Year 6 Maths Curriculum Overview

Term 1	Place Value Counting Read, write and compare	Place Value Decimals	Mental addition and subtraction	Addition and subtraction (integers/ decimals for MA)	Number properties	Mental Multiplication and division link to volume	Multiplication and division
Y6	• Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit • Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places • Solve number and practical problems that involve all of the above.	• Revise ordering of decimals • Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places • Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate • Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places. See Y5 for examples.	• Perform mental calculations, including with mixed operations and large numbers	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Solve problems involving addition, subtraction, • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy • Decimal addition/subtraction 1 and 2 decimal places	• Revise squares, cubes • Identify common factors, common multiples and prime numbers • Problem solve with above	• Revise Y5 • Perform mental calculations, including with mixed operations and large numbers • Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3]. • Recognise when it is possible to use formulae for volume of shapes	• Multiply numbers up to 4 digits by a two-digit number using a formal written method, including long multiplication • Multiply one-digit numbers with up to two decimal places by whole numbers • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Term 2	Multiplication (Area)	Geometry Angles	Geometry Properties of 2-D Shapes Include perimeter	Addition and subtraction through Statistics	Fractions	Fractions	Assess and Review
Y6	• Recognise that shapes with the same areas can have different perimeters and vice versa • Recognise when it is possible to use formulae for area of shapes • Area of rectangles with mixed measures • Area of rectangles with missing sides • Area of rectangles	• Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. • Draw 2-D shapes using given dimensions and angles	• Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons • Recognise that shapes with the same areas can have different perimeters and vice versa	• Interpret pie charts and line graphs and use these to solve problems • Construct line graphs and use these to solve problems	• Compare and order fractions, including fractions > 1 • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination • Associate a fraction with division and calculate decimal fraction equivalents • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams (Y5 revision)	Review and consolidate term 1 and 2 Check against ARE

Term 3	Place Value Negative Numbers Roman Numerals Rounding	Addition and subtraction Decimals and measures	Multiplication and Division - may need to be extended to 2 weeks	Multiplication and Division Problem Solving and decimals	Geometry 3-D and Coordinates	Fractions, decimals and %
Y6	• Round any whole number to a required degree of accuracy • Use negative numbers in context, and calculate intervals across zero • Solve number and practical problems that involve all of the above.	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate • Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places • Use estimation to check answers to calculations and determine, in the context of a problem,	• Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context	• Multiply one-digit numbers with up to two decimal places by whole numbers • Use written division methods in cases where the answer has up to two decimal places • Calculate mean as an average (link to division) • Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate	• Recognise, describe, and build simple 3-D shapes, including making nets • Describe positions on the full coordinate grid (all four quadrants) • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes	• **Revise finding %** • Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison

Term 4	Fractions, decimals, %	Fractions consolidation Y5 Ratio and proportion Y6	Time and Measures – 4 rules	Missing information Y5 Algebra Y6 Roman Numerals BODMAS	Area and perimeter Revisit Properties	Review and Assess
Y6	• Multiply simple pairs of proper fractions, writing the answer in its simplest form revise • Divide proper fractions by whole numbers	• Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts • Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. • Include fractions linked to pie charts	• Multi step measures problems links to 4 rules, including conversion of measures • Time problems • Revise 12 hour and 24 hour time • Revise time conversion and facts • Roman numerals to 1000 (M) and recognise years written in Roman numerals.	• Express missing number problems algebraically • Find pairs of numbers that satisfy an equation with two unknowns • Missing numbers, • Equivalent expressions (for example, $a + b = b + a$) • Use their knowledge of the order of operations to carry out calculations involving the four operations	• Area of triangles and Parallelograms • Revisit area of rectangles • Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius	• Review and assess terms 3 and 4 check against ARE

Notes for terms 5 and 6.

- **By end of term 4 all of the maths curriculum should be taught to Y6.**
- **Term 5 should be gaps and consolidation**
- **Term 6 problem solving and transition to next year group**

T6	Place Value	Calculation & Measures	Calculation & Measures	Fractions, decimals and %	Geometry	Statistics	Transition x 2 weeks
Y6	Problem solving with place value and number properties	Problem solving with 4 rules applied to measures and missing boxes, known facts	Problem solving with 4 rules applied to measures and missing boxes, known facts	Problem solving with fractions, decimals and %	Problem solving geometry	Problem solving statistics	Y6 non negotiables for Y7, skill and application