

## Mathematics Policy

Status: Final Review 2012.  
Education Committee.

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### Rationale:

Learning mathematics creates opportunities for and enriches the lives of all Australians. Mathematics provides students with essential mathematical skills and knowledge in *Number and Algebra*, *Measurement and Geometry*, and *Statistics and Probability*. It develops the numeracy capabilities that all students need in their personal, work and civic life, and provides the fundamentals on which mathematical specialties and professional applications of mathematics are built.

### Aims:

All students should benefit from access to the power of mathematical reasoning and learn to apply their mathematical understanding creatively and efficiently. Through learning mathematics at Rolling Hills Primary School, students will: -

- Develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in Number and Algebra, Measurement and Geometry, and Statistics and Probability.
- Be confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens.
- Be confident to apply their personal knowledge of mathematics and to acquire new knowledge and skills as needed.
- Recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.
- Develop a positive attitude and sense of achievement within a stimulating, gender inclusive environment.

### Guidelines:

- Mathematics learning and teaching at RHPS will focus on the three content strands of Number & Algebra, Measurement & Geometry and Statistics & Probability, and the four proficiencies of Understanding, Fluency, Problem Solving & Reasoning, identified in the Australian National Curriculum [AUSVELS].
- Level descriptions emphasise the importance of working mathematically within the content. They provide an overview of the relationship between the proficiencies (Understanding, Fluency, Problem Solving and Reasoning) and the content for each level.
- Students will develop mathematical skills and understandings so that they can confidently and competently participate in everyday life.
- ICT will be used appropriately and effectively to support the learning of mathematics, including the whole school use of Mathematics.
- The Mathematics program will consist of 5 x 1 hour teaching blocks per week.
- National Numeracy Benchmarks are used as a guideline for reporting achievement in Numeracy at Years 3 and 5 (National Assessment Program - NAPLAN).

### Implementation:

- A member of staff will be designated as the Mathematics Co-coordinator and will be responsible for
  - a) the preparation of the annual budget.
  - b) the purchasing, organisation, storage and maintenance of mathematics resources.
  - c) the administration of Mathematics.
- The Mathematics Curriculum/Project Team will be responsible for program assistance and professional development in conjunction with the Curriculum Co-ordinator and the Professional Development Co-ordinator.
- The day-to-day teaching of Mathematics will be the responsibility of the classroom teacher and is part of Professional Learning Team planning.
- The teaching of Mathematics will include activity based problem-solving, individual and shared experiences, and development and use of appropriate terminology. The teaching of Mathematics will encourage students to develop generalizations and link abstract ideas to real life experiences.
- Students will be given opportunities to talk, think, reflect, read and write about Mathematics, and to develop mathematical reasoning and language.
- Students of a wide range of ability and interest will be differentiated within PoLT elements [Principles of Learning and Teaching].
- Individual Learning Plans will be developed as required.

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- The classroom program will be supported by the provision of materials and equipment, reference books, computer programs, excursions and in-school experiences.
- Students will be encouraged to refine their mathematical understandings at home using Mathletics.
- The classroom teacher will use a variety of assessment procedures such as checklists, teacher-devised tests, self and peer assessment, negotiated rubrics, anecdotal records, work samples, portfolio tasks and observations to evaluate individual children's progress.
- Moderation and common assessment tasks will be used to ensure that students are assessed according to teachers' common understandings of the AusVELS content and proficiency strands achievement standards.
- Student progress in all content strands and proficiencies of Mathematics will be reported in the mid and end of year reports, from Prep – Year 6, as well as in the School's Annual Report.
- Awareness of the Mathematics Program will be highlighted through the school's newsletters and information programs.
- Teachers will use contemporary assessment tools as diagnostic and planning tools, such as DMT and the Early Years Numeracy Interview.

## Evaluation:

The Mathematics committee will be responsible for organising an annual review of the Mathematics Policy. Consideration will be given to the School Strategic Plan, Annual Implementation Plan, VELS, Australian National Curriculum and the learning outcomes achieved by students.

References:

Circular 249/2001 – Early Years Numeracy Program

Rolling Hills Primary School Mathematics: Scope and Sequence.

<http://ausvels.vcaa.vic.edu.au/Mathematics/Overview/Rationale-and-Aims>