Poulton Lancelyn

Maths

Long Term Plan

Y6

2023/24

	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 10 000 000 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 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 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 Use written division methods in cases where the answer has up to two decimal places	Identify common factors, common multiples and prime numbers Use their knowledge of the order of operations to carry out calculations involving the four operations
Ready to Progress	6NPV–1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000). 6NPV–2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning. 6NPV–3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.		6AS/MD–1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). 6AS/MD–2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding. 6AS/MD–3 Solve problems involving ratio relationships. 6AS/MD–4 Solve problems with 2 unknowns. ** For year 6, MD ready-to progress criteria are combined with AS ready-to-progress criteria*			

	W1 - Operation	W2 - Geometry	W3 and 4 - Fractions	W5 - Fractions	W6 – Geometry	W7 - Statistics
A2	Calc Solve problems involving addition, subtraction,	Draw 2-D shapes using given dimensions and angles 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 Compare and order fractions, including fractions > 1 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
Ready to Progress	6AS/MD–1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). 6AS/MD–2 Use a given additive or multiplicative calculation to derive or	6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	6F–1 Recognise when fractions can be simplified, and use common factors to simplify fractions. 6F–2 Express fractions in a common denomination and use this to compare fractions that are similar in value. 6F–3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.		6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	

	complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.						
	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 Calculate the area of parallelograms and triangles	Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4×½=1/8) Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 6) Multiplying fractions by whole number	Problem solving	
Ready to Progress	6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	6NPV–1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000). 6NPV–2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning. 6NPV–3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.	6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.		6F–1 Recognise when fractions can be simplified, and use common factors to simplify fractions. 6F–2 Express fractions in a common denomination and use this to compare fractions that are similar in value. 6F–3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.	6AS/MD–1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). 6AS/MD–2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding. 6AS/MD–3 Solve problems involving ratio relationships. 6AS/MD–4 Solve problems with 2 unknowns. ** For year 6, MD ready-to progress criteria are combined with AS ready-to-progress criteria*	
	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	Recall and use equivalences between simple fractions, decimals and percentages,	Solve problems involving similar shapes where the	Solve problems involving unequal sharing and grouping	Recognise when it is possible to use formulae for area and volume of shapes		

	are vertically opposite, and find missing angles. Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	including in different contexts. Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison	scale factor is known or can be found	using knowledge of fractions and multiples.	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres and cubic metres and extending to other units		
Ready to Progress	6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	6F–1 Recognise when fractions can be simplified, and use common factors to simplify fractions. 6F–2 Express fractions in a common denomination and use this to compare fractions that are similar in value. 6F–3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.					
	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 Calculate and interpret the mean as an average.	Round any whole number to a required degree of accuracy	Use simple formulae Generate and describe linear number sequences Express missing number problems algebraically Find pairs of numbers that satisfy an equation with two unknowns Enumerate possibilities of combinations of two variables	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 three decimal places Solve problems involving the conversion of units of measure, using decimal notation up to three decimal places where appropriate Convert between miles and kilometres	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		
Ready to Progress		6NPV–1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1			6NPV–1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size		

		tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000). 6NPV–2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning. 6NPV–3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.			(multiply and divide by 10, 100 and 1,000). 6NPV–2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning. 6NPV–3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.		
Su 1	W1 - Revision	W2 - Revision	W3 - Revision	TESTING			
	Number Operation	Measure Geometry Ratio	Fractions Statistics Algebra	SATs Testing			
Ready to Progress	All 6NPV1-3 All AS/MD 1-4	6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	6F–1 Recognise when fractions can be simplified, and use common factors to simplify fractions. 6F–2 Express fractions in a common denomination and use this to compare fractions that are similar in value. 6F–3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.				
Su2	£5 Challenge						