- Read, write, order and compare numbers up to 10 000 000 round any whole number.

- Use negative numbers in context e.g. temperature.

- Multiply and divide numbers up to 4 digits by a 2-digit whole number using written methods, including recording remainders

- Identify common factors, common multiples and prime numbers.

- Use their knowledge of the order of operations to carry out calculations involving the four operations.

- Solve addition and subtraction multi-step problems, deciding which operations and methods to use and why.

- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

- Multiply simple proper fractions and simplify the answer (e.g. ¼ x ½ = ⅛). Divide proper fractions by whole numbers (e.g. ⅓ ÷ 2 = ⅙).

- Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places.

- Multiply one-digit numbers with up to two decimal places by whole numbers.

- Recall and use equivalences between simple fractions, decimals and percentages.

- Solve problems involving the calculation of percentages (e.g. of measures) 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.

- Express missing number problems algebraically. Use simple formulae expressed in words.

- Generate and describe number sequences.

- Find pairs of numbers that satisfy number sentences involving two unknowns

- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. Convert between miles and km.

- Use, read, write & convert between standard units of measure, converting length, mass, volume & time from smaller to larger units, and vice versa, using decimal notation to up to 3 dec places.

- 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 and volume of shapes.

- Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm_2) and cubic metres (m_3), and extending to other units.

- 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.

- 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.

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

- Calculate and interpret the mean as an average.