## National 5 Mathematics

Section 1 - Expressions and Formulae
Section 2 - Relationships
Section 3 - Applications

## Section 1 - Expressions and Formulae

Approximating Numbers
Significant Figures \& Scientific Notation
Operations with Surds
Rules of Indices
Algebraic Operations
Algebraic Fractions
The Gradient of a Straight Line Graph
The Equation of a Straight Line Graph
Arc Length \& Sector Area
Volumes of Cones, Pyramids \& Spheres

## Section 2 - Relationships

Solving Linear Equations \& Inequations
Solving Simultaneous Equations
Rearranging Formulae
Solving Quadratic Equations
Discriminant and the Nature of Roots
Graphs of Quadratic Functions
Pythagoras' Theorem
Geometry and the Properties of Shapes
Similar Figures
Trigonometric Functions
Trigonometric Function Graphs
Trigonometric Equations

## Section 3 - Applications

The Sine \& Cosine Rule
Problems Involving Bearings
Vectors
Simple \& Compound Measures
Appreciation \& Depreciation
Operations with Fractions
Comparing Distributions
Quartiles \& Standard Deviation
Scatter Graphs \& Lines of Best Fit

