



# Teacher Program Overview

## Ever-Changing Environments – Year 5

**Program Duration:** 1 Hour

**Location:** Dolphin Beach

**Minimum Participants:** 10 Students

**Maximum Participants:** 35 Students

### Program Overview:

This program will introduce students to the global issue of climate change with a focus on how it is impacting the survival of Polar bears. Ever Changing Environments aligns with the Australian Curriculum through all strands of Science, and the Geography, Economics and Business strands of Humanities and Social Sciences. The involvement of the sun's light and heat energy; the various land surfaces that absorb, reflect, and reradiate that energy; and the unique properties of atmospheric gases will be discussed in relation to the greenhouse effect that is necessary for life on Earth. Students will consider how human activities are enhancing the greenhouse effect and are contributing to the current period of global warming. This will be related back to Polar bears and how, despite specialised adaptations, their survival is threatened by climate change. Students will contemplate the difference between needs and wants and what choices we can make to better manage limited resources as a means of minimising our negative impact on climate change, Polar bears, and their environment.

### Program Schedule

#### Time

#### 9.15am Arrival

The school will arrive promptly at 9:15am and will be met by a Marine Education Officer on the lawn next to the flagpoles out the front of Sea World.

#### 9.20am Park Entry

The Marine Education Officer will lead the school group through the admissions gate to Polar Bear Shores for the Education Program.

#### 9.30am Education Program

#### 10:30am Program Conclusion

At the conclusion of this session, students will be free to enjoy the park for the rest of the day, at the discretion of school staff.

**\*Please note that school groups participating in this program will be unable to attend the morning *Seal Guardians Presentation*.**



## Program Mapping

### Ever-Changing Environments – Year 5

Alignment with the Australian Curriculum V8.4	
<b>SCIENCE</b>	
<b>Science Understanding</b>	
Biological Sciences	Living things have structural features and adaptations that help them to survive in their environment ( <a href="#">ACSSU043</a> )
Chemical Sciences	Solids, liquids and gases have different observable properties and behave in different ways ( <a href="#">ACSSU077</a> )
Earth and Space Sciences	The Earth is part of a system of planets orbiting around a star (the sun) ( <a href="#">ACSSU078</a> )
Physical Sciences	Light from a source forms shadows and can be absorbed, reflected and refracted ( <a href="#">ACSSU080</a> )
<b>Science as a Human Endeavour</b>	
Use and Influences of Science	Scientific knowledge is used to solve problems and inform personal and community decisions ( <a href="#">ACSHE083</a> )
<b>Science Inquiry</b>	
Questioning and Predicting	With guidance, pose clarifying questions and make predictions about scientific investigations ( <a href="#">AC SIS231</a> )
<b>HUMANITIES AND SOCIAL SCIENCES</b>	
<b>Knowledge and Understanding</b>	
Geography	The influence of people on the environmental characteristics of places in Europe and North America and the location of their major countries in relation to Australia ( <a href="#">ACHASSK111</a> )
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 ( <a href="#">ACHASSK120</a> )
<b>General Capabilities:</b>	
<ul style="list-style-type: none"> <li>• Critical and Creative Thinking</li> <li>• Ethical Understanding</li> <li>• Personal and Social capability</li> <li>• Literacy</li> </ul>	
<b>Cross- Curriculum Priorities:</b>	
<ul style="list-style-type: none"> <li>• Sustainability</li> </ul>	