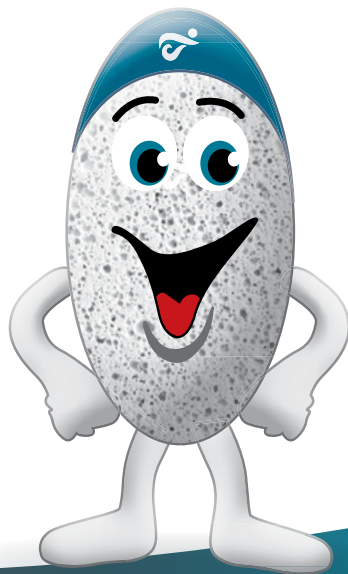
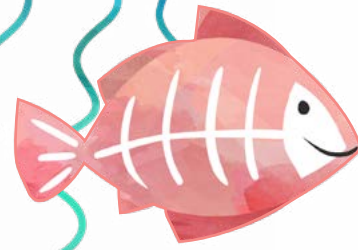
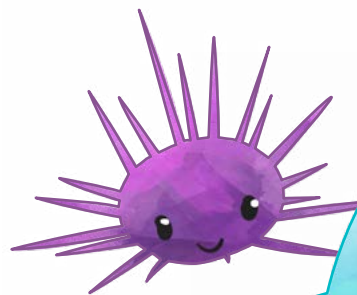


BEACH
WATER SKILLS FOR LIFE

MARINE LIFE

MODULE

11



9 LESSONS

LEVEL **2**



SUPPORTED BY



He Kaupare. He Manaak
He Whakaora.
prevention. care. recovery



MARINE LIFE

DESCRIPTION

This module gives students the opportunity to explore oceans and ocean life. After locating the earth's major oceans on a world map, students will "dive underwater" to discover the plants and animals that live in the sea.

ACHIEVEMENT OBJECTIVES

Science

Nature of Science

Communicating in science: Build their language and develop their understandings of the many ways the natural world can be represented.

Living World:

Life processes: Recognise that all living things have certain requirements so they can stay alive.

Ecology: Recognise that living things are suited to their particular habitat.

Evolution: Recognise that there are lots of different living things in the world and that they can be grouped in different ways. Explain how we know that some living things from the past are now extinct.

Planet Earth & Beyond

Interacting systems: Describe how natural features are changed and resources affected by natural events and human actions

Listening, Reading & Viewing

Processes and strategies: Select and use sources of information, processes, and strategies with some confidence to identify, form, and express ideas.

- Selects and uses processing strategies and an increasing range of comprehension strategies with some understanding and confidence

Ideas: Show some understanding of ideas within, across, and beyond texts.

- Uses their personal experience and world and literacy knowledge to make meaning from texts
- Makes meaning of increasingly complex texts by identifying main ideas

