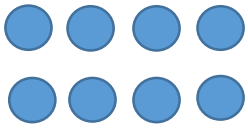
Addend	A number which is added to another number.
Addition	• When a set of numbers are added together. E.g. 5 + 3 or 6 + 2 + 4 • The answer is called the 'sum' or the 'total' and is shown by the 'equals' sign (=) • This may be two or more numbers. • The order of addition does not matter, e.g. 5 + 3 or 3 + 5 will give the same answer of 8. • The inverse (opposite) to addition is subtraction. E.g. 3 + 5 = 8 so 8 -5 = 3 or 8 - 3 = 5
Array	An ordered collection of counters in rows or columns, showing multiplication facts.  2 rows of 4 counters 2 x 4 = 8 4 columns of 2 counters 4 x 2 = 8
Associative	If a calculation is associative, then it doesn't matter how we group the numbers, the answer will remain the same. This is true for addition and multiplication. E.g. 7 + 5 + 8 = 20 can be solved in any order: (7 + 5) + 8 = 20 or 7 + (8 + 5) = 20 4 x 5 x 3 = 60 can be solved in any order: (4 x 5) x 3 = 60 or 4 x (3 x 5) = 60
Brackets ( )	Symbols used to group numbers in a calculation to show calculation within the brackets must be completed first. 2 x **(3 + 4)** = 2 x **7** = 14 Without the brackets this would be: 2 x 3 + 4 = 6 + 4 = 10
Cardinal numbers	A number that denotes a quantity (1, 2, 3, 23, 29) as opposed to an ordinal number which denotes a position (1st, 2nd 10th)
Column addition or subtraction	The formal layout to solve an addition or subtraction calculation 31 + 45 = 76 178 – 54 = 124 3 1 1 7 8 + 4 5 - 5 4 7 6 1 2 4 **See Calculations Policy for guidance on using this method.**

Commutative	When we add or multiply, we can swap the order of the digits and the answer will remain the same. E.g. 3 + 5 = 8 and 5 + 3 = 8 The answer is the same whichever order the numbers are. 2 x 5 = 10 and 5 x 2 = 10 Again, the answer is the same whichever order the numbers are. *Subtraction and division **are not** commutative 6 - 3 does not give the same answer as 3 - 6*
Common factor	A number which is a factor or two or more other numbers. E.g. 3 is a common factor of 9 (3 x 3 = 9) and 30 (3 x 10 = 30).
Common multiple	An integer (whole number) which is a multiple of a set of other whole numbers E.g. 12 is a common multiple of 2 (2 x 6 = 12), 3 (3 x 4 = 12), 4 (4 x 3 = 12) and 6 (6 x 2 = 12).
Complement	In addition, a number and its complement have a given total. E.g. When considering complements to 100, 65 has the complement 35 as 65 + 35 = 100.
Consecutive	Following in order. Consecutive numbers are adjacent when counting. E.g. 5, 6, 7, 8 are consecutive numbers.
Cube numbers	A number multiplied by itself 3 times gives a cube number. E.g. 3 x 3 x 3 = 27. This can also be written $3^3 = 27$
Decimal	A number that contains a decimal point and tenths, hundredths thousandths etc. are represented by the numbers to the right of the decimal point. E.g. 0.275 has 3 decimal places – 2 tenths, 7 hundredths and 5 thousandths.
Decimal fraction	When a decimal is represented as a fraction rather than using a decimal point. E.g. 0.275 equivalent to $^2/_{10}$, $^7/_{100}$ and $^5/^{1000}$ or $^{275}/_{1000}$
Denominator	When using fractions, the denominator is the number on the **bottom** of the fraction. E.g. In the fraction $^3/_4$, the denominator is 4.
Difference	In maths, the difference is the numerical difference between the quantities of one set of objects compared to another E.g. The difference between 5 and 9 is 4; 9 is 4 more than 5; 9 is 5 more than 4. Difference is one way of thinking about subtraction e.g. 9 – 5 = 4.

