Sequences

Small Steps

- Describe and continue a sequence given diagrammatically
- Predict and check the next term(s) of a sequence
- Represent sequences in tabular and graphical forms
- Recognise the difference between linear and non-linear sequences
- Continue numerical linear sequences
- Continue numerical non-linear sequences
- Explain the term-to-term rule of numerical sequences in words
- **Finding missing numbers within sequences** (H)

(H) denotes higher strand and not necessarily content for Higher Tier GCSE

Understanding and using notation

Small Steps

- Given a numerical input, find the output of a single function machine
- Use inverse operations to find the input given the output
- Use diagrams and letters to generalise number operations
- Use diagrams and letters with single function machines
- Find the function machine given a simple expression
- Substitute values into single operation expressions
- Find numerical inputs and outputs for a series of two function machines
- Use diagrams and letters with a series of two function machines
- Find the function machines given a two-step expression
- Substitute values into two-step expressions
- Generate sequences given an algebraic rule
- Represent one- and two-step functions graphically

Equality and Equivalence

Small Steps

- Understanding the meaning of equality
- Understand and use fact families, numerically and algebraically
- Solve one-step linear equations involving +/- using inverse operations
- Solve one-step linear equations involving x/÷ using inverse operations
- Understand the meaning of like and unlike terms
- Understanding the meaning of equivalence
- Simplify algebraic expressions by collecting like terms, using the ≡ symbol