Year 4 Primary Curriculum Programme of Study for Mathematics (Draft)

NUMBER: **Pupils should be taught to**

Number, place value and rounding			
	read and write numbers to at least 10,000	recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens, and ones)	
	order and compare numbers up to 10,000	count in multiples of 2, 3, 4, 5, 6, 7, 8, 9, 10, 25, 50, 100 and 1000 from any given number, and 10 or 100 more or less than a given number	
	round any number to the nearest 10 or 100	read and write negative numbers; order, count forwards and backwards with positive and negative whole numbers through zero	
	read Roman numerals to 100 and understand how Hindu-Arabic numerals included the concept of zero and place value	solve word problems that involve negative and increasingly large positive numbers	
Addition and subtraction			
	add and subtract numbers using formal written methods with up to 4 digits	accurately add and subtract numbers mentally including two 2-digit numbers	
	estimate, within a range, the answer to a calculation and use inverse operations to check answers		
Multiplication and division			
	recall multiplication and division facts for multiplication tables up to 12 x 12	mentally perform multiplication and division calculations quickly and accurately, including multiplying by 0 and dividing by 1	
	multiply or divide 2-digit and 3-digit numbers by a 1-digit number using formal written methods; interpret remainders appropriately as integers	recognise and use factor pairs within 144	
	solve word problems involving the four operations		
Fractions			
	identify and name equivalent fractions of a given fraction with denominator not greater than 12	write the equivalent fraction of a fraction given the denominator or the numerator	
	reduce fractions to their simplest form	add and subtract two fractions with common denominators within one whole	
Decimals			
	compare numbers with the same number of decimal places up to 2 decimal places	find the effect of dividing a 2-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths	
	recognise and write decimal equivalents to ¼, ½, ¾ and any number of tenths and hundredths		

GEOMETRY AND MEASURES: **Pupils should be taught to**

Properties of shapes			
	identify lines of symmetry in 2-D shapes presented in different orientations	compare and classify geometric shapes, including squares, rectangles and triangles based on their properties and sizes	
	identify acute and obtuse angles and compare the size of different angles		
Position, direction, motion			
	describe positions, and movements between positions, on a 2-D grid, and as coordinates in the first quadrant	plot specified points and draw sides to complete a given polygon	
	recognise a symmetric figure and complete a symmetric figure with respect to a specific line of symmetry		
Measures			
	convert between different units of measure, for example: kilometre to metre; metre to centimetre; centimetre to millimetre; kilogram to gram; litre to millilitre; hour to minute; minute to second; year to month; week to day	measure and calculate the perimeter of a rectilinear figure, where each side is labelled in centimetres and metres	
	find the area of squares and rectangles and related composite shapes	read and convert time between analogue and digital 12- and 24- hour clocks	
	estimate, compare and calculate different measures, including money in pounds and pence		
Data			
	read, interpret and solve problems using information in bar graphs, including reading scales on the axes		