USING THE OCEAN'S RESOURCES RESPONSIBLY

Teacher resources - Lesson plan

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Australian Curriculum Objectives

Years 5 & 6 (Stage 3) - HASS

- AC9HS5K05
  The management of Australian environments, including managing severe weather events such as bushfires, floods, droughts or cyclones, and their consequences
- AC9HS5K08
  Types of resources (natural, human, capital) and the ways societies use them to satisfy the needs and wants of present and future generations
- AC9HS6K08
  Influences on consumer choices and methods that can be used to help make informed personal consumer and financial choices
- AC9HS5S01 / AC9HS6S01
  Develop questions to investigate people, events, developments, places and systems
- AC9HS5S02 / AC9HS6S02
  Locate, collect and organise information and data from primary and secondary sources in a range of formats
- AC9HS5S03/ AC9HS6S03
  Evaluate information and data in a range of formats to identify and describe patterns and trends, or to infer relationships
- AC9HS5S05/AC9HS6S05
  Develop evidence-based conclusions
- AC9HS5S06 / AC9HS6S06
  Propose actions or responses to issues or challenges and use criteria to assess the possible effects
- AC9HS5S07/AC9HS6S07
  Present descriptions and explanations, drawing ideas, findings and viewpoints from sources, and using relevant terms and conventions

In this 40-60 minute lesson using the film My Dad the Fisherman as a starting point, learners will consider how people use, modify and change the ocean ecosystem to obtain food. Learners will examine some of the ways in which fishers try to look after the oceans and what sustainability means for the future of our oceans. This lesson is suitable for learners aged 10+.

Key terms

- Fishery
- Quota
- Overfishing
- Bycatch
- Food web
- Sustainable fishing
- Maximum Sustainable Yield
- Quota
- Fish stocks

You will need

- Access to the film 'My dad the fisherman'
- Access to the Sustainable Fishing Key Terms Kahoot, Beginner or Advanced versions
- *Or* printed copies of the Key terms in sustainable oceans worksheet printed for each learner (There are two versions to choose from)
- Paper, pens and stationery for each group of learners

Key questions

- What do sustainable oceans mean to you?
- What are some of the environmental, economic and social factors that affect our oceans?
- How do people impact on the oceans?
- What might be some responses to the challenges of overfishing?

Class Activities

- Learners use the film to examine how people use, modify and change the ocean ecosystem to obtain food
- Learners understand some of the key terms and concepts in sustainable fishing
- Learners match key terms with the definitions provided, or write their own definitions
- Learners identify environmental, social and economic issues that relate to Overfishing
- Learners work together to create infographics that demonstrate systems thinking in their understanding of overfishing.

LESSON PLAN:
USING THE OCEANS RESOURCES RESPONSIBLY

Starter (5-10 mins)

Start by asking learners what they think of when they hear the term '**sustainable**'.

- *What does it mean to them?*
- *Where do they hear it?*
- *Do they think it has significance for their lives?*
- *Is "sustainable" only about the environment or about other aspects of our lives?*

You could ask learners to discuss these questions in groups and create a mind-map or list of what "sustainable means to them. Encourage questioning of this term; some learners may say they hear it associated with particular products or adverts, or may feel they hear it a lot but don't understand what is meant by it, or that they don't understand how sustainable principles can be applied.

Main activity (25-35 mins)

Explain to learners that they are going to explore what sustainability means in practice by looking in more depth at **sustainable fishing**.

Watch the film My dad the fisherman (14:45) and ask students to write down any terms they think are relevant to ocean sustainability in the film.

Students will need access to the Sustainable Fishing Key Terms Kahoot Beginner or Advanced, or alternatively distribute printed copies of the Key terms worksheets version A or B (pages 5 and 6).

Ask learners to complete the key terms matching exercise, then review as a class.

Students then return to the mind maps or lists that they made at the beginning of class. Working in groups, students add in any new 'sustainable oceans' terms they've learned, and write down a list of three questions that they have after watching the film.

Discussion (10-15 mins)

Ask students to share their questions with the rest of the class. Students can then work in groups to generate responses to another group's questions.

Version A

KEY TERMS IN SUSTAINABLE OCEANS

Can you match these terms with their definitions?

Fishery	1. When a certain species of fish, are fished too much, they are unable to reproduce their numbers back to a healthy number and begin to decline.
Quota	2. This happens when fishing boats catch fish and animals that they don't really want or shouldn't take. It can also include young or undersized fish.
Maximum sustainable yield	3. Each animal relies on the others to survive.
Overfishing	4. The amount of fish living in our oceans that could be caught by fishers.
Bycatch	5. Fishing in a responsible way, making sure that fish populations don't drop below levels where they cannot reproduce and grow faster than they are caught.
Food web	6. An area of the sea where fish are caught for commercial purposes.
Sustainable fishing	7. A scientific calculation that shows fishers how much they can catch without overfishing.
Fish stocks	8. Fishing for a certain number of fish per year.

Version B

KEY TERMS IN SUSTAINABLE OCEANS

Can you write down terms that match these definitions?

1. When a certain species of fish, are fished too much, they are unable to reproduce their numbers back to a healthy number and begin to decline.

2. This happens when fishing boats catch fish and animals that they don't really want or shouldn't take. It can also include young or undersized fish.

3. Each animal relies on the others to survive.

4. The amount of fish living in our oceans that could be caught by fishers.

5. Fishing in a responsible way, making sure that fish populations don't drop below levels where they cannot reproduce and grow faster than they are caught.

6. An area of the sea where fish are caught for commercial purposes.

7. A scientific calculation that shows fishers how much they can catch without overfishing.

8. Fishing for a certain number of fish per year.

Answers - Key Terms

1. **Overfishing**
   When a certain species of fish, are fished too much, they are unable to reproduce their numbers back to a healthy number and begin to decline.

2. **Bycatch**
   This happens when fishing boats catch fish and animals that they don't really want or shouldn't take. It can also include young or undersized fish.

3. **Food Web**
   Each animal relies on the others to survive.

4. **Fish Stocks**
   The amount of fish living in our oceans that could be caught by fishers.

5. **Sustainable Fishing**
   Fishing in a responsible way, making sure that fish populations don't drop below levels where they cannot reproduce and grow faster than they are caught.

6. **Fishery**
   An area of the sea where fish are caught for commercial purposes.

7. **Maximum Sustainable Yield**
   A scientific calculation that shows fishers how much they can catch without overfishing.

8. **Quota**
   Fishing for a certain number of fish per year.