

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:	Ben Hobbs, Sujata Chaudhri, Will Roberts	Learning Period:	Semester One, 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 Year 7 Science, you'll develop the skills and knowledge to think and work like a scientist. We begin by exploring the **science laboratory**, learning how to work safely and use scientific equipment correctly. You'll develop essential practical skills that allow you to conduct experiments and follow the **scientific method** - making observations, forming hypotheses, and analyzing results. You'll investigate how to **separate pure substances from mixtures**, using different techniques to explore real-world applications of chemistry. In **biology**, you'll discover how scientists classify and categorize living things, highlighting the incredible diversity of species. You'll also explore **ecosystems**, learning how living and nonliving parts interact and depend on each other in different environments around the world. Throughout the semester, you'll develop key skills in **scientific investigation and report writing**, helping you communicate your findings and build a deeper understanding of the world around you. Get ready for a semester of discovery,

experimentation, and exciting scientific challenges!

Unit learning outcomes:

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

- Explains how biological diversity is ordered and organised.
- Represents flows of matter and energy in ecosystems and predicts the effects of environmental changes.
- Uses particle theory to explain the physical properties of substances and develops processes that separate mixtures.
- Students identify the factors that can influence development of and lead to changes in scientific knowledge.
- Plans and conducts safe, reproducible investigations to test relationships and aspects of scientific models.
- Uses equipment to generate and record data with precision.
- Selects and constructs appropriate representations to organise data and information.
- 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
- Exercise and Heart Rate Experiment	Week 4
- Introduction to Science Test	Week 6
- Separating Mixtures Scientific Report	Week 9
- Separation Techniques Test	Week 10
- Camouflage Scientific Report	Week 14
- Ecology Test	Week 16
- Classification Test	Week 19

Learning Experiences

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

Incursions/Excursions - TBA

Competitions - Big Science Competition, 4-15 May