



Year 7

Unit 4

21 Lessons

Aims:

Develop and deepen students understanding of what an algebraic expression is and how it can be manipulated. Writing algebraic expressions, substitution, collecting like terms and simplifying, solving equations including unknowns on both sides and with brackets. Index laws.

Key Skills

Understand the language of algebra and how to write an expression. Know how to substitute numbers into an expression. Be able to solve an equation.

- **Excellence** - Solve equations with unknowns on both sides. Solve equations involving brackets. Write an expression for the area/perimeter of a shape.
- **Secure** - Solve linear equations. Use laws of indices to simplify expressions.
- **Developing** - Collect like terms and simplify an expression.
- **Emerging** - Write simple expressions, substitute numbers into an expression.

Literacy Links:

Key words:
Solve, substitute, expression, equation, simplify, brackets, indices, identity.

Numeracy Links:

Embedded throughout.

Assessment

Pre-test at the beginning of the unit to establish prior learning, post-test at the end of the unit to determine progress.

Cross-Curricular Links

Solving and rearranging equations as required for Science.

SMSC opportunities and British values

Opportunities for further learning

Mymaths sections on algebraic manipulation, expressions and formulae and equations linear – all from the ALGEBRA category.