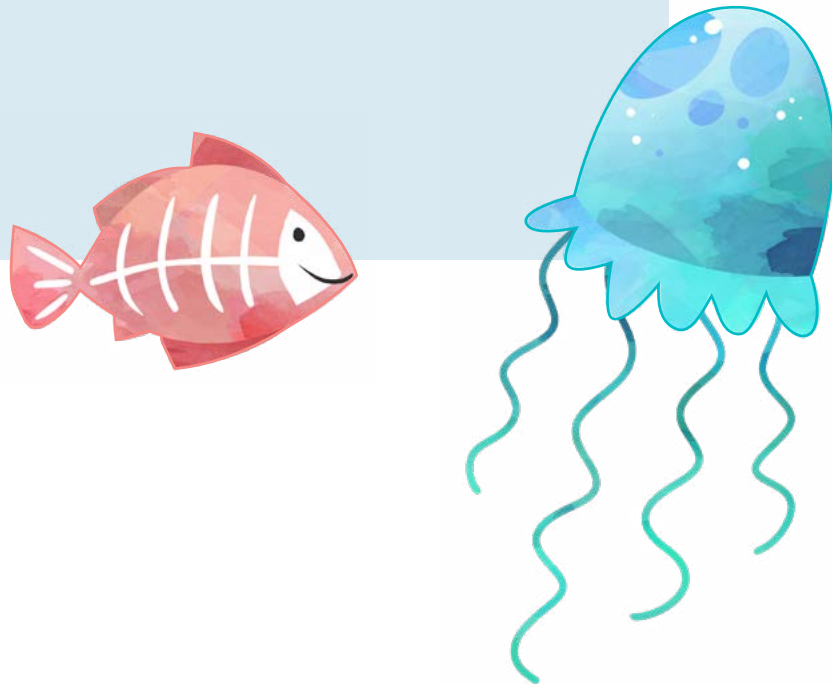
Speaking, Writing & Presenting

Purposes and audiences: Show some understanding of how to shape texts for different purposes and audiences.

- Constructs texts that demonstrate a growing awareness of audience and purpose through appropriate choice of content, language, and text form
- Expects the texts they create to be understood, responded to, and appreciated by others

Ideas: Select, form, and express ideas on a range of topics.

- Forms and expresses ideas and information with reasonable clarity, often drawing on personal experience and knowledge



LEARNING INTENTION

- Students will listen to stories, videos and poems with ocean settings and learn about the forms of sea life featured in each
- Students learn about rock pools and how they have their own mini ecosystems

SUCCESS CRITERIA

- Understand the importance of ocean life and the ocean environment
- Investigate a local water ecosystem (rock pool) by making observations and collecting samples
- Interact with online technology to view, describe, and discuss different sea life
- Research ocean life and report on findings

KEY COMPETENCIES

Participating and Contributing:

- Participate in all class activities

Managing Self:

- Manage behaviour both in and outside of the classroom
- Complete all tasks in a timely manner
- Ask for help when needed

Thinking:

- Make connections between prior and new knowledge
- Evaluate marine species and their overall impact on a mini ecosystem

Using language, symbols and texts:

- Engage with poetry, videos and other online texts to help learn about marine life

Relating to others:

- Be respectful of others' ideas
- Actively listen to my peers presentations to help me learn about marine life

RESOURCES

internet , student devices, youtube clips, poem: [Rock Pool by Barb Davidson](#),
Rock pool life guide, observation sheet,

ASSESSMENT ACTIVITIES

- Create a presentation about a rock pool plant or creature
- Verbally reflect on the important role each rockpool species plays in a mini ecosystem

LESSON

1

Tuning In

Introduce the students to the Marine Life topic by reading the poem [Rock Pool by Barb Davidson](#).

Discuss the different aspects of rockpools the poem refers to such as the sea life, the conditions, what the children are doing at the rock pool.

Activate students prior knowledge using the following questions: What do you know about rock pools? What is a rock pool? Where can we find rock pools? What animals live in rock pools? What do people often do in rock pools? What have you done in or around rock pools? Record students' responses in a modelling book or large piece of paper.

Activity:

Show the students the [Rock pool life video](#) and **discuss** the harsh conditions rock pool creatures face e.g. temperatures, changing tides, predators.

Ask the students to draw a picture of a rock pool that includes the plant life and marine life that they know lives in a rock pool.

