

# Mathematics

## POLICY

### **Rationale:**

At SKiPPS we believe Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. Mathematical ideas have evolved across all cultures over thousands of years, and are constantly developing. Learning mathematics creates opportunities for and enriches the lives of all Australians. A high-quality mathematics education therefore provides a foundation for understanding the world. It develops the numeracy capabilities that all students need in their personal, work and civic life. Mathematics is composed of multiple but interrelated and interdependent concepts and systems which students need to be able see connections between and to apply them to situations beyond the mathematics classroom.

At SKiPPS we strive to ensure all students benefit from access to realistic mathematical learning opportunities and apply their mathematical understanding creatively and efficiently. We strive to provide students with a carefully paced, in-depth study of critical skills and concepts. Teachers assist students in becoming self-motivated, confident learners through inquiry and active participation in challenging and engaging experiences. There is a strong emphasis on providing opportunities to demonstrate and articulate their reasoning skills.

The Australian 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 situations by employing mathematical strategies to make informed decisions and solve problems efficiently.

We believe that learning in the curriculum areas of Discipline-based Learning; Interdisciplinary Learning; and Physical, Personal and Social Learning provide students with knowledge, skills and behaviours to achieve a degree of autonomy in developing and maintaining life-long learning. As such all Discipline-based subjects incorporate, as appropriate, Interdisciplinary Learning and Physical, Personal and Social Learning.

### **Aims:**

The AusVELS Mathematic curriculum aims to ensure that students:

1. 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
2. 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
3. recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.

### **At SKiPPS we aim to;**

1. Connect Mathematics to practical real life experiences
2. Be engaging, fun and hands-on
3. Provide open ended tasks for students to demonstrate their understanding
4. Celebrate the journey rather than the destination E.g. getting students to explain the steps in finding the answer to a problem
5. Relate to real life situations that help develop students understanding
6. Be presented in a variety of ways to provide challenges and support for student
7. Allow students to show their understanding through a variety of methods

8. Be relevant and realistic to help students make connections with their world
9. Be experienced through structured and engaging lessons that are also supportive and extend the range of abilities
10. Provide students with meaningful feedback
11. Lay the foundations for their lifelong learning journey
12. Allow our students to reflect on their learning, challenge themselves and question new concepts.

**Implementation:**

1. Follow the consistent and agreed lesson structure-  
Number Fluency Task, Launch, Discovery, Summary/Plenary
2. Use the Ymer yearly overviews
3. Teach Maths at 9am every day unless Specialist classes are timetabled
4. 5 hourly sessions of Maths or 6 x 50 minute sessions
5. Displaying WALTs (We Are Learning To) and WILFs (What I'm Looking For) during lessons and referring to them throughout
6. Follow the Australian Curriculum
7. Have a designated Professional Learning Team and a Maths Leader to lead Mathematics in the school
8. Level teams will dedicate a portion of their Approved Planning Time (APT) together on discussing Maths planning and assessment
9. Weekly planners will show differentiation with extension and enabling prompts.

**Evaluation:**

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

This policy was last ratified by School Council in...

**October, 2014**