

Maths Long Term Plan Year 6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Number and Place Value	Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit Round any number to a required degree of accuracy			Use negative numbers in context, and calculate intervals across zero Solve number and practical problems		
Addition and Subtraction	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy	Use order of operations to carry out calculations involving the four operations Solve problems			Solve problems	Solve problems
Multiplication and Division	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division Divide numbers up to 4 digits by a two-digit number using the formal written method of short division. Identify common factors, common multiples and prime numbers	Use order of operations to carry out calculations involving the four operations Solve problems		Identify common factors, common multiples and prime numbers	Multiply and divide numbers up to 4 digits by a two-digit whole number using formal written methods Solve problems Solve problems using all 4 operations	Solve problems
Fractions (including decimals and percentages)	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts Add and subtract fractions with different denominators Multiply simple pairs of proper fractions, writing the answer in its simplest form	Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving	Multiply one-digit numbers with up to two decimal places by whole numbers Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts Add and subtract fractions with different	Compare and order fractions, including fractions > 1 Add and subtract fractions with different denominators and mixed numbers Recall and use equivalences between simple fractions, decimals	Add and subtract fractions with different denominators and mixed numbers Multiply and divide proper fractions Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	

	Divide proper fractions by whole numbers	answers up to three decimal places Multiply one-digit numbers with up to two decimal places by whole numbers	denominators and mixed numbers Multiply and divide simple pairs of proper fractions, writing the answer in its simplest form.	and percentages, including in different contexts		
Measurement		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 up to three decimal places Calculate the area of parallelograms and triangles		Solve problems involving the calculation and conversion of units of measure, using decimal notation, up to decimal places where appropriate Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit to a larger unit, and vice versa, using decimal notation to up to three decimal places Convert between miles and kilometres	Solve problems involving the calculation and conversion of units of measure Calculate the area and perimeter of shapes Calculate the volume of cubes	Draw 2-D shapes using given dimensions and angles
Geometry		Properties of Shape Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles Position and Direction Describe positions on the full coordinate grid Draw and translate simple shapes on the coordinate plane, and reflect them in the axes	Properties of Shape Draw 2-D shapes using given dimensions and angles Find missing angles Position and Direction Describe positions on the full coordinate grid (including identifying missing angles)	Draw 2D shapes using given dimensions and angles Recognise, describe and build simple 3D shapes, including making nets Compare and classify geometric shapes based on their properties and sizes	Describe positions on the full coordinate grid Draw and translate simple shapes Compare and classify geometric shapes	
Statistics		Calculate and interpret the mean as an average	Interpret and construct pie charts and line graphs and use these to solve problems Calculate and interpret the mean as an average		Calculate and interpret the mean	
Algebra			Use simple formulae Generate and describe linear number sequences Express missing number problems algebraically		Use simple formulae	Use simple formulae. Generate and describe linear number sequences. Express missing number problems algebraically.

			Find pairs of numbers that satisfy an equation with 2 unknowns Enumerate possibilities of combinations of 2 variables			Find pairs of numbers that satisfy an equation with two unknowns. Enumerate possibilities of combinations of two variables.
Ratio and Proportion						Solve problems involving similar shapes where the scale factor is known or can be found. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.