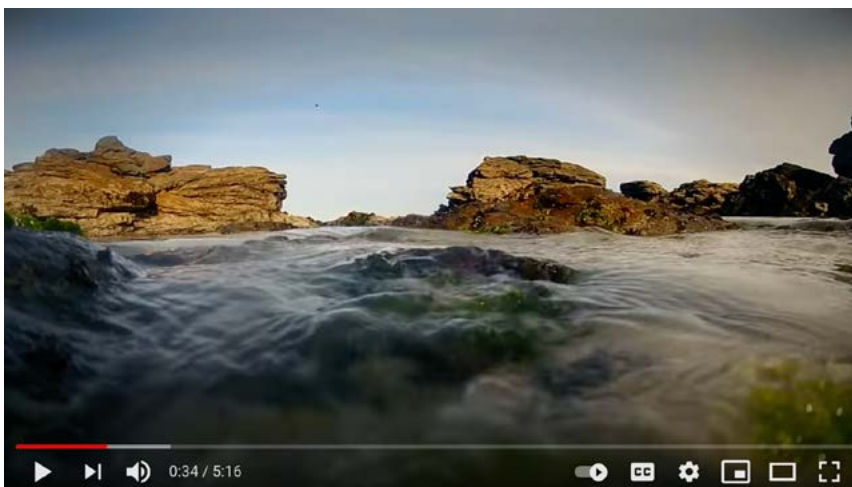
Rock Pool



Diamond sparkled water, rolling to and fro,
Pebbles turning gently in the tides ebb and flow,
Rock pools of life, shallow, own worlds within,
Anemones opening, sifting life's silt,
Crabs scurrying gently, in their sideways gait,
Searching their world, snapping, small finger bait.

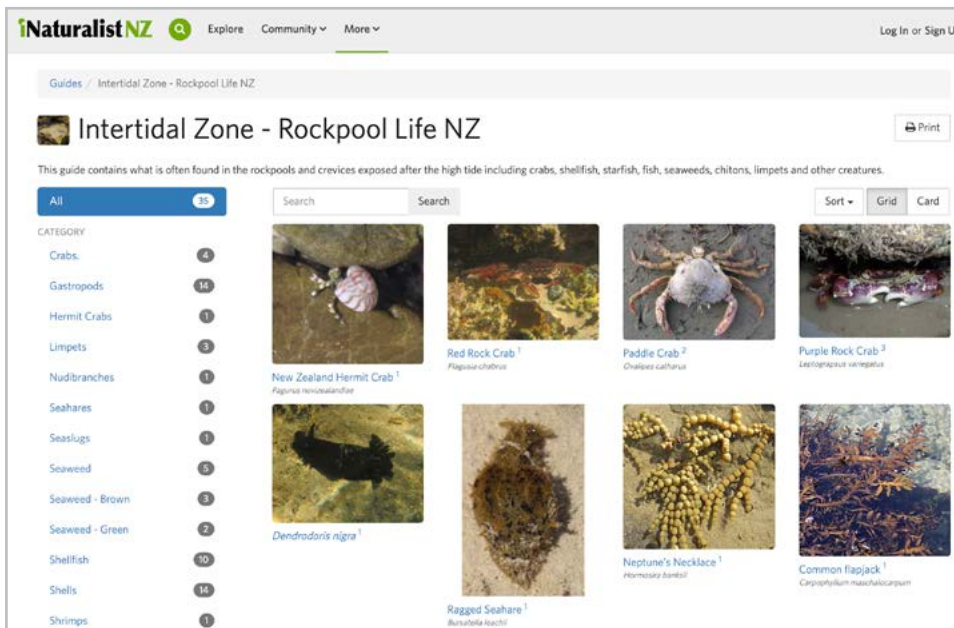
Children with buckets, coloured rainbow bright,
Smiles entwined with laughter, a memory capturing sight,
Fishing nets in hand, faces filled with a seaman's hope,
Hunters of the pools, catchers of monsters
Peering through glass clear water, to the world below,
The treasures beneath, hidden, not willing to show.

Sunkissed bodies, glowing with health,
Nothing compares, no greater wealth,
Joy and life's magic, the ultimate prize,
Memories forged never to leave,
Sun going down, breeze bringing balm,
Homewards they walk, gentle, fulfilled, an ozone induced calm.

