

# TOGETHER FOR OUR MOANA - WE'RE SHAPING OUR FUTURE

## FANTASTIC FISH

### Overview

Find out about the different types of ika / fish that live in the moana in Aotearoa.

## NZ CURRICULUM LINKS:

Learning areas:	Achievement objectives:
<b>Science</b>	Identification and classification.
<b>Te Ao Māori</b> Te reo (language), tikanga (customs and traditional values)	By learning te reo Māori, students are able to participate with understanding and confidence in situations where te reo and tikanga Māori predominate and to integrate language and cultural understandings into their lives ; strengthen Aotearoa New Zealand's identity in the world.
<b>English</b>	Listening, Reading, Viewing

### Success criteria

Children can name some NZ fish and show an understanding of what sustainability means.

### Learning intention

Tamariki are learning to understand about the different types of ika in Aotearoa and what sustainability means.

## Background information for teachers:

### **Fish of the Hauraki Gulf**

The Hauraki Gulf is a precious taonga / treasure, and is home to many species of fish. The area has traditionally been used as an important food source for early Maori who first settled the area, and for later inhabitants. The name 'Ko te Pataka kai o Tikapa Moana Te Moananui a Toi' shows that it is seen as a pataka kai - a pantry / food storage.

Recreational fishing in the Hauraki Gulf now takes more than the commercial catch of Tāmure / snapper, kahawai and haku / kingfish in the Gulf (*source: Hauraki Gulf Forum, 2020 State of the Gulf Report*). The increased presence of kina barrens around the Gulf is due to a lack of key kina predators: tāmure and kōura / crayfish.

### **Sustainability**

All life on Earth depends on the environment. The natural resources that come from the environment include food, water, plants, and minerals. Sustainability is the idea that humans must interact with the environment in a way that ensures there will be enough resources left for future generations.

If too many of a certain species are taken, or if they are taken in a way that damages the ecosystem, then the system becomes out of balance and there is a risk that permanent damage may be done. One way of helping sustainability are rules such as catch limits (7 snapper per person in the Hauraki Gulf) and size limits (snapper must be over 30cm long) and rahui / restrictions to temporarily or indefinitely stop catches in some areas to allow species to regenerate.

## LEARNING SEQUENCE

Based on the Inquiry model



### **Inspire**

Provoke curiosity  
and wonder



### **Explore/Educate**

Gather information  
Use / apply  
learning



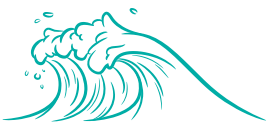
### **Activate**

Reflect and act

# LESSON PLAN

## Fish / Ika

Teachers are encouraged to choose and adjust activities to suit the learning needs and interests of their tamariki.



## Inspire

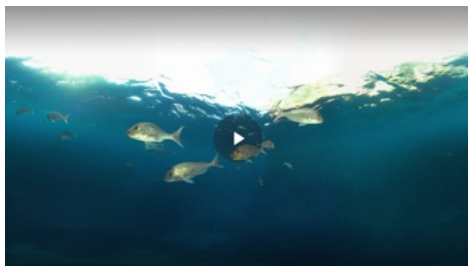
 Allow approximately 10 mins

- **Watch** this Young Ocean Explorers video - [Can a girl fish become a boy fish?](#) Discuss - when and why do they change? Which ones are the most colourful?

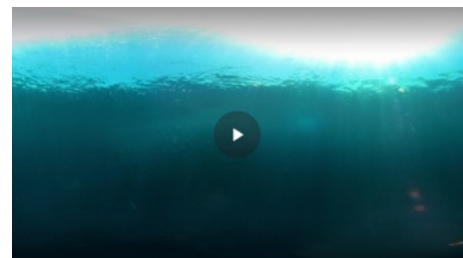
*Video is 4:34 minutes*



- **Take a virtual 'dive'** into the water and meet some other fish - [Trevally](#) and [snapper](#).



HAURAKI GULF  
**MEET THE LOCALS**



HAURAKI GULF  
**TREVALLY TRAFFIC**



## Educate

 Allow approximately 30 mins

- Other fish - [take a look at this poster about the Hauraki Gulf Marine Park](#). Which fish can you see? Have you heard of any of them before? Perhaps you have seen them while snorkelling, or fishing, or even heard of them at the fish and chip shop? This website gives you more information on each [NZ fish species](#). You could take a **vote** and see which is the most popular fish species in your class. **Graph** it for some maths.



- The full Maori name for the Hauraki Gulf "Ko te Pataka kai o Tīkapa Moana Te Moananui a Toi" shows that the gulf is seen as a pataka kai / food basket or food store. Many fish are caught to be eaten - [here is a chart](#) of fish and other kai moana / seafood that is commonly food for some people. Which ones have you tried?
- Sustainability - what does it mean? **Find out**. Here is one definition: *Sustainability is the idea that humans must interact with the environment in a way that ensures there will be enough **resources** left for future generations.* What are the resources in the ocean? How can we make sure there are enough left for future generations? **Discuss** ideas.
- **Explore** this [Forest and Bird guide](#) to the best fish (most sustainable) according to data from 2017. Things might have changed now, but this guide is interesting to look at. What surprises you? Why are the 'best fish' better than others for eating?





## Activate

 *Timing will vary*

# DAILY ACTION



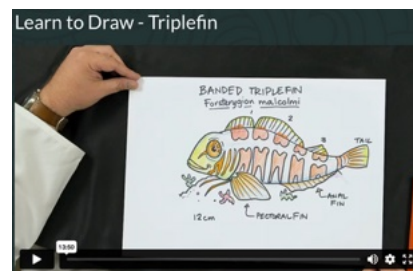
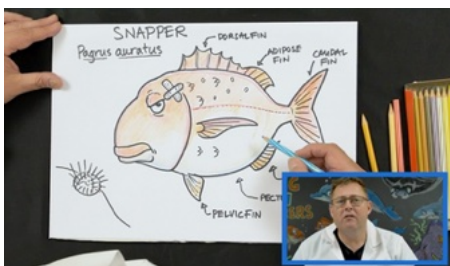
**MAKE A DIFFERENCE** for our moana - pick up at least 1 piece of kirihou / plastic each day. [Log how many pieces your class picks up on the Young Ocean Explorers website.](#)

- **Watch** this [hope story from Young Ocean Explorers - Fish and Chips](#) - about someone making a difference in her area. What can YOU do to make a difference? *Video is 1:34 minutes*



- **Learn to draw** a [snapper](#) or a [triplefin](#) with Young Ocean Explorers. You could use your fish drawing to make a poster to let people know how we can be sustainable with ocean resources.

*Allow a bit of time for students to complete learn to draw videos*



## EXTRA LEARNING IDEAS AND RESOURCES

- **Explore** [these videos featuring fish](#) from Young Ocean Explorers.
- **Watch** [SeaSick - Episode 3](#) - Recreational fishing to get you thinking about fishing and sustainability. *Video is 21:14 minutes*

