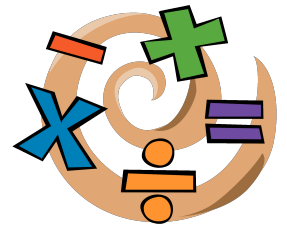




Mathematics

Number & Calculations



Name: _____

By the end of Year 6...

To Know and Use Numbers			<ul style="list-style-type: none"> *I can read and write numbers up to 10,000,000. *I can use negative numbers in context and calculate intervals across zero.
			<ul style="list-style-type: none"> *I can determine the value of each digit in any number. *I can order and compare numbers up to 10,000,000. *I can round any number to a required degree of accuracy. *I understand the Roman numeral system, including recognising years written in Roman numerals.
			<ul style="list-style-type: none"> *I can solve a wide variety of number and practical problems using all four operations. *I can use negative numbers in context and calculate intervals across zero. *I review my approaches to problem solving and make improvements for next time.
To Add and Subtract			<ul style="list-style-type: none"> *I can add and subtract negative integers in context. *I can add and subtract whole numbers with more than five digits. *I can add and subtract numbers mentally with increasingly large numbers.
			<ul style="list-style-type: none"> *I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. *I use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
To Multiply and Divide			<ul style="list-style-type: none"> *I can identify common factors, common multiples and prime numbers. *I can perform mental calculations, including with mixed operations and large numbers.
			<ul style="list-style-type: none"> *I can multiply multi-digit numbers up to 4 digits by a two digit whole number using formal methods. *I can divide numbers up to 4 digits by a two-digit whole number using formal methods. *I can interpret remainders as whole number remainders, fractions, or by rounding as appropriate to the context.
			<ul style="list-style-type: none"> *I can use my knowledge of the order of operations to calculate with all four operations. E.g. $2+1 \times 3 = 5$ whereas $(2+1) \times 3 = 9$.
			<ul style="list-style-type: none"> *I can solve multi-step problems, using all operations, in contexts. *I use estimation to check answers to calculations and problems and determine an appropriate degree of accuracy.
Algebra			<p><u>Ration and Proportion</u></p> <ul style="list-style-type: none"> *I can use the notation $a : b$ to record my work. *I can solve problems comparing quantities and sizes through my understanding of ratio. *I can solve problems involving the relative sizes of two quantities where missing values can be found by using multiplication and division facts. *I can solve problems involving the calculation of percentages and the use of percentages for comparison. *I can solve problems involving similar shapes where the scale factor is known or can be found. *I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
To Use Fractions			<ul style="list-style-type: none"> *I can compare and order fractions, including fractions > 1. *I can identify the value of each digit in numbers given to 3dp.
			<ul style="list-style-type: none"> *I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. *I can multiply simple pairs of proper fractions, writing the answer in its simplest form. *I can divide proper fractions by whole numbers.
			<ul style="list-style-type: none"> *I can multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places. *I can multiply and divide numbers with up to 2dp by one and two digit whole numbers. *I can multiply decimals by whole numbers, including in the context of money and measures. *I am beginning to divide decimal numbers by a one digit whole number, in practical contexts.
			<ul style="list-style-type: none"> *I can reduce fractions to their simplest form by cancelling common factors. *I can reduce fractions to their simplest form by expressing fractions in the same denomination. *I can associate a fraction with division and calculate decimal fraction equivalents. e.g. $\frac{3}{8} = 3 \div 8 = 0.375$
			<ul style="list-style-type: none"> *I can solve problems that involve using my knowledge of the relationship between unit fractions and division. e.g. $\frac{1}{4}$ of a length = 36cm so the whole length is $36 \times 4 = 144$cm.

