Abstract	The written method for a calculation which doesn't use the support of concrete or pictorial models.
Addition	Finding the total value of more numbers. Denoted by the symbol '+'.
Array	A pictorial representation used to help children with multiplication and division. Typically shown as rows of dots, for example 2 x 3 would be shown as two rows of 3 dots
Bridging through 10	A mental method of adding two numbers whose total is greater than 10. It helps to count up to the boundary first, then through it. E.g. 18 + 4 will bridge through the boundary so we would add 2 to make 20 and then 2 to make 22.
Commutative law	The law that states that: a multiplication or addition can be made in any order to arrive at the same *product* or *sum* respectively. *eg: 8+5+2 = 15; 2+5+8 = 15; 5+8+2 = 15* *3x4x10 = 120; 10x4x3 = 120 etc…* These calculations are said to demonstrate ***commutativity.*** Subtraction and division are not commutative.
Composite numbers	A whole **number** that can be divided exactly by **numbers** other than 1 or itself. Example: 9 can be divided exactly by 3 (as well as 1 and 9), so 9 is a **composite number**.
Concrete materials	Anything which children may use to help them carry out practical maths activities e.g. counters, cubes, Base 10
Counting back	As with *counting on*, but in subtraction.
Counting on	When performing a calculation, such as 8 + 3, start at 8 and count: 9, 10,**11.** You can *count on* or *back* in TENS or HUNDREDS etc. as well as ONES.
Decimal	A decimal number is expressed in the scale of tens. More simply, numbers are referred to as a decimal if they contain a decimal point and represent a whole number plus a fraction of a whole number (tenths and hundredths etc).
Dividend	The number being divided.
Division	The process of dividing a number up into equal parts and finding out how many equal parts can be made and whether there is a remainder. It is represented by the '÷' symbol.
Divisor	A number that will divide the dividend exactly.
Exchanging	The correct term used instead of 'borrow' or 'pay back'. E.g. exchange one ten for ten ones.
Factor	A factor is one of two or more whole numbers that divides a given number without a remainder. In the number sentence 2 x 6 = 12, both 2 and 6 are factors of 12.
Finding the difference	A way of carrying out subtraction calculations by finding the numerical difference between the two numbers. E.g. the difference between 2 and 5 is 3.
Grouping	This refers to how many equals groups you can make out of a number e.g. there are 4 groups of 4 in 16.
Inverse operation	The opposite of an *operation.* Inverse operations are used to find a missing value in a *number sentence*. The inverse of an addition is a

	subtraction and vice-versa. The inverse of a multiplication is a divide. However, the inverse of a divide calculation is not always a multiplication *5 + **15** = 20 20 – 5 = **15** (and vice-versa)* ***3** x 4 = 12 12 ÷ 4 = **3** BUT…* *12 ÷ **4** = 3 3 x 12 is not **4**! (You have to do 12 ÷ 3 to get **4**).*
Lowest common multiple	The lowest common multiple of two whole numbers is the smallest number that is a multiple of both. For example, the lowest common multiple of 3 and 4 is 12.
Multiple	A multiple is a number that can be divided by another number a certain number of times without a remainder. In the number sentence 4 x 5 = 20, 20 is a multiple of 4 and 5.
Multiplication	Finding how many altogether in a given number of equal sized groups. Represented by the symbol 'x'.
Minus	Another word for subtract.
Number bonds	Pairs of numbers that add up to make a specific number. E.g. the number bonds to 10 are 10+0, 9+1, 8+2 etc. Children are taught these early on so they can apply this knowledge to number bonds to 20, 100, 1000, 10,000, bridging to the next 10 etc.
Number line	A visual representation of numbers along a horizontal line.
Number Sentence	An arrangement of numbers and symbols which makes sense and is correct e.g. 3+4 = 7.
Operation	The four mathematical operations are **addition, subtraction, multiplication** and **division.**
Partition	Splitting a number greater than 10 into its constituent THOUSANDS, HUNDREDS, TENS and ONES. eg: 43 → 40 and 3 356 → 300 and 50 and 6 4723 → 4000 and 700 and 20 and 3
Pictorial	Pictures or diagrams used to solve a mathematical statement.
Place value	Place value determines the value of a digit depending on where it sits in the written number. *eg: 4**5**62 → The '5' represents 500 in this case. When performing column methods, it is important that the children are secure with place value in order to line the numbers with TENS under TENS etc.* Children need to understand place value in order to write numbers accurately, such as: four-hundred and 2. A child without place value understanding may write 4002 (ie: 400, then 2).
Prime factors	A **factor** that is a **prime** number. In other words: any of the **prime** numbers that can be multiplied to give the original number. Example: The **prime factors** of 15 are 3 and 5 (because 3×5=15, and 3 and 5 are **prime** numbers)
Prime numbers	A number that is only divisible by itself and 1. E.g. 2, 3, 5, 7, 11.
Product	The result of a multiplication calculation.
Quotient	The result/answer of a division.
Recombining	After *partitioning* and calculating, putting the numbers 'back together'.

Regrouping	The process of changing groups of ones into tens to make adding and subtracting easier.
Remainder	The amount left over when a number cannot be exactly divided by another number e.g. 10 ÷ 3 = 3 remainder 1
Repeated addition	A way of teaching about multiplication as the repeated grouping of the same number. For example, 4 x 2 is the same as four groups of 2 or 2+2+2+2.
Subtraction	Taking one number away from another, finding the difference between the two. Denoted by the symbol '-'.
Sum	The result of adding two numbers together. N.B. Sum only refers to addition calculations. It must **not** be used to refer to calculations.
Written method	A way of carrying out a calculation which is done on paper rather than entirely mentally.