Year 6
Term 1

Number - number and place value (2 weeks)

- Read, write and order numbers up to 10,000,000 and determine the value of each digit
- find 10 or 100 more or less than a given number
- recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)
- compare and order numbers up to 1,000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1,000 in numerals and in words
- solve number problems and practical problems involving these ideas

Number – addition, subtraction multiplication and division (4 weeks)

- 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, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- 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
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the 4 operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Mental oral starter	Term 1 Week 1 Angles – Triangles and quadrilaterals	Term 1 Week 2 ASSESS-MENTS	Term 1 Week 3 Measurement- Properties of 2D and 3D shapes	Term 1 Week 4 Statistics- pie charts, line graphs, mean	Term 1 Week 5 Area and Perimeter including radius and diameter and triangles	Term 1 Week 6 Coordinates	Extra possible week Common factors, multiples and prime numbers
Counting stick/non negotiable	All tables	All tables	All tables	All tables	All tables	All tables	All tables
Main focus	Place Value		Place Value	Addition and Subtraction	Addition and Subtraction	Multiplication and Division	Multiplication and Division

Term 2

Number – Fractions (4 weeks)

- 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, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- 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
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the 4 operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division

Geometry – position and direction (1 week)

- describe positions on the full coordinate grid (all 4 quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Mental oral starter	Term 2 Week 1 Place Value- application of PV knowledge (ordering, rounding, estimating)	ASSESSMENTS	Term 2 Week 3 Multiplication and division	Term 2 Week 4 Perform mental calculations including with negative numbers	Term 2 Week 5 Rounding and estimating	Term 3 Week 6 Christmas week
Counting stick/non negotiable	All tables	All tables	All tables	All tables	All tables	All tables
Main focus	Fractions including decimals and percentages		Fractions including decimals and percentages	Fractions including decimals and percentages	Fractions including decimals and percentages	Coordinates

Term 3

Ratio and proportion (2 weeks)

- solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison
- 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

Measurement (3 weeks)

- solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate
- 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
- convert between miles and kilometres
- recognise that shapes with the same areas can have different perimeters and vice versa
- recognise when it is possible to use formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- 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]

Mental oral starter	Term 3 Week 1 Add and subtract fractions including with decimal fractions	ASSESSMENTS	Term 3 Week 3 Percentages and fractions of amounts	Term 3 Week 4 Fractions	Term 3 Week 5 Factors, multiples, square numbers, cube numbers and prime numbers	Term 3 Week 6 Equivalent Fractions
Counting stick/non negotiable	All tables	All tables	All tables	All tables	All tables	All tables
Main focus	Ratio and Proportion		Ratio and Proportion	Measurement	Measurement	Measurement

Algebra (1 week)

- 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

Geometry – properties of shape (2 weeks)

- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- 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

Geometry – position and direction (1 week)

- describe positions on the full coordinate grid (all 4 quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Statistics (1 week)

- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average

Mental oral starter	Term 4 Week 1 Calculation (fractions)	Term 4 Week 2 Place value	ASSESSMENTS	Term 4 Week 4 Algebra	Term 4 Week 5 Converting measurements (including time)	Term 4 Week 6 Ratio and proportion
Counting stick/non negotiable	All tables	All tables		All tables	All tables	All tables

Main focus	Algebra	Geometry- Properties of shape		Geometry – Properties of shape	Geometry – Position and direction	Statistics

Term 5

Revision (3 weeks)

Geometry – position and direction (1 week)

- describe positions on the full coordinate grid (all 4 quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Statistics (1 week)

- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average

Mental oral starter	Term 5 Week 1 Statistics- pie charts, line graphs, mean	Term 5 Week 2 Number- calculation (four operations)	Term 5 Week 3 Fractions, decimals and percentages	SATs	Term 5 Week 5 Number- Place Value	Term 5 Week 6 Measurement- Area, perimeter and volume
Counting stick/non negotiable	All tables	All tables	All tables		All tables	All tables
Main focus	Revision of what is needed	Revision of what is needed	Revision of what is needed		Geometry- position and direction (draw and translate simple shapes on the full coordinate grid and reflect in axes)	Statistics- Line and pie charts and mean average

Number - number and place value (1 week)

- Read, write and order numbers up to 10,000,000 and determine the value of each digit
- find 10 or 100 more or less than a given number
- recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)
- compare and order numbers up to 1,000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1,000 in numerals and in words
- solve number problems and practical problems involving these ideas

Algebra (2 weeks)

- 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

Ratio and proportion (1 week)

- solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison
- 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

Number – addition, subtraction multiplication and division (1 week)

- 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, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- 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
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the 4 operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division

use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Mental oral starter	Term 6 Week 1 Measurement- area of parallelograms and triangles	RESIDENTIAL	Term 6 Week 3 Ratio and proportion calculation (four operations)	Term 6 Week 4 Algebra	Term 6 Week 5 Measurement- conversion of units including time	Term 6 Week 6 Geometry- angles
Counting stick/non negotiable	All tables		All tables	All tables	All tables	All tables
Main focus	Number and place value		Algebra	Ratio and proportion	Algebra	Number- calculation revision