Year 6 Maths Long Term Planning – 2024-2025

Autumn	**Number – Place Value** Read, write, order and compare numbers up to 10,000,000,000 Use reasoning to solve problems involving addition, subtraction, multiplication and division. Round any whole number to a required degree of accuracy. Use negative numbers in context, & calculate intervals across zero. Use reasoning to solve problems involving addition, subtraction, multiplication and division.	**Assessment Week**	**Number – Addition, Subtraction, Multiplication and Division** Add and subtract whole numbers; mentally & formally Solve addition & subtraction multi-step problems in context, deciding operations & methods to use & why Solve reasoning and problem-solving style questions involving addition and subtraction Multiply 4 digits by 2 digits and solving associated problems Use estimation to check calculations Divide numbers up to 4 digits by a two-digit number using the formal written method of **SHORT** division then long division where appropriate, interpreting remainders according to the context. Identify common factors, common multiples and prime numbers. solve division calculations using factors To know the meaning of BIDMAS/BODMAS and how to apply to it to calculations To be able to use reasoning to solve problems involving addition, subtraction, multiplication and division.	**Number – Fractions** Use common factors to simplify fractions; use Common multiples to express fractions in the same denomination. Use knowledge of equivalent fractions and ordering fractions to place fractions on a number line. Compare and order fractions (denominators) x2 Compare and order fractions by the numerator Add fractions when the answer is more than 1 Add fractions that give a total greater than one. Subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions Multiply whole numbers and fractions together Multiply pairs of simple proper fractions, writing the answer in its simplest form Divide proper fractions by whole numbers Find fractions of amounts Find the whole amount from the known value of a fraction Use the four operations with fractions	**Assessment Week**	**Consolidation / problem areas**	**Geometry – position & direction** understand coordinates on the full coordinate grid (all four quadrants), that you move across first and then up or down. understand the terms 'reflection' 'translation'; Translate & reflect in 4 quadrants. Solve problems involving 'reflection' & 'translation';
Spring	**Number – Addition, Subtraction, Multiplication & Division** multiply decimal numbers by 10, 100 & 1,000 Multiply decimals by integers Divide decimals by integers Use division to solve problems in cases where the answer has up to 2 decimal places. Use the relationship between decimals & fractions. Associate a fraction with division & calculate decimal fraction equivalents for a simple fraction Recall & use equivalences between simple fractions, decimals and percentages, including in different contexts	**Number – Frac, Dec & %** Find a percentage of an amount Solve problems involving the calculation of missing percentages Number – fractions (inc. decimals and %). Calculate the percentage increase & percentage decrease of a number Convert between fractions, decimals & % to order and compare them	**Assessment Week**	**Algebra** Understand and use simple formulae. Make generalisations Solve one-step equations Possible pairs of values Revisit / consolidate topics	**Measure** Read, write and recognise all metric measures for length, weight & capacity Use skills of multiplying and dividing by 10, 100 and 1,000 when converting between units of length, mass, capacity. Use & apply conversion skills and all four operations to solve measurement problems in context. Use the fact that 8 km is approximately 5 miles to calculate from km to miles and vice versa. Understand the relationship between imperial and metric units of measure. Identify rectilinear shapes with the same area but different perimeters and vice versa Calculate area & perimeter of rectangles & non-rectangular areas Find the area of triangles by estimating and counting squares Calculate the area of a right-angled triangle, Calculate the area of a parallelogram Find the volume of a shape by counting cubes Use the formula (l × w × h)	**Assessment Week**	

Summer	**Geometry – Properties of Shape** Use a protractor to measure angles Recognise angles as a measure of turn Calculate missing angles including in a different triangle Calculate missing external angles of a triangle	**Statistics** Drawing, reading and interpreting different graphs; Reading two-way tables; Reading and interpreting timetables	**Consolidation / revision / SATs**	**Number / Investigation / Problem solving** Number; Nrich activities e.g. Reach 100, Happy Numbers Creation of maths board games for younger children (Theory behind learning to count / add subtract etc) Creation of maths board games including playing games with EYFS / KS1 Proving / disproving a theory using maths EG Smarties investigations Money – life skills Coins, notes, adding /subtracting, income/expenditure, budgeting Money – life skills / Enterprise project Making money! 5er challenge? Or similar? Money – life skills / Enterprise project	