

Subject links:

Geography, Design Technology,
Maths, Citizenship

Curriculum key words:

Natural resources, food, human activity, data, statistics,
sustainability, environmental responsibility

Ocean Literacy Principles:

6. The ocean and humans are inextricably interconnected.

Learning objectives:

- To learn more about where our food comes from
- To understand what 'sustainable' means, and provide examples of what makes food sustainable
- To collate, analyse and present data on seafood types

Resources provided:

- [Overfishing Fact File](#)
- [Seafood shopping list](#)
- [From fish to food](#)
- [Good Fish Guide](#)
- [Seafood stats](#)

Extra resource required

Computers or tablets

Seafood investigators

Sustainability Goals:



Step 1

Background

Today, over 90% of world fish stocks are fully or over-exploited from fishing. When we catch fish faster than they can reproduce, fishers can't make a living and fish populations struggle to recover.

By choosing sustainable seafood, we can reduce pressure on wild fish populations and support local fishers and producers. It also encourages supermarkets and restaurants to demand sustainability measures from their suppliers, which in turn can reward fishers who use sustainable practices and encourage governments to improve management. See the [fact file](#) for further information.

Note: Before the lesson, ask pupils to use the [seafood shopping list](#) to record 5 seafood products in the supermarket and where they've come from.

Step 2

Set the Scene

10 minutes – Introduction to seafood

Did you know that 97% of UK households eat fish? As a class, create a quick brainstorm of the types of seafood pupils have eaten or have seen others eating.

Then, use the [from fish to food](#) worksheet to match up each species to the seafood product. This will help get pupils thinking about where their food comes from.

Answers:

Cod, Haddock, Pollock = fish fingers, fish and chips, fish cakes

Mackerel, Tuna = canned fish

Salmon = canned fish, fish cakes

Step 3

Activities

Activity 1: 10 minutes – Sustainable seafood

Discuss the term 'sustainable' and ask pupils for ideas about what it means. A useful way to think about sustainability in relation to food is ensuring there's *enough for all, forever*.

In the UK, about 80% of seafood sold is from just 5 species groups (cod, haddock, salmon, tuna and prawns). Ask pupils to consider why this could be a problem for seafood stocks.

Activity 2: 30 minutes – The Top 5

As a class, combine the results from the [seafood shopping list](#) activity by creating a table on your whiteboard. Find the 5 most-common types of seafood recorded by the class, and tally how many people recorded them. Pupils could analyse and present the results in a graph or chart.

Compare the class's top 5 seafood types to the 5 most-popular fish species consumed in the UK – cod, haddock, salmon, tuna and prawns – and encourage pupils to draw conclusions about their findings.

Activity 2: 10 minutes – Good Fish Guide

In pairs or as a class, use the [Good Fish Guide](#) to check the sustainability ratings of the top 5 species found by the class and record the findings on the [seafood stats](#) worksheet. Explain that the ratings depend on the area the species was caught, and the method that was used to catch it.

Step 4

Extend

30 minutes – Spreading the word

Using the [Good Fish Guide](#), pupils could research some sustainable swaps for the Top 5 species found by the class.

Then, generate ideas for a campaign to share your findings with your school, including the canteen, and how people can make more sustainable choices. You could hold an assembly, write an article for the school newsletter, or post on the school website about the importance of sustainable seafood.

Step 5

Reflect

5 minutes

What does 'sustainable' mean? Why is it important to try and make more sustainable seafood choices? What impact could this have on our seas?

Step 6

Follow up

Learn more about the different ways that fish are caught in our [Fishing methods](#) lesson plan.

Use our [Fish farming](#) resource to explore aquaculture, the fastest-growing sector in the food industry.

Overfishing Fact File

Fish are central to the health of our ocean and the livelihoods of fishing communities.

Many fish stocks are in a state of serious decline. With added pressure from climate change and pollution, we're moving into dangerous waters when it comes to the fish of the future.



Threats from unsustainable fishing

Overfishing

Overfishing happens when we catch fish faster than they can reproduce. Today, over 90% of world fish stocks are fully or over-exploited from fishing. The more that fish stocks become depleted, the greater the risk that they won't recover at all, which can be devastating for fishers' livelihoods and the marine environment.

Damage to marine habitats

A wide range of fishing methods are used throughout the world to catch different types of fish. Fishing methods like trawling or dredging can cause long-lasting damage to the sea bed and marine habitats. Although the UK has 377 Marine Protected Areas (MPAs), which cover over a third (38%) of UK seas, only 38 of the designated MPAs have bans in place that stop the use of bottom-towed gear across the whole of the site.

