



Year 6		Step 1	Step 2	Step 3	End of Year Expectations
Using and Applying		I can solve number problems and practical problems involving a range of ideas			
Number	Number system and counting	I can read, write, order and compare numbers up to 10,000 and determine the value of each digit (4c)	I can read, write, order and compare numbers up to 100,000 and determine the value of each digit (4b)	I can read, write, order and compare numbers up to 1,000,000 and determine the value of each digit (4a) (Y5)	I can read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (5a)
		I can round 3 and 4 digit numbers to the nearest 10 and 100 (3b)	I can round 5 digit numbers to the nearest 10, 100 and 1000 (4b)	I can round any number up to 1,000,000 to the nearest 10, 100, 1000 and 10,000 (4a) (Y5)	I can round any whole number to a required degree of accuracy
		I can recognise negative numbers and continue negative number sequences and find missing numbers (3a)	I can put negative numbers onto a number line	I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through 0 (Yr 5)	I can use negative numbers in context, and calculate intervals across 0
					I can solve number and practical problems that involve all of the above
	Fractions and decimals		I know and can use the terms multiple and factor	I can identify common factors of pairs of numbers	I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination
		I can compare and order fractions whose denominators and multiplies of the same number using resources	I can compare and order fractions whose denominators and multiplies of the same number (Yr 5)	I can compare and order fractions, including fractions >1 using resources	I can compare and order fractions, including fractions >1
		I can add and subtract	I can add and subtract	I recognise and understand	I can add and subtract



		fractions with the same denominator (Yr4)	fractions with the same denominator and multiplies of the same number (Yr 5)	mixed numbers	fractions with different denominators and mixed numbers, using the concept of equivalent fractions
		I can multiply proper fractions by a whole number using materials and diagrams	I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams (Yr 5)	I can multiply simple pairs of proper fractions	I can multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]
				I can divide proper fractions by whole numbers using diagrams	I can divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]
					I can associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]
			I can read and write decimal numbers as fractions and vice versa E.g. $\frac{73}{100} = 0.73$ (Yr 5)	I can partition decimal numbers up to 3 decimal places and state the value of each digit.	I can identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places
			I can recognise and write decimal equivalents to $\frac{1}{4}$ $\frac{1}{2}$ and $\frac{3}{4}$ (Yr 4)	I can solve problems which require the knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of a multiple of 10 or 25. *	I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts



Calculating	Addition & Subtraction		I can add and subtract multiples of 10 and 100 to three and four digit numbers mentally	Add and subtract numbers mentally with increasingly large numbers	I can perform mental calculations, including with mixed operations and large numbers
			I can use brackets in simple calculations (4a)	I can use brackets and inverses effectively e.g. $(24+P) \times 6 = 150$	I can use my knowledge of the order of operations to carry out calculations involving the 4 operations
		I can solve simple addition and subtraction problems (2c)	I can solve more complex one step problems in context deciding which operations to use and why (3c)	I can solve addition and subtraction two-step problems in context deciding which operations and methods to use and why(3b)	I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
		I can solve one-step problems in contexts, deciding which operations to use and why (2b)	I can solve more complex one-step problems in contexts, deciding which operations to use and why (3c)	I can solve addition and subtraction two-step problems in contexts, deciding which operations to use and why (3b)	I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
			I can check whether my answer is likely	I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy (Yr 5)	I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
		Multiplication & Division	I can recall all times tables up to 12 x 12 and know related division facts.	I can multiply larger numbers (<10,000) by single-digit numbers using short multiplication	I can multiply decimals by a single-digit number using short multiplication
			I can recall all division facts	I can divide a two digit	I can divide numbers up to



		related to times tables up to 12×12	number by 2,3,4,5,and 10 with whole number answers and remainders (3a)	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.
				I can 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
	Recall and use multiplication and division facts up to 12×12 (Yr 4)	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 1 and 0; dividing by 1; multiplying together three numbers. (Yr 4)	I can multiply and divide numbers mentally drawing on known facts. (Yr5)	I can perform mental calculations, including with mixed operations and large numbers
		I know multiples, factors, square numbers prime numbers (4b)	I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. (Yr 5)	I can identify common factors, common multiples and prime numbers.
		I can use brackets in simple calculations (4a)	I can use brackets and inverses effectively e.g. $(24+P) \times 6 = 150$ (5c)	I can use my knowledge of the order of operations to carry out calculations involving the 4 operations
	I can use knowledge of times tables and place value to	I can use knowledge of times tables and place	Multiply one-digit numbers with one decimal place by	I can multiply one-digit numbers with up to 2



