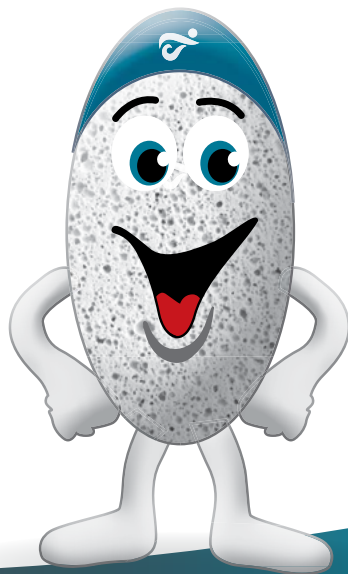
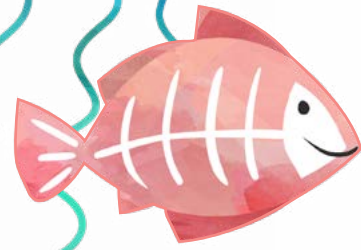
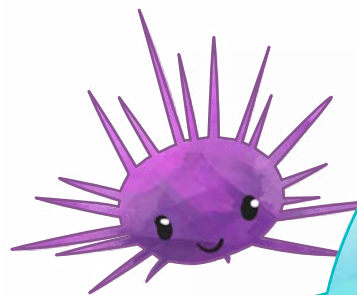


BEACH
WATER SKILLS FOR LIFE

MARINE LIFE

MODULE

11



9 LESSONS

LEVEL 3



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

Investigating in science: Build on prior experiences, working together to share and examine their own and others' knowledge. Ask questions, find evidence, explore simple models, and carry out appropriate investigations to develop simple explanations.

Communicating in science: Begin to use a range of scientific symbols, conventions, and vocabulary. Engage with a range of science texts and begin to question the purposes for which these texts are constructed.

Living World

Ecology: Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

Evolution: Begin to group plants, animals, and other living things into science-based classifications.

Planet Earth & Beyond

Earth systems: Appreciate that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth's resources.

Listening, reading & Viewing

Purposes and audiences: Show a developing understanding of how texts are shaped for different purposes and audiences.

- Recognises and understands how texts are constructed for a range of purposes, audiences, and situations
- Identifies particular points of view and begins to recognise that texts can position a reader

Language features: Show a developing understanding of how language features are used for effect within and across texts.

- Uses an increasing vocabulary to make meaning
- Shows an increasing knowledge of how a range of text conventions can be used appropriately

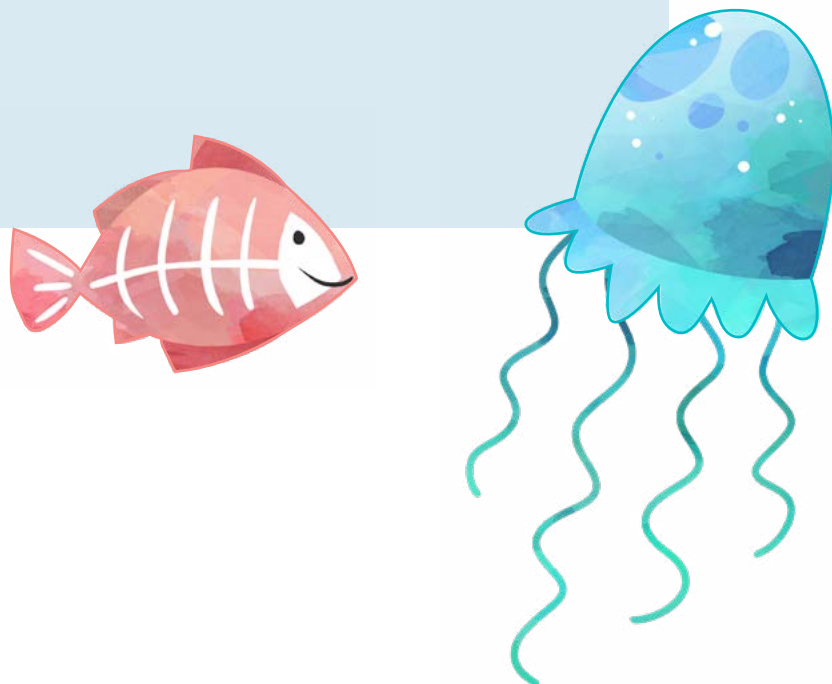
Speaking, Writing & Presenting

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

- Constructs texts that show a growing awareness of purpose and audience through careful choice of content, language, and text form

Language features: Use language features appropriately, showing a developing understanding of their effects.

