Bearwood Primary School
Year 5 – End of Year Expectations
MATHS

NUMBER	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 through zero
	Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100000
	Solve number problems and practical problems that involve all of above
	Read Roman numerals to 1000 (M); recognise years written in Roman numerals
CALCULATION	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
	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
	Solve problems involving multiplication and division where larger numbers are used by decomposing them into their factors
	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 2-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
	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 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
STATISTICS	Solve comparison, sum and difference problems using information presented in a line graph
	Complete, read and interpret information in tables, including timetables

FRACTIONS, DECIMALS and PERCENTAGES	Compare and order fractions whose denominators are all multiples of 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 (e.g. 2/5 + 4/5 = 6/5 = 11/5)
	Add and subtract fractions with the same denominator and multiples of the same number
	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
	Read and write decimal numbers as fractions (e.g. 0.71 = 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 ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25
GEOMETRY	Identify 3-D shapes, including cubes and other cuboids, from 2-D representations
	Know angles are measured in degrees: estimate and compare acute, obtuse, reflex
	Draw given angles, and measure them in degrees (o)
	Identify angles at a point and one whole turn (total 360o); on a straight line and ½ a turn (total 180o); at a point; other multiples of 90o
	Use the properties of rectangles to deduce related facts & find missing lengths & angles
	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
	Identify, describe & represent the position of a shape following a reflection or translation, using appropriate language, and know that the shape has not changed
MEASUREMENT	Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
	Understand and use equivalences between metric units and common imperial units such as inches, pounds and pints
	Measure and calculate the perimeter of composite rectilinear shapes in cm & metres
	Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm2) and square metres (m2)
	Estimate the area of irregular shapes
	Estimate volume (e.g. using 1cm cubes) and capacity (e.g. using water)
	Solve problems involving converting between units of time
	Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling
U / A	Present information and results in a clear and organised way
	Search for a solution by trying out ideas of their own