WORLD OCEAN DAY

Teaching resources Lesson plan



LET'S MANAGE A DEAL WHITE STATE A DEAL A

The role of sustainable fishing in protecting the Ocean



IT ALL STARTS HERE...

There are many challenges facing the Ocean. But the momentum to solve them is growing. We all have a part to play in this. Over a third of global fish stocks are exploited at an unsustainable rate. We need to change this. Our individual actions can add up to a bigger change. World Ocean Day is a chance to shine a spotlight on how we can make a deal to protect the Ocean.

These activities are suitable for learners aged 9+ across science and social science, with the opportunity to get creative with art or creative writing too.

LEARNING OBJECTIVES

- Learners discuss the role of the Ocean in our lives, and the different ways we use it
- Learners explore environmental, economic or social themes of Ocean sustainability:
 - Focusing on food chains and food webs, learning how organisms in the marine ecosystem are linked through food webs and that these can be drawn to represent the feeding relationships between them
 - Focusing on understanding how human processes can influence and change the Ocean environment, and how human activity relies on effective functioning of the Ocean system
 - Focusing on building their knowledge of what sustainable fishing means and what action can be effective to protect the Ocean
- Learners get creative to express what they can do to protect the Ocean

KEY TERMS AND QUESTIONS

| Overall | | |
|--|--|--|
| Ocean sustainability Economic Social Environmental Sustainable fishing | Why do we need the Ocean? What are the economic, social and environmental ways that we use the Ocean's resources? What challenges is the Ocean facing? What action can we take to protect the Ocean? | |

| Social path | Environmental path | Economic path |
|--|---|---|
| Pollution Ecosystem Biodiversity What does Ocean sustainability mean to you? What sorts of action to protect the Ocean might be effective? | Organism Energy transfer Energy Food chain Food web Producer Primary consumer Secondary consumer Apex Predator Decomposer How do animals and plants get energy and what happens to that energy? What's a food chain? What's a food web? | Livelihood Fishing industry Animal protein Fishery Overfishing How do people impact on the Ocean? What's the relationship between fishing and the marine environment? |



You will need...

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- World Ocean Day 2023 PowerPoint
- Paper, paint and pens (optional, for the final activity)

| Social path | Environmental path | Economic path |
|---|---|------------------|
| Printed sheets of the Diamond Ranking Activity worksheet (one for each group) | Printed copy of the String Game AND/OR Access to Kahoot | Access to Kahoot |

STARTER: Why do we need the Ocean? (10 mins)

Use slide 3 to display the question – Why do we need the Ocean? Learners could work in pairs or small groups to discuss their view and share with the class.

Record learners' answers and then show them slide 4 which helps categorise them into what's often referred to as the 'three pillars' of sustainability - 'social', 'environmental' and 'economic'. You could ask learners what they think they mean, or explain that all of these are important for us and the world we live in. 'Social' is all about people, and what we need for our wellbeing. 'Environmental' is all about nature, plants, animals and our resources like air, water and land. 'Economic' is important for us too, we all need a livelihood to help provide for ourselves, to pay for what we need to live happy, healthy lives. Some of their ideas may fall into two or more categories. Here are some ideas:

Social:

- People use the Ocean for sports, like surfing, swimming and sailing
- People catch fish for their families or for fun
- Fish is an important part of our global diet and food culture
- People visit the Ocean to have fun and relax
- Many people find spending time by the Ocean is good for their mental health
- People travel on the Ocean to visit other places and see family and friends

Environmental:

- The Ocean helps regulate the earth's temperature through Ocean currents transporting warm water to colder parts of the world
- The Ocean absorbs carbon dioxide which would otherwise heat up the earth
- The Ocean is home to a huge number of different species of animals and plants
- The Ocean produces half the oxygen we breathe

Economic:

- Our fishing industry provides hundreds of millions of people with their livelihoods
- Tourism companies make money offering cruises or activities
- We transport many of the foods and products we use by ship across the world
- We buy fish, seafood and seaweed
- Many other people have jobs that have something to do with the Ocean, such as marine scientists, sportspeople, government workers and more

After the starter activity, select one path for the rest of the lesson, depending on your setting.



