

# UNIT 1 & 2 VOCATIONAL MAJOR NUMERACY

VCE Vocational Major Numeracy focuses on enabling students to develop and enhance their numeracy skills to make sense of their personal, public and vocational lives. Students develop mathematical skills with consideration of their local, national and global environments and contexts, and an awareness and use of appropriate technologies.

## UNIT 1

In this unit students will apply the use of integers, decimals, fractions, ratios, proportions, percentages and rates to solve practical problems. They will use and interpret formulas and algebraic expressions to describe relationships between variables and to model patterns that exist in everyday contexts. Students will apply and use metric units for length, area, volume, time, speed and currencies and convert between units as required. They will interpret and use time and duration including time and date specifications, conventions, schedules, timetables and time zones. The focus of the learning is applied and project based with an emphasis on developing competencies rather than maximizing test scores.

### AREA OF STUDY

- Number
- Shape
- Quantity and measures
- Relationships.

### OUTCOMES

**Outcome 1:** Demonstrate a range of different numeracy skills and capabilities in order to make sense of their daily personal, public and vocational lives.

**Outcome 2:** Select, interpret and use the four stages of the mathematical problem-solving cycle, using a range of both informal and formal mathematical processes, representations, and conventions.

**Outcome 3:** select and effectively and accurately use the appropriate mathematical tools and applications chosen from a developing mathematical toolkit.

## UNIT 2

In this unit students will investigate geometric conventions and properties of shapes and objects, the application and use of similarity and symmetry and the processes involved in the enlargement and reduction of diagrams and models. The interpretation and use of location, distance, direction and scale on diagrams, maps and plans will be discussed and applied in practical situations. Students will cover the processes involved in the collection, presentation and analysis of gathered and provided data from community, work, recreation and media contexts. Students will interpret diagrams, charts, tables and graphs and use measures of averages and spread to summarise, interpret and compare data sets.

### NUMERACY CONTEXTS

- Personal numeracy
- Civic numeracy
- Financial numeracy
- Health numeracy
- Vocational numeracy
- Recreational numeracy.

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