

Unit outcomes

Push-pull

Science outcomes

Push-pull is a Stage 1 unit. Unit outcomes have been identified for Level 1 and Level 2 of the *National Scientific Literacy Progress Map*, allowing teachers to cater for the range of abilities in the second and third 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 1

- c** Identify and describe a push acting on an object in a familiar context.
- c** Identify and describe a pull acting on an object in a familiar context.
- i** Follow directions to conduct simple investigations involving floating, sinking and falling through air.
- i** Make and share observations.

Level 2

- c** Identify pushes and pulls acting on objects floating and sinking in water, and falling through air.
- c** Use force-arrows to show the direction in which a push or pull is acting.
- c** Given a familiar context, explain the effect of a push or pull on the movement of an object.
- c** Given a familiar context, explain the effect of gravity on a falling or sinking object.
- i** Identify some variables to investigate.
- i** Make and record observations.

Literacy focuses

Push-pull 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 *Push-pull* are:

- tables
- science journals
- word walls
- force-arrow diagrams
- factual texts