Mathematics

Rationale

Mathematics pervades all aspects of our lives and competence in Mathematics is integral to successful participation in modern society. Mathematics has a fundamental role in enabling cultural, social and technological advances, and empowering individuals as critical citizens in contemporary society and for the future. The Mathematics program will allow all students to have genuine access to mathematical learning. It should build on students’ interests and experiences so they see a purpose for the concepts and skills being taught. Encouraging students to analyse, compare, explain, estimate and synthesise the mathematics problem will enable them to develop the ability to choose the best approach to solve problems.

Policy Statement

Croydon Hills will deliver a sequential course based on the outcomes from the Victorian Essential Learning Standards (VELS)
Mathematics is a process subject and is therefore integrated as far as possible into content areas of the VELS curriculum
Mathematical knowledge includes knowledge of concepts, objects, definitions and structures. Mathematical reasoning and thinking underpins all aspects of school mathematics, including problem posing, problem solving, and investigation and modelling.
The Mathematics domain is organised into six sections, one for each level of achievement from Level 1 to Level 6. Each level includes a learning focus statement and a set of standards organised by dimension

Through learning mathematics at Croydon Hills, students should:
• demonstrate useful mathematical and numeracy skills
• solve practical problems with mathematics
• see mathematical connections and be able to apply mathematical concepts, skills and processes in posing and solving mathematical problems
• be confident in one’s personal knowledge of mathematics, to feel able both to apply it, and to acquire new knowledge and skills when needed
• use ICT as a tool to develop and represent mathematical skills and understanding
• communicate and reason mathematically

Implementation

• The Numeracy Coordinator is responsible for overall coordination, organisation and implementation of effective numeracy strategies across the school.
Classroom teachers have the principle responsibility for developing numeracy skills in classroom programs, through comprehensive level planning and consultation with the relevant Coordinator. Teachers will draw on student’s knowledge of the real world to ensure that abstract ideas are linked to something familiar.

Monitoring children’s achievement against VELS standards enables teachers at Croydon Hills to provide intervention and extension strategies for students who are performing below or above expected standards of Mathematics with provision made for students who have special needs in numeracy.

Classroom Teachers will:

- present mathematics in a variety of learning contexts including real-life experiences, games, open ended tasks and literature based tasks
- use a variety of activities and experiences will be provided to enable students to confidently apply their knowledge, being flexible and creative in problem solving and risk taking situations
- use ICT to support the development of students’ mathematical understandings, skills and practices.
- ensure assessment is FOR learning, OF learning and AS learning with common assessment tasks developed, implemented and moderated on
- ensure students are involved in self and peer assessment that enables them to recognise, articulate and share their understandings
- ensure student’s individual abilities are measured and learning opportunities are provided that cater for the identified needs of each student.
- ensure students requiring additional assistance or extension are identified, supported and monitored through IEPs and/or targeted small group assistance.
- plan for mathematics study for each student for at least 5 hours per week.

References

Victorian Essential Learning Standards.

Review

This policy will be reviewed as part of the school’s cyclic review.