Bycatch

In UK waters, thousands of rare and threatened marine animals continue to be caught, killed or injured as 'bycatch' in fishing gear every year, caught on fishing hooks, entangled in nets, or wrapped up in ropes.

These animals can include dolphins, sharks, whales, seabirds, skates and rays, as well as young fish deemed too small. Longlining, gillnets, trawl fisheries and creel pots are largely responsible for bycatch in the UK. An estimated 40% of global marine catches consist of bycatch.

Did you know about 80% of seafood sold in the UK comes from just 5 species groups? These are cod, tuna, haddock, salmon and prawns



Trawler

📷 NarissaFotoSS via Shutterstock



Species caught as bycatch

📷 Ivan Sarenas via Shutterstock

Overfishing Fact File



Sustainable seafood

We need to change how we fish, farm and purchase seafood to help protect our seas and sustain livelihoods and food security into the future.

There are several ways that better management of fishing can help:

- Quotas based on scientific evidence on how many and what type of fish can be caught can help limit overfishing
- Fishing practices and gear can be modified to avoid vulnerable species as much as possible, including avoiding fishing at certain times, adding sections for small fish to escape from nets, using specially shaped hooks or utilising visual and sound deterrents
- No-take zones (NTZs) or Highly Protected Marine Areas (HPMAs), where no fishing activity is allowed, can help fish populations to recover and support the protection and restoration of habitats
- Managing fishing activities to ensure everyone is sticking to the rules is challenging, which means technology plays a big part in fisheries management



Responsible consumption

97% of UK households eat fish. When consumers choose sustainable seafood, it encourages supermarkets and restaurants to demand it from their suppliers. This demand can reward fishers and fish farmers who adopt sustainable practices and encourage governments to improve fisheries management.

In the UK, about 80% of seafood sold is from just 5 species groups (cod, haddock, salmon, tuna and prawns). Diversifying your seafood choices can reduce pressure on wild populations and support local fishers and producers.

The [Good Fish Guide](#) can help! Use the simple traffic light system to make more informed choices about the seafood on your plate.

Find 5 seafood items in the supermarket.

Record the name and the country they came from



Seafood Shopping List

Name: _____



Seafood

Country of Origin

1

2

3

4

5

Remember to take your shopping list back to school so you can use it in class!

From fish to food

Name: _____

Can you match the fish to the product type?

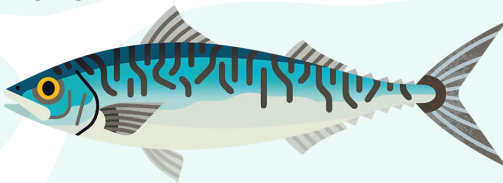
Cod



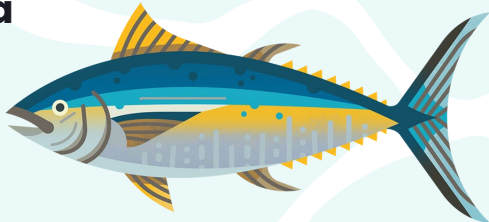
Haddock



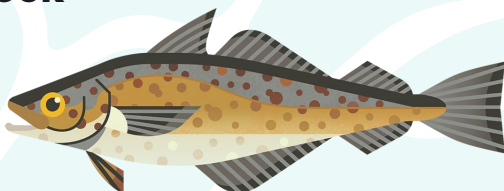
Mackerel



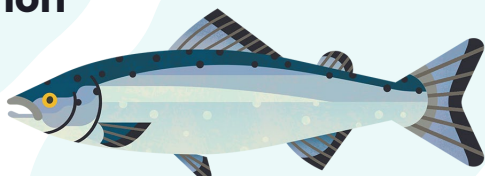
Tuna



Pollock



Salmon



Fish fingers



Fish and chips



Canned fish



Fish cakes



Next time, why not look for pollock instead of cod fish fingers?



Name:

Seafood stats

1. What were the top 5 most common supermarket items you found as a class?

2. Where were the top 5 items caught or produced? List the locations below:

3. Choose one seafood item and use the Good Fish Guide to find its sustainability rating.

Seafood item:

Location:

Good Fish Guide rating:



4. Why might this seafood item have this rating? Think about where and how it was caught



5. Can you think of some sustainable swaps for this type of seafood? Use the Good Fish Guide for ideas

Use this box to design your own sustainable seafood logo. You could use one of your top 5 species as a starting point!

