



# **EXPLORING MARINE ECOSYSTEMS POSTER PROJECT**

**PROJECT:** You will be designing an informative poster board that will detail vital facts about a specific marine environment.

- First, you will select one marine ecosystem to explore. Using any reference books and the internet, you will research the details of your chosen ecosystem and record the information in your notebook.
- You should research and record information such as:
  - Ecosystem description and locations
  - Various plants and animals living there
  - Biotic and abiotic factors
  - Describe what it is like to live there
  - Anthropogenic impacts (positive and negative)
- Once your research is complete, you will organize the facts to be creatively displayed on a poster board.
- Then, present your poster and research to the class for a discussion.

**\*\*\*Be sure to reference the rubric when designing your poster board.\*\*\***

## Exploring Marine Ecosystems Project Grading Rubric

Criteria/Score	20	15	10	5
<b>Description of Ecosystem</b>	Ecosystem is <u>well defined</u> , including a <u>thorough</u> description with details and a precise map of ecosystem locations.	Ecosystem is defined, including a detailed description and a map of ecosystem locations.	Ecosystem is defined, with some details and a map of the locations where the ecosystem is found.	Ecosystem is not defined and/or map does not define the ecosystem.
<b>Dominant Plants and Animals</b>	Dominant species are described in <u>great detail</u> and carefully chosen images are used to support the description.	Dominant species are described in detail and appropriate images are included.	Dominant species are described and images are included.	Description of dominant species lacks significant content and/or images do not support the description.
<b>Habitat Description</b>	Description of the habitat is <u>thorough</u> , and includes details about the components and the challenges organisms might face in the ecosystem.	Description of the habitat includes details about the components and the challenges organisms might face in the ecosystem.	Description of the habitat includes some details about the components and the challenges organisms might face in the ecosystem.	Description of the habitat lacks details about the components and the challenges organisms might face in the ecosystem.
<b>Human Impacts</b>	Details of current and future human impacts to the ecosystem are described <u>completely and accurately</u> .	Details of current and future human impacts to the ecosystem are well described.	Details of current and future human impacts to the ecosystem are addressed.	Details of current and future human impacts to the ecosystem lack content and/or details.
<b>Organization &amp; Aesthetics</b>	Poster is <u>very well</u> organized and aesthetically pleasing.	Poster is fairly well organized and aesthetically pleasing.	Poster has some organizational problems.	Poster is poorly organized.

## OBJECTIVES

- Explore the different marine ecosystems that exist around the world.
- Identify how marine ecosystems connect and work together to sustain life for plants and animals.
- Investigate what abiotic and biotic features comprise marine ecosystems.

## KEY TERMS

**Anthropogenic** caused or produced by humans

**Ecosystem** is a community of living and non-living things in an environment which function/work together as a unit.

**Abiotic** non-living factors in an ecosystem; examples include sunlight, oxygen and wind.

**Biotic** living features in an ecosystem; examples include plants and animals.

## KEY CONCEPTS

- A variety of marine ecosystems exist across the planet.
- These ecosystems sustain life for many different ecosystems.
- Humans depend on marine ecosystems for survival just as the organisms living in these ecosystems lives' depend on humans to live sustainably as to not destroy these ecosystems.

## ADDITIONAL RESOURCES

### **Ecosystem Valuation**

This website from NOAA and U.S. Department of Agriculture describes how economists value ecosystem benefits to people. It is designed for non-economists who need answers to questions about the benefits of ecosystem conservation, preservation, or restoration. It provides non-technical explanations of ecosystem valuation concepts, methods, and applications.

<http://www.ecosystemvaluation.org/>

## **NOAA Marine Life Education Resources**

This collection provides links and resources to understand marine life, the pressures that threaten their existence, and the role humans play in sustaining marine ecosystems.

[http://www.education.noaa.gov/Marine\\_Life/](http://www.education.noaa.gov/Marine_Life/)

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