

# Life on Earth and in the Sea - Year 6

Students investigate firsthand the impact of salt water on the growth of plants and observe behaviours and adaptations of plants and animals that enable them to survive in the extreme marine environment. Indigenous plant usage is investigated. The key practical components from **Curriculum into the Classroom - Science Unit 4 (V2.0) - Life on Earth, lessons 1, 2, 5, 19 & 20** are investigated during a visit to the centre.



## Day Visit program

| YEAR 6 Science – Australian Curriculum and C2C Mapping |                              |  |   |  |   |
|--|------------------------------|--|---|--|---|
| ACARA  | Science as a Human Endeavour | <p><b>Nature and developing science</b><br/>Science involves testing predictions by gathering <b>data</b> and using <b>evidence</b> to develop explanations of events and phenomena (<a href="#">ACSH098</a>)<br/>Important contributions to the advancement of science have been made by people from a range of cultures (<a href="#">ACSH099</a>)</p> <p><b>Using and Influencing science</b><br/>Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives (<a href="#">ACSH100</a>)<br/>Scientific knowledge is used to inform personal and community decisions (<a href="#">ACSH220</a>)</p>   |   |  |   |
|  | Science Inquiry Skills       | <p><b>Questioning and Predicting</b><br/>With guidance, pose questions to clarify practical problems or inform a scientific <b>investigation</b>, and predict what the findings of an <b>investigation</b> might be (<a href="#">ACSI232</a>)</p> <p><b>Planning and Conducting</b><br/>With guidance, plan appropriate <b>investigation</b> methods to answer questions or solve problems (<a href="#">ACSI103</a>)<br/>Decide which <b>variable</b> should be changed and measured in fair tests and accurately observe, measure and record <b>data</b>, using <b>digital technologies</b> as appropriate (<a href="#">ACSI104</a>)<br/>Use equipment and materials safely, identifying potential risks (<a href="#">ACSI105</a>)</p> <p><b>Processing and Analysing data and Information</b><br/>Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in <b>data</b> using <b>digital technologies</b> as appropriate (<a href="#">ACSI107</a>)<br/>Compare <b>data</b> with predictions and use as <b>evidence</b> in developing explanations (<a href="#">ACSI221</a>)</p> <p><b>Evaluating</b><br/>Suggest improvements to the methods used to investigate a question or solve a problem (<a href="#">ACSI108</a>)</p> <p><b>Communicating</b><br/>Communicate ideas, explanations and processes in a variety of ways, including multi-modal texts (<a href="#">ACSI110</a>)</p> |   |  |   |
|  | Science Understandings       | <p><b>Biological Science</b></p> <p>The growth and survival of living things are affected by the physical conditions of their <b>environment</b> (<a href="#">ACSSU094</a>)</p>  | <p><b>Chemical Science</b></p> <p>Changes to materials can be reversible, such as melting, freezing, evaporating; or irreversible, such as burning and rusting (<a href="#">ACSSU095</a>)</p> | <p><b>Earth and Space Science</b></p> <p>Sudden geological changes or extreme weather conditions can affect Earth's surface (<a href="#">ACSSU096</a>)</p> | <p><b>Physical Science</b></p> <p>Electrical circuits provide a means of transferring and transforming electricity (<a href="#">ACSSU097</a>)<br/>Energy from a variety of sources can be used to generate electricity (<a href="#">ACSSU219</a>)</p> |
|  | C2C                          | Life on Earth  | Making changes  | Our Changing World   | Energy and electricity  |
| Nudgee Beach EEC programs                              | Life on Earth and In the Sea |  |   | Energisers- power up electricity Down  |   |
| ACARA  | General Capabilities         | <p><b>Literacy</b></p> <ul style="list-style-type: none"> <li>Comprehending texts through listening, viewing and reading</li> <li>Composing texts through speaking, writing and creating</li> <li>Text knowledge</li> <li>Grammar knowledge</li> <li>Word knowledge</li> <li>Visual knowledge</li> </ul> <p><b>Numeracy</b></p> <ul style="list-style-type: none"> <li>Calculating and estimating</li> <li>Recognising and using patterns and relationships</li> <li>Interpreting and drawing conclusions from statistical information</li> <li>Using measurement</li> </ul> <p><b>Information and communication technology capability</b></p> <p>Queensland student ICT expectations</p> <ul style="list-style-type: none"> <li>Inquiring with ICT</li> <li>Creating with ICT</li> <li>Operating ICT</li> </ul> <p><b>Critical and creative thinking</b></p> <ul style="list-style-type: none"> <li>Inquiring - identifying, exploring and clarifying information</li> <li>Generating innovative ideas and possibilities</li> <li>Reflecting on thinking, actions and processes</li> <li>Analysing, synthesising and evaluating information</li> </ul> <p><b>Personal and social capability</b></p> <ul style="list-style-type: none"> <li>Self-management</li> <li>Social management</li> </ul>  |   |  |   |
|  | Cross Curriculum Priorities  | <p><b>Aboriginal and Torres Strait Islander histories and cultures</b><br/>Students will explore how Aboriginal peoples view their position in the environment, how they care for their country and how they use their ecological knowledge when harvesting resources sustainably, ensuring the growth and survival of living things.</p> <p><b>Asia and Australia's engagement with Asia</b><br/>Students will investigate living things within the Asia Pacific and how scientists use technology to monitor how their growth and survival is affected by environment.</p> <p><b>Sustainability</b><br/>Students will:</p> <ul style="list-style-type: none"> <li>explore ways in which Aboriginal people ensure sustainability of living things for the future.</li> <li>explore ways in which humans ensure that environmental conditions provide for the growth and survival of living things in particular areas.</li> <li>examine actions being considered to improve sustainable living through reducing electrical energy consumption and wastage</li> <li>examine sustainable energy sources and how they can be used to generate electricity</li> <li>explore how waste can be used as an alternative, sustainable energy source.</li> </ul>  |   |  |   |