

Deep Sea Denizens

LOCATION: NZ Marine Studies Centre, Portobello, Dunedin

PROGRAMME DESCRIPTION:

During this programme we uncover the mysteries of deep-sea creatures. We look in detail as to how they go about finding food and avoiding predators. Come with us as we take a dive in our virtual submarine to the depths of the Otago Coast, where we will see what species lurk in our local deep-sea waters.

In this programme we discover the tricky nature that scientists face when studying creatures that live in such a deep, dark environment. We also lightly dive into some of their shallow-water cousins in order to study their adaptations more closely.

Add a squid dissection to find out more about these creatures.

LEARNING OUTCOMES

Students will:

- Be able to identify adaptations that allow these creatures to live at such depths
- Gain an understanding of the difficulties that scientists face when studying the deep-sea.

Extras

Gain a new or renewed appreciation of marine life and the marine environment.

Gain a new appreciation of marine science as a possible field of study or a future career.

YEAR/LEVEL Years 6-10 Levels 3-5

CURRICULUM LINKS

Nature of Science (NoS): Investigating in Science, Understanding about Science

Science: Science Living World, Life processes, Ecology, Evolution, Levels 1-2; Evolution Level 3

KEY COMPETENCIES: Thinking, managing self, using language, symbols and text.

PRE TRIP PREPARATION: No preparation essential.

RESOURCES AVAILABLE TO SUPPORT PROGRAMME

Class sets of Rocky shore and Sandy and Muddy Shore identification guides are available on application to the NZMSC.

RELATED TOPICS: Deep sea, animal relatives, adaptations

PROGRAMME COSTS: \$8.00 per student or \$10 to include dissection (GST excl.)

PROGRAMME LENGTH: 2 hours

GROUP INFORMATION: As we will be working in a University of Otago Laboratory, students must wear closed toed shoes.

Example itinerary

10.00 am

Arrive at NZ Marine Studies Centre

LAB: Intro and overview of the programme

10.15 am

LAB: What is a mollusc? Evolution and characteristics.

11.00 am

Rotate between stations of 20min

i) LAB: Understand the rocky shore environment

ii) AQUARIUM: Discover the feeding habits of molluscs

iii) FOYER: Create a mollusc food web

11.45 am

Morning tea

12.00 pm

Wrap up and depart NZMSC (opportunity to stay for lunch)

SAFETY ACTION PLAN:

In the field: as per field operations

In Laboratory: as per Lab safety

Covid guidelines: as per government and University of Otago Covid guidelines

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