



I Can Statement - Year 7 Maths

Topic Overview - Algebraic Notation	Pre-taught Vocabulary	
In this algebra unit, we will establish a solid foundation in core principles by using single and double function machines, bar models, and standard letter notation to visualise mathematical relationships. We will master standard algebraic shorthand—learning how to write multiplication, division, and squared indices cleanly—and use inverse operations to undo calculations effectively. Our skills will progress as we practice translating real-world situations into formal expressions, substituting numerical values, and simplifying them into their neatest forms. Finally, we will learn how to generate terms in a number sequence using a term-to-term rule and bring our algebra to life by plotting linear functions as straight-line graphs.	Algebraic Expression	Variable
	Coefficient	Notation
	Inverse Operation	Substitution
	Simplify	Index (Power)
	Term-to-term rule	

RAG Rating:		Start	End	Teacher
1.	I can find the correct output of a single function machine from a numerical input, and use inverse operations to work backwards and find the original input.			
2.	I can use diagrams, models, and formal letter notation to generalise and describe basic number operations.			
3.	I can use diagrams and algebraic letters to represent unknown inputs and outputs inside single function machines.			
4.	I can construct or identify a single function machine when I am given a simple algebraic expression.			
5.	I can confidently substitute numerical values into short, single-operation algebraic expressions to find an answer.			
6.	I can accurately calculate the numerical inputs and final outputs for a series of two connected function machines.			
7.	I can use diagrams and letter notation to represent how algebraic variables change as they pass through a series of two function machines.			
8.	I can determine the correct order of function machines when given a two-step algebraic expression.			
9.	I can substitute numbers into more complex, two-step algebraic expressions and use an algebraic rule to generate a sequence of numbers.			
10.	I can represent both one- and two-step functions graphically by plotting their coordinates on a grid.			