

A Focus on Conservation

Students will:

- Explore human interactions with the environment, including human adaptations and modifications.
- Identify the negative consequences of human actions to the environment.
- Evaluate the impact of human actions on energy conservation and efficiency.
- Examine conservation efforts to protect the environment.
- Select a topic and create a message to *inspire* others to **take action** to save the environment.
- Be **EM-powered** to take their message into the community and invite others to **take action** to preserve the Earth!

Overview: 90-120 minutes

Alignment to Social Studies Practices:

1. Gathering, Interpreting and Using Evidence,
2. Chronological Reasoning and Causation,
3. Comparison and Contextualization,
4. Geographic Reasoning,
5. Economics and Economic Systems
6. Civic Participation

<http://www.nysed.gov/common/nysed/files/programs/curriculum-instruction/ss-framework-k-8a2.pdf>

Alignment to Social Studies Practices:

Theme 4: Geography, Humans, and the Environment (GEO)

Theme 7: Civic Ideals and Practices (CIV)

Theme 9: Science, Technology, and Innovation (TECH)

Theme 10: Global Connections and Exchange (EXCH)

Activity 1: GATHER INFORMATION AND EVIDENCE

- Students will explore three main areas related to human interaction with the environment and use of energy.
- Students will use the graphic organizers to explore vocabulary terms associated with the theme, “Human interaction with the environment.” Direct students to complete the Vocabulary Map for each phrase. They may use the Internet to research the terms.

Activity 2: HUMAN-ENVIRONMENT INTERACTION PICTURE CHART

- Students will view each picture of Human-Environment Interaction on the chart. (Alternatively, click on the link for a picture.)
- Students should decide which type of interaction is demonstrated in the description/picture and explain their choice. (Note: There may be more than one answer for each picture. Be sure students explain their choices.)
- Refer to the definitions below when evaluating student responses:
 - DEPEND: People need things from the environment.
 - MODIFY: People change the environment.
 - ADAPT: People adjust to the environment.
 - Website for additional information <https://www.nationalgeographic.org/standards/national-geography-standards/14/>

Activity 3: LEARN THE ISSUES

A. Consequences of Adaptations and Modifications to the Environment

- Students will respond to each True or False statement. This can be done as a class as a way to assess prior student knowledge on the topic. The class can then brainstorm evidence to support or refute each response. Some possible responses are provided below.

Answer Key: Note there may be other acceptable evidence

1. We are not able to repair the negative impacts humans have had on the planet.

TRUE or FALSE

Evidence to support or refute the claim above:

- Modifying human behaviors.
- Conservation efforts and changing the energy consumption habits of humans
- New technologies such as biodegradable plastics made of plants rather than fossil fuels will also help solve some of our planet's environmental problems

2. Human activities have been linked to climate change.

TRUE or FALSE

Evidence to support or refute the claim above:

- Use of fossil fuels has been linked to climate change

3. Environmental conservation refers to efforts by humans to protect our planet and preserve its natural resources.

TRUE or FALSE

Evidence to support or refute the claim above:

- Recycling
- Energy conservation
- Any conservation effort would be acceptable as a response

4. Laws written to protect the environment have had no benefit.

TRUE or FALSE

Evidence to support or refute the claim above:

- Clean Air act, Marine Mammal Protection, Endangered species act

B. Be inspired to do something! (Silent Spring and/or the Majestic Osprey Readings)

- Teachers have the option to use one or both of the activities listed in the student guide depending on age level. Both activities are intended to demonstrate real solutions to environmental challenges.
- Steps for identifying a topic for further study on **conservation and protection of the environment:**
 - Problem
 - Solution
 - Challenge/Action

Note: Students and teachers may enjoy watching the osprey cameras live (or recorded) on Long Island:

<https://www.psegliny.com/wildlife/ospreycam>