

Our ocean and us



Age 14-16



60 minutes

Curriculum links

- Understand the interdependence of organisms in an ecosystem
- Understand economic activity in the primary sector

Resources



Slideshow 2:
Our ocean and us



Student Sheet 2a:
Goods and services factsheet

Student Sheet 2b:
Goods and services worksheet



Subject Update:
Learn more: What are ecosystem goods and services?

Subject Update:
Learn more: How ecosystems (E7) and G7 economies compare

Lesson overview

In this lesson students learn about the concept of ecosystem goods and services, following this they will answer GCSE style exam questions which they will peer assess, reflecting on how dependent we are on the ocean.

Lesson steps

Learning outcomes

1. Ocean goods (10 mins)

Students discuss ways in which we rely on the ocean and explore some of the ways we depend on it for things such as food, transport and livelihoods, linking to case studies.

- List and describe the goods provided by the ocean

2. Ocean services (15 mins)

Students learn about key services provided by the ocean such as climate regulation, acting as a carbon store and how marine environments such as mangrove forests prevent coastal erosion.

- List and describe the services provided by the ocean

3. GCSE style exam questions (10 mins)

Students answer GCSE style exam questions and peer assess using the mark scheme.

- Consolidate understanding of ecosystem goods and services

4. Letter to the Secretary of State for the Environment (15 mins)

Students write a letter to the Secretary of State for the Environment expressing their opinion about the importance of the oceans and why more needs to be done to protect them.

- Evaluate the importance of the goods and services provided by the ocean

5. Reflection (10 mins)

Students consider how the ocean is used and the subsequent threats to the ocean sharing their concerns with a partner and the teacher.

- Reflect and build on learning

Extension or home learning

Students conduct research about the fishing industry in the UK then create a fact-sheet covering the key areas of the industry.

TEACHER GUIDANCE 2 (page 1 of 2)

Step Guidance

Resources

1
10
mins



Step 1 sees the students learn about the goods and services ecosystems provide for us.

- Use slides 1-2 to introduce the lesson and the learning outcomes.
- Slide 3 provides students with definitions of ecological goods and services that they should copy into their books.
- Take feedback and examples from students.

Slideshow 2:
Slides 1-3

2
15
mins



Step 2 involves students examining some of the goods and services provided by the ocean.

- Students match key words with definitions.
- Check answers by asking for feedback.
- Using the information on Student Sheet 2a students complete Student Sheet 2b.

Slideshow 2:
Slides 4-7

Student Sheet 2a:
Goods and services factsheet

Student Sheet 2b:
Goods and services worksheet

3
15
mins



Step 3 asks students to reflect on the learning they have done so far by completing GCSE style exam questions.

- Students use the image on slide 8 to rank the services provided by the ocean from most important to least important.
- They then answer questions in their books.
- Students then peer assess their partners answers.
- Take feedback from class if students are unable to answer the question, then bounce it to another pupil.
- Extension: ask students to write a GCSE style exam question for their partner to answer.

Slideshow 2:
Slides 8-10

4
15
mins





Step 4 involves students writing a letter that is accurate, passionate and uses the correct format.

- Students are to write a letter to the Secretary of State for the Environment.
- Using slides 11-12 explain the correct letter format they should use.
- Encourage students to use facts included on Student Sheet 2a in their letter as evidence, to make their arguments more convincing.

Slideshow 2:
Slides 11-12

TEACHER GUIDANCE 2 (page 2 of 2)

Step	Guidance	Resources
5 5 mins	 <p>Step 5 asks students to reflect on their learning and think of questions they would like to find out about.</p> <ul style="list-style-type: none">· Choose students to explain how each learning outcome has been met. For each outcome bounce it to at least one more student to assess learning.· Give students the opportunity to ask questions, this can be used as an opportunity to clear up any misconceptions or write a list of further questions for investigation.	Slideshow 2: Slides 13-15
H/L 30 mins	 <p>Students conduct research about the fishing industry in the UK then create a fact-sheet covering key areas of the industry; where does fishing take place, what is the value of the industry, how many people are employed by it and are there any restrictions?</p>	