

Unit outcomes

Plants in action

Science outcomes

Plants in action is a Stage 2 unit. Unit outcomes have been identified for both 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 changes to the seed during germination and to the seedling during its growth.
- c** Identify a number of conditions required for plants to grow.
- c** Identify parts of a seedling (for example, root, stem, leaves).
- c** Identify parts of a flower (for example, petals, stamens).
- i** Identify some variables that can be investigated.
- i** Make and record observations.

Level 3

- c** Explain the role of roots, stems, leaves, flowers and fruits.
- c** Explain the relationships between the stages and processes in the plant life cycle.
- i** Show awareness of the need for fair testing.
- i** Make predictions.
- i** Make measurements and observations.
- i** Display results in simple tables and graphs or as scientific diagrams.
- i** Identify and summarise patterns in results.

Literacy focuses

Plants in action 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 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 *Plants in action* are:

- science journals
- tables
- timelines
- labelled diagrams
- procedural texts
- writing questions
- TWLH charts
- factual texts
- summaries
- word walls
- cross sections
- oral presentations.