MATHS

Year 5 Standard

Key Performance Indicators					Performance Standard
Number					
Number and Place Value	**Addition and Subtraction**	**Multiplication and Division**	**Fractions including decimals and percentages**	**Ratio and Proportion**	
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 Roman numerals.	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. 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. 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.	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 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 4h. 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.	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison. Solve problems involving similar shapes where the scale factor is known or can be found. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.	By the end of Y5, a child should be fluent in formal written methods for addition and subtraction. Using a developing knowledge of formal methods of multiplication and division, a child should be able to solve problems including properties of numbers and arithmetic. A child can: ❖ make connections between fractions, decimals and percentages; ❖ read, spell and pronounce mathematical vocabulary correctly.

Number of KPI's achieved:	Y5 level:	Y5 score:	Number of KPI's achieved:	Y5 level:	Y5 score:	Number of KPI's achieved:	Y5 level:	Y5 score:	Number of KPI's achieved:	Y5 level:	Y5 score:
1 - 11	5d	37	12 – 23	5c	38	24 – 35	5b	39	36	5a	40