Manland Primary School – Whole School Maths Intent

Overview of Skills

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Count to 10 Count objects Recognise Numbers Recognise and create patterns Order Numbers Measure objects and compare lengths	One more, one less Name 2D shapes Begin to count to 20 Describe the position of objects Match numerals to objects Begin to add two groups together	Use money vocabulary Add two amounts Order numbers Subtract objects Count to 20 Estimate Use size vocabulary– height and length	Represent maths through mark making Use time vocabulary Name 3D shapes Record addition Begin to count backwards from 10 and 20 One more and one less up to 20	Count aloud in 2s and 10s Recognise & order numerals to 20 Add and subtract two single digit numbers - Double and Halve numbers -Describe 2D and 3D shapes	-Talk about and compare capacity -Share into equal groups -Estimate, measure and weigh objects -Add and subtract by counting on or back from a number
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 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 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
Year 2	Securing Fluency to 20 Place Value – Making Tens and Some More Place Value and Regrouping Two-digit Numbers	Numbers to 20 – Mental Addition and Subtraction Finding Complements of 10 and 100 including Measures Add and Subtract Numbers Mentally Using 1 and 20digit numbers	Statistics – Totalling and Comparing Amounts in Block Graphs, Pictograms, Tables and Tally Charts Written Addition Method Commutativity in Addition	Double and Halve One and Two-digit numbers and amounts of Money Times Tables – 2s, 5s, and 10s, Patterns and Strategy Counting in 3s	Fractions – Finding Halves, Quarters and Thirds of Amounts and Shapes Fractions – Equivalence Fractions of Continuous Quantities	Multiplication and division – equality and balance Geometry – Properties of 2d and 3d shapes and symmetry Mental Calculation Review Geometry - Sequencing

	Counting On and Back in Ones and Tens from any Number Representing, Ordering and Comparing Numbers to 100 and Quantities for Measure Estimation and Magnitude	Finding Part or Whole Unknown Money – Making Combinations and Finding Change Comparison (difference, more, less, fewer) Measures – Estimation and Measure Using Different Scales	Written Subtraction Method Problem Solving with Addition and Subtraction Time – Telling the time: O'clock, Half Past, Quarter Past and Quarter To Time – Estimating, Ordering and Comparing Time	Multiplication – Multiples and Repeated Addition Multiplication – Numbers of Groups, Group Size and Product Multiplication Problem Solving Division – Sharing and Grouping Division – Sharing and Grouping Problems including Remainders	Time – Telling the time to the nearest 5 minutes Problem solving for all operations	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 2d shape properties and drawing Perimeter including problem solving using written and mental methods	Multiplication – 3, 4 and 8 times tables Division – 1, 2, 3, 4, 5, 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 Multiplications – multiplying multiples of 10 Multiplication – formal written multiplication	Division problem solving – sharing and grouping Division – 2- and 3-digit numbers by 1-digit numbers Multiplication, division and fractions – scaling and correspondence problems Division – long division Time – hours, minutes, seconds, days, weeks, months years Telling the time to the minute and estimation Time - duration	Securing the four operations with whole numbers including problem solving Place value and decimals – ten times greater and ten times smaller Place value and decimals – regrouping Place value and decimals – estimation, comparing and rounding Measures – measuring and problem solving 3d shape – building and identifying properties
Year 4	Place value – ordering nd compare numbers beyond 1000 Rounding, estimation and magnitude Securing addition and subtraction mental fluency Securing formal written addition and subtraction fluency	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	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	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-	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	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

	Counting in multiples of 6, 7, 9, 25 and 1000 Ultiplication and division facts (times tables)	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	digit number using a formal written layout	Roman numerals to 100 and zero Negative numbers – counting through zero and calculating in context Geometry – angles Geometry – properties of triangles	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 numbers. 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 methods for Multiplication. Formal Written Method of Short Division. Equivalent Fractions. Compare and Order 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 1000 Choosing effective mental calculation strategies Problem solving with four operations Application of Factors, Multiples and Primes, Equivalent Fractions,	Fraction and Decimal equivalents Fractions, Decimals and Percentages Calculating percentages, Formal written methods 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 r 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 SATs revision	Statistics – Calculate and Interpret Mean Average, Application of previous years' learning, Application of Known Facts and Calculation Strategies SATs revision	Constructing Pie Charts Statistical Representations Further Algebra Financial Maths and Enterprise Maths prep for KS3

	Comparing and ordering fractions					