Subject Year 8 Mathematics – Semester 1

Course Content

The emphasis in Year 8 Mathematics is the development of more abstract ideas. The foundations built in previous years prepare students for this change. By engaging in activities such as exploration, recognition and application of patterns, the capacity for abstract thought can be developed. Students solve non-routine problems that are relevant to their interests and learn to appreciate the usefulness of Mathematics in modelling the world around them and in making predictions. More mathematically able students will be extended with appropriate challenges and extensions within the available topics.

The following topics will be taught:

- **Measurement**: including finding perimeter, area and volume for a range of 2-D and 3-D shapes
- **Integers**: including using index laws, the four operations, using mental and written strategies
- **Fractions, decimals, percentages**: including terminating and recurring decimals, percentage increases and decreases and solving problems involving rates and ratios, with and without calculators.
- **Statistics**: including collecting, understanding and analysing data

Assessment

Assessment will include a range of the following, both as individual and group tasks:

- Tests
- Directed investigations
- Assignments
- Research
- Folios
- Other tasks as directed by the teacher