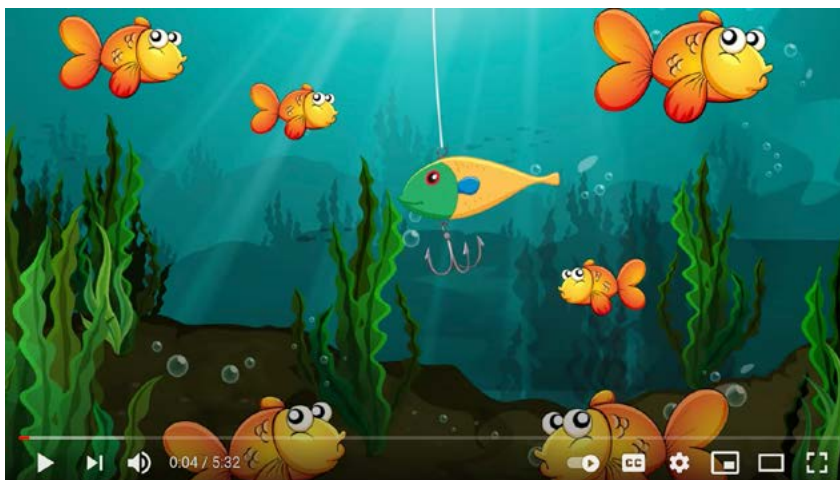


Finding Out/ Sorting Out

Show the students the [Rock Pool Life NZ Guide](#) and identify and discuss the types of creatures that live in rock pools. The purpose of this is to give students some practice with recognising and naming different types of rock pool plants and creatures in preparation for an upcoming rock pool observation trip. **Ask the students:** Have you seen any of these creatures in real life at the rock pools? Which ones? What creature/s do you think look the strangest? What creatures or plants do you think we will see on our observation trip?



Watch the [Rock Pool Creatures video](#) and discuss the techniques mentioned that will help with observing creatures in a rock pool.



Activity: Rock Pool Observation

Take the students to **visit** the local rock pools during low tide. **Explain** to them that the purpose of the trip is to observe the plants and creatures that live in the rock pools. Give each student an observation worksheet/clipboard that allows them to record the species, interesting features, a tally, and a place to record other interesting observations. Provide students with a camera to photograph rock pool species. Let the **students observe** from 30mins to an hour depending on attention spans. Once finished, sit down together in a shady spot and discuss findings.

Inquiry Questions: Ask the students to choose one species they observed on the local rock pool trip to research for their inquiry. Allow students to embark on their inquiry individually or in groups. Once they have chosen their species to research, **ask** students to come up with key questions to guide their inquiry.

Example of possible questions:

- What do crabs eat?
- How many types of crabs are there?
- What body parts do crabs have?
- What are crabs' threats or predators?
- How do crabs defend themselves?

Researching & Collecting Relevant Information

Students to organise their own way of collecting and sorting information taking into account the following:

- Tools we will use to research
- People we can ask for help
- Where we will keep our research
- Possible ways we will present our research

Once students have collected research, they must sort through it using the following questions as a guide:

- What information helps answer my questions?
- Do I need to find out more information to answer the question?
- What are my questions now?
- How have they changed?
- What changes do I need to make to my inquiry?

6 Going Further

to

8

Creating a presentation and presenting their learning

Students must decide how they will present their inquiry to the class.

Possible presentation formats include google slides, prezi, video, infographic, poster...

The teacher and students must co-construct a criteria that all presentations need to have to make sure the students have a clear understanding of what is expected of them.

Students spend time creating their presentations using the following guiding questions:

- What information is important to share?
- Have I answered all the questions to answer my inquiry?
- Have I checked to see if my presentation meets the success criteria?

Once completed, allow students to present their work to the class/assembly to allow students to broaden their knowledge of other rock pool creatures.

9 Making Conclusions/ Taking Action

Sit the students in a circle and discuss the overall learning that has occurred during the module. Ask each student to verbally reflect on the important role each rock pool species plays in its overall mini ecosystem and the diverse conditions that these species face.