



Topic 1: Number/Place Value	Sept.	Topics will be taught in numerical order across the academic year. The precise order of the statements within each topic is to be determined by the class teacher. Each statement will be taught and assessed in a learning sequence.
Read, write, order and compare numbers up to 10 000 000.		
Identify the value of each digit in numbers from tens of millions to thousandths.		
Round any whole number to a required degree of accuracy.		
Solve problems which require answers to be rounded to specified degrees of accuracy.		
Use negative numbers in context, and calculate intervals across zero.		
Multiply and divide numbers by 10, 100 & 1000 giving answers up to 3 decimal places.		
Solve reasoning problems that involve all of the above.		
Topic 2: Four operations		
Identify common factors, common multiples and prime numbers.		
Use the compact method to add/subtract numbers up to 2 decimal places.		
Solve multi-step reasoning problems that feature addition and/or subtraction (compact method).		
Multiply multi-digit whole numbers (up to 4 digits) by a 2-digit whole number using compact method.		
Multiply one-digit numbers with decimal numbers (up to 0.th) using the compact method.		
Divide numbers up to 4 digits by a two-digit whole number using long division.		
Divide numbers up to 4 digits by a one-digit number using short division.		
Calculate division answers up to 2 decimal places.		
Interpret division remainders as whole numbers, fractions or decimals.		
Solve multi-step reasoning problems that feature multiplication and/or division.		
Use knowledge of the order of operations (BIDMAS) to carry out calculations involving the four ops.		
Use estimation to check that answers are reasonable.		
Topic 3: Fractions, decimals and percentages		
Put fractions into their simplest form.		
Compare and order fractions, including fractions > 1.		
+/- fractions with different denominators and mixed numbers by standardising the denominator.		
Multiply proper fractions by proper fractions/whole numbers, writing answer in its simplest form.		
Divide proper fractions by proper fractions and whole numbers.		
Identify fractions as divisions and calculate decimal equivalents for a simple fraction.		
Recall equivalences between common fractions, decimals and percentages.		
Solve reasoning problems involving the calculation of percentages [e.g. calculate 15% of 360ml].		
Topic 4: Measurement		
Solve reasoning problems that require unit conversions for measures of length, mass, volume & time (e.g. cm → m) with answers up to 3 d.p.		
Convert between miles and kilometres.		
Topic 5: Ratio and Proportion		
Use integer multiplication and division facts to scale up/down a quantity (e.g. scaling a recipe).		
Solve problems involving similar shapes where the scale factor is known or can be found.		
Apply knowledge of ratio/percentages of 360° to proportionately represent data in a pie chart.		
Topic 6: Properties of shape and position		
Draw 2-D shapes using given dimensions and angles using a ruler and protractor.		
Recognise, describe and build simple 3-D shapes, including making nets.		
Compare and classify geometric shapes (incl. regular/irregular & types of triangle).		
Find unknown angles in any triangle, quadrilateral or regular polygon.		
Calculate the perimeter of a range of 2D shapes.		
Calculate the area of triangles.		
Calculate the area of parallelograms.		
Recognise that shapes with the same areas can have different perimeters and vice versa.		
Illustrate and name the radius, diameter and circumference of a circle (and known $D=2r$).		
Calculate missing angle where angles meet at a point, are on a straight line or are vertically opposite		
Describe positions on the full coordinate grid (all four quadrants).		
Draw and translate simple shapes on the coordinate plane, and reflect them in the axis.		
Calculate, estimate and compare volume of cubes and cuboids using standard units (e.g. cm^3 / m^3).		
Topic 7: Statistics		
Interpret and construct pie charts and line graphs and use these to solve problems.		



Calculate and interpret the mean as an average.

Topic 8: Algebra

Use simple formulae in calculations.

Generate and describe linear number sequences.

Express missing number problems algebraically.

Find pairs of numbers that satisfy an equation with two unknowns.



May