

Supper in the Sea

LOCATION: NZ Marine Studies Centre, Portobello, Dunedin

PROGRAMME DESCRIPTION:

This programme investigates the different feeding groups or trophic levels in the ocean, how they are all connected to each other, and the adaptations they have to aid their survival. Based at NZMSC in Portobello, students will be discovering the senses and protective features of various sea creatures. They will be looking closely into how animals eat, what they eat, how they find their food and how they protect themselves. Students will use this information to build a marine food web.

Extensions: For middle to senior primary we offer a dissection that looks closely at a local marine predator (e.g. shark or squid). A seashore visit, to look at feeding strategies of local species, can also be added to the programme if the tide is suitable.

LEARNING OUTCOMES

Students will:

- Be able to describe the unique adaptions that some of the local marine creatures have to survive
- Be able to model a food chain and/or a food web and explain the connections between the animals
- Be able to explain what it means if a creature is a predator, scavenger, grazer, producer and filter feeder

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 4-8 Levels 2-4

CURRICULUM LINKS

Nature of Science (NoS): Nature of Science (NoS): Understanding about science, Participating and contributing

Science: Living World - Ecology and Life processes

KEY COMPETENCIES: Thinking, managing self **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: Microscopes, iPads, running experiments, live marine creatures, research

PROGRAMME COSTS: \$8.00 per student or \$10 per student with a 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.

The NZ Marine Studies Centre is part of the Marine Science Department, University of Otago. This programme is supported by the Ministry of Education's LEOTC service. See WWW.MARINE.AC.NZ for more programmes and resources.



Example itinerary

10.00 am

Arrive at NZ Marine Studies Centre - Intro and overview of the programme

10.15 am

Rotate between stations of 30 mins

i)) LAB: Explore feeding adaptations of producers, grazers, and predators! What are their adaptations for survival?

ii) AQUARIUM: More adaptations for survival and habitats - specifically for filter feeders! iii) TOUCH TANKS: Close up and hands-on with local marine creatures - which ones are scavengers?

11.45 am

Multipurpose Room: Food web - How are these animals connected? How are they connected to us?

12.00 pm

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

Option to do squid dissection:

-Stations become 15 mins long (total 45 mins) and dissection is 45 mins long

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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