

## *A Focus on Conservation*

You will explore:

- human interactions with the environment, including human adaptations and modifications.
- the negative consequences of human actions to the environment.
- the impact of human actions on energy conservation and efficiency.
- 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 your message into the community and invite others to **take action** to preserve the Earth!

### Activity 1: GATHER INFORMATION AND EVIDENCE

We must understand the ways that human activity affects the environment. Additionally, it is important to recognize that humans are greatly impacted by environmental influences. Many of the important issues facing society are the result of these interactions. Some of these are intentional and positive; others unintentional and negative. These changes have political, economic, and social consequences, from the local to the global. We must understand the interaction between people and the environment in order to create positive change.

There are many things that can be done to help the environment. You are first going to focus on understanding the interactions between people and the environment using these terms:

**Interaction**

**Dependence**

**Modify**

**Adapt**



**PSEG** LONG  
ISLAND

## Vocabulary Word Map

Directions: Define the bold-faced words in the CONTEXT of each phrase.

Phrase 1: Humans **interact** with the environment.

Define it in your own words.	Draw or insert a picture.
Give an example.	
Use it in a sentence.	

Phrase 2: Humans **depend** on the environment.

Define it in your own words.	Draw or insert a picture.
Give an example.	
Use it in a sentence.	

## Vocabulary Word Map (continued)

Phrase 3: Humans **modify** the environment.

Define it in your own words.	Draw or insert a picture.
Give an example.	
Use it in a sentence.	

Phrase 4: Humans **adapt** to the environment.


Define it in your own words.	Draw or insert a picture.
Give an example.	
Use it in a sentence.	

## Activity 2: Human-Environment Interaction


As you learned in Activity 1, there are many ways that humans and the environment affect each other. It is demonstrated in how people **DEPEND** on, **MODIFY** and/or **ADAPT** to the environment.


Read each description/picture of Human-Environment Interaction on the chart. (Alternatively, click on the link for a picture)

Decide which type of interaction is demonstrated in the description/picture and explain your choice.


Description/Picture of Interaction	Circle/Highlight the Correct Interaction Described (Choose One)	Explain WHY You Chose This Response
 <p><a href="https://www.quora.com/What-are-the-implications-for-climate-change-to-our-everyday-life-Why-cant-we-depend-on-the-enduring-ability-of-human-adaptation-to-deal-with-it">https://www.quora.com/What-are-the-implications-for-climate-change-to-our-everyday-life-Why-cant-we-depend-on-the-enduring-ability-of-human-adaptation-to-deal-with-it</a></p>	<p><b>DEPEND</b></p> <p><b>MODIFY</b></p> <p><b>ADAPT</b></p>	


## Activity 2: Human-Environment Interaction (continued)

Description/Picture of Interaction	Circle/Highlight the Correct Interaction Described (Choose One)	Explain WHY You Chose This Response
 <p><a href="https://ucsdnews.ucsd.edu/feature/deforestation-drives-disease-climate-change-and-its-happening-at-a-rapid-rate">https://ucsdnews.ucsd.edu/feature/deforestation-drives-disease-climate-change-and-its-happening-at-a-rapid-rate</a></p>	<p>DEPEND</p> <p>MODIFY</p> <p>ADAPT</p>	