- Uses oral, written, and visual language features to create meaning and effect and engage interest
- Uses a range of vocabulary to communicate meaning



LEARNING INTENTION

- Students will engage in various forms of writing about the ocean and ocean life
- 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 by making observations and/or collecting samples
- Demonstrate an understanding of behavior and adaptations of organisms
- Interact with online technology to view, describe, and discuss different sea life
- Research ocean life and write information reports and cinquain poems to inform others about a range of sea life

KEY COMPETENCIES

Participating and Contributing:

- Actively participate in activities both inside and outside of the classroom environment
- Share ideas and observations with others

Managing Self:

- Complete all tasks and activities in a timely manner
- Manage behaviour in a range of environments

Thinking:

- Evaluate information read on the internet to decide whether it is relevant to inquiry.

Using language, symbols and texts:

- Create fiction and nonfiction texts about marine life
- Review a range of texts on the internet to assist with inquiry e.g. videos, online encyclopedia

Relating to others:

- Work as a member of an inquiry team to research and make decisions about learning.

RESOURCES

Internet, smartphones, google cardboard, 360 youtube videos, online marine life encyclopedia, rock pool life NZ guide, student devices, cameras (could use ipad cameras), online presentation tools e.g. google suite, prezi...

ASSESSMENT ACTIVITIES

- Classroom discussions
- Construct an information report about a marine life family e.g. anthozoans, crustacean
- Reflect on the inquiry learning process

LESSON

1
to
2

Tuning In

Elicit students prior knowledge about marine life. **Ask the students:**

What types of marine life do you know about? What marine animals have you seen in real life? What types of marine life have you eaten? Why do you think marine life is important? What parts of the ocean do different types of marine life live in?

Activity: VR experience & Cinquain Poems

Set up a VR ocean experience for the students using google cardboard, smartphones and 360 ocean youtube experiences. **Ask the students** to record descriptive words to describe the different types of marine animals they are viewing. Get them to think about what they look like and how they move. **Ask the students** to create cinquain poems about the ocean animals they have encountered. Students can follow either of the following formats depending on their previous experience with cinquain poems.

For beginners:

Line 1: One word (a noun, the subject of the poem)

Line 2: Two words (adjectives that describe the subject in line 1)

Line 3: Three words (-ing action verbs–participles–that relate to the subject in line 1)

Line 4: Four words (a phrase or sentence that relates feelings about the subject in line 1)

Line 5: One word (a synonym for the subject in line 1 or a word that sums it up)

For experts:

Line 1: two syllables

Line 2: four syllables

Line 3: six syllables

Line 4: eight syllables

Line 5: two syllables

List of Youtube 360 ocean videos:

[Turtles](#)

[Dolphins](#)

