

SDG14 Future of the Ocean

MM1: Introduction to Ocean Literacy



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Research and Development

Lesson 1: How Ocean Literate Am I?

Subject Areas: CSPE, Climate Action and Sustainability, Geography, Science, SPHE

Lesson Title and Summary: How Ocean Literate Am I?

Understanding our connection with the ocean is vital to create strong links and passion for environmental stewardship.

This lesson supports learners to understand how ocean literate they currently are and aims to increase the awareness of the ocean's impact on us, and our impact on the ocean.

Vocabulary: Blue Mind, Impact, Ocean Literacy, Stewardship

In this lesson, the learner will:

- develop an understanding of the importance of the ocean
- increase their awareness about how the ocean influences and impacts their lives
- increase their awareness about how humans influence and impact the ocean
- practice active listening skills
- paraphrase information and record specific data
- work autonomously and as part of a group
- reflect on ideas, thoughts and opinions and give constructive feedback

Materials

- Worksheet: Ocean Literacy Quiz
- Worksheet: Sea Change: Increasing Ocean Literacy
- Teacher's Guide
- Coloured pens, pencils
- Poster Paper
- Internet access

3 GOOD HEALTH AND WELL-BEING



11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



17 PARTNERSHIPS FOR THE GOALS



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L1: How Ocean Literate Am I?



Activity Instructions

Activity 1: Quiz: Ocean Literacy (15 mins)

1. Ask learners to work in pairs to complete Worksheet: Ocean Literacy Quiz.
2. Swap quizzes with another pair to mark, going through the answers as a whole class.
3. Hold a brief discussion; What information is surprising to you? What do you want to know more about? What does the term 'ocean literacy' mean?

Activity 2: Introduction to Ocean Importance: What Do I Already Know? (15 mins)

1. Form pairs and ask learners to list at least 10 reasons they believe the ocean is important.
2. Ask learners share and compare their lists with the pair next to them.
3. Elicit one reason from each learner in the class and write them on the board.
4. Discuss these reasons in more depth, ask for more detail about why they chose these reasons. See Teacher's Notes.

Activity 3: Active Listening Task 'Sea Change: Increasing Ocean Literacy' (20 mins)

1. Using Worksheet: 'Sea Change: Increasing Ocean Literacy', ask learners to read through the questions and clarify any points they don't understand.
2. Play Video: Sea Change: Increasing Ocean Literacy [2:07 min] and ask learners to complete the task. Compare answers with a partner.
3. Review answers as a whole class.
4. Working with the same partner as they did in the previous activity, compare the information in the video to their lists from Activity 2.
5. Use a different coloured pen to add points to their lists after watching the video. This gives a foundational awareness on what they already knew and what they have learned.

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks
- Two things they found most interesting and would like to explore more
- One opinion they have about the activities, what did they like or how they would improve them

Use Post-its or a Mentimeter survey - [mentimeter.com](https://www.mentimeter.com) to gather reflections

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EXTENSION / REDUCTION ACTIVITIES

Reduction: For a shorter class, complete Activity 2 & 3 only.

Extension: For a longer class, ask learners to work together, using their lists from Activity 2&3, to create a wall table using the following headings: What We Know | What We Have Learned | What We Want To Know More About. This will create a repository that learners can refer back to, add to and amend as they continue through the micro-module.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Video: Sea Change: Increasing Ocean Literacy [2:07 mins]

<https://youtu.be/SmM-H3b5dhw?si=Gcnqbeadz2aKucDj>

Video: Blue Mind: Why the Ocean is Good For You [1:44 mins]

<https://youtu.be/0dgNVSv1qow?si=kYbEEDeWyGl22aAa>

Website: The Ocean Literacy Principles: <https://irishoceanliteracy.ie/ocean-literacy-resources/>

Website: Irish Whale & Dolphin Group: <https://iwdg.ie/>

Website: Fair Seas: <https://fairseas.ie/>

Resources: Green Schools [Global Citizenship - Marine Environment](#)

Resources: Blue Mind meditations: <https://www.youtube.com/watch?v=0dgNVSv1qow>

Local Trip / Expertise / Additional Work and Assessments

Research ocean campaigns / groups (see Media Box) to find out more about what is happening around marine awareness in Ireland.

