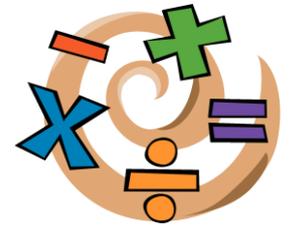




# Mathematics

## Number & Calculations



Name: \_\_\_\_\_

*By the end of Year 6...*

To Know and Use Numbers		I can <b>read and write</b> numbers up to <b>10,000,000</b> .
		*I can use <b>negative numbers</b> and calculate <b>intervals across zero</b> .
		I can determine the <b>value of each digit</b> in any number.
		I can <b>order and compare</b> numbers up to <b>10,000,000</b> , including <b>decimals</b> .
		*I can <b>round</b> any number to the required degree of accuracy.
To Add and Subtract		I can <b>add and subtract negative integers</b> in context.
		I can <b>add and subtract whole numbers</b> with <b>more than five digits</b> .
		I can <b>add and subtract numbers mentally</b> with increasingly large numbers.
		*I can solve <b>addition and subtraction multi-step problems</b> , deciding which operations and methods to use and why.
		I use <b>rounding to check answers to calculations</b> and determine, in the context of a problem, levels of accuracy.
To Multiply and Divide		I can identify <b>common factors, common multiples</b> and <b>prime numbers</b> .
		I can perform <b>mental calculations</b> , including with mixed operations and large numbers.
		*I can <b>multiply numbers up to 4 digits by a two digit whole number</b> , using formal methods.
		*I can <b>divide numbers up to 4 digits by a two-digit whole number</b> , using formal methods
		*I can <b>interpret remainders as whole number remainders, fractions, or by rounding</b> (and reading the question carefully to see which one to use).
		I can use my knowledge of the order of operations ( <b>BIDMAS</b> ) to calculate with all four operations. E.g. $2+1 \times 3 = 5$ whereas $(2+1) \times 3 = 9$ .
Algebra		<u>Ration and Proportion</u> I can <b>use the notation a : b</b> to record my work.
		I can solve problems <b>comparing quantities and sizes through my understanding of ratio</b> .
		I can solve problems involving <b>the relative sizes of two quantities where missing values can be found by using multiplication and division facts</b> .
		I can solve problems involving <b>similar shapes where the scale factor is known or can be found</b> .
		*I can solve problems involving <b>unequal sharing and grouping using knowledge of fractions and multiples</b> .
To Use Fractions, Decimals and Percentages.		I can <b>compare and order fractions</b> , including fractions $> 1$ .
		I can <b>identify the value of each digit</b> in numbers given to <b>3dp</b> .
		*I can <b>add and subtract fractions with different denominators and mixed numbers</b> , using the concept of equivalent fractions and the lowest common multiple (LCM).
		I can <b>multiply simple pairs of proper fractions</b> , writing the answer in its simplest form.
		I can <b>divide proper fractions by whole numbers</b> .
		*I can <b>multiply and divide numbers by 10, 100 and 1000</b> giving answers up to three decimal places.
		I can <b>multiply decimals with up to 2dp by one and 2 digit whole numbers</b> in the context of money and measures.
		I can <b>divide decimals with up to 2dp by one and 2 digit whole numbers</b> in the context of money and measures.
		I can <b>reduce fractions to their simplest form</b> by cancelling common factors (using the GCF).
		I can <b>calculate 1%, 5% and 10% of a number</b> and combine these to calculate percentages of amounts.
		I can apply my knowledge of <b>powers of 10</b> to solve problems including fractions, decimals and percentages.
		*I can <b>associate a fraction with division and calculate decimal fraction equivalents</b> . e.g. $\frac{3}{8} = 3 \div 8 = 0.375$
	*I can <b>convert between fractions, decimals and percentages</b> using a range of strategies.	