

St Joseph's Primary School

MATHEMATICS BELIEFS AND UNDERSTANDING STATEMENT

Child Safety at St Joseph's - We are committed to ensuring the safety and wellbeing of our students, staff, and volunteers. As part of this commitment we have implemented the <u>Victorian Child Safe Standards</u> to help protect children and young people under the age of 18 from child abuse and neglect, including cultural safety for Indigenous children and those from culturally and linguistically diverse backgrounds, and children with a disability.

Mathematics is an essential life skill that enables individuals to better understand and negotiate the world in which they live. At St. Joseph's Primary School we believe that students learn best when the learning environment treats each student as unique, thinking individuals with their own potential and talents. In Mathematics our planning provides students with 'point of need' teaching and includes extension prompts for high achiever students and enabling prompts for those requiring additional support. When planning teachers review student data, such as pre unit Rich Assessment Tasks (RATs) and couple this information with curriculum documents (Victorian Curriculum). We recognise that the Victorian Curriculum sets out a Mathematics curriculum and reporting framework that is developmental and teachers are mindful of this when planning.

The Victorian Curriculum: Mathematics aims to ensure that 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
- 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
- Recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.



Mathematics Learning at St Joseph's Primary School Northcote

The Melbourne Declaration on Educational Goals for Young Australians, 2008 states that 'a high quality of life for all will depend on the ability to compete in the global economy on knowledge and innovation. Education equips young people with the knowledge, understandings, skills and values to take advantage of opportunity and to face the challenges of this era with confidence'. We believe that a deep conceptual understanding of Mathematics is an important factor in attaining this goal. The staff at St Joseph's Primary School break down their responsibility to the above goal by focusing on the statement made by The National Council of Teachers of Mathematics (2000) which draws our attention to the importance that students need to 'understand and be able to use mathematics in every day life and in the workplace'.

We are striving to achieve this Mathematical Understanding by:

- Analysing and reflecting on student data (such students pre-unit tests) to aid in the planning of Maths sessions to ensure that all students can access the curriculum
- Improving teacher pedagogical content knowledge by participating in Professional Learning Team meetings and reading/reviewing Professional readings about Math content areas. Professional reading allows teachers to keep up with current research
- Encouraging students to derive and share their own strategies. We believe students develop better conceptual understanding.
- Using a Mathematics planning documentation that is consistent across the P-6 team. This ensures that the planning process and expectations are uniform.
- Using the Australian Curriculum documents to ensure our planning is meeting curriculum demands
- Using Maths Walls in every classroom as we believe that this tool helps with peer sharing of maths strategies and conceptual development
- Using open problems with enabling and extending prompts so all students are accessing the curriculum
- Using teacher questions strategically to promote student thinking.
 These questions are pre-planned
- Using Mathematical assessment and record keeping that is ongoing and informs teaching
- Using the Catholic Education Office resource: Key ideas for concept development in Mathematics, as a resource that all staff have had PD on and is an important reference when planning units.

EVALUATION:

This Statement will be evaluated in accordance with the School Improvement Plan under the sphere of Learning and Teaching.