

## Shirley Smith High School Vision and Values

### *Grow with us.*

*At Shirley Smith High School, teaching and learning is authentic, rigorous, and designed to maximise student agency. We align deep disciplinary knowledge and excellent pedagogical practice to ensure our learners are empowered to find their purpose, fulfil their potential, and shape their own futures.*

Students at Shirley Smith High School are:

### **Curious**

*brave and open minded inquirers with a desire to know and understand*

### **Connected**

*inclusive young people connected to each other, connected to their community and connected to Country*

### **Learners**

*creative empowered learners with boundless potential for their futures and the future of our planet*

## Subject Details

|                  |                                                          |                         |                   |
|------------------|----------------------------------------------------------|-------------------------|-------------------|
| <b>Subject:</b>  | Science                                                  | <b>Learning Area:</b>   | STEM              |
| <b>Teachers:</b> | Cheryl Walker, Adam Douglas, Kurt Halbauer and Adam King | <b>Learning Period:</b> | Semester 2, 2026. |

## Engagement in Learning

In order to facilitate active engagement in their learning, students are expected to:

- Arrive prepared for their lessons, equipped with a fully charged chromebook, a notebook, a pen or pencil, and any other subject-specific materials that may be necessary.
- Independently make an effort to retrieve and complete any missed assignments or coursework due to absences or extracurricular activities during their own time.
- Embrace the principles of the school's Yindymarra wellbeing framework by treading lightly. This involves taking moments to pause, authentically connecting with others, engaging in deep listening, thoughtful reflection, and considering the impact of their actions on others.

## Learning and Assessment Policies

Please see the school website for policies regarding the submission of late work, extension requests for assessment tasks, and plagiarism and academic integrity.

## Description of Learning

### **Unit overview:**

In this Year 8 Science program, students build a deep understanding of Earth and physical sciences through hands-on inquiry, real-world connections, and collaborative learning. They begin by exploring the nature of energy—investigating heat transfer, electricity, and energy transformation—before applying this knowledge in a sustainable design task. Students then examine the processes that drive the rock cycle, classifying different types of rocks and exploring how heat, pressure, and erosion contribute to geological change over time. This leads into a focused study of tectonic theory, where students investigate the structure and movement of Earth's plates and how these processes shape the planet's surface and affect human communities. Throughout the units, students link scientific ideas to everyday applications, from energy efficiency to natural disaster preparedness, and explore how scientific knowledge continues to evolve. A

continued focus on scientific report writing prompts students to construct evidence-based arguments to support conclusions that are made after experiments.

**Unit learning outcomes:**

By the end of this unit, students will demonstrate a level of achievement for the following standards:

- Applies an understanding of the theory of plate tectonics to explain patterns of change in the geosphere.
- Explains how the properties of rocks relate to their formation and influence their use.
- Compares different forms of energy and represents transfer and transformation of energy in simple systems.
- Selects and uses equipment to generate and record data with precision.
- Selects and constructs appropriate representations to organise and process data and information.
- Analyses data and information to describe patterns, trends and relationships and identify anomalies.
- Selects and uses language and text features appropriately for their purpose when communicating their ideas, findings and arguments to specific audiences.

**Assessment:**

| Task                                      | Approximate Due Date |
|-------------------------------------------|----------------------|
| - Class work                              | Ongoing              |
| - Formative Assessment                    | Ongoing              |
| - Energy Efficiency Assignment            | Week 8-10            |
| - Heat, Energy and Temperature Topic Test | Week 9               |
| - Rock Cycle Topic Test                   | Week 15              |
| - Continental Drift to Tectonics Timeline | Week 18              |

**Learning Experiences**

Throughout the unit, students may have the opportunity to engage in the following learning experiences:

**Incursions/Excursions** - TBC

**Competitions** - None during Semester 2

**Film Studies** - General documentaries and topic specific content

Please contact your child's teacher if you do not wish for your child to view these films.