



Poulton Lancelyn

Maths

Long Term Plan

Y5

2021/22

	W1	W2 - Number	W3 - Operations	W4 - Operation	W5 and 6 - Operation	W7 - Number	Week 8 - Factors and Multiples
A1	2 day week – times table assessment	<p>Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</p> <p>Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</p> <p>Read, write, order and compare numbers with up to three decimal places</p>	<p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p> <p>Add and subtract numbers mentally with increasingly large numbers eg 5-digit – 4-digit multiple of 10</p>	<p>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</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</p> <p>Multiply and divide numbers mentally drawing upon known facts</p>	<p>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</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</p> <p>Multiply and divide numbers mentally drawing upon known facts</p>	<p>Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000</p> <p>Round decimals with two decimal places to the nearest whole number and to one decimal place</p>	<p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</p> <p>Establish whether a number up to 100 is prime and recall prime numbers up to 19</p> <p>Recognise and use square numbers and cube numbers, and the notation for squared and cubed</p>
	W1 - Operation	W2 - Fractions	W3 - Fractions	W4 - Number	W5 - Number	W6 – Statistics	W7 - Geometry
A2	<p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p> <p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</p> <p>Solve problems involving number up to three decimal places</p> <p>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</p> <p>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</p>	<p>Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</p> <p>Compare and order fractions whose denominators are all multiples of the same number (less than one)</p>	<p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number</p>	<p>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p>	<p>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</p>	<p>Solve comparison, sum and difference problems using information presented in a line graph (and bar charts)</p>	<p>Identify, describe and represent the position of a shape following a <u>reflection</u> or <u>translation</u>, using the appropriate language, and know that the shape has not changed.</p>
	W1 - Fractions	W2 - Fractions	W3 - Measure	W4 - Operations	W5 - Fractions	W6 - Fractions	W7 - Geometry
Sp1	<p>Recognise mixed numbers and improper fractions and convert from one form to the other and write</p>	<p>Multiply proper fractions and mixed numbers by whole numbers, supported</p>	<p>Solve problems involving converting between units of time</p>	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations</p>	<p>Recognise the per cent symbol (%) and understand that per cent relates to</p>	<p>Solve problems which require knowing percentage and</p>	<p>Identify 3-D shapes, including cubes and other cuboids, from 2-D representations</p>

	<p>mathematical statements > 1 as a mixed number</p> <p>Compare and order fractions greater than 1</p> <p>Add and subtract mixed number fractions</p>	<p>by materials and diagrams</p>	<p>Complete, read and interpret information in tables, including timetables.</p>	<p>and methods to use and why.</p> <p>Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p>	<p>'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal</p>	<p>decimal equivalents of (numbers) and those fractions with a denominator of a multiple of 10 or 25</p>	<p>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p>	
	W1 - Fractions	W2 - Geometry	W3 - Statistics	W4 - Fractions	W5 - Measure	W6 - Measure		
Sp2	<p>Read and write decimal numbers as fractions</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</p> <p>Add and subtract decimals</p>	<p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <p>Draw given angles, and measure them in degrees ($^{\circ}$)</p> <p>Identify:</p> <ul style="list-style-type: none"> angles at a point and one whole turn (total 360°) angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) <p>other multiples of 90°</p>	<p>Solve comparison, sum and difference problems using information presented in a line graph (and bar charts)</p>	<p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number</p> <p>Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number</p>	<p>Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>Solve problem converting between units</p> <p>Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.</p>	<p>Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes</p>		
	W1 - Measure	W2 - Geometry	W3 - Geometry	W4 - Fractions	W5 - Geometry			
Su1	<p>Estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water]</p>	<p>Quadrilaterals and triangles</p> <p>Use the properties of rectangles to deduce related facts and find missing lengths and angles</p>	<p>Identify, describe and represent the position of a shape following a reflection or <u>translation</u>, using the appropriate language, and know that the shape has not changed.</p>	<p>Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number</p> <p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</p>	<p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <p>Draw given angles, and measure them in degrees ($^{\circ}$)</p> <p>Identify:</p> <ul style="list-style-type: none"> angles at a point and one whole turn (total 360°) 			

					<ul style="list-style-type: none"> angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) other multiples of 90°			
	W1 - Operations	W2 - Measure	W3 - Measure	W4 - Number	W5 - Number	W6 - revision		
Su 2	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p> <p>Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</p>	<p>Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>Solve problem converting between units</p> <p>Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints</p>	<p>Complete, read and interpret information in tables, including timetables.</p>	<p>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p> <p>Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000</p> <p>Round decimals with two decimal places to the nearest whole number and to one decimal place</p>	<p>Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000</p> <p>Round decimals with two decimal places to the nearest whole number and to one decimal place</p>	Revision		