# Poulton Lancelyn 

## Maths

Long Term Plan
Y5
2022/23

|  | W1 - Number | W2 - Operations | W3 - Operation | W 4+5-Operation | W - Number |  | Week 7 - Factors and Multiples |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A1 | Read, write, order and compare numbers to at least 1000000 and determine the value of each digit <br> Count forwards or backwards in steps of powers of 10 for any given number up to 1000000 <br> Read, write, order and compare numbers with up to three decimal places | Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) <br> Add and subtract numbers mentally with increasingly large numbers eg 5-digit - 4-digit multiple of 10 | Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for twodigit numbers <br> Multiply and divide whole numbers and those involving decimals by 10,100 and 1000 <br> Multiply and divide numbers mentally drawing upon known facts | Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context <br> Multiply and divide whole numbers and those involving decimals by 10,100 and 1000 <br> Multiply and divide numbers mentally drawing upon known facts | Round any number up to 1000000 to the nearest 10, $100,1000,10000$ and 100000 <br> Round decimals with two decimal places to the nearest whole number and to one decimal place |  | Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers <br> Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers <br> Establish whether a number up to 100 is prime and recall prime numbers up to 19 <br> Recognise and use square numbers and cube numbers, and the notation for squared and cubed |
|  | W1-Operation | W2 - Fractions | W3 - Fractions | W4 - Number | W5 - Number | W6 - Statistics | W7-Geometry |
| A2 | Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) <br> Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy <br> Solve problems involving number up to three decimal places <br> Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers <br> Divide numbers up to 4 digits by a onedigit number using the formal written method of short division and interpret remainders appropriately for the context | Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths <br> Compare and order fractions whose denominators are all multiples of the same number (less than one) | Add and subtract fractions with the same denominator and denominators that are multiples of the same number | Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero | Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. | Solve comparison, sum and difference problems using information presented in a line graph (and bar charts) | Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. |
|  | W1 - Fractions | W2 - Fractions | W3 - Measure | W4-Operations | W5 - Fractions | W6-Fractions |  |
| Sp1 | Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number | Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams | Solve problems involving converting between units of time | Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. | Recognise the per cent symbol (\%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction | Solve problems which require knowing percentage and decimal equivalents of (numbers)and those fractions with a |  |


|  | Compare and order fractions greater than 1 <br> Add and subtract mixed number fractions |  | Complete, read and interpret information in tables, including timetables. | Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign | with denominator 100, and as a decimal | denominator of a multiple of 10 or 25 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | W1-Geometry | W2 - Fractions | W3 - Geometry | W4-Statistics | W5 - Fractions |  |  |
| Sp2 | Identify 3-D shapes, including cubes and other cuboids, from 2-D representations <br> Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. | Read and write decimal numbers as fractions <br> Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents <br> Add and subtract decimals | Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles <br> Draw given angles, and measure them in degrees ( ${ }^{\circ}$ ) Identify: <br> - angles at a point and one whole turn (total $360^{\circ}$ ) <br> - angles at a point on a straight line and $1 / 2$ a turn (total $180^{\circ}$ ) <br> other multiples of $90^{\circ}$ | Solve comparison, sum and difference problems using information presented in a line graph (and bar charts) | Add and subtract fractions with the same denominator and denominators that are multiples of the same number <br> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number |  |  |
|  | W1 - Measure | W2 - Measure | W3-Measure | W4-Geometry | W5 - Geometry | W6-Fractions |  |
| Su1 | Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) <br> Solve problem converting between units <br> Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. | Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres <br> Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres ( m 2 ) and estimate the area of irregular shapes | Estimate volume [for example, using 1 cm 3 blocks to build cuboids (including cubes)] and capacity [for example, using water] | Quadrilaterals and triangles <br> Use the properties of rectangles to deduce related facts and find missing lengths and angles | Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. | Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number <br> Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams |  |
|  | W1-Geometry | W2 - Operations | W3 - Measure | W4-Measure | W5 - Number | W6 - Number | 7-revision |
| Su 2 | Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles <br> Draw given angles, and measure them in degrees ( ${ }^{\circ}$ ) <br> Identify: <br> - angles at a point and one whole turn (total $360^{\circ}$ ) | Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. <br> Solve problems involving addition, subtraction, multiplication and division and a combination of these, | Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) Solve problem converting between units | Complete, read and interpret information in tables, including timetables. | Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero <br> Round any number up to 1 000000 to the nearest 10 , $100,1000,10000$ and 100 000 | Round any number up to 1000000 to the nearest $10,100,1000$, 10000 and 100000 <br> Round decimals with two decimal places to the nearest whole number and to one decimal place | Revision |



