Maths Curriculum Overview – Raedwald Trust Cross-Site

CYCLE A				
Subject Content	**Unit 1 Number**	**Unit 2 Fractions, Decimals & Percentages**	**Unit 3 Number/FDP Consolidation**	**Unit 4 Shape**
Core knowledge	Core Maths Skills Understand and use place value for decimals. measures and integers of any size (Place Value, addition subtraction, multiplication, division, Order of operations Highest common factor and LCM Powers and index notation Multiplying decimals Worded questions	Fractions, decimals and percentages Adding, subtracting, multiplying and dividing fractions Adding and subtracting mixed numbers Multiplying mixed numbers Dividing mixed numbers Converting between mixed numbers and improper fractions Simplifying fractions	Rounding whole numbers and decimals Rounding significant figures Approximating and estimation Finding percentage increase/decrease Finding upper and lower bounds Standard form	Perimeter Area of; rectangles, triangles, parallelograms, trapezia, compound shapes
Key Skills	Four operations Calculator use Accurate laying out of calculations Times tables woven throughout	Four operations Calculator use Writing fractions accurately Accurate laying out of calculations Times tables woven throughout	Know that per cent represent a value out of 100. Understand associated vocabulary Organisation of calculations on the page to show working out Reverse calculations to check accuracy	Using correct formulae to calculate area and perimeter Measuring accurately Drawing shapes using a ruler accurately Correct use of units Understand the nature of shapes drawn to scale/not to scale.

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Subject Content	Unit 5 Ratio & Proportion	Unit 6 Algebra	Unit 7 Statistics	Unit 8 Number
Core knowledge	Sharing within a ratio Ratio equivalence to fractions Difference between two values Simplifying ratio Expressing ratio as 1:n Expressing ratio as a fraction Adjusting recipes proportionally Using proportion to find best value Exchange rates	Solving linear equations Forming expressions and equations solving multistep equations Factorising double brackets Factorising expressions with and without co-efficients Expanding single brackets Expanding double brackets Collecting like terms Substitution Know and use key algebraic terms	Stem and leaf diagrams Averages (from listed data) Interpreting averages from grouped data Scatter diagrams Averages (mean, median, mode and range) Comparing averages Pictograms, pie charts, two-way tables Venn diagrams Box plots Line graph – time	Repeated percentage change Finding percentage change Finding the original Compound interest
Key Skills	Problem solving Represent and analyse data accurately Organise information clearly using a standardised format Understand equivalence between fractions and ratio Use proportion to find best value including real life examples Use proportion to find exchange rate including real world finance	Use and simplify algebraic expressions (collecting like terms, using algebraic notation) Substitute values into formulae and expressions Solve linear equations (one and two-step equations, equations with brackets) Expand and factorise expressions (single brackets and common factors) Use algebra to solve problems and represent real-life situations	Represent and analyse data accurately Organise information clearly using a standardised format Use averages to describe relationships between data sets Use range as a spread of data Calculate mean, median, mode. Using vocabulary e.g. data set, average, mean median, mode correctly Accurately interpret data Accurately compare data sets	Reverse calculations to check accuracy Use correct formulae

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Subject Content	Unit 9 Mensuration	Unit 10 Probability	Unit 11 Geometry	Unit 12 Consolidation: Algebra and FDP
Core knowledge	Area of trapezia and parallelograms Area of a circle Circumference Volume of a cuboid Volume of a composite shape Volume of a cylinder Surface area	Simple probability Probability scale Relative frequency Dependent and independent tree diagrams	Bearing Construction and loci Transformations Angle rules Trigonometry	Algebra: Linear equations Sequences Linear graphs Quadratic graphs Straight line graphs FDP: Multiply and divide mixed numbers Find percentage change
Key Skills	Using appropriate formulae to find volume, area, surface area	Calculate simple probability Calculate relative frequency Use tree diagrams accurately	Using appropriate formulae Transform shapes accurately Recall angle facts	Algebra: Substitution Represent data accurately Solve equations methodically Form expressions accurately using terminology FDP: Calculation skills Use of formulae

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CYCLE B				
Subject Content	**Unit 1 Number**	**Unit 2 Fractions, Decimals & Percentages**	**Unit 3 Number/FDP Consolidation**	**Unit 4 Shape**
Core knowledge	Core Maths Skills Understand and use place value for decimals. measures and integers of any size (Place Value, addition subtraction, multiplication, division, Order of operations Highest common factor and LCM Powers and index notation Multiplying decimals Worded questions	Fractions, decimals and percentages Adding, subtracting, multiplying and dividing fractions Adding and subtracting mixed numbers Multiplying mixed numbers Dividing mixed numbers Converting between mixed numbers and improper fractions Simplifying fractions	Rounding whole numbers and decimals Rounding significant figures Approximating and estimation Finding percentage increase/decrease Finding upper and lower bounds Standard form	Perimeter Area of; rectangles, triangles, parallelograms, trapezia, compound shapes
Key Skills	Four operations Calculator use Accurate laying out of calculations Times tables woven throughout	Four operations Calculator use Writing fractions accurately Accurate laying out of calculations Times tables woven throughout	Know that per cent represent a value out of 100. Understand associated vocabulary Organisation of calculations on the page to show working out Reverse calculations to check accuracy	Using correct formulae to calculate area and perimeter Measuring accurately Drawing shapes using a ruler accurately Correct use of units Understand the nature of shapes drawn to scale/not to scale.

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Key Skills	Problem solving Represent and analyse data accurately Organise information clearly using a standardised format Understand equivalence between fractions and ratio Use proportion to find best value including real life examples Use proportion to find exchange rate including real world finance	Use and simplify algebraic expressions (collecting like terms, using algebraic notation) Substitute values into formulae and expressions Solve linear equations (one and two-step equations, equations with brackets) Expand and factorise expressions (single brackets and common factors) Use algebra to solve problems and represent real-life situations	Represent and analyse data accurately Organise information clearly using a standardised format Use averages to describe relationships between data sets Use range as a spread of data Calculate mean, median, mode. Using vocabulary e.g. data set, average, mean median, mode correctly Accurately interpret data Accurately compare data sets	Reverse calculations to check accuracy Use correct formulae

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Key Skills	Using appropriate formulae to find volume, area, surface area	Calculate simple probability Calculate relative frequency Use tree diagrams accurately	Using appropriate formulae Transform shapes accurately Recall angle facts	Algebra: Substitution Represent data accurately Solve equations methodically Form expressions accurately using terminology FDP: Calculation skills Use of formulae