



Rationale Mathematics Learning Area St Stephen's School Carramar

In the Mathematics learning area students learn to use ideas about number, space and chance, and mathematical ways of representing patterns and relationships, to describe, interpret and reason about their social and physical world. Mathematics plays a key role in the development of students' numeracy and assists learning across the curriculum.

Mathematics can enhance our understanding of the world and the quality of our participation in society. Since it is valuable to us individually and collectively, it should be an integral part of the general education of every young person.

Students should learn to read, write and speak mathematics in a variety of contexts and forms so that they can interpret and convey mathematical ideas; interpret prose containing mathematical notation or ideas; and continue to learn mathematics autonomously. Whether dealing with familiar or unfamiliar tasks, they need to:

- Recognise that mathematics may usefully be applied to the task.
- Choose appropriate mathematical ideas or procedures.
- Make decisions about the level of precision and accuracy needed.
- Do the mathematics.
- Interpret the results of using mathematics in the original context.
- Judge the appropriateness of the methods used.

Many students develop strong views about mathematics during their schooling: What it is about, who it is for, and what kind of people need it and are good at it. Some are effectively excluded from some of life's opportunities because they and significant others assume that they cannot do "it". For this reason, it is essential that the common mathematics curriculum be as rewarding as we can make it; that all students feel, and are, able to learn mathematics, and that they develop a positive attitude to their own continued use of it. Every student needs to develop an awareness of the nature of mathematics; how it is created, used and communicated; for what purposes it is used and how it both influences and is influenced by the things we believe and the values we hold.