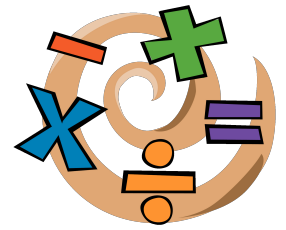




Mathematics

Number & Calculations



Name: _____

By the end of Year 5...

To Know and Use Numbers		<ul style="list-style-type: none"> *I can read and write numbers to at least 1,000,000. *I can count forwards and backwards in steps of powers of 10 for any number up to 1,000,000. *I can count forward and backwards with positive and negative whole numbers, including across zero.
		<ul style="list-style-type: none"> *I can determine the value of each digit in any number up to at least 5 digits. *I can order and compare numbers up to 1,000,000. *I can read Roman numerals to 1000 (M). *I can round any number up to 1,000,000 to the nearest 10,100, 1000, 10,000 and 100,000.
		<ul style="list-style-type: none"> *I can use numbers in context, including interpreting negative numbers and measurements. *I can solve a wide variety of number and practical problems using all four operations.
To Add and Subtract		<ul style="list-style-type: none"> *I can add and subtract negative integers. *I can add and subtract whole numbers with more than four digits. *I can add and subtract numbers mentally with increasingly large numbers.
		<ul style="list-style-type: none"> *I can solve two-step problems in context involving all operations. *I use rounding to check answers to calculations and determine level of accuracy.
To Multiply and Divide		<ul style="list-style-type: none"> *I can identify multiples and factors, including common factors of two numbers. *I know and use the vocabulary: prime numbers, prime factors and composite numbers and use them to construct equivalence statements. ($3 \times 270 = 3 \times 3 \times 9 \times 10 = 9^2 \times 10$) *I can recall prime numbers up to 19 and can establish whether any number up to 100 is a prime number. *I can recognise and use square numbers, cube numbers, including the notation. ($3^2, 5^3$).
		<ul style="list-style-type: none"> *I can multiply and divide mentally, drawing upon known facts. *I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
		<ul style="list-style-type: none"> *I can multiply multi-digit numbers up to four digits by a one/two-digit number using formal methods. *I can divide numbers up to four digits by a one-digit whole number using formal methods. *I can interpret remainders as whole number remainders, fractions or by rounding, as appropriate.
		<ul style="list-style-type: none"> *I understand the inverse relationship between multiplication and division and use it to check the answers to a calculation.
		<ul style="list-style-type: none"> *I understand the equals sign as 'the same as' and use it to express distributivity: $a(b+c)=ab+ac$ *I can solve problems involving multiplication and division, using my knowledge of factors and multiples, squares and cubes. *I can solve problems involving a combination of addition, subtraction, multiplication and division. *I can solve problems that include scaling by simple fractions and problems involving simple rates.
To Use Fractions		<ul style="list-style-type: none"> *I can read, write, order and compare numbers with up to 3dp. *I can round decimals with 2dp to the nearest whole number and to 1dp. *I can compare and order fractions whose denominators are all multiples of the same number.
		<ul style="list-style-type: none"> *I can identify, name and write equivalent fractions of a given fraction. *I can read and write decimal numbers as fractions. *I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. *I can recall and use equivalences between simple fractions, decimals and percentages, in context.
		<ul style="list-style-type: none"> *I can add and subtract decimals. (mix of whole numbers and decimals; decimals with different number of decimal points; compliments to 1 e.g. $0.83+0.17=1$) *I can add and subtract fractions with the same denominator and denominators that are multiples of the same number. e.g. $\frac{1}{3} + \frac{2}{6} = \frac{2}{3}$ *I can convert mixed numbers and improper fractions from one form to the other. *I can multiply proper fractions and mixed numbers by whole numbers.
		<ul style="list-style-type: none"> *I can recognise the percent symbol (%) and understand its meaning. *I can write percentages as a fraction with denominator 100 and as a decimal. E.g. $\frac{30}{100} = 30\% = 0.30$.
		<ul style="list-style-type: none"> *I can solve problems involving numbers up to 3dp. *I can 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.