

# Mathematics Policy

## Rationale

To ensure 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. In Mathematics students will develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes and pose and solve problems and reason in Number and Algebra, Measurement and Geometry and Statistics and Probability. The study of Mathematics will assist students to recognise connections between the areas of Mathematics and other disciplines and appreciate Mathematics as an accessible and enjoyable discipline relevant to everyday life.

## 1. Guidelines

- 1.1 Facilitate students' acquisition of mathematical skills and knowledge so they can deal confidently and competently with everyday life
- 1.2 Ensure the needs of all students are catered for when learning Mathematics
- 1.3 Appropriately and effectively use a range of strategies and technology to support students' learning of Mathematics

## 2. Implementation

- 2.1 The Mathematics Program will reflect a balance of study in the strands of Mathematics as specified in AusVELS
- 2.2 The program will be sequential in nature and will be geared to each student's developing ability to move from concrete to abstract ways of conceptualising mathematical ideas. It will take into account that students learn at different rates and that not all students at a given year level will necessarily be working at the same stage of the program. To this end, mathematically rich, active, differentiated tasks will form the basis of each lesson
- 2.3 The program will operate in every class. It will incorporate the structure, strategies and approaches of Early Years (EY) Numeracy lesson format including a tuning in activity, whole class (main teaching) activity, small group or individual activities reinforcing the ideas introduced in the whole class activity and whole class reflection consolidating the learning that has been taking place
- 2.4 Learning activities will be structured to assist each student's working towards and achievement of the AusVELS standards. They will include tasks from various sources such as the DET Mathematics Continuum, teacher reference books, Mathletics and FUSE or other websites
- 2.5 The program will provide opportunities for focused discussion and will allow demonstration, prediction, questioning, clarification and application of mathematical ideas. Correct use of mathematical terms and language will form part of each lesson with time given for students to articulate their understandings

- 2.6 Mathematical experiences will incorporate “hands-on” exploration, investigation and problem-solving of mathematical ideas and equipment and their practical application involving both individual and co-operative group work
- 2.7 A comprehensive picture of each student’s mathematical achievements will be gained through continuous monitoring and assessment, both formal and informal, including: the Maths online interview, moderated assessment tasks, peer and self assessment, VCAA on demand tests, NAPLAN (grades 3 and 5) and teacher observational records. Assessment for learning will form the basis of mathematics planning
- 2.8 Mathematics planning will be undertaken and refined across the level each term at the level planning meeting. The planning format will be consistent across the school in order to provide a seamless transition from year to year and a sequential pathway of mathematical learning
- 2.9 Enrichment, extension and additional assistance activities in mathematics will be provided. This will occur essentially through the learning tasks within the class program, but may also include participation in a range of wider school activities
- 2.10 The Mathematics Coordinator, in conjunction with the Mathematics Committee, will develop and administer an action plan, annual budget and program review. Together, they will be responsible for overseeing and supporting a comprehensive Prep-6 Mathematics curriculum.

### **3. Resources**

- 3.1 Classroom resources for Mathematics will be supported through the annual program budget
- 3.2 Each classroom will be supplied with a ‘Mathematics Tub’ for experience based activities
- 3.3 Mathematical materials and teacher references are available for borrowing from the Mathematics Resource Room
- 3.4 The Mathematics Coordinator will be responsible for the purchase of student and teacher resources
- 3.5 ICT programs and resources will be used to enhance the Mathematics Program.

### **4. Evaluation**

- 4.1 The Education Sub Committee and Weeden Heights staff will review the effectiveness of the school’s Mathematics Policy on a cyclical basis in accordance with DET guidelines and priorities.