		multiply U.t by U e.g. $0.6 \times 4 = 2.4$	value to multiply TU.t by U e.g. $0.06 \times 4 = 0.24$	whole numbers	decimal places by whole numbers
				I divide HTU by U where the remainder is recorded as a fraction.	I can use written division methods in cases where the answer has up to 2 decimal places
					solve problems which require answers to be rounded to specified degrees of accuracy
					I can solve problems involving multiplication and division
			I can check whether my answer is likely	I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy (Yr 5)	I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
Geometry – Properties of Shape			I can name a circle, square, triangle, rectangle, pentagon, hexagon, octagon, cube, cylinder, sphere, cuboid, cone, pyramid (Yr 3)	I can draw 2d shapes (Yr 3)	I can draw 2-D shapes using given dimensions and angles
				I can make 3d shapes using modelling materials; recognise 3d shapes in different orientations and describe them.	recognise, describe and build simple 3-D shapes, including making nets
				I can compare and classify	I can compare and classify



			geometric shapes, including quadrilaterals and triangles, based on their properties and sizes (Yr 4)	geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
				I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
		I can identify acute and obtuse angles and compare and order angles up to two right angles by size. (Yr 4)	I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles (and right angles) (Yr 5)	I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
Position and Direction			I can describe positions on a 2D grid as coordinates in the first quadrant (Yr 4)	I can describe positions on the full coordinate grid (all 4 quadrants)
		I can describe movements between positions as translations of a given unit to the left/right and up/down (Yr 4)	I can identify, describe and represent the position of a shape following a reflection or a translation, using the appropriate language, and know that the shape has not changed (Yr 5)	I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes
Measurement		I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (Y4)	I can solve problems involving converting between units of time (Y5)	I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate



	I can convert between units of length and capacity (ml, l)	I can convert between units of length, capacity and time (seconds, minutes, hours, days)	I can convert between different units of metric measure (e.g. km and m; cm and m; cm and mm; g and kg; l and ml) (Y5)	I can 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 3 decimal places
			I can understand and use equivalences between metric units and common imperial units such as inches, pounds and pints (5b)	I can convert between miles and kilometres
	I can find the length of a rectangle given the perimeter and width (5c)	I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres (5a)	I can measure and calculate the perimeter of composite rectilinear shapes in cm and m	I can recognise that shapes with the same areas can have different perimeters and vice versa
	I can use the formula $L \times B$ to find the area of square/rectangle (5c)	I can find the area of rectilinear shapes by counting squares (5a)	I can calculate and compare the area of squares and rectangles including using standard units cm^2 and m^2 and estimate the area of irregular shapes	I can recognise when it is possible to use formulae for area and volume of shapes
				I can calculate the area of parallelograms and triangles
		I can compare and order different volumes	I can estimate volume (e.g. using 1 cm^3 blocks to build cubes and cuboids) and	I can calculate, estimate and compare volume of cubes and cuboids using



			capacity (e.g. using water)	standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units [for example, mm ³ and km ³]
Statistics	I can collect discrete data (4b)	I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and line graphs (4a) (Y4)	I can complete, read and interpret information in tables, including time tables (4c)	I can interpret and construct pie charts and line graphs and use these to solve problems
	I can draw a line graph (4a)			I can calculate and interpret the mean as an average
Algebra		I can use inverses in number problems (e..g I think of a number, double it and add five, the answer is 35. What is the original number) (3b)	I can use symbols and letters to represent an unknown number	I can use simple formulae (5b)
			I can use my knowledge of the order of operations to carry out calculations involving the four operations	I can express missing number problems algebraically
				I can find pairs of numbers that satisfy an equation with 2 unknowns (5b)
				I can enumerate possibilities of combinations of 2 variables
				I can recognise negative numbers and continue



			positive negative number sequences and find missing numbers (3a)	
Ratio and Proportion		I can understand simple ratio and can solve problems involving direct proportion by scaling up/down (5b)	I can reduce a ratio to its simplest form and use it in problem solving by multiplying (e.g. given the ingredients in a recipe for 5 people, calculate the quantities needed for 8) (5a)	I can solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts
				I can solve problems involving similar shapes where the scale factor is known or can be found
	I can find simple percentages of quantities (e.g.10%, 25%, 50% and 75%) of quantities (4b)	I can find percentages (e.g. 30%, 60%) of quantities (multiples of 10) (4a)	I can calculate simple fractions and percentages of quantities (e.g. $\frac{3}{8}$ of 980g, 15% of 360)	I can solve problems involving the calculation of percentages [for example, of measures such as 15% of 360] and the use of percentages for comparison (5b)
				I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples