

## Unit outcomes

# Spinning in space

### Science outcomes

*Spinning in space* is a Stage 2 unit. Unit outcomes have been identified for Level 2 and Level 3 of the *National Scientific Literacy Progress Map*, allowing teachers to cater for the range of abilities in the fourth and fifth years of schooling. Summative assessment will need to take account of the levels of achievement expected for a cohort of students. Summative assessment of conceptual learning outcomes (c) occurs in the *Evaluate* phase and summative assessment of the investigating outcomes (i) occurs in the *Elaborate* phase.

#### Level 2

- c Describe the shapes and sizes of the Sun, Earth and Moon.
- c Describe the apparent movement of the Sun across the sky from East to West.
- c Describes changes in shadows, and differences between day and night, and relates these changes to the spinning of the Earth.
- i Identify some variables that can be investigated.
- i Make and record observations.

#### Level 3

- c Describe the shapes and sizes, positions and movements of the Sun, Earth and Moon.
- c Explain how day and night occur on Earth.
- i Show awareness of the need for fair testing.
- i Make measurements and observations.
- i Record measurements in a table and display results in a column graph.

### Literacy focuses

*Spinning in space* engages students in activities that reflect the mutually supportive relationship between science and literacy. Learning activities have been designed to explicitly introduce the literacy focuses and to provide students with the opportunity to use them as they think about and represent their understanding of science.

The interdependence of science and literacy is demonstrated throughout the unit when students participate in discussions and use talk to: inquire, report on observations, clarify understanding and reflect on experience. The use of gestures and oral, written and visual language to relate science to students' personal worlds is another important aspect.

The literacy focuses identified for *Spinning in space* are:

- science journals
- word walls
- labelled diagrams
- role-plays
- tables
- graphs
- posters.