

# SACRED HEART PARISH SCHOOL MATHEMATICS POLICY

## Rationale

Mathematics provides students with access to important mathematical ideas, knowledge and skills that they will draw on in their personal and work lives. The curriculum also provides students, as life-long learners, with the basis on which further study and research in mathematics and applications in many other fields are built.

Mathematical ideas have evolved across societies and cultures over thousands of years, and are constantly developing. Digital technologies are facilitating this expansion of ideas and provide new tools for mathematical exploration and invention. While the usefulness of mathematics for modelling and problem solving is well known, mathematics also has a fundamental role in both enabling and sustaining cultural, social, economic and technological advances and empowering individuals to become critical citizens.

Number, measurement and geometry, statistics and probability are common aspects of most people's mathematical experience in everyday personal, study and work situations. Equally important are the essential roles that algebra, functions and relations, logic, mathematical structure and working mathematically play in people's understanding of the natural and human worlds, and the interaction between them.

The Mathematics curriculum focuses on developing increasingly sophisticated and refined mathematical understanding, fluency, reasoning, modelling and problem-solving. These capabilities enable students to respond to familiar and unfamiliar situations by employing mathematics to make informed decisions and solve problems efficiently.

The curriculum ensures that the links between the various components of mathematics, as well as the relationship between mathematics and other disciplines, are made clear. Mathematics is composed of multiple but interrelated and interdependent concepts and structures which students apply beyond the mathematics classroom. For example, in Science, understanding sources of error and their impact on the confidence of conclusions is vital; in Geography, interpretation of data underpins the study of human populations and their physical environments; in History, students need to be able to imagine timelines and time frames to reconcile related events; and in English, deriving quantitative, logical and spatial information is an important aspect of making meaning of texts.

## Aims

The Mathematics curriculum aims to ensure that students:

- develop useful mathematical and numeracy skills for everyday life, work and as active and critical citizens in a technological world
- see connections and apply mathematical concepts, skills and processes to pose and solve problems in mathematics and in other disciplines and contexts
- acquire specialist knowledge and skills in mathematics that provide for further study in the discipline

- appreciate mathematics as a discipline – its history, ideas, problems and applications, aesthetics and philosophy.

**Implementation:**

- The Mathematics domain is an essential component of Victorian Curriculum
- All students at our school will study a sequential Mathematics course based upon the learning foci contained within the Victorian Curriculum
- That students are exposed to STEM education
- All teachers are required to work with their respective teams to develop and implement a sequential Mathematics course for all students
- Student's individual abilities must be measured at the commencement of each unit of work, and learning opportunities must be provided that cater for the identified needs of each student
- Student progress in all dimensions of Mathematics will be reported in half and end of year academic reports, as well as be reported in the school's annual report
- Mathematics study for each student will be not less than 5 hours per week
- Mathematical activities that reflect the topics being studied at school, and are appropriate to each child's ability, will form a regular component of Years 3-6 homework regime
- The Mathematics Coordinator will be responsibility of coordinating the school's Mathematics program, including a whole school mathematics day, and the school's involvement in the various Mathematics competitions and exhibitions available.

**Evaluation:**

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

This policy was last ratified by staff and school leadership team in....

**Nov 2016**