SOCIAL PATH (age 9-12) (20-30mins)

The Ocean is really important to us and it is important we look after it sustainably. But what does Ocean sustainability really mean?

Use slide 6 to spark paired, group or class discussion about the term 'sustainability'. Each pair or group could choose one question to discuss and feed back to the class, for instance. Use this to support learners to question this term; some 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.

You might want to share the United Nations' definition of sustainability – "meeting the needs of the present without compromising the ability of future generations to meet their own needs". You may also want to refer to some of the following or your own resources:

- www.un.org/ sustainabledevelopment/
- www.bbc.com/future/tags/ sustainability
- www.nationalgeographic.org/ topics/sustainability/

Next, ask learners to look at the set of photos (slides 7-12). They could start by choosing their favourite using slide 13 and sharing their reason. *Does their photo show an aspect of sustainability? Why (not)?*

This discussion may prompt learners to bring up challenges facing our Ocean, or aspects of Ocean sustainability they have come across before. To recap or expand this, use slide 14 to ask them if they came up with any of the terms in the word cloud. If you have time, why not ask learners to write down some words they think are important, as they have their discussion, and create a class word cloud?

Now that learners have discussed what Ocean sustainability means to them, ask them to focus on what we can do to help protect the Ocean. They can work in pairs or small groups to complete the Diamond Ranking Worksheet. Groups rank different actions, discussing aspects such as how easy, realistic or meaningful they might be, relative to each other. They arrange the actions into a diamond shape, with their preferred action at the top, and others ranked below it in a diamond shape, with the least preferred right at the bottom. They then share their top action and the reasons why they think it would be effective with the rest of the class.

Go on to the final activity.

ENVIRONMENTAL PATH (AGE 10-13) (25-30mins)

Use slides 16-22 to introduce the concepts of energy transfer, food chains and food webs to learners.

Then use one or both of the String Game https://www.msc.org/string-game or the Kahoot Marine Food Webs and Overfishing https://bit.ly/3Lvns6s which both examine energy transfer, food webs, and the impact that humans can have on marine food webs through overfishing.

Go on to the final activity.

ECONOMIC PATH (age 12-15) (25-30mins)

Start by using slide 24 to show learners the film clip "The most traded food in the world", and follow this up by using slides 25-28 to show the significance of the Ocean for people's jobs and livelihoods. Then ask learners, what do they think could happen when so many people rely on fish and fishing?

To find out more about the consequences of overfishing, use the Kahoot Cod: collapse, conservation, culture https://bit.ly/41GqHxg which tells the story of the cod fishery in the Grand Banks, which collapsed in the 1980s after many years of overfishing.

Finally, follow the Kahoot with one or more of these discussion questions, which learners can discuss in a group or as a class.

- Why was Giovanni Caboto's visit to Newfoundland important for the Grand Banks?
- Why do you think the Grand Banks fishery collapsed?
- What were the consequences of the Grand Banks fishery collapsing? Go on to the final activity.





Use slides 29-30 to ask learners how they think they could help protect the Ocean. We can all make a deal with the Ocean - What do learners think can be done?

We propose two creative activities to motivate your students to pledge to protect the Ocean.

- 1 Arts and Plastics: Create a large mural in your school and invite your students to make a fish handprint (add fish handprint photo from mkt toolkit) and to write their pledge on it. You can download (introduce link to MML) a background photo from our Multimedia library, print it and ask your students to sign it with their handprints or you can create your own mural with the help of your Arts and Plastics teacher.
- **Creative Writing:** Ask your students to write a letter to the Ocean with their pledge on it. Use the short template on slide 30 as a starter.



