



# Stage 2 – Science Living World – Coasts

Bateau Bay or Copacabana Beach

## Program Overview

Rock platforms are fascinating displays of biodiversity that foster curiosity and offers opportunities for students to explore and discover.

The cliffs reveal the past and the sandy beach reflects the dynamic nature of our coastline.

## Learning Experiences & Content

### The Rocky Coast

**Activity One:** Students will investigate living things on the rock platform using a visual guide. Group discussion will include the topics of tides, what animals eat on the rock platforms and how they find their food. e.g. filter feeders, grazers, scavengers, hunters.

**Activity Two:** Study of headland and rocks: Students will identify the thin layers of siltstone, shale and thicker sandstone beds that were laid down before the Mesozoic Era. They will discuss how the boulders fell and collect some smaller rocks that might add to the story. Students will use iPads to create a photographic artwork that shows the different sediment layers in the cliff.

### The Sandy Coast

**Activity One:** Students will conduct a science investigation to discover where sand comes from, what it is made of, the importance of sand dunes and the hardiness of the Spinifex plant we find on dunes.

**Activity Two:** Students will collect man-made and natural items from the berm. Discussion includes where they came from, effects on the environment and how they can better care for our beaches.



### Games – optional

Students will play a tag game that has a message about protecting marine habitats, followed by a sand modelling activity.



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## Outcomes

### Science K-6

#### Working Scientifically

Students:

- ✿ Investigates their questions and predictions by analysing collected data, suggesting explanations for their findings, and communicating and reflecting on the processes undertaken. **(ST2-4WS)**

#### Earth and Space

A student:

- ✿ Describes some observable changes over time on the Earth's surface that result from natural processes and human activity. **(ST2-8ES)**

### Science Content

#### Earth and Space

- ✿ Earth's surface changes over time as a result of natural processes and human activity. **(ACSSU075)**

Students:

- describe some changes in the landscape that have occurred over time as a result of natural processes e.g. erosion by wind and water.

#### Living World

- ✿ Living things can be grouped on the basis of observable features and can be distinguished from non-living things. **(ACSSU044)**
- ✿ Living things, including plants and animals, depend on each other and the environment to survive. **(ACSSU073)**

Students:

- sort objects according to whether they are living or non-living.
- identify some features of living things that distinguish them from non-living things e.g. reproducing, growing and responding to stimuli.

#### Living World

A student:

- ✿ Describes that living things have life cycles, can be distinguished from non-living things and grouped, based on their observable features. **(ST2-10LW)**
- ✿ Describes ways that science knowledge helps people understand the effect of their actions on the environment and on the survival of living things. **(ST2-11LW)**

Students:

- identify some factors in the local environment that are needed by plants and animals for survival.
- outline the relationship between plants and animals, including that plants are able to use light to make food, while animals must eat plants or other animals to obtain food.
- investigate the role of living things in a habitat, e.g. plants as producers and microbes (micro-organisms) as decomposers.

