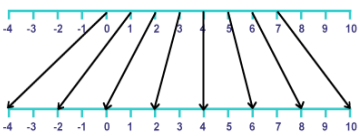


STAGE 7: UNIT 6 ALGEBRAIC

PROFICIENCY

KEYWORDS AND DEFINITIONS

1	ALGEBRA
2	EXPRESSION The combination of letters, numbers and operations, but with no equal sign (for example: $3m + 25$).
3	TERM Part of an expression, separated from the other terms by + or – signs. (for example: In the expression $2x + 3y$ the terms are $2x$ and $3y$).
4	FORMUAL (formulae) A rule that links two or more quantities. (for example: if $m=10c$ and $c=5$, $m = 10 \times 5 = 50$).
5	EQUATION An expression equal to a number or another expression ($x + 3 = 11$, $2x-6= x +3$).
6	VARIABLE Letter representing something which can vary (for example: x , m , n , p).
7	FUNCTION A function is a relationship that pairs each input with exactly one output.
	MAPPING DIAGRAM A function can be represented on a mapping diagram. 

9	INPUT What goes into a function
10	OUTPUT What comes out of a function
11	SUBSTITUTE A method for checking if your solution to an equation is correct by replacing the unknown with the solution (for example: Substituting $x=3$ into $2x +1$ gives $2 \times 3 +1 = 7$).
12	EVALUATE To find a numerical expression or equivalent for (an equation, formula, or function).
13	LIKE TERMS Like terms are made from the same letters. (for example: $3x$ and $5x$ are like terms but $3x$ and y are not.
14	SIMPLIFY / COLLECT To collect like terms and make the expression look less complicated! (For example: $2a + 3a = 5a$).

NOTATION

15	Multiplication signs aren't written. $4y$ not $4 \times y$
16	Terms involving letters are written in alphabetical order. ab not ba
17	Terms involving letters and numbers are written in alphabetical order with the number first. $4ab$ not $ab4$
18	If there is a bracket write the term outside the bracket first. $4(x+2)$ not $(x+2)4$
19	x squared is written using the power of two. x^2 not xx

PRIOR KNOWLEDGE

20	Use symbols (including letters) to represent missing numbers
21	Substitute numbers into simple algebraic formulae
22	Substitute numbers into worded formulae

CORE SUCCESS CRITERIA

23	Know the meaning of expressions, term, formula, equation, function.
24	Know basic algebraic notation (the rules of algebra)
25	Use letters to represent variables
26	Identify like terms in an expression
27	Simplify an expression by collecting like terms
28	Know how to multiply a (positive) single term over a bracket (the distributive law)
29	Substitute positive numbers into expressions and formulae
30	Given a function, establish outputs from given inputs and vice versa
31	Use a mapping diagram (function machine) to represent a function
32	Use an expression to represent a function
33	Use the order of operations correctly in algebraic situations