I will learn more about sustainable fishing and share it with my friends

Signed by:

#the Ocean And Us

Have you created a display of learners' pledges to help protect the Ocean? Take a photo and share it with us via your school, aquarium or other organisation social media account using the hashtags **#theOceanAndUs** and **#WorldOceanDay**

Tag us on social media @MSCecolabel







Download here: https://multimedialibrary.msc.org/?r=17758

THE MARINE STEWARDSHIP COUNCIL

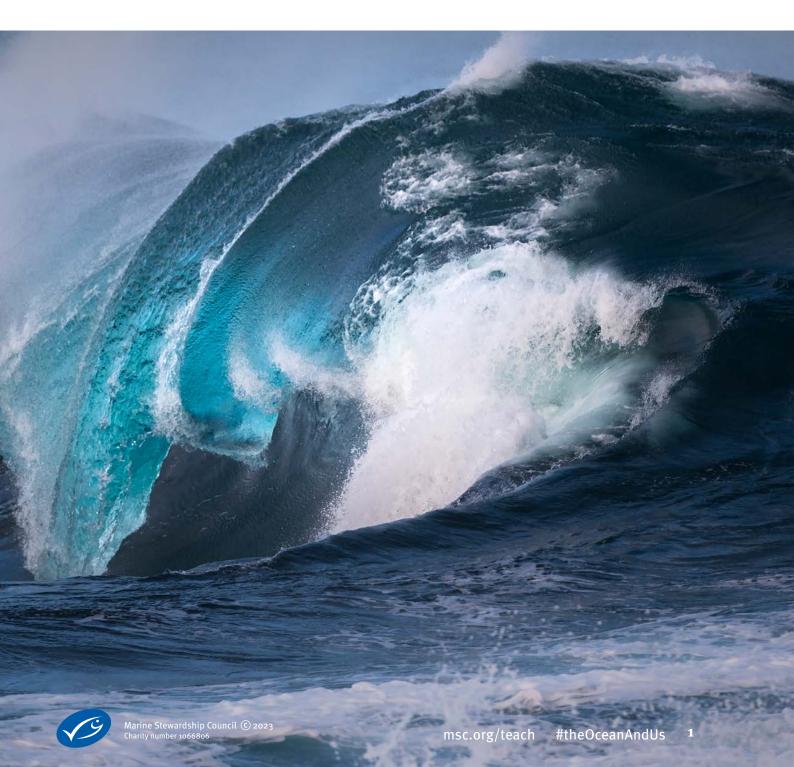
TThe Marine Stewardship Council is an international non-profit organisation. We recognise and reward efforts to protect oceans and safeguard seafood supplies for the future.

We want future generations to be able to enjoy seafood and oceans full of life, forever.

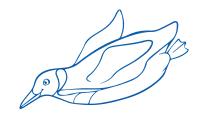
Our vision is of the world's oceans teeming with life, and seafood supplies safeguarded for this and future generations.

Our mission is to use our label and fishery certification program to contribute to the health of the world's oceans by recognising and rewarding sustainable fishing practices, influencing the choices people make when buying seafood and working with our partners to transform the seafood market to a sustainable basis.

msc.org/teach

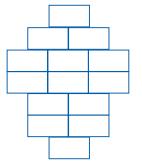


DIAMOND RANKING WORKSHEET



What can we do to protect the Ocean?

Cut out and arrange the ideas into a diamond, with the best ideas at the top and the one you like least at the bottom. You can also write your own ideas. Which is your favourite idea?



Your diamond could be shaped like this.

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|--|---|---|----|
| Stop dumping plastic pollution in our Ocean | Clean up our beaches | Invent new technology to help fishers that protect the Ocean: like inventions that scare away dolphins from fishing nets | |
| Have more protected areas in the Ocean where no fishing is allowed | Encourage people to visit the seaside and learn about the Ocean | Make sure that people who catch our fish do it sustainably | |
| Support fishers that protect the Ocean | Make sure everyone knows how important the Ocean is | Take action on climate change | 20 |
| Pass new laws to make harmful fishing illegal | Make sure people who rely on fish for their jobs can keep working | Help fishers catch just the fish they want, not other animals | |
| Choose sustainable fish to eat | YOUR IDEA | YOUR IDEA | |





