

Core Knowledge

Topic/Skill	Definition/Tips	Example
1. Integer	A whole number that can be positive, negative or zero.	-3, 0, 92
2. Decimal	A number with a decimal point in it. Can be positive or negative.	3.7, 0.94, -24.07
3. Negative Number	A number that is less than zero . Can be decimals and fractions.	-8, -2.5
4. Addition	To find the total , or sum , of two or more numbers. 'add', 'plus', 'sum'	$3 + 2 + 7 = 12$
5. Subtraction	To find the difference between two numbers. To find out how many are left when some are taken away. 'minus', 'take away', 'subtract'	$10 - 3 = 7$
6. Multiplication	Can be thought of as repeated addition . 'multiply', 'times', 'product'	$3 \times 6 = 6 + 6 + 6 = 18$
7. Division	Splitting into equal parts or groups. The process of calculating the number of times one number is contained within another one . 'divide', 'share'	$20 \div 4 = 5$ $\frac{20}{4} = 5$
8. Remainder	The amount ' left over ' after dividing one integer by another.	The remainder of $20 \div 6$ is 2, because 6 divides into 20 exactly 3 times, with 2 left over.
9. BIDMAS	An acronym for the order you should do calculations in. BIDMAS stands for ' Brackets, Indices, Division, Multiplication, Addition and Subtraction '. Indices are also known as 'powers' or 'orders'. With strings of division and multiplication, or strings of addition and subtraction, and no brackets, work from left to right.	$6 + 3 \times 5 = 21, \text{not } 45$ $5^2 = 25$, where the 2 is the index/power. $12 \div 4 \div 2 = 1.5, \text{not } 6$
10. Recurring Decimal	A decimal number that has digits that repeat forever . The part that repeats is usually shown by placing a dot above the digit that repeats, or dots over the first and last digit of the repeating pattern.	$\frac{1}{3} = 0.333 \dots = 0.\dot{3}$ $\frac{1}{7} = 0.142857142857 \dots = 0.1\dot{4}285\dot{7}$ $\frac{77}{600} = 0.128333 \dots = 0.128\dot{3}$