

Student Name: _____**Class:** _____**Student ID:** _____**Date:** {{DATE}}

Assessment Details

Duration: 10 weeks	Total Marks: 100
Topics Covered:	<ul style="list-style-type: none">• Ocean Literacy Dimensions• Coastal River Delta Ecosystems• Human Impact on Coastal Ecosystems• Conservation and Sustainability

Instructions to Students:

1. Read all questions carefully before attempting.
2. Show all working out - marks are awarded for method.
3. Calculator use is permitted except where stated otherwise.
4. Write your answers in the spaces provided.
5. If you need more space, use the additional pages at the end.
6. Time management is crucial - allocate approximately 1 minute per mark.

Match the following ocean literacy dimensions with their correct descriptions:

1. The Earth's ocean is a single, interconnected system	_____
2. The ocean and life in the ocean shape the Earth's surface	_____
3. The ocean is a major influence on weather and climate	_____
4. The ocean makes Earth habitable	_____
5. The ocean supports a diverse range of ecosystems and species	_____
6. The ocean's resources are limited, and its services are threatened	_____
7. The ocean's health and human health are linked	_____

Descriptions:

1. a) The ocean's processes shape the coastline and affect human activities
2. b) The ocean's temperature, currents, and chemistry impact global climate patterns
3. c) The ocean regulates the Earth's climate, provides half of the oxygen we breathe, and serves as a source of food and medicine
4. d) The ocean is connected to the atmosphere, land, and living organisms
5. e) The ocean is home to a diverse range of plants and animals
6. f) Human activities impact the ocean's resources and services
7. g) The ocean's health affects human well-being, including the impact of pollution, overfishing, and climate change

1. Draw a diagram of a coastal river delta ecosystem, labeling its physical components.



2. Write a short paragraph describing the importance of water quality testing in coastal river delta ecosystems.



3. Identify and classify three plants and animals found in coastal river delta ecosystems.



1. What is the impact of pollution on coastal ecosystems?

2. How does overfishing affect coastal ecosystems?

3. What are some ways to reduce the impact of human activities on coastal ecosystems?

1. Design a watershed management plan to reduce pollution and protect coastal ecosystems.

2. Research and present on sustainable fishing practices and their impact on coastal ecosystems.

3. Write a short paragraph describing the importance of coastal conservation efforts.

Case Study: The Mississippi River Delta

The Mississippi River Delta is a coastal river delta ecosystem located in the United States. The delta is home to a diverse range of plants and animals, including alligators, birds, and fish. However, the delta is threatened by human activities such as pollution, overfishing, and climate change.

1. What are some of the human activities that impact the Mississippi River Delta?

2. How do these activities affect the ecosystem?

3. What are some ways to conserve and protect the Mississippi River Delta?

Write a reflective journal entry describing what you have learned about coastal river delta ecosystems and the ocean's role in the Earth's system. Include the following:

1. What did you learn about the ocean literacy dimensions?

2. How do human activities impact coastal ecosystems?

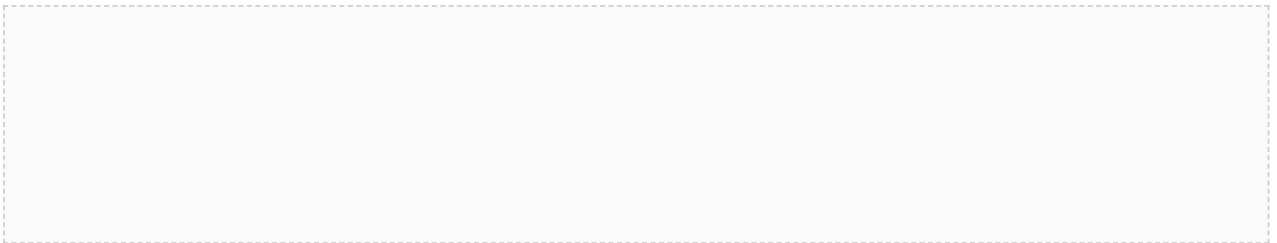
3. What can you do to help conserve and protect coastal ecosystems?

Work in groups to research and present on a topic related to coastal river delta ecosystems. Include the following:

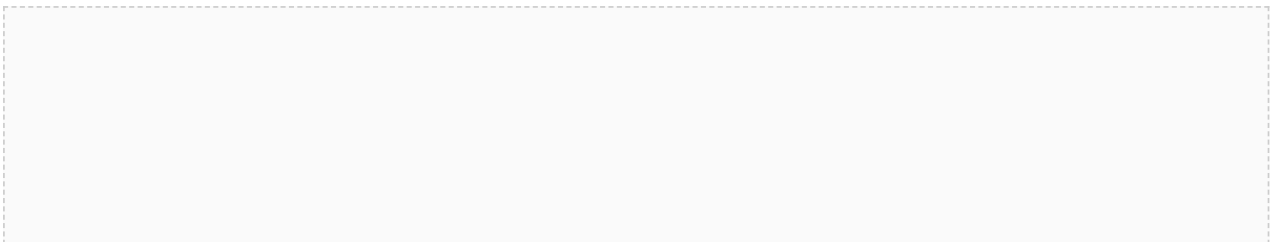
1. A brief overview of the topic



2. The importance of the topic in relation to coastal river delta ecosystems



3. Ways to conserve and protect the topic

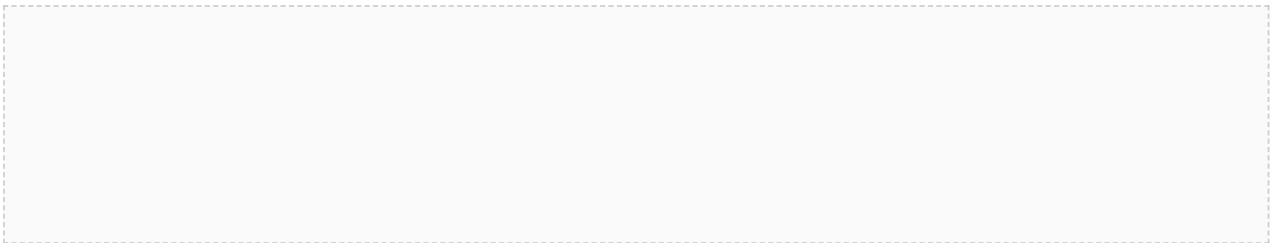


Complete a comprehensive assessment project that demonstrates your understanding of the ocean literacy dimensions and coastal river delta ecosystems. Include the following:

1. A diagram of a coastal river delta ecosystem



2. A written description of the importance of water quality testing



3. A presentation on sustainable fishing practices



Conclusion

Congratulations on completing the Ocean Science Experiments assessment handout! You have demonstrated your understanding of the ocean literacy dimensions and coastal river delta ecosystems. Remember to apply what you have learned to real-world scenarios and to continue exploring the wonders of the ocean.