

# **Mathematics Policy**

Written by	Education Sub-Committee and Numeracy Committee
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#### Rationale

Mathematics pervades all aspects of our lives – as citizens, in our homes and in the workplace. It has applications in all human activities, crossing cultural and linguistic boundaries. Mathematics is used for describing and analysing the world around us and it has become a highly effective tool for solving problems.

### Aims

Through learning mathematics at school, students will work towards the following:

- Students become competent users of the language of mathematics, and can begin to use it as a way of thinking.
- Provide students with the opportunity to see themselves as "mathematicians", where they enjoy and are enthusiastic when exploring and learning about mathematics.
- Learners acquire mathematical understanding by constructing their own meaning, from concrete to abstract.
- Acquire mathematical skills and knowledge so they can deal confidently and competently with daily life.
- Develop knowledge and skills in using mathematics for employment, further study and interest.
- Be able to articulate their knowledge and their goals accurately.
- Recognise the fundamental importance of mathematics to the functioning of society.
- Understand and appreciate the nature of mathematical thinking, the processes by which mathematics changes and its cultural role.
- Understand the dynamic role of mathematics in social and technology change.
- Use technology appropriately and effectively to support the learning of mathematics, and in carrying out mathematical activities in context.

#### Implementation

- All students at our school will study a mathematics course based upon the Victorian Curriculum
- Where possible, Mathematics is to be used in real-life situations, mathematics is taught in relevant, realistic contexts.
- Technology will be used to develop and implement mathematics curriculum for all students.
- Mathematics is to be inclusive and differentiated for all students.
- Mathematical activities that are appropriate to each child's ability will form a regular component for Grade 3 to 6 student's homework regime, also including Mathletics homework tasks.
- A budget that provides for the needs of the mathematics program will be developed by staff and resourced by school council.
- Staff members will be allocated the responsibility of coordinating the school's mathematics program.
- Children will be given adequate opportunities to reinforce and extend their understanding of mathematics by using learning technologies such as computer software, the Internet (Mathletics) and calculators.
- Within the classroom, there will be opportunities for exploration with concrete aids to assist in the development of mathematical skills, concepts and insights into solving problems.
- In the classroom there are to be opportunities during mathematics lessons for children to reflect upon and share their learning with others.
- The parallels between Mathematics IB knowledge and the Victorian Curriculum is represented below.

IB STRANDS	VICTORIAN CURRICULUM STRANDS
Data handling	Chance
	Data representation and interpretation
Measurement	Using units of measurement

	Money and Financial Mathematics
Shape and space	Shape
	Location and Transformation
Pattern and function	Patterns and Algebra
Number	Number and Place Value
	Fractions and Decimals

• The Kath Murdoch Inquiry Process will be used as a model for teaching (see attached Model for Teaching)

## **Evaluation**

A variety of data sources will be utilised to evaluate the effectiveness of the mathematics program. These include:

- Teacher assessment of student progress against the Victorian Curriculum outcomes and benchmarks.
- Comparison with Like School Group (LSG) and Statewide benchmarks.
- Student performance in NAPLAN.
- Online Demand testing results.
- Numeracy Online results
- SPA

This policy will be reviewed as part of the school's three-year review cycle.