Stage 9 Algebraic Proficiency: Basic

WHAT DO WE ALREADY *know?*

- Collecting like terms.
- Know that $x \times x = x^2$.
- Calculate with negative numbers.
- Know the grid method for multiplying two-digit numbers.
- Know the difference between an expression, an equation and a formula.

- Understand what an identity is.
- Know the difference between an equation and an identity.
- Expand double brackets.
- Factorise quadratic expressions.
- Show two algebraic expressions are equivalent.
- Create an expression or a formula to describe a situation.

- Identity-c. 1600, "sameness, oneness, state of being the same," from French identité
- Equation-"action of making equal" is from 1650s, from Latin aequationem say *ee kway shun*
- Equivalent
- Expand
- Factorise
- Formula
- Linear
- Quadratic
- Expression

Targets	Before Topic	After Topic	Teacher Mark
Understand what an identity is.			
Multiply two linear expressions of the form (x+a)(x+b).			
Multiply two linear expressions of the form (ax+b)(cx+d).			
Expand expressions of the form $(x+a)^2$.			
Factorise a quadratic expression of the form ax^2+bx.			
Factorise a quadratic expression of the form ax^2+bx+c.			
Work out why two algebraic expressions are equivalent.			
Create a mathematical argument to show that two algebraic expressions are equivalent.			
Distinguish between situations that can be modelled by an expression or a formula.			
Create an expression or a formula to describe a situation.			