



Maths Long Term Plan

Hamilton

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Sparrows Year R Cycle 1	- Counting and naming numerals - Ordering numbers: sequencing - Exploring and playing with symmetry - Exploring repetitive patterns - Count how many; match one-to-one - One more/less up to 12 - Introducing time	- Partitioning to create number bonds - Recording number bonds - Comparing lengths - Comparing measures directly - Counting in 2s; odd/even numbers - Exploring 2-D shapes	- Counting and estimating - Order and compare numbers - Where is it? - Time - Partition to create number bonds - Say the number 1 more/less - Comparing weights - Measuring weights	- Count on to add - Count back to subtract - Explore and play with 3-D shapes - Coin recognition - Money role play	- Teen numbers: 10 and some more - Exploring 100 - Measuring outside - Equivalence - Bonds to 10 - Talking about shapes - Sorting	- Counting on; 1 more/less - Clever counting - Telling the time - Doubling and halving - Fractions - Number games
Sparrows Year R/I Cycle 2	- Numerals, counting and place value - Number sequences and comparing - Compare/ measure length and height 1 more/ 1 less, 10 more/10 less - Partitioning to create number bonds - Symmetry and 2D shapes	- How many? Count to add - Adding - Introducing and telling the time - Counting back - Exploring number bonds - Introducing money - Explore 2D and 3D shapes	- Counting and place value in 2-digit numbers - Ordering and comparing numbers - Compare and measure weight - Say numbers 1/10 more/less - Number bonds - Addition facts - Time	- Add by counting on or using facts - Count back and find 10/20/30 more/less - Money role play - Counting in 2s - Even and odd - Double and halve - Exploring 3D shapes	- Building on 10 - Place value and patterns within 100 - Exploring measures: Inside and Out - Games and money - Equivalence and money - Number bonds +/- 1 digit numbers and money - Time	- Counting and calculating by grouping - Fractions - Doubling and Halving - Position and shapes; grouping - Developing data handling

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Doves Year 1/2 Cycle 1	- Counting and estimation - Teens and place value in 2-digit numbers - Numbers on a line; compare/order - Count to 100, 1 more/less; ordinals - Partition numbers; learn number bonds - Add by counting on in 1s or 10s - Counting back; understand + and – - Comparing and measuring lengths - Reinforce and consolidate number bonds - Use number facts to add and subtract - Adding and subtracting tens and ones	- Tell time to half and quarter hours - Understand units of time - Using different strategies for addition - Coin recognition: find amounts & change - Understanding halves and quarters - Doubling & halving; odd & even numbers - Counting in steps of 5 and 10	2-digit place value - Numbers and quantities - Mental addition and subtraction - Adding and subtracting money - Add/sub pairs of 2-digit numbers - Tell the time; units of time - Compare and measure weight - Measure and represent capacity	- Addition - Subtraction - Clever counting; multiplication - Relating multiplication and division - Fractions 2-D shapes - Symmetry 3-D shapes	- Place value - Fractions - Addition - Subtraction - Multiplication and division - Position and Time - Measures - Shape - Place value in 2-digit numbers	- Add and subtract 1-digit numbers using pattern - Bonds to 10- complements to 10s numbers - Adding three numbers-number games - Bridging 10 and counting up subtraction using money - Finding totals and change of money - Doubling and halving - Exploring shape properties - Telling the time - Units of time- data handling
Woodpeckers Year 2/3 Cycle 2	- Numberlines 2 digit and 3 digit place value - Exploring money - Number facts for addition and subtraction - Adding and subtracting using facts and digit patterns - Bridging - Use place value to add and subtract - Length	- Weight - Capacity - Exploring multiplication and division - Add/ subtract near multiples - Mental strategies to add/ subtract - Turns and angles - Properties of 2D shapes - Exploring 3D shapes	- Place numbers on lines - Number properties and place value - Money place value and totals - Mental addition and subtraction - Add by partitioning - Units of time and data - Telling the time	- Fractions of shapes and amounts - Count up to subtract - Subtraction word problems - Doubles, halves and commutativity - Count in steps - Word problems- multiply by partitioning - Telling the time	- Mental addition and subtraction - Counting up (y2) written addition (Y3) - Time - Shape - Shopping and subtraction - Addition and subtraction - Multiplication	- Fractions - Puzzles- multiplication and scaling - Arithmetic puzzles- division - Logic puzzles- division - Numbers and fractions on a line - Exploring place value

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	• Lines of symmetry • Doubles and halves • Patterns • Mental +/- near multiples and place value • Add pairs of 2- digit numbers • Counting up subtraction		• Time tables , multiplication and division • Grouping- multiplication and division facts			
Robins Year 3/4 Cycle I	• Numbers on a line; compare and order • PV in 3-/4-digit numbers; amounts of money • +/- 1, 10, 100 and 1000, and multiples • Strategies for adding and subtracting • Number bonds to 100 • Subtract by counting up: frog • Rehearsing & understanding times tables • Partitioning in multiplication and division	• Doubling, halving and the concept of a half • Conceptualising fractions Finding fractions of amounts • Strategies for division • +/- near-/multiples of 10, 100, 1000 • Partitioning and column addition • Formal addition & subtraction algorithms • Symmetry and 2-D shapes • Understanding 3-D shapes Co-ordinates in the first quadrant	• Negative numbers • Fractions • Equivalent fractions; +/- fractions • Mental addition and subtraction • 3-digit +/- 1-digit numbers • Length and data • Weight and data • x and ÷ with money and 1-place decimals • Decimals and money on a line	Times tables and factors Partitioning in multiplication Column addition Frog and decomposition • Division • Telling the time Time and data	• Number and Place Value • Sequences and Roman Numerals • Written algorithms • Finding a difference – whole numbers • Times tables, factors and multiples • Division • Decimals and Money • Decimals and Measures	• Area and Perimeter • Time • Line Graphs and Bar Charts • Exploring shape properties • Co-ordinates and 3-D shapes • Money: finding change and differences • Written addition and subtraction • Partitioning to double, halve and multiply • Scaling problems and mental strategies • Fractions

