# Poulton Lancelyn 

Maths
Long Term Plan
Y6
2022/23

|  | W1 - Number | W2 - Number | W3 - Operation | W4 and 5 - Operation | W6-Operation |  | W7 - Factors and Multiples |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A1 | Read, write, order and compare numbers up to 10000000 and determine the value of each digit | Use negative numbers in context, and calculate intervals across zero | Solve problems involving addition, subtraction, | Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication <br> Multiply one-digit numbers with up to two decimal places by whole numbers | 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 <br> 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 <br> Use written division methods in cases where the answer has up to two decimal places |  | Identify common factors, common multiples and prime numbers <br> Use their knowledge of the order of operations to carry out calculations involving the four operations |
|  | W1-Operation | W2-Geometry | W3 and 4 - Fractions |  | W5 - Fractions | W6-Geometry | W7-Statistics |
| A2 | Calc <br> Solve problems involving addition, subtraction, | Draw 2-D shapes using given dimensions and angles <br> Recognise, describe and build simple 3-D shapes, including making nets | Use common factors to simplify fractions; use common multiples to express fractions in the same denomination <br> Compare and order fractions, including fractions $>1$ <br> Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions |  | Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8] | Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius | Interpret and construct pie charts and line graphs and use these to solve problems |
|  | W1-Geometry | W2 - Number | W3 - Geometry | W4-Measure | W5 - Fractions | W6 - Operations |  |
| Sp1 | Describe positions on the full coordinate grid (all four quadrants) | Use negative numbers in context, and calculate intervals across zero | Draw and translate simple shapes on the coordinate plane, and reflect them in the axes | Recognise that shapes with the same areas can have different perimeters and vice versa <br> Calculate the area of parallelograms and triangles | Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example, $1 / 4 \times 1 / 2=1 / 8$ ) <br> Divide proper fractions by whole numbers [for example, $1 / 3 \div 2=6$ ) <br> Multiplying fractions by whole number | Problem solving |  |
|  | W1-Geometry | W2 - Fractions | W3 - Ratio | W4 - Ratio | W5 - Measure |  |  |
| Sp2a | Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. <br> Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons | Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. <br> 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. | Recognise when it is possible to use formulae for area and volume of shapes <br> Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres and cubic metres and extending to other units |  |  |
|  | W1 - Statistics | W2 - Number | W3 - Algebra | W4 - Measure | W5 - Number |  |  |
| Sp2b | Interpret and construct pie charts and line graphs and use these to solve problems <br> Calculate and interpret the mean as an average. | Round any whole number to a required degree of accuracy | Use simple formulae <br> Generate and describe linear number sequences <br> Express missing number problems algebraically | 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, | Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places |  |  |



