

# Oceans

## SDGs Covered:



## Experience

Undertake **one** activity related to **each** of the following:

1. Learn about the ocean – what exists beneath the surface, its ecosystems, how the ocean can influence weather and climate, and why the ocean is important

After completing these activities, you will **understand** what it's like beneath the surface and **recognise** the ocean's importance to people and the planet.

- Go swimming, snorkelling, or diving, ideally in a marine reserve, in New Zealand. Check out the life under the surface. What surprised you most about New Zealand's marine environment? Describe your trip and what you saw.
- Research some key facts about the ocean closest to where you live. For example, how large and deep is it? What human activities go on there? In what other ways does this ocean influence your life? Put together a quiz.
- Visit a beach at low tide. (Before you go, make sure you read the Seashore Code and remember, even if you live next to the coast, don't go without an adult. Make sure you tell someone where you are going and when you expect to be back). Investigate the different plants and animals that live there.

2. Understand the threats to our oceans, including pollution, overfishing, and climate change

These activities will help you **understand** the threats to our oceans and **recognise** what human actions can negatively affect the ocean and ocean life.

- Organise a visit to your local fish market (if there is no fish market close by, you could visit a fishmonger or the fish counter at your local supermarket). How many different types of fish and shellfish can you see? Where have they come from? Are they deep sea fish or have they been caught near the coast? Who caught them? Were they local fishers or fishers from far away? How were they caught? Have any of the fish come from a fish farm? Draw pictures or take photos of the different seafood you see and make a big display.
- Survey your friends and whānau to find out what goes down the drain at their house/school. Does any waste/rubbish get flushed down the sink/toilet? Where do they wash their car? What chemicals do they use in their garden? Prepare a report of your findings.
- Find a video of deep-sea trawling or dredging. What do you think about this fishing practice? What might some of the impacts be? Research why deep-sea trawling or dredging exists. Are there any countries which don't use these methods? Are there any alternative methods?

### 3. Recognise the impacts of these threats on our oceans

These activities will help you **identify** how the ocean is impacted by human activities and **consider** the long-term effects of this damage.

- Find out if tourism and recreation are having negative effects on the marine environment in your area. What can be done to help? Is anything being done to help already? As a group, put together an action plan to make sure tourism and recreation don't become a problem at your local beach, or at your favourite seaside destination.
- Talk to your local council about whether your local beach is safe to swim at all year round. Find out how your waste water is managed, what causes the ocean to become unswimmable, and discuss what this means for your local community. How is the water tested? At what point does it become unsafe for humans?
- Learn about the impacts of marine sports and recreation on the ocean, in particular those relating to boats. How does the way you clean your boat affect the marine environment? How can this be done more sustainably? What other things should you be aware of when enjoying the ocean – e.g. is some sunscreen better or more 'water safe' than others?

### 4. Recognise some solutions to these threats

After completing these activities you will be able to **identify** ways to reduce the human impact on the ocean and **take action** to protect it.

- Some species are important for cleaning the water in a marine ecosystem. These filtering systems can remove bacteria, viruses, heavy metals, toxins and/or debris. Research and compare the methods used by different species, such as oysters, mosses, and trees, to filter water. Make your own water filter using natural or recycled materials.
- Visit a local waterway and see if there is any planting near (or in) the water. These plants act as a buffer to help prevent our oceans being polluted. Research the benefits of waterway plantings. What plants are there? Are they planted or do they occur naturally? Are they at risk of being damaged/torn down? What species of plants act as natural filtrators in your region?
- Imagine you are going out for a day's fishing with four relatives. Download the free NZ Fishing Rules app to find out: a) how much snapper you are allowed to catch? b) what is the smallest snapper you are allowed to catch? c) what should you do if you catch a snapper that is too small? Do you think you need to catch your full limit? Would it be better if you only caught what you needed?

### Act

- Create a campaign to teach people how to avoid overusing plastic.
- Learn about seabins. If there is one in your local area, go and have a look at it and seek permission to audit the waste it collects. Fundraise for, and set up, a seabin in your area.
- Organise a beach clean up for your group. Consider 'adopting' a stretch of beach or coastline to keep constantly tidy.