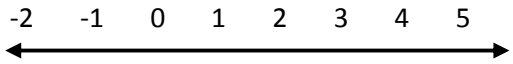
Digit	• Each symbol of the number system is a digit • The digits are: 0 1 2 3 4 5 6 7 8 9 • 38 is a 2-digit number; there are 3 digits in 2.95 • The position or place of a digit conveys its value. The value of the 3 in 38 is 30
Divide ÷	To split a number into equal groups or parts. It is 'fair sharing'. The ÷ or / symbol are used to show division.
Dividend	In division, the dividend is the number that is being divided. E.g. In the calculation 20 ÷ 5 = 4, 20 is the dividend.
Divisibility Divisible	The property of being divisible by a given number with no remainder. E.g. the number 12 is divisible by 6, 4, 3 and 2. 12 is not divisible by 5 as 12 ÷ 5 = 2 remainder 2.
Divisor	In division, the number by which another is being divided. In the calculation 35 ÷ 7 = 5, 7 is the divisor.
Double	To multiply by 2. Double 4 is 8 (2 x 4 = 8); double 11 is 22 (2 x 11 = 22) See also '**near double'**
Efficient methods	A means of a calculation which achieves the correct answer in as few steps as possible. This may be a mental or written method.
Equal **=**	The symbol = is read as 'equal to' or 'equals' and means 'is the same as'. E.g. In the calculation 7 - 2 = 4 + 1; 7 subtract 2 is 5 which is the same as 4 add 1 which also equals 5. Or 7 = 2 + 5
Equivalent fractions	Fractions with the same value as another. E.g. $^{2}/_{4}$ is equivalent to ½ : 
Estimate	To arrive at a rough or approximate answer by calculating using approximate terms e.g. 19 + 39 is approximately equal to 20 + 40 = 60. In measurement, an estimate might be made from previous experience.
Evaluate	To solve a calculation.
Even number	A whole number that is divisible by 2, leaving no remainder.

Exchange	Change a number or expression for another of equal value. (This was previously known as 'borrowing'.) E.g. in subtraction, we might exchange a 'ten' for 'ten ones' in order to carry out the calculation. **Please see Calculation Policy for further explanation.**
Factor	Factors are numbers we multiply together to get another number. In the calculation 3 x 2 = 6; 3 and 2 are factors of 6. A number can have many factors: 1, 2, 3, 4, 6 and 12 are all factors of 12.
Factorise	To find all the factors of a given number.
Facts	The word 'fact' is related to the four operations (+ - x and ÷) and the instant recall of knowledge about a number i.e. addition facts for 20 could be 11+9, 13 + 7 and so on. A multiplication fact for 20 could be 5 x 4 or 2 x 10.
Fluency	To be mathematically fluent there must be a solid understanding, be competent at using a method, a solid knowledge of facts and use all these to tackle problems appropriate to stage of development.
Formal written methods	Setting out calculations using the column form – see Column Method for Addition and Subtraction.
Four Operations	Addition, subtraction, multiplication and division.
Fraction	The result of dividing one whole number by another whole number (not 0). E.g. 1 ÷ 2 = ½
Hundred square	A 10 by 10 grid numbered 1 to 100 or 0 – 99.
Inequality ≠	Where a number or quantity is not equal to another.
Infinite	An infinite number sequence is one which continues forever. Numbers are infinite.
Integer	Any whole positive or negative number or 0. E.g. -4, 16, 0.
Inverse operation	The 'opposite' operation. + and – are inverse operations: 4 + 5 = 9 and 9 – 5 = 4. x and ÷ are inverse operations 3 x 2 = 6 and 6 ÷ 2 = 3

Long division	A column division method which divides by a 2 (or more) digit number e.g. 435 ÷ 15 2 5 1 5 3 7 5 3 0 0 7 5 7 5 0 **Please see Calculations Policy for further explanation.**
Long multiplication	A column multiplication method for multiplying by a 2 (or more) digit number: 37 x 3 = 881 3 7 x 2 3 1 4 1 (3 x 37) 7 4 0 (20 x 37) 8 8 1 **Please see Calculations Policy for further explanation.**
Mental calculation	Calculations that are solved mentally or supported by a few jottings.
Missing number problems	A type of problem where a missing number must be calculated. These are often used as an introduction to algebra. E.g. 7 = ☐ - 9
Mixed fraction	A whole number and a fraction e.g. $1\ ^{3}/_{4}$. Also known as a mixed number.
Mixed number	See mixed fraction above.
Multiple	We get a multiple of a number when we multiply it by another number. E.g. 8, 12 and 16 are multiples of 4
Multiplication **x**	Denoted by the sign 'x'. Repeated addition: 3 + 3 + 3 + 3 = 12 which is the same as 4 'lots of' 3 = 12 so 4 x 3 = 12 We can multiply by whole number, fractions and decimals.
Multiply	To carry out the process of multiplication
Near doubles	A 'near double' is one away from a double. E.g. 27 is a near-double of 13 and of 14. (Spotting near doubles is a good mental strategy e.g. 13 + 14 = double 13 add one more.)
Negative numbers	A number less than zero e.g. -2 Commonly known as 'minus 2'. **-5 -4 -3 -2 -1** 0 1 2 3 4 5

<table>
<tr><td>Number bond</td><td>A pair of numbers with a particular total e.g. all the pairs of numbers that add together to make ten are known as the number bonds to 10 (1 + 9; 2 + 8; 3 + 7; 4 + 6; 5 + 5; 6 + 4; 7 + 3; 8 + 2; (+ 1; 10 + 0) or number bonds to 20 (1 + 19; 2 + 18; 3 + 17 and so on)

These number facts can be transferred to larger numbers e.g. if we know that 3 + 7 = 10, we know that 30 + 70 = 100.</td></tr>
<tr><td>Number line</td><td>A line where numbers are represented by points upon it.

