

Human Dependence and Influence on Oceans

Engage

Watch the video “Trash on the Spin Cycle” found at pbslearningmedia.org/resource/71e7ab34-8fe6-4b05-8b20-40fc221421a3/71e7ab34-8fe6-4b05-8b20-40fc221421a3/?student=true&focus=true

Answer the following questions:

1. What are some of the items Jean-Michel Cousteau found on the beach on Laysan Island?

2. Where did these items come from?

3. How does garbage wind up on the beaches of the Northwestern Hawaiian Islands?

4. What kinds of trash are most likely to become marine debris?

Explore

Materials: Access to internet

What To Do:

1. Choose any three from each of the following columns on the list below.
2. If you are working in a group, spread out the choices so all are taken.
3. Using access to the internet fill out the following pages with information asked for.

Ocean Systems	Human Impacts	Consequences
<ul style="list-style-type: none">• Oxygen Production• Coral Reefs• Estuaries• Mangrove Swamps• Kelp forests• Currents• Wind Patterns• Evaporation and Precipitation• Marine Life• Storage and Exchange of Gases; Carbon Dioxide and Nitrogen• Sea Ice• Seasonal Weather Patterns	<ul style="list-style-type: none">• Coastal Development• Aquaculture• Commercial and Recreational Fishing• Burning of Fossil Fuels• Deforestation• Introduction of Invasive Species• Agricultural Waste and Pollution• Oil Spills• Trash Pollution• Urban Runoff via Storm Drains• Raw Sewage Pollution• Industrial Pollution	<ul style="list-style-type: none">• Extreme Storms• Dead Zones• Ocean Acidification• Human Displacement• Collapsed Fisheries• Habitat Destruction• Change in Precipitation and Weather Patterns• Disrupted Gas Storage and Exchange• Human Health Issues• Extinction and Loss of Biodiversity• Siltation• Garbage Patches

