

# Seashore Investigation and Marine Metre Squared

## *Marine Education Programme for Years 1-8*

**Location:** NZ Marine Studies Centre, Portobello, Dunedin or your local shore

### **Programme Description**

Through hands-on exploration, students will investigate the abundance and diversity of life on our local shores. We will discover why different marine creatures live where they do, and how they have adapted to do so.

For Years 5 - 8: Our Marine Metre Squared (MM2) citizen science project encourages students to monitor the life on our shores. They gain science skills and experience using shore survey techniques and equipment to identify and group species and communicate their findings.

### **Learning Outcomes**

Students will:

- Gain a deeper understanding of the environment that sea creatures live in.
- Be able to identify marine creatures in English and Te Reo Māori.
- Understand more about different species abundance, location, diversity and adaptations.
- Gain an understanding of and participate in a citizen science project.
- Learn about how marine scientists study the environment.

### **Curriculum Links**

**Nature of Science (NoS):** Understanding about Science, Investigating in Science, Communicating in science, Participating and contributing.

**Science:** Living World - Life processes, Ecology, and Evolution

**Other curriculum areas:** Mathematics: Measurement and Number strategies, English, Te Reo Māori, Health and Physical Education

*This programme can be adapted to fit the specific needs of your students, just talk to one of our educators upon booking about customising the itinerary and/or delivery for your class.*

**Programme Length:** 2 hours

**Programme Cost:** \$9.00 per student (GST excl.), additional hours \$4.50 per student per hour. There may be an additional travel cost if we come to your local shore.

**Extra Information:** The date and time of this programme are dependent on low tide.

As we will be working in a University of Otago Laboratory, students must wear closed toed shoes (no sandals or crocs).

Bring suitable clothing for outdoors - rain or shine (e.g. hats, sunscreen, or warm jackets).

RAMS forms are available on request.

## **Example Itinerary**

15 min introductory presentation covering:

- Introduction to the NZMSC and the Rocky Shore, H&S and Seashore Etiquette

45 min exploration and investigation on the shore

- What creatures can we find and identify - looking around, under and on top of rocks
- What patterns can we find of where different creatures live
- Marine Metre 2 investigation and data collection for students Years 5-8

45 min exploration and investigation in the NZMSC

- Looking for different creatures in the aquarium and touch tanks
- Learning about the different creatures' adaptations

15 min wrap up

- What did we find on the shore and in the tanks
- What have we learnt today about our local shores
- What can we do to protect our local shores

*Option to have morning tea or lunch at the NZMSC before or after the programme.*

**Resources available** to support the programme can be found at [www.marine.ac.nz](http://www.marine.ac.nz)

**More information** about Marine Metre Squared can be found at [mm2.net.nz](http://mm2.net.nz)

### **Ideas for learning in class before your visit:**

- Look at the NZMSC Rocky Shore Guides and become familiar with identifying some of the different creatures you may see on your visit.
- Play our seashore bingo game!
- Introduce students to the concepts of adaptations, biodiversity, habitats and zonation.

### **Ideas for learning in class after your visit:**

- Create a rock pool wall art project, make a rock pool out of coloured card, get the students to draw their favourite shore creatures and place them where they live.
- Create marine foodwebs out of pictures and string.
- Brainstorm ways that we can help protect the life on our local shores, take action around your school and home. You could even do a clean up of your local environment!

## **NZMSC Contact**

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**See [www.marine.ac.nz](http://www.marine.ac.nz) for more programmes and resources.**