Using Media Communications Modules 1-4, develop a media output, such as a poster, video or podcast episode, to raise awareness amongst the school community on ocean issues.

L1: MM1 OCEAN LITERACY QUIZ

14 LIFE BELOW WATER



Activity 1: With a partner, complete the quiz questions. Use your own knowledge to answer as many questions as you can.

1. How much of planet Earth is covered by the ocean?

- a. 99% b. 71% c. 49% d. 19%

2. Does the ocean?

- a. give us oxygen b. control the weather c. drive the water cycle d. all of the above

3. How much oxygen does the ocean provide?

- a. 20% b. over 50% c. 100% d. none

4. Can the ocean contribute to your health & wellbeing?

- a. yes b. no

5. What is the largest animal in the world?

- a. Blue whale b. Great White Shark c. African elephant d. Tyrannosaurus

6. Is there a connection between your favourite ice cream and the ocean?

- a. yes b. no

7. What is Sustainable Development Goal 14 about?

- a. fish b. humans c. conserving the ocean environment d. all of the above

8. How many people worldwide rely on fish as their main source of protein?

- a. 4.3 billion b. 8 million c. 7 billion d. 1 million

L1: MM1 OCEAN LITERACY QUIZ

14 LIFE BELOW WATER

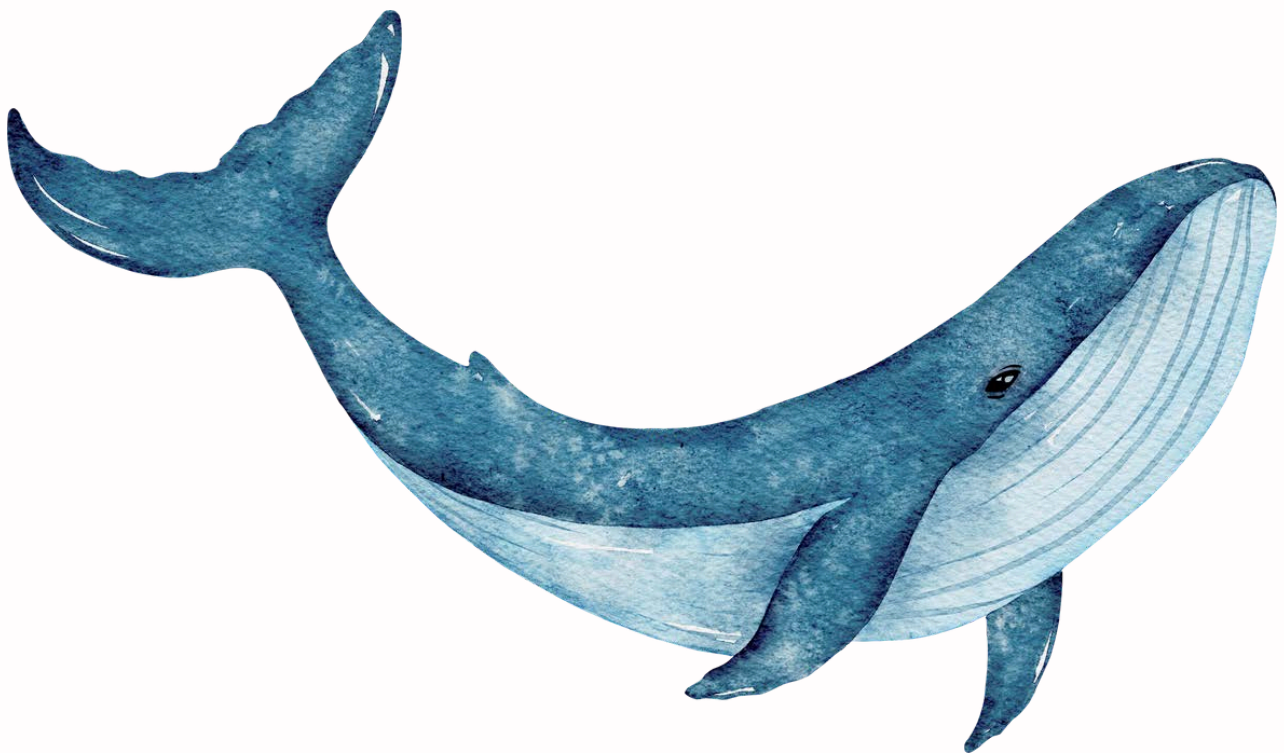


9. How many people in Ireland are directly and indirectly employed by sea fisheries?

- a. 1500 b. 100,000 c. 8200 d. 5000

10. True or False. Over 50% of Irish population live by the coast.

- a. true b. false





Activity 3

An ocean literate person is someone who...