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Robins Year 4/5 Cycle 2	- Place value in 4/5 digit numbers - Place numbers on a line- including decimals - Place value addition - Rounding - Column addition - Mental addition and subtraction - Mental multiplication and division - Tell the time - Timetables	- Fractions of an amount - Equivalent fractions - Add/ subtract powers of 10 - Subtraction strategies - Add and subtract near multiples - Written methods- multiplication and division - Explore 2D shape - Deepen understanding of 3D shape	- Decimal place value - Multiply and divide by powers of 10 - Mental multiplication and division - Factors and multiples - Column addition and subtraction - Exploring 24-hour time - Round and subtract decimals - Fraction and decimal equivalence	- Subtraction strategies - Multiplication strategies - Grid method (Y4) short multiplication (Y5) - Chunking (Y4) short division (Y5) - Perimeter and area - Volume (Y5) - Polygons and coordinates - Exploring angles	- Place value next steps- larger numbers - Count in steps- roman numerals - Negative numbers- temperature - Column addition and subtraction - Money calculation - Subtraction strategies - Fraction problems - Equivalent fractions - Counting fraction steps - Multiplying fractions - Strategies for mental calculation - Scaling problems - Decimal place value	- Convert measures - Count through zero - Imperial measures - Hundredths and percentages - Choose calculation strategies - Problem solving - Division and multiplication strategies - Time, data recording and line graphs
Kingfishers Year 5/6 Cycle 1	- PV and +/- in 5-digit and 6-digit numbers - Numbers on a line; round to powers of 10 - Column addition with whole numbers - Column addition: decimals and money - Whole number column subtraction & frog - PV in 2- and 3-place decimal numbers	- Money: counting up, change, differences - Subtract numbers with 1 or 2 decimal places - Strategies for +/-; word problems - Mental multiplication and division problem solving - Written division strategies - Order fractions; fractions of	- Place value - Negative numbers - Use of brackets in calculation - Addition and subtraction - Frog for decimals - Explore fractions, decimals & percentages - Multiply and divide fractions - Time and timetables - Line graphs and pie charts	- Multiples, factors and mental strategies - Multiplication - Units of measurement - Area, perimeter, scaled shapes - Finding volumes - Division 4-Digit multiplication and division - Algebra - Ratio	- Numbers and place value - Addition and subtraction - Decimals, multiplication and division - Fractions, ratio and percentages - Charts, graphs and algebra - Area, perimeter and angles - Factors, multiples, primes and squares	- Exploring decimals - Smashing subtraction - Accomplished addition - Number properties - Exploring multiplication - Division - Calculating with fractions - Mastering percentages - Time - Line graphs

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	- Count/add/subtract 0.1, 0.01, 0.001 - Place value in decimals - Rounding and adding decimals - Properties of numbers, including primes - Written multiplication strategies - Mental division strategies	- amounts - Decimal/fraction equivalents - Add/subtract fractions using equivalence - Quadrilaterals, other polygons and circles Find missing angles and draw 2-D shapes - Sort 3-D shapes; nets and 3-D shapes - Coordinates: polygons & transformations			- Multiplication and division - Fraction - decimal - % equivalence - Data: Pi charts and mean - Transformations and co-ordinates - Volume	Understanding angles
Kingfishers Year 6 Cycle 2	- Place value in 6 and 7 digit numbers, on lines and rounding - Estimation - Column addition and subtraction - Mental and written calculation strategies - Add and subtract decimals - Add and subtract multiples of 0.1, 0.01, 0.001 - Generate and use simple formulae - Solve equations with two unknowns	- Compare and order decimals and fractions - Equivalent fractions - Add and subtract fractions 2D shapes (circles and quadrilaterals) - Draw, translate and reflect polygons - Draw 2D shapes - Find missing angles - Construct 3D shapes using nets - Understand and calculate negative numbers - Use bracket and order of operations	- Place value in 3 decimal places - Add numbers with up to 3 decimal places - Multiply and divide 2 place decimal numbers - Conversion- metric and imperial units - Line graphs - Time intervals - Timetables 24 hour clock - Pie charts - Find the mean of a data set - Scale factor problems concerning area	- Solve rate and scaling problems - Percentages - Fractions of amounts - Multiply and divide fractions - Ratios, proportion and percentages - Calculate area of different shapes - Calculate volumes of cubes and cuboids - Long division with different remainder forms - Use long/ short multiplication in problems	- Decimals - Negative numbers - Problem solving - All formal written methods for adding, subtracting, multiplying and dividing - Ratio - Fractions - Percentages - Area - Perimeter - Volume - Shapes - Angles - Reflection, translation, rotation	- Bar charts - Pie charts - Line graphs - Mean average - Algebra - History of Maths - Explore a million - Number games and puzzles - Measuring ourselves and around us - Tessellation and pattern - Ratios in nature and art - Calculator patterns

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	• Generate and continue linear sequences • Multiples, factors and prime numbers • Short multiplication and short division problems • Long multiplication problems • Formal and informal calculation strategies			• Use short/ long division in problems		
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