

	Autumn Term	Spring Term	Summer Term
Year 5	Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. Count up and down in thousandths; recognise that thousandths arise from dividing an object into 1000 equal parts and in dividing numbers or quantities by 1000. Add and subtract numbers mentally with increasingly large numbers. Add and subtract whole numbers with more than 4 digits including using formal written methods (columnar addition and subtraction). 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. Know and use the vocabulary of prime numbers, prime factors and composite (non- prime) numbers. Multiply numbers up to 4- digits by a 1-digit or 2-digit number using a formal written method, including long multiplication for 2- digit numbers. Identify, name and write equivalent fractions	Interpret negative numbers in context, count forwards and backwards with positive and negative. numbers including through zero. Read Roman numerals to 1000 and recognise years written in Roman numerals. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. Divide numbers up to 4-digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements. Estimate volume & capacity (e.g. using water).	Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000 or 100000 Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. Consolidate: Addition and Subtraction using columnar addition and subtraction. Recognise and use square numbers and cube numbers, and the notation for squared and cubed. Compare and order fractions whose denominators are all multiples of the same number. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places. Recognise the percent symbol (%) and understand that per cent relates to 'number of parts per hundred' and write percentages as a fraction with denominator 100, and

	of a given fraction, represented visually, including tenths and hundredths. Read and write decimal numbers as fractions. Measure and calculate the perimeter of composite rectilinear shapes in cm and m. Calculate & compare the area of rectangles & estimate the area of irregular shapes. Know angles are measured in degrees; estimate & compare acute, obtuse & reflex angles. Complete, read and interpret information in: - tables, including timetables.	Convert between different units of metric measure (e.g. km/m; cm/m; cm/mm; g/kg;l/ml). 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 Distinguish between regular and irregular polygons based on reasoning about equal sides and angles Identify 3D shapes, including cubes and other cuboids, from 2D representations. Use the properties of rectangles to deduce related facts & find missing lengths & angles. Solve comparison, addition and difference problems using information presented in a line graph.	as a decimal. Solve problems involving converting between units of time. Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. Consolidate and revise all Year 5 learning associated with geometry to include work on angles, translations and shape
	Autumn Term	Spring Term	Summer Term
	To read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Use negative numbers in context and calculate intervals across zero. Use knowledge of the order of operations to carry out calculations involving the four operations. Multiply multi-digit	Consolidate all learning in relation to the four operations using formal efficient methods at all times. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Year 6	Identify common factors, common multiples and prime numbers. Perform mental calculations, including mixed numbers and large numbers. Recall and use equivalences between simple fractions, decimals and percentages, including different contexts. Calculate, estimate and compare volume of cubes and cuboids using standard units, including cm³ and m³ and extending to other units such as mm³ and km³. Convert between miles and km. 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 three decimal places. Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.	numbers up to 4-digits by a 2-digit whole number using the formal written method of long multiplication. Divide numbers up to 4-digits by a 2-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 2-digit number using the formal written method of short division, where appropriate, interpreting remainders according to the context. Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate. Recognise when it is possible to use the formulae for area & volume of shapes. Interpret and construct:	Multiply simple pairs of proper fractions, writing the answer in the simplest form. Recognise that shapes with the same areas can have different perimeters and vice versa. Calculate the area of parallelograms and triangles. Recognise when it is possible to use formulae for area & volume of shapes. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. Calculate and interpret the mean as an average
----------------------	---	---	---

		- pie charts - line graphs and use these to solve problems 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.	
--	--	--	--