

QUEENSLAND MUSEUM:

gateway to STEM

professional development day

Session Information

Fantastic Features

<https://www.museum.qld.gov.au/learning-resources/learnings/fantastic-features-teacher-resource>

To conserve Queensland's natural heritage, Queensland Museum has a responsibility to collect, research and promote our unique and fascinating animals, plants, and habitats. In this workshop, we will:

- Explore mysterious creatures from the oldest book in our collection.
- Investigate how adaptations support the survival of Australian animals in a range of habitats.
- Understand the benefits of camouflage with an exciting investigation.
- Consider a design challenge for a camouflaged camera that can be used to record native wildlife.
- Analyse specialised stinging cells of jellyfish.

Year 5 - Biological Sciences

Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)

Year 6 – Biological Sciences

The growth and survival of living things are affected by physical conditions of their environment (ACSSU094)

Year 8 - Biological Sciences

Cells are the basic units of living things; they have specialised structures and functions (ACSSU149)

Multi-cellular organisms contain systems of organs carrying out specialised functions that enable them to survive and reproduce (ACSSU150)

Activities in this resource also link to:

Years 5-9 SHE and Science Inquiry Skills
Year 5 Physical Sciences
Years 8-9 Biological Sciences
Year 5 Design & Technologies
Year 5 English
Years 5-6 Mathematics
Year 6 Humanities & Social Sciences

General Capabilities: Literacy, ICT & Numeracy

Cross-Curriculum Priorities: Sustainability

More details can be found on the digital resources [here](#).

Problematic Polymers

<https://www.museum.qld.gov.au/learning-resources/learnings/problematic-polymers-teacher-resource>

It can be difficult to imagine modern life without plastic. Despite its many uses, plastic has been criticised for its detrimental effects on our planet. In this workshop, we will:

- Stimulate curiosity about the impact of litter in our local communities.
- Explore concepts and issues underpinning the question, "Why do we use so much plastic?"
- Investigate gut contents of animals, including ingested plastic.
- Conduct an innovative experiment creating biodegradable and edible water 'bottles' made from brown algae.

Year 6 – Chemical Sciences

Changes to materials can be reversible or irreversible (ACSSU095)

Year 6 - Biological Sciences

The growth and survival of living things are affected by physical conditions of their environment (ACSSU094)

Year 5 – Humanities & Social Sciences

The environmental and human influences on the location and characteristics of a place and the management of spaces within them (ACHASSK113)

Year 6 – Humanities & Social Sciences

The effect that consumer and financial decisions can have on the individual, the broader community and the environment (ACHASSK150)

Cross Curriculum Priorities: Sustainability

Activities in this resource also link to:

Years 6-9 Biological Sciences
Years 5-9 SHE & Science Inquiry Skills
Years 5-10 Design & Technologies
Years 5-7 Mathematics
Years 9-10 Geography

General Capabilities: Literacy, Ethical Understanding & Intercultural Understanding

More details can be found on the digital resources [here](#).