

## MATHEMATICS POLICY

### **RATIONALE:**

A fundamental role of teachers is to create a learning environment that supports the education of every student (Australian Institute for Teaching and School Leadership [AITSL], 2014). This is as true for mathematics as for any other subject.

Students experience success and develop curiosity and confidence when using mathematics in everyday situations.

### **AIMS:**

- Provide a strategic and comprehensive approach to mathematics for all students
- Define and implement the elements of quality mathematics teaching and learning
- For all students to experience success in learning and using mathematics
- Teach an understanding and appreciation of the importance of mathematics in daily life
- Encourage a greater application of mathematical problems within a real life context
- Develop expertise in interpreting and communicating ideas using a mathematical context
- Develop explicit links between mathematics and other learning outcomes
- Provide opportunities for learning mathematics through students participating in real life problem solving
- Appreciating that the mathematical thinking of all students contributes to learning

### **IMPLEMENTATION:**

The Australian Curriculum: Mathematics is organised in three content strands *Number and Algebra*, *Measurement and Geometry* and *Statistics and Probability* and four proficiency strands: *understanding*, *fluency*, *problem solving* and *reasoning*. The content strands describe what students should know and the proficiency strands describe what students should be able to do (Australian Curriculum, 2012). Mathematics by its very nature is complex and abstract. It is critical that learning experiences begin through exploration and discussion, allowing students to make connections between different mathematical ideas, before moving onto abstract concepts.

We are committed to providing:

- 5 hours of mathematics instruction per week
- a structured and stimulating environment
- a program that builds upon previous mathematical understandings, concepts and skills
- opportunities for students to make connections between mathematical ideas
- teaching strategies that are based on current research and best practice
- experiences where learning is engaging and interactive with a focus on student articulation of their mathematical thinking
- a range of approaches which include teachers using mathematical and everyday language
- the facilitation of purposeful sharing of different strategies to solve tasks
- opportunities to record their understandings in a variety of ways
- learning experiences which promote curiosity that are engaging and purposeful
- an engaging environment which encourages the use of concrete materials
- classroom materials that are purposefully promoted by the teacher and selected by the student
- students with constructive feedback about their mathematical learning and thinking
- learning experiences that are challenging and require the learner to take risks
- a program that is well resourced within the school and is supported with an appropriate budget
- access to professional learning for teachers, to build capacity around teaching and learning, knowledge, skills and expertise
- opportunities for caregivers to become actively involved in their child's mathematical learning

**EVALUATION:** This policy shall be reviewed as part of the school's three year review cycle

**REFERENCE:**

Australian National Curriculum

Maths continuum Prep – Year 10

DET Website

*'Numeracy in Practice: Teaching, Learning and Using Mathematics'* Paper 18 June 2009.