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| **Objectives**  | **Autumn** | **Spring** | **Summer** |
| * Use negative numbers in context, and calculate intervals across zero.
* Round any whole number to a required degree of accuracy and solve problems which require answers to be rounded to a specific degree of accuracy.
* Solve problems involving the relative sizes of two quantities where the missing values can be found by using integer multiplication and division facts.
* Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
* Solve problems involving the calculation of percentages, (for example, of measures) such as 20% of 440 and the use of percentages for comparison.
* Multiply 1-digit numbers with up to two decimal places by whole numbers.
* Perform mental calculations, including with mixed operations with large numbers.
* Divide numbers up to 4-digits by a 2-digit whole number using formal written methods of long division and interpret remainder in various ways.
* Use knowledge of order of operations to carry out calculations involving all four operations.
* Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
* Multiply simple pairs of proper fractions, writing the answer in its simplest form.
* Divide proper fractions by whole numbers (⅛ ÷ 2 = 1/16)
* Associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375 for ⅜)
* Express missing number problems algebraically.
* Find pairs of numbers that satisfy number sentences involving two unknowns.
* Recognise, describe and build simple 3D shapes, including making nets.
* Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangle, quadrilateral and regular polygons.
* Illustrate and name parts of circles, including radius, diameter and circumference and know that the radius is half the diameter.
* 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.
* Calculate the area of a parallelogram and triangles and calculate, estimate and compare volume of cubes and cuboids using standard units.
* Interpret and construct pie charts and line graphs and use these to solve problems.
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