  </td></tr>
<tr><td>Number sentence</td><td>Any mathematical sentence involving numbers

E.g. 6 + 3 = 9 is a number sentence; 3 < 8 is a number sentence.</td></tr>
<tr><td>Numeral</td><td>A symbol used to denote a number. E.g. Roman numerals are I V X L C D and M.</td></tr>
<tr><td>Numerator</td><td>The top part of a fraction. In the fraction ¾ 3 is the numerator.</td></tr>
<tr><td>Odd number</td><td>A number that is not divisible by 2 – a remainder of 1 will always be left.

E.g. 1, 3, 5, 7, 9</td></tr>
<tr><td>Ordinal number</td><td>A word that describes a position within an ordered set

E.g. first (1st), second (2nd), third (3rd), fourth (4th)….. fifteenth, sixteenth etc.</td></tr>
<tr><td>Partition</td><td>To partition a number means to separate it into parts.

E.g. to partition 38 we could get 30 and 8 or 19 and 19. Every number can be partitioned in many different ways.</td></tr>
<tr><td>Percentage %</td><td>An amount shown as a part of 100. The symbol is %.

E.g. 1% means 1 out of 100. 45% means 45 out of 100.</td></tr>
<tr><td>Place value</td><td>The value of a digit that relates to its position or number

E.g. in the number 1483 the values of the 1 is 1000; the 4 is 400; the 8 is 80 and the 3 is 3 ones.

A place value chart:

<table>
<tr><th>Thousands</th><th>Hundreds</th><th>Tens</th><th>Ones</th></tr>
<tr><td>1</td><td>4</td><td>8</td><td>3</td></tr>
<tr><td>1000</td><td>400</td><td>80</td><td>3</td></tr>
</table>
</td></tr>
<tr><td>Plus +</td><td>A name for the symbol + (addition)</td></tr>
</table>

Positive number	A number greater than zero (0)
Prime factor	The factors of a number that are also prime numbers. E.g. the factors of 12 are 1, 2, 3, 4, 6 and 12. The prime factors are 2 and 3.
Prime Number	A whole number greater than 1 that has exactly two factors, itself and 1. E.g. 2 (factors are 1 and 2); 3 (factors are 1 and 3); 13 (factors are 1 and 13). One (1) is not a prime number because it only has one factor (1).
Product	The result of multiplying one number by another number. The product of 3 and 4 is 12 (3 x 4 = 12)
Proper fraction	A fraction where the denominator is larger than the numerator E.g. ½ is a proper fraction because 2 is larger than 1, whereas $^3/_2$ is an improper fraction because the numerator is larger than the denominator.
Quotient	The answer from a division calculation e.g. 35 ÷ 7 = 5 so 5 is the quotient.
Remainder	When dividing, the remainder is what is left over E.g. 21 ÷ 4 = 5 remainder 1
Repeated addition	The process of adding the same number or amount. 5 + 5 + 5 + 5 = 20 is an example of repeated addition (Links to multiplication: 4 x 5 = 20)
Repeated subtraction	The process of subtracting the same number or amount 20 – 5 – 5 – 5 – 5 = 0 is an example of repeated subtraction (links to division: 20 ÷ 5 = 4)
Roman Numerals	The Romans used a set of capital letters to denote cardinal numbers. I = 1 V = 5 X = 10 L = 50 C = 100 D = 500 M = 1000 And all other numbers are built up using these letters.
Round	To round a number to the nearest whole number / ten / hundred. 5 and above are always rounded up. 0 - 4 are rounded down. E.g. 45 rounded to the nearest 10 is 50. 31 rounded to the nearest 10 is 30.

Sequence	A succession of numbers formed according to a rule. E.g. 2, 4, 6, 8, 10 is a sequence of even numbers. 2, 4, 9, 16 is a sequence of square numbers.
Set	A well-defined group of objects
Share	To share equally is to split a group of objects into equal groups (division)
Short division	A compact method of division E.g. 65 ÷ 5 = 15  **Please refer to Calculation Policy for further explanation.**
Short multiplication	A compact method of multiplication E.g. 136 x 4 = 544 1 3 6 x 4 5 4 4 **Please refer to Calculation Policy for further explanation.**
Simple fraction	Where both the numerator and the denominator are whole numbers, also known as a common fraction.
Simplify (a fraction)	To reduce a fraction to its simplest form. E.g. $^{5}/_{10}$ can be simplified to ½
Subtract -	To carry out the process of subtraction
Subtraction	The inverse operation to addition – take away.
Subtraction by decomposition	When you need to 'exchange' within a subtraction calculation E.g. 62 – 37 = 25 6 2 - 3 7 2 5 **For further explanation, please see the Calculation Policy.**

Sum	The sum of addition – the sum of 4 and 5 is 9.
Take away	To remove a number of items from a set (subtraction)
Total	The sum found when adding
Zero	Nought or nothing. It is neither positive nor negative. It is even (rather than odd)