MATHEMATICS POLICY - 2014
To be reviewed: 2017

RATIONALE:

Mathematics has applications in all human activities, crossing cultural and linguistic boundaries to provide a universal way of solving problems. The learning of Mathematics assists students to organise and make sense of the natural and human world they live in by encouraging them to value, explore and engage in a range of activities. The curriculum focuses on developing increasingly sophisticated and refined mathematical understanding, fluency, logical reasoning, analytical thought and problem-solving skills. These capabilities enable students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.

AIMS:

• To ensure that students are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens.
• To appreciate that Mathematics is a dynamic field with origins from many cultures.
• To communicate ideas logically and accurately.
• To develop accuracy in computational skills and the capacity to use mathematics in solving problems both individually and collaboratively.
• To encourage the students to take risks, learn from their mistakes and participate in decision-making.
• To make connections that help the students realise that mathematics is relevant to them in real-life situations.
• To develop an appreciation and enjoyment of Mathematics.
• To develop the use and understanding of mathematical language.

Organisation of the Curriculum
The Australian Curriculum directs the teaching of Mathematics

Mathematics is organised around the interaction of three Content Strands and Four Proficiency Strands. These provide students with the essential Mathematical skills and knowledge in:

• Number and Algebra.
• Measurement and Geometry.
• Statistics and Probability.
The proficiency strands are *Understanding, Fluency, Problem Solving, and Reasoning.*

**IMPLEMENTATION:**

- Teachers refer to the Australian Curriculum Mathematics Scope and Sequence document for planning their teaching.
- A Mathematics Leader supports the teachers and the students.
- Maths Intervention is implemented for students deemed at risk in Levels One and Two and Levels Three and Four.
- Students in Foundation to Level Four participate in a daily, one hour Mathematics block. Students in Levels Five and Six participate in four one hour blocks of Mathematics per week.
- A Term Overview is prepared at the beginning of each term.
- Teachers use relevant contemporary teaching and learning skills and practices.
- Concrete materials, digital technologies and small focus teaching groups enhance student knowledge and understanding.
- Students are provided with a broad range of learning experiences that link to the specific mathematical content.
- Where applicable Mathematics is linked with the Inquiry Based learning units.
- Professional Learning Team (PLT) meetings provide teachers with support and continued understanding of current pedagogical practices.
- Teachers assess students knowledge and understanding against the Australian Curriculum content and achievement standards to:
  - Identify current levels of learning and achievement and then to select the most appropriate content (possibly from across several year levels).
  - Teach individual students and/or groups of students. (Pre-tests).
  - Make on-balance judgments about the quality of learning demonstrated by the students – that is whether they have achieved below, at or above the standard (Post-Tests).

**Assessment has three distinct forms:**

1. Ongoing formative assessment within classrooms for the purposes of monitoring learning and providing feedback, to teachers to inform their teaching, and for students to inform their learning.
2. Summative assessment for the purposes of twice-yearly reporting by schools to parents and carers on the progress and achievement of students.
3. Annual testing of Years 3 and 5 students’ levels of achievement in aspects numeracy, conducted as part of the National Assessment Program – Numeracy (NAPLAN)
4. The ACER Progressive Achievement Tests in Mathematics (PatMaths) provide information to teachers about the level of achievement attained by their students in the skills and understandings of Mathematics. Each test includes the Mathematics strands Number, Space, Measurement, Chance and Data, with later
tests including questions on Patterns and Algebra. These tests are conducted in November.

**EVALUATION:**
This policy will be reviewed as part of the school’s three year cycle.