

# OVERVIEW



## Overboard and Underwater

## Year 5 & 6 Program

In this day program students adopt the role of Environmental Managers and explore various marine environments to discover how living things are affected by the physical environment and how human activity impacts upon this. Students observe and catalogue marine debris, investigating possible impacts of this on these marine environments.

Students start the day exploring the Manly foreshore where they annotate maps notating the movement of rubbish through the environment. Students then travel out onto Moreton Bay on our boat, *Inspiration*, to collect data about benthic microorganisms and microplastics using a sediment grab. They conduct a rubbish audit at Bayside Park, identifying microplastics and investigating types of marine debris using the Tangaroa Blue method and national standard for rubbish audits.

At the end of the day, students propose and evaluate environmental management strategies, making recommendations on how to minimise marine debris. Students answer the key inquiry questions based on the Australian Curriculum:

- How do people and environments influence one another?
- How does the physical environment affect living things?
- How can people use environments more sustainably?

### Curriculum Intent

#### Humanities and Social Sciences

##### Knowledge and Understanding – Year 5

###### Geography

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

###### Economics and Business

- Types of resources (natural, human, capital) and the ways societies use them to satisfy the needs and wants of present and future generations ([ACHASSK120](#))

##### Inquiry and Skills – Years 5-6

###### Researching

- Locate and collect relevant information and data from primary and secondary sources ([ACHASSI095](#) / [ACHASSI123](#))
- Organise and represent data in a range of formats including tables, graphs and large- and small-scale maps, using discipline-appropriate conventions ([ACHASSI096](#) / [ACHASSI124](#))

###### Evaluating and reflecting

- Evaluate evidence to draw conclusions ([ACHASSI101](#) / [ACHASSI129](#))
- Work in groups to generate responses to issues and challenges ([ACHASSI102](#) / [ACHASSI130](#))
- Reflect on learning to propose personal and/or collective action in response to an issue or challenge, and predict the probable effects ([ACHASSI104](#) / [ACHASSI132](#))

#### Science

##### Science Understanding – Year 6

###### Biological sciences

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



**Moreton Bay**  
ENVIRONMENTAL EDUCATION CENTRE  
*Inspiring Champions for the Bay*



**Queensland  
Government**

(07) 3906 9111  
[www.moretoneec.eq.edu.au](http://www.moretoneec.eq.edu.au)  
[admin@moretoneec.eq.edu.au](mailto:admin@moretoneec.eq.edu.au)

# OVERVIEW



## Science as a Human Endeavour – Years 5-6

### *Nature and development of science*

- Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena and reflects historical and cultural contributions ([ACSHE081](#) / [ACSHE098](#))

### *Use and influence of science*

- Scientific knowledge is used to solve problems and inform personal and community decisions ([ACSHE083](#) / [ACSHE100](#))

## Science Inquiry Skills – Years 5-6

### *Planning and conducting*

- Identify, plan and apply the elements of scientific investigations to answer questions and solve problems using equipment and materials safely and identifying potential risks ([ACSIS086](#) / [ACSIS103](#))
- Decide variables to be changed and measured in fair tests, and observe measure and record data with accuracy using digital technologies as appropriate ([ACSIS087](#) / [ACSIS104](#))

### *Processing and analysing data and information*

- Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in data using digital technologies as appropriate ([ACSIS090](#) / [ACSIS107](#))
- Compare data with predictions and use as evidence in developing explanations ([ACSIS218](#) / [ACSIS221](#))

### *Communicating*

- Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts ([ACSIS093](#) / [ACSIS110](#))

## General Capabilities

### *Critical and creative thinking*

- Critical thinking requires the ability to identify and clarify information and ideas, and organise and process information

### *Ethical understanding*

- Understanding ethical concepts and issues requires exploring ethical concepts in context

## Cross-curriculum Priorities

### *Sustainability*

- All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival
- Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments
- Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments

