

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

Subject: Science

Learning Area: STEM

Teachers: Will Roberts, Adam Douglas, Sujata Chaudhri and Adam King

Learning Period: 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 integrated series of science units, students develop an understanding of how forces affect motion and how simple machines can be used to modify the effort needed to perform tasks. They investigate the principles of balanced and unbalanced forces, explore mechanical advantage through the use of levers, pulleys, and gears, and apply their knowledge in practical contexts such as sport, accessibility, and Indigenous technologies. Students also examine the Earth-Sun-Moon system, learning how gravitational forces and relative motion create observable patterns like seasons, tides, and eclipses. Complementing this, students explore First Nations Australian perspectives on astronomy and land management, recognising how cultural knowledge contributes to scientific understanding. 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:

- Represents and explains the effects of forces acting on objects.
- Models cycles in the Earth-sun-moon system and explains the effects of these cycles on Earth phenomena.
- Selects and constructs appropriate representations to organise data and information.
- Processes data and information and analyses it to describe patterns, trends and relationships.
- Identifies evidence to support their conclusions and constructs arguments to support or dispute claims.
- Selects and uses language and text features appropriately for their purpose and audience when communicating their ideas and findings.

Assessment:

Task	Approximate Due Date
- Class work	Ongoing
- Formative Assessment	Ongoing
- Forces Test	Week 5
- Scientific Report - Levers	Week 8
- Simple Machines Test	Week 10
- Earth, Sun and Moon Test	Week 15
- Country as Teacher Presentation	Week 18

Learning Experiences

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

Incursions/Excursions - TBC

Competitions - None in 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.