The Piggott School: Charvil Primary

'Go and do Likewise' Luke 10:25, -37 The Parable of the Good Samaritan
We live with love and compassion, seeking help in times of need

Curriculum Map: Maths Year 4

Long Term Plan

Autumn	Spring	Summer
Investigating Number Systems Pattern Sniffing Solving Calculation Problems Generalising Arithmetic Exploring Shape	Reasoning with Measures Discovering Equivalence Reasoning and Fractions Solving Number Problems Investigating Statistics	Visualising Shape Exploring Change Proportional Reasoning Describing Position Measuring and Estimating

Content Declarative Knowledge 'I know' and Skills Procedural Knowledge 'I know how to'

Number				Measurement	Geometry		Statistics	Ratio & Proportion	Algebra
Number and Place Value	Addition and Subtraction	Multiplication and Division	Fractions, Decimals & Percentages		Properties of Shapes	Position & Direction			
count in multiples of 6, 7, 9, 25 and 1000	add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	recall multiplication and division facts for multiplication tables up to 12 × 12	recognise and show, using diagrams, families of common equivalent fractions	Convert between different units of measure [for example, kilometre to metre; hour to minute]	compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	describe positions on a 2-D grid as coordinates in the first quadrant	interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs		

find 1000 more or less than a given numberr	estimate and use inverse operations to check answers to a calculation	use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	identify acute and obtuse angles and compare and order angles up to two right angles by size	describe movements between positions as translations of a given unit to the left/right and up/down	solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs		
count backwards through zero to include negative numbers	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	recognise and use factor pairs and commutativity in mental calculations	solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	find the area of rectilinear shapes by counting squares	identify lines of symmetry in 2-D shapes presented in different orientations	plot specified points and draw sides to complete a given polygon			
recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)		multiply two-digit and three-digit numbers by a one-digit number using formal written layout	add and subtract fractions with the same denominator	estimate, compare and calculate different measures, including money in pounds and pence	complete a simple symmetric figure with respect to a specific line of symmetry				

order and compare numbers beyond 1000		solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	recognise and write decimal equivalents of any number of tenths or hundredths	read, write and convert time between analogue and digital 12- and 24-hour clocks					
identify, represent and estimate numbers using different representations			recognise and write decimal equivalents to $^1/_4$, $^1/_2$, $^3/_4$	solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days					
round any number to the nearest 10, 100 or 1000			find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths						

solve number and practical problems that involve all of the above and with increasingly large positive numbers			round decimals with one decimal place to the nearest whole number						
read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value			compare numbers with the same number of decimal places up to two decimal places						
			solve simple measure and money problems involving fractions and decimals to two decimal places						

Vocabulary

Number and place value	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions and decimals	Data/statistics
Tenths, hundredths Decimal (places) Round (to nearest) Thousand more/less than Negative integers Count through zero Roman numerals (I to C)	Multiplication facts (up to 12x12) Division facts Inverse Derive	Convert	Coordinates Translation Quadrant X-axis Y-axis Perimeter and area	Quadrilaterals Triangles Right angle, acute and obtuse angles	Equivalent decimals and fractions	Continuous data Line graph