

**Ashwell Primary School**  
**Maths Curriculum**  
***Algebra – Skills & Knowledge Progression***



**YEAR 6 – Algebra**

**Core knowledge to be acquired:**

- Express missing number problems algebraically.
- Use simple formulae.
- Generate and describe linear number sequences.
- Find pairs of numbers that satisfy an equation with two unknowns.
- Enumerate possibilities of combinations of two variables.

**Key Vocabulary (in addition to previous year group):**

formula(e), equation, unknown, variable.

**Prior knowledge / skills this builds on:**

- See Number, Place Value, Four Operations Skills and Knowledge Progression document

**What comes next:**

Key Stage 3: Algebra

- use and interpret algebraic notation
- substitute numerical values into formulae and expressions
- understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors
- simplify and manipulate algebraic expressions to maintain equivalence
- understand and use standard mathematical formulae; rearrange formulae to change the subject
- model situations or procedures by translating them into algebraic expressions or formulae and by using graphs
- use algebraic methods to solve linear equations in one variable
- work with coordinates in all four quadrants
- recognise, sketch and produce graphs of linear and quadratic functions
- interpret mathematical relationships both algebraically and graphically
- reduce a given linear equation in two variables to the standard form  $y = mx + c$ ;
- calculate and interpret gradients and intercepts of graphs
- use linear and quadratic graphs to estimate values of  $y$  for given values of  $x$  and vice versa and to find approximate solutions of simultaneous linear equations
- find approximate solutions to contextual problems from given graphs of a variety of functions
- generate terms of a sequence from either a term-to-term or a position-to-term rule
- recognise arithmetic sequences and find the  $n$ th term
- recognise geometric sequences and appreciate other sequences that arise.