

## Introduction

A science journal is a record of observations, experiences and reflections. It contains a series of dated, chronological entries. It can include written text, drawings, measurements, labelled diagrams, photographs, tables and graphs.

Using a science journal provides an opportunity for students to be engaged in a real science situation as they keep a record of their observations, ideas and thoughts about science activities. Students can use their science journals as a useful self-assessment tool as they reflect on their learning and how their ideas have changed and developed during a unit. Monitoring students' journals allows you to identify students' alternative conceptions, find evidence of students' learning and plan future learning activities in science and literacy.

Keeping a science journal supports students to experience and understand how scientists work, and aligns to descriptions in the Australian Curriculum: Science and Australian Curriculum: English.

## Using a science journal

- Provide each student with a notebook for their science journal or use a digital format. Tailor the type of journal to fit the needs of your students. Explain to students that they will use their journals to keep a record of their observations, ideas and thoughts about science activities. Emphasise the importance of including pictorial representations as well as written entries.
- Use a large project book, A3 paper, or interactive whiteboard to make a class science journal. This can be used at all year levels to model journal entries. With younger students, the class science journal can be used more frequently than individual journals, or could take the place of individual student journals.
- Make time to use the science journal in each lesson. Provide opportunities for students to plan procedures and record predictions, and their reasons for predictions, before an activity. Use the journal to record observations during an activity and reflect afterwards, including comparing ideas and findings with initial predictions and reasons. It is important to encourage students to provide evidence that supports their ideas, reasons and reflections.
- Provide guidelines in the form of questions and headings and facilitate discussion about recording strategies, such as note-making, lists, tables and concept maps. Use the class science journal to show students how they can modify and improve their recording strategies.
- Science journal entries can include narrative, poetry and prose as students represent their ideas in a range of styles and forms.
- In science journal work, you can refer students to display charts, pictures, diagrams, word walls and phrases about the topic displayed around the classroom. Revisit and revise this material during the unit. Explore the vocabulary, visual texts and ideas that have developed from the science unit, and encourage students to use them in their science journals.

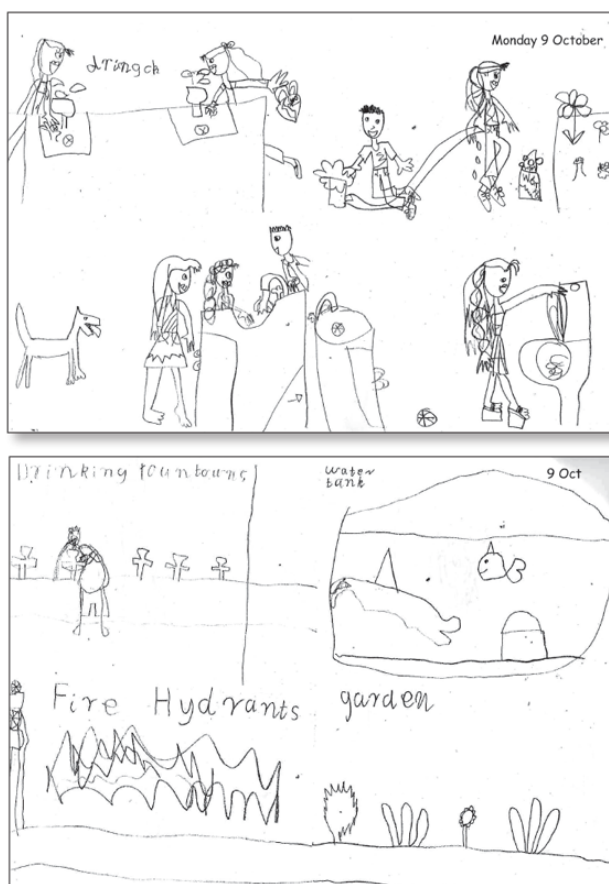
# Using a science journal throughout inquiry

with Primary Connections

- Use the science journal to assess student learning in both science and literacy. For example, during the Engage phase, use journal entries for diagnostic assessment as you determine students' prior knowledge. Science journals are also valuable for self-assessment and peer-assessment.
- Discuss the importance of entries in the science journal during the Explain and Evaluate phases. Demonstrate how the information in the journal will help students develop literacy products, such as posters, brochures, letters and oral or written presentations.

16 October The role play helped me understand how day and night happen. Using human bodies for the models of the Sun and the Earth and Moon was fun. Mrs Jones told the story and some of the students acted it out. When we are facing the Sun it is day and when we are not facing the Sun it is dark and night time. The Earth spins around the Sun and the Moon spins around the Earth

A sample student science journal entry for the Year 3 unit *Night and day*



A sample student science journal entry for the Foundation unit *What's it made of?*