Mathematics (2 Unit) Topics

- Using the calculator to evaluate expressions.

- Scientific notation and significant figures.

- Using the index laws.

- Writing recurring decimals as rational numbers (fractions).

- Substitution in formulae.

- All applications of surds:
  - simplifying surds
  - writing an expression as an entire surd
  - expansions involving surds
  - rationalising the denominator

- All algebraic applications:
  - simplifying
  - expanding
  - factorising
  - algebraic fractions

- Equations:
  - linear equations
  - quadratic equations
  - absolute value equations

- Inequalities:
  - linear inequalities
  - quadratic inequalities

- Simultaneous equations:
  - two linear
  - one linear and one non-linear\

- All plane geometry.

- Angle sum of a polygon.

- Areas, volumes and surface areas.

- Trigonometry
  - right-angled problems
  - complementary angles

Extension 1 (3 Unit) Topics

- Algebraic fractions:
  - fractions
  - expansions
  - factorisation
  - solving inequalities with the unknown in the denominator
  - absolute value equations
  - indicial equations

- Simultaneous equations with three unknowns.

- Trigonometry:
  - right-angled problems
  - exact values
  - angles of any magnitude
  - complementary ratios
  - sine and cosine rules
  - trigonometric identities

- All real functions

- Locus

- All circle geometry

- Pythagoras theorem

- Calculus
  - continuity
  - limits

- Angle sum of a polygon