

Academy: St Nicholas C of E Long Term Map - Year 6 Maths (2022/2023)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15		
Autumn	Number: Place Value		Number: Addition, Subtraction, Multiplication and Division					Half Term	Number: + - x /	Number Fractions A		Number Fractions B		Measure: Converting Units	End of term		
Spring	Number: Ratio		Number: Algebra		Number: Decimals		Half Term	Fractions, Decimals & Percentages		Measure: Perimeter, Area and Volume		Statistics		End of term	End of term		
Summer	Geometry: Properties of Shape			Geometry: Position and Direction	Consolidation		Half term	Themed Learning Investigations						End of term			
Number and Place Value							AU	SP	SU	Measures					AU	SP	SU
• Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit										• Convert between miles and kilometres							
• Round any whole number to a required degree of accuracy										• Recognise that shapes with the same areas can have different perimeters and vice versa							
• Use negative numbers in context, and calculate intervals across zero										• Recognise when it is possible to use formulae for area and volume of shapes							
• Solve number and practical problems that involve all of the above										• Calculate the area of parallelograms and triangles							
Addition and Subtraction & Multiplication and Division										• Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units [for example, mm ³ and km ³].							
• Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication										Properties of Shape							
• 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										• Draw 2-D shapes using given dimensions and angles							
• 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										• Recognise, describe and build simple 3-D shapes, including making nets							
• Perform mental calculations, including with mixed operations and large numbers										• Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons							
• Identify common factors, common multiples and prime numbers										• Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius							
• Use their knowledge of the order of operations to carry out calculations involving the four operations										• Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.							
• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods										Position and Direction							
• Solve problems involving addition, subtraction, multiplication and division										• Describe positions on the full coordinate grid (all four quadrants)							
• Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.										• Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.							
Fractions (including decimals and percentages)										Statistics							
• Use common factors to simplify fractions; use common multiples to express fractions in the same denomination										• Interpret and construct pie charts and line graphs and use these to solve problems							
• Compare and order fractions, including fractions > 1										• Calculate and interpret the mean as an average.							
• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions										Algebra							
• Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 × 1/2 = 1/8]										• Use simple formulae							
• Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]										• Generate and describe linear number sequences							
• Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]										• Express missing number problems algebraically							
• 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										• Find pairs of numbers that satisfy an equation with two unknowns							
• Multiply one-digit numbers with up to two decimal places by whole numbers										• Enumerate possibilities of combinations of two variables.							
• Use written division methods in cases where the answer has up to two decimal places										Ratio and Proportion							
• Solve problems which require answers to be rounded to specified degrees of accuracy										• Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts							
• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.										• Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison							
Measures										• Solve problems involving similar shapes where the scale factor is known or can be found							
• Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate										• Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.							
• 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																	

