



## Mangroves and the Environment V9

## Year 3 / 4 Program

In this immersive program, students take on the role of *Junior Ecologists* to explore the vital role mangrove forests play in supporting life in the marine environment and protecting the coastline. Through hands-on investigations, they examine lifecycles, feeding relationships, and the ways living things depend on one another for survival.

The students are introduced to the importance of mangroves through pre-program resources to spark questions about the value of mangroves for humans, wildlife, and the wider environment. On program day they board *Inspiration*, our research vessel, to investigate life out in Moreton Bay (Quandamooka). A plankton trawl is conducted in real time to collect samples for exploration, investigating lifecycles and feeding relationships in marine ecosystems.

The students then explore the mangrove habitat where they identify mangrove species, learn about their lifecycles and the adaptations that help them survive in challenging environments. On their exploration they observe the diversity of organisms that live among the mangroves and the interdependent relationships that link plants and animals in these ecosystems.

By the end of the day, students will have developed a deeper understanding of how mangroves contribute to ecosystem health, biodiversity and sustainability.

Curriculum Intent – Year 3	Curriculum Intent – Year 4
<p><b>Science</b>  <b>Science Understanding</b>  <i>Biological sciences</i></p> <ul style="list-style-type: none"> <li>Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals (<a href="#">AC9S3U01</a>)</li> </ul> <p><b>Science as a Human Endeavour</b>  <i>Nature and development of science</i> (<a href="#">AC9S3H01</a>)  <i>Use and influence of science</i> (<a href="#">AC9S3H02</a>)</p> <p><b>Science Inquiry Skills</b>  <i>Questioning and predicting</i> (<a href="#">AC9S3I01</a>)  <i>Planning and conducting</i> (<a href="#">AC9S3I02</a>) (<a href="#">AC9S4I03</a>)</p>	<p><b>Science</b>  <b>Science Understanding</b>  <i>Biological sciences</i></p> <ul style="list-style-type: none"> <li>Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships (<a href="#">AC9S4U01</a>)</li> </ul> <p><b>Science as a Human Endeavour</b>  <i>Nature and development of science</i> (<a href="#">AC9S4H01</a>)  <i>Use and influence of science</i> (<a href="#">AC9S4H02</a>)</p> <p><b>Science Inquiry Skills</b>  <i>Questioning and predicting</i> (<a href="#">AC9S4I01</a>)  <i>Planning and conducting</i> (<a href="#">AC9S4I02</a>) (<a href="#">AC9S4I03</a>)</p>

General Capabilities	Cross-curriculum Priorities
<p><u>Critical and creative thinking</u>  <u>Personal and social capability</u>  <u>Ethical understanding</u></p>	<p><u>Aboriginal and Torres Strait Islander Histories and Cultures</u>  <u>Sustainability</u></p>

A Curriculum Activity Risk Assessment is available on request.

