Year 5 Maths Curriculum Overview Map							
Number – Number and Place Value	Number – Addition and subtraction	Number – Multiplication and division	Number – fractions (including decimals & %)	Measurement	Geometry – Properties of shape	Geometry – Position and direction	Statistics

Pupils should be taught to:
 	
▪ read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
 	
▪ count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
 	
▪ interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
 	
▪ round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
 	
▪ solve number problems and practical problems that involve all of the above
 	
▪ read Roman numerals to 1000 (M) and recognise years written in
	Pupils should be taught to:
	
	▪ add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
	
	▪ add and subtract numbers mentally with increasingly large numbers
	
	▪ use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
	
	▪ solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		Pupils should be taught to:
		
		▪ identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
		
		▪ know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
		
		▪ establish whether a number up to 100 is prime and recall prime numbers up to 19
		
		▪ 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
		
		▪ 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
			Pupils should be taught to:
			
			▪ compare and order fractions whose denominators are all multiples of the same number
			
			▪ identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
			
			▪ recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]
			
			▪ add and subtract fractions with the same denominator and denominators that are multiples of the same number
			
			▪ multiply proper fractions and mixed numbers by whole numbers, supported by materials and
				Pupils should be taught to:
				
				▪ convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
				
				▪ understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
				
				▪ measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
				
				▪ 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
				
				▪ estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water]
				
				▪ solve problems involving converting between units of time
				
				▪ use all four operations to solve problems involving measure [for example, length,
					Pupils should be taught to:
					
					▪ identify 3-D shapes, including cubes and other cuboids, from 2-D representations
					
					▪ know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
					
					▪ draw given angles, and measure them in degrees (°)
					
					▪ identify:
					  ▪ 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°)
					  ▪ other multiples of 90°
					
					▪ use the properties of rectangles to deduce related facts and find missing lengths and angles
					
					▪ distinguish between regular and irregular polygons based on
						Pupils should be taught to:
						
						▪ 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.
							Pupils should be taught to:
							
							▪ solve comparison, sum and difference problems using information presented in a line graph
							
							▪ complete, read and interpret information in tables, including timetables.

Roman numerals.		▪ multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 ▪ recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}) ▪ solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes ▪ solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign ▪ solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.	diagrams ▪ read and write decimal numbers as fractions [for example, 0.71 = $\frac{71}{100}$] ▪ recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents ▪ round decimals with two decimal places to the nearest whole number and to one decimal place ▪ read, write, order and compare numbers with up to three decimal places ▪ solve problems involving number up to three decimal places ▪ recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal ▪ solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.	mass, volume, money] using decimal notation, including scaling.	reasoning about equal sides and angles.		