Year 5 Maths Curriculum Overview

T1	Place Value	Place Value	Place Value	Mental Addition and Subtraction	Addition and subtraction	Addition and subtraction	Mental Multiplication and division	Mental multiplication and division
Y5	• Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit • Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • Multiply and divide whole numbers by 10, 100 and 1000 • Link with convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	• Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • Read, write, order and compare numbers with up to three decimal places • Multiply and divide decimals by 10, 100 and 1000 • Link with convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)		• Add and subtract numbers mentally with increasingly large numbers • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy • Solve addition and subtraction problems mentally	• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. • Include decimal addition and subtraction and measures problems	**Square/prime and cube numbers** • Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • Establish whether a number up to 100 is prime and recall prime numbers up to 19 • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	• Revise multiply 3 single digit numbers • Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • Multiply and divide numbers mentally drawing upon known facts • Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • Link Cube numbers to volume	• Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • Solve problems involving multiplication including using their knowledge of factors and multiples, squares and cubes

T2	X and division	Geometry	Fractions	Fractions	Time	4 rules through Statistics	Assess and Review
Y5	• Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) • Areas of rectangles mixed units cm/mm etc • Use the properties of rectangles to deduce related facts and find missing lengths	• Know angles are measured in degrees: estimate and compare acute, obtuse, and reflex angles • Draw given angles, and measure them in degrees () • Identify: angles at a point and one whole turn (total 360°) angles at a point on a straight line and a turn (total 180°),other multiples of 90°	• Compare and order fractions whose denominators are all multiples of the same number • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • Read and write decimal numbers as fractions • Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number	• Add and subtract fractions with the same denominator and denominators that are multiples of the same number	• Revisit 12- and 24-hour clock and problem solving with timetables. • Revise time conversion and facts • Read and interpret tables and charts.	• Solve comparison, sum and difference problems using information presented in a line graph.	• Gaps analysis for term 2 and review

T3	Place Value	Addition and Subtraction through Perimeter and length	Multiplication through area if mixed	Division	Division	Fractions
Y5	• Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero • Solve number problems and practical problems that involve all of the above read • Round decimals with two decimal places to the nearest whole number and to one decimal place	• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. • Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	• Revisit x of 4 by 1 in problem solving • Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context		• Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. • Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	• Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal • Solve problems which require knowing percentage and decimal equivalents of ½,1/4,1/5,2/5,4/5 and those fractions with a denominator of a multiple of 10 or 25.

T4	Geometry	Geometry	Fractions and decimals	Fractions and Decimals	Multiplication	Assess and Review
Y5	• Distinguish between regular and irregular polygons based on reasoning about equal sides and angles • Use the properties of rectangles to deduce related facts and find missing lengths and angles	• Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. identify, • Describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	• Revisit and consolidate fractions through problem solving	• Problem solving with multiplication check using inverse	Gaps analysis and review

T5	Statistics	Time	Addition and Subtraction	Multiplication and Division	Mass/Volume and Capacity
Y5	• Read and interpret charts, tables and graphs. • Problem solve with above.	• Complete, read and interpret information in tables, including timetables. • Solve problems involving converting between units of time •	• Find missing lengths and angles revision problems linked to area and perimeter • Empty boxes in calculations •	• Problem solve with x and division	• Estimate, compare and calculate different measures through problems • Round mass and volume • Solve simple measure problems involving fractions and decimals to three decimal places.

T6	Place Value	Calculation & Measures	Calculation & Measures	Fractions	Geometry	Transition x 3 weeks
Y5	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,	Problem solving geometry	Y5 non negotiables for Y6, skill and application