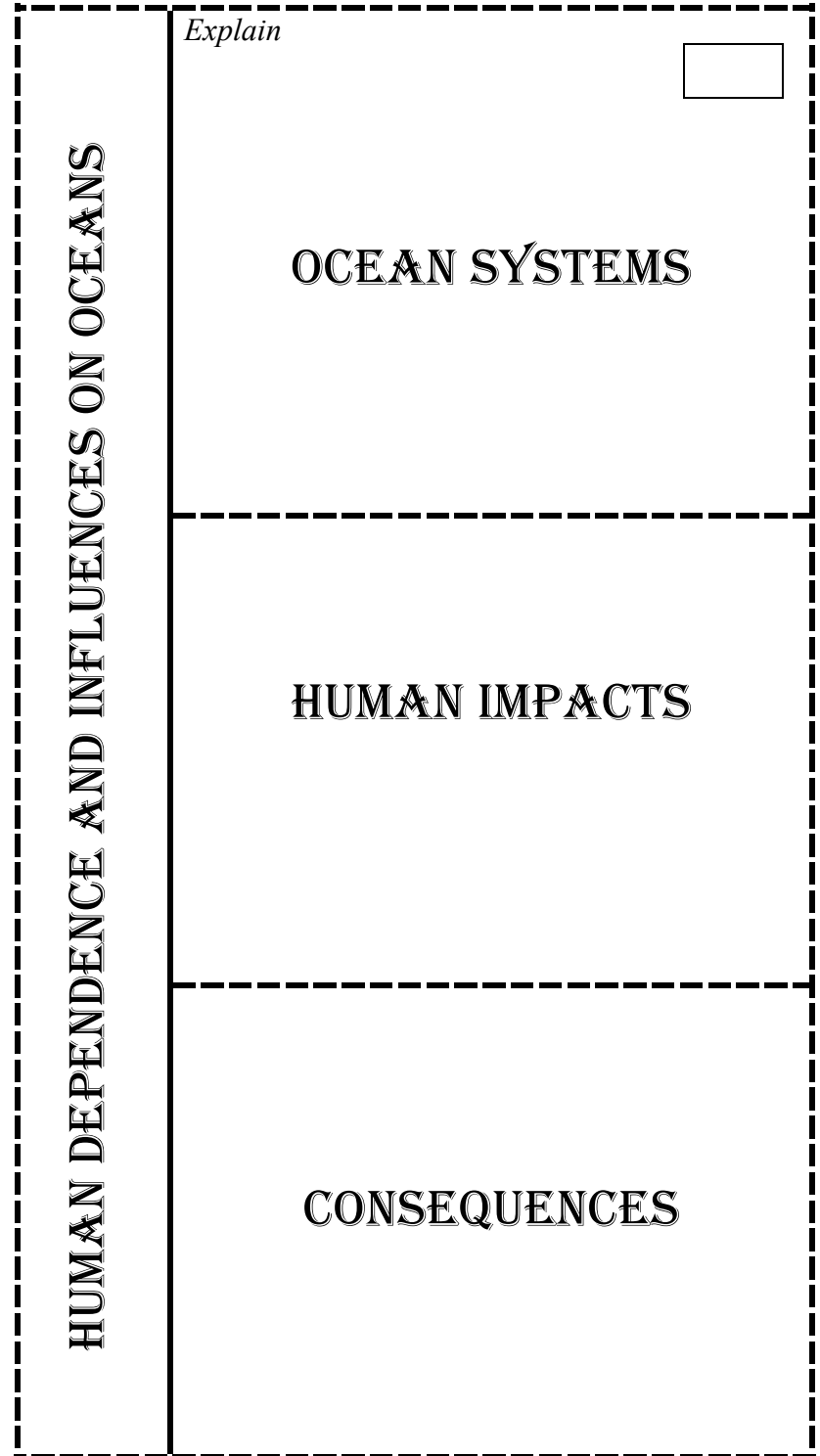


Ocean System	How Humans Depend on this System

Human Impacts	How Humans Cause this



Consequences	How This Effects Humans





Elaborate

What To Do:

1. Watch the video “Ocean and People” from <https://www.youtube.com/watch?v=P80KjyN8UCw&t=3s>
2. Use the Word Bank to help you fill in the blanks as the video plays.

WORD BANK

fish	healthy	coastlines	depend	medicines
half	climate	restore	plastic	marine
flooding	seafood	single-use	dispose	corals

1. Three billion people around the world rely on _____ as their primary source of protein.
2. More than _____ of Earth’s oxygen comes from the ocean.
3. A _____ ocean also supports livelihoods.
4. The ocean even plays a role in providing for our _____.
5. The ocean is an enormous buffer for _____ change.
6. When the ocean becomes acidified, it becomes increasingly difficult for _____ life to live.
7. The loss of ocean biodiversity such as _____, means those living near the coasts will have lesser protection from _____ and typhoons.
8. People living along _____ are threatened with being displaced from their homes.
9. There are actions we can all take to protect and _____ it.
10. Buy locally where possible and choose _____ that are sustainably sourced.
11. Reducing _____ waste is crucial to ensuring healthy ocean ecosystems.
12. Besides recycling, we can also refuse using _____ plastics.
13. _____ from cities often ends up in the ocean.
14. If you see litter on your street, do help to _____ of it properly.
15. Everyone can and must play their part to ensure the protection and conservation of the ocean we all _____ on.



Evaluate

Name _____ period _____

EXIT TICKET

Human Dependence and Influences on Oceans

1. Where does more than half of the oxygen we breathe come from?
 - A. giant redwood trees
 - B. The Amazon rainforest
 - C. phytoplankton in the ocean
2. Which of the following is a way humans depend on the ocean?
 - A. To give us shade
 - B. For food
 - C. To take care of dead zones
3. Which of the following does NOT come from the oceans?
 - A. wood
 - B. food
 - C. minerals
4. Which of the following is not a way humans influence oceans?
 - A. Putting plastic and other pollutant in it.
 - B. Overfishing it.
 - C. Encouraging more oxygen to be produced
5. What consequence might be a result of trash pollution?
 - A. ocean acidification
 - B. garbage patches
 - C. human displacement