## Curriculum Overview

| Year | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| 7 | Numbers and place value <br> Recognise the place value of any number in an integer up to one billion. <br> Understand and write integers up to one billion in words and figures Order positive and negative integers and decimals; use the number line as a model for ordering of the real numbers; use the symbols $=, \neq,<,>, \leq$, Round numbers to an appropriate number of decimal places. <br> Round numbers to an appropriate number of significant figures <br> Calculations <br> Use the 4 operations, including formal | Fractions, decimals and percentages Use the four operations for proper and improper fractions Define percentage as 'number of parts per hundred' Interpret percentages and fractions as operators. Interpret percentage changes as a fraction or a decimal, interpret these multiplicatively. Work interchangeably with terminating decimals and their corresponding fractions. I can order fractions. <br> Ratio and proportion Use ratio notation, including reduction to simplest form Divide a ratio into | Algebra <br> Substitution positive and negative integers into expressions. Simplify by collecting like terms Solve linear equations Plot linear graphs and understand $y=m x+c$ Linear sequences | Measurement Solve problems involving perimeter and area of triangles, parallelograms, trapezia. Calculate the area and circumference of a circle. | Geometry properties Apply the properties of angles at a point, angles on a straight line, vertically opposite angles. <br> Understand and use the relationship between parallel lines and alternate and corresponding angles Use Pythagoras' theorem to calculate the missing length of a right-angled triangle. <br> Geometry position Transformations translation, rotation, reflection, and enlargement (positive scale factor) | Statistics <br> Calculate simple probabilities. Calculate the mean, mode and media. Construct pie charts |

## written methods,

applied to integers and decimals, both positive and negative.
Recognise and use relationships between operations including inverse operations Use integer powers and associated real roots (square, cube and higher), recognise powers of $2,3,4,5$. Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples. Find the highest common factor, lowest common multiple of two or more numbers. Write a number as a product of its prime factors (including product notation). Use BIDMAS.

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given parts in the ratio
part: part and part:
whole.
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