts 6LS28 Algebra and Sequences	6LS29 Statistics – Calculate and Interpret Mean Average 6LS30 Application of Previous Years' Learning 6LS31 Application of Known Facts and Calculation Strategies SATs preparation: consolidation of key learning	Post SATs learning sequences: 6LS32 Constructing Pie Charts 6LS33 Statistical Representations 6LS34 Further Algebra 6LS35 Financial Maths and Enterprise 6LS36 Maths Preparation for KS3