

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.

AIMS

The Mathematics curriculum (Victorian 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 Curriculum is organised by the three strands of Number and Algebra, Measurement and Geometry, and Statistics and Probability.

Each strand is organised by sub--strands. Sub-strands group content descriptions under an appropriate concept, to provide both a focus and a clear sequence for the development of related concepts and skills within strands and across levels.

MATHEMATICS POLICY

Strands	Number and Algebra	Measurement and Geometry	Statistics and Probability
Sub-strands	Number and place value	Using units of measurement	Chance
	Fractions and decimals	Shape	Data representation and interpretation
	Real numbers	Geometric reasoning	
	Money and financial mathematics	Location and transformation	
	Patterns and algebra	Pythagoras and trigonometry	
	Linear and non-linear relationships		

The proficiencies of Understanding, Fluency, Problem Solving and Reasoning are fundamental to learning mathematics and working mathematically, and are applied across all three strands Number and Algebra, Measurement and Geometry, and Statistics and Probability.

- The teachers will devise the yearly and unit planners using the Victorian Curriculum F-10 prescribed content and achievement standards, with supporting activities and resources
- The teachers will use George Booker and Nadia Walker's model to guide their planning for teaching and learning.
- The teaching of Mathematics will follow Barton Primary School's Instructional Model for Mathematics
- The teaching and learning programs will build on students' interests, strengths, goals and learning needs, to ensure engagement and successful Mathematical learning
- Mathematics will be taught for a minimum of 5 hours per week
- Student achievement will be ongoing and learning opportunities will be planned and provided to cater for the identified learning needs of each student
- The whole school assessment schedule will inform regular school-wide Mathematics assessments to be completed, including the use of Essential Assessments
- Student progress in Mathematics will be recorded progressively for each strand. Final judgements against the Victorian Curriculum achievement standards will be moderated by teachers and reported in half and end of year parent reports, and the school's annual report
- Home-school partnerships will be actively fostered, with students having online resources to access
- A Mathematics team will be allocated the responsibility of coordinating the school's Mathematics program, in consultation with the Curriculum Co-ordinator. The team will oversee the delivery of the Mathematics curriculum, provide ongoing teacher professional learning, allocate resources and promote the value of Mathematics in the school
- The Mathematics Sub-Program Budget is to be managed by the Mathematics Team Leader. The amount of funds available to the Mathematics Team may vary in accordance with whole school priorities and the distribution of funds as outlined in the annual Student Resource Package, Indicative Budget and Confirmed Budget

REVIEW CYCLE AND EVALUATION

This policy was last updated on 17 June 2021 and is scheduled for review in 17 June 2024