- understands the importance of the ocean to all species
- can communicate about the ocean in a meaningful way
- is able to make informed and responsible decisions regarding the ocean and its resources

Watch the video and answer the following questions.

'[Sea Change: Increasing Ocean Literacy](https://youtu.be/SmM-H3b5dhw)' <https://youtu.be/SmM-H3b5dhw> si=X7E9jMPTUtgT0TyH

1. Why does breathing connect you to the ocean?

2. List the three things we can source from the ocean.

3. What role does the ocean play in our climate?

4. What type of activities connect us to the ocean?

5. How do we impact the ocean?



How ocean literate do you feel you are?

1 - not at all ocean literate

2 - reasonably ocean literate

3 - very ocean literate

?

Why do you think this?
Give three reasons for this.

1.

2.

3.



Ocean Literacy Quiz Answer Key

1. How much of planet Earth is covered by the ocean?

- a. 99% **b. 71%** c. 49% d. 19%

About 71 percent of the Earth's surface is water-covered, and the oceans hold about 96.5 percent of all Earth's water.

2. Does the ocean?

- a. give us oxygen b. control the weather c. drive the water cycle **d. all of the above**

3. How much oxygen does the ocean provide?

- a. 20% **b. over 50%** c. 100% d. none

Scientists estimate that roughly half of the oxygen production on Earth comes from the ocean. The majority of this production is from oceanic plankton — drifting plants, algae, and some bacteria that can photosynthesize.

4. Can the ocean contribute to your health & wellbeing?

- a. yes** b. no

Being near the ocean can help shift your mindset and boost your mood. Spending time at the beach can also increase your levels of serotonin, a neurotransmitter that plays a role in positive mood regulation.

5. What is the largest animal in the world?

- a. Antarctic Blue Whale** b. Great White Shark c. African Elephant d. Tyrannosaurus

The Antarctic blue whale is the biggest animal on the planet, weighing up to 400,000 pounds (approximately 33 elephants) and reaching up to 98 feet in length.

6. Is there a connection between your favourite ice cream and the ocean?

- a. yes** b. no

Seaweed is used as a type of thickening agent for ice cream.

Ocean Literacy Quiz Answer Key

7. What is Sustainable Development Goal 14 about?

- a. fish b. humans c. conserving the ocean environment d. all of the above

Conserve and sustainably use the oceans, seas and marine resources. Goal 14 is about conserving and sustainably using the oceans, seas and marine resources. Healthy oceans and seas are essential to human existence and life on Earth

8. How many people worldwide rely on fish as their main source of protein?

- a. 3.1 billion b. 8 million c. 7 billion d. 1 million

Fish and seafood are important for nutrition and provide about 3.1 billion people with almost 20% of their animal protein.

9. How many people in Ireland are directly and indirectly employed by sea fisheries?

- a. 1000 - 2000 b. over 1 million c. over 16 000 d. under 500

With over 16,000 direct and indirect jobs across fisheries, aquaculture, processing and ancillary sectors, the seafood industry plays a vital role in the sustainable economic viability of many coastal communities across Ireland.

10. How many people live within 5km of the coast in Ireland?

- a. 500 000 b. 5 million c. 1.9 million d. 2.5 million

In Ireland, 1.9 million people live within 5km of the coast and many communities along our coast depend on industries such as tourism, fishing and aquaculture.



'Sea Change: Increasing Ocean Literacy' Answer Key

1. Why does breathing connect you to the ocean?

Over half of the world's oxygen comes from the sea.

2. List the three things we can source from the ocean (mentioned in the video).

Freshwater, Food, Medicine

3. What role does the ocean play in our climate?

Regulates our climate by transferring heat across the globe

4. What types of activities connect us to the ocean?

Trade, Holidays, Recreation, Employment

5. How do we impact the ocean?

By what we put into it and what we take out of it.