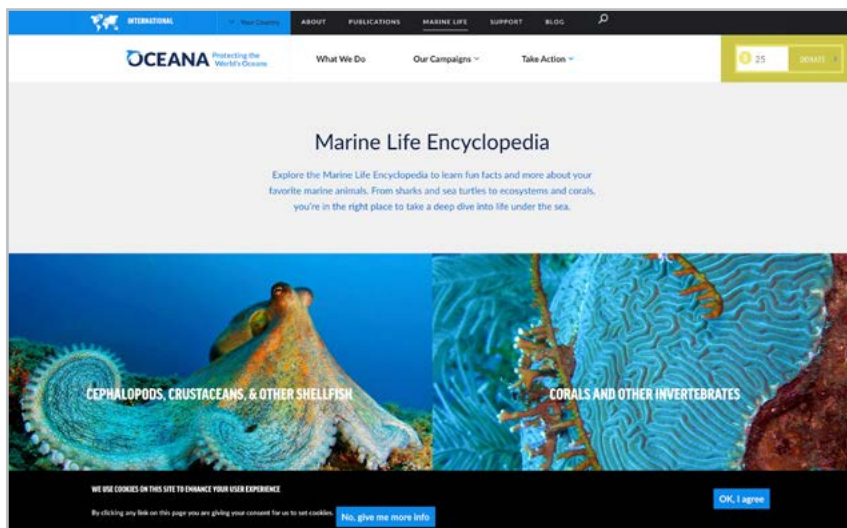
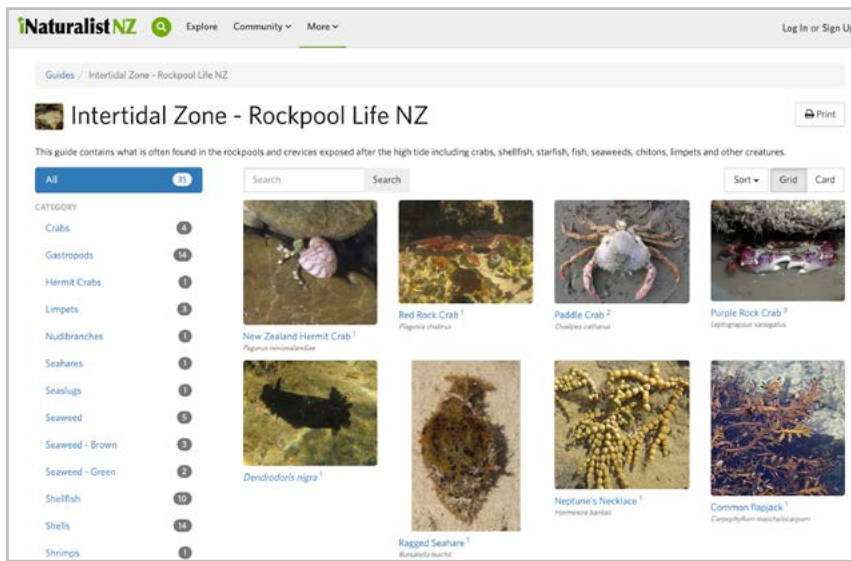
[Octopus](#)

[Hammerhead Shark](#)



Finding Out/ Sorting Out

Explain to the students that they will be conducting an inquiry focused on the marine life that live in rock pools. **Introduce** students to the different species that live in rock pools using the [Rock Pool Life NZ guide](#). **Discuss** the range of different species and how they are all different members of the animal kingdom. **Show** the students the [Oceana Marine Life Encyclopedia](#) and discuss the different families sea life belong to e.g. crustaceans, anthozoans...



Activity: Rock Pool Observation

Visit a local rock pool during low tide to observe marine life in action. Give students an observation sheet to record the different species, their features, the amount of each creature, and any of their behaviours. Allow students to capture photographs of the marine life and make note of any species they are unsure of for further investigation. Meet together in a shady spot on the beach to discuss discoveries and observations.

Inquiry:

Ask the students to form groups of 3 or 4 and explain to them that they will be choosing one of the ocean families observed in the rock pools to further investigate e.g. crustaceans. Discuss the purpose of the inquiry which is to learn about how these creatures live and what contribution they make to the ecosystem they live in. Ask the students to make a list of questions to guide their inquiry.

Examples of questions include:

- What main species are classified as crustacean?
- What are crustaceans' preferred living conditions?
- What do crustaceans need to survive?
- What threats or predators do crustaceans have?
- How do crustaceans contribute to the ecosystem it lives in?

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?

5 Going Further

Creating a presentation and presenting their learning

to **Creating** information reports to inform others about their species.

7 Each group must create information reports to present their inquiry findings to the class. **Co-construct** a success criteria with the students so they know what is expected from them. Students may present their information report using digital presentation tools if able e.g. google slides presentation, prezi, google drawings (digital poster).

Students spend time constructing their information reports 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 information report meets the success criteria?

Students share their information reports with the class.

8 Making Conclusions/ Taking Action

to **Discuss** the overall learning achieved from the module. **Ask** the students to reflect the inquiry process e.g. what was easy, what was difficult, what they would do differently next time.

9 **Discuss** possible steps that can be taken to share their knowledge with others outside of the classroom. This could include making a mini documentary about their chosen marine species including filming at the local beach.