21 DAY CHALLENGE HAURAKI GULF MARINE PARK TĪKAPA MOANA



LESSON 17 - FANTASTIC FISH /IKA

Overview

Find out about the different types of ika / fish that live in Tikapa Moana / the Hauraki Gulf.

NZ CIRRICULUM LINKS:

Learning areas:	Achievement objectives:
Science	Identification and classification.
Te Ao Māori 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.
English	Listening, Reading, Viewing

Learning intention

Tamariki are learning to understand about the different types of ika / fish in Tīkapa Moana / the Hauraki Gulf, and what sustainability means.

Success criteria

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



LESSON 17

LEARNING SEQUENCE

Based on the Inquiry model



Inspire Provoke curiosity and wonder



Explore/Educate Gather information Use / apply learning



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 Tīkapa 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.





LESSON PLAN Fish / Ika

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



• **Watch** this Young Ocean Explorers video - <u>Can a girl fish become a boy</u> <u>fish?</u> 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 - <u>Trevally</u> and <u>snapper.</u>



MEET THE LOCALS



TREVALLY TRAFFIC





Educate (1) Allow approximately 30 mins

• Other fish - <u>take a look at this poster about the Hauraki Gulf Marine Park.</u> 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 <u>NZ fish</u> <u>species.</u> 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 - <u>here is a chart</u> 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 <u>Forest and Bird guide</u> 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?



LESSON 17





Activiate () Timing will vary

Go outside and pick up at least 1 piece of plastic or other rubbish make a difference in YOUR community. Log your rubbish data on the

21 day challenge graph.

Each daily entry goes into the draw to win amazing prizes for your class and school

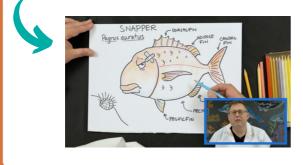


Watch this hope story from Young Ocean Explorers - Fish and Chips - about someone making a difference in her area. What can YOU do to make a difference? Video is 1:34 minutes Hope Stories - Fish and Chips



• 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





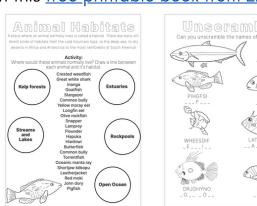




EXTRA LEARNING IDEAS AND RESOURCES

ACTIVITY BOOK - lots of activities in this <u>free printable book from EMR</u> - Experiencing Marine Reserves.





- **Explore** these videos featuring fish from Young Ocean Explorers.
- Watch <u>SeaSick Episode 3</u> Recreational fishing to get you thinking about fishing and sustainability. *Video is 21:14 minutes*



Find out more:

There are many other lesson ideas from Young Ocean Explorers – choose another one. <u>Young Ocean Explorers</u> You can find out about some of the amazing creatures that live in or visit the Hauraki Gulf. There are also lessons on some of the amazing places in Tikapa Moana. Or you could explore ideas of how people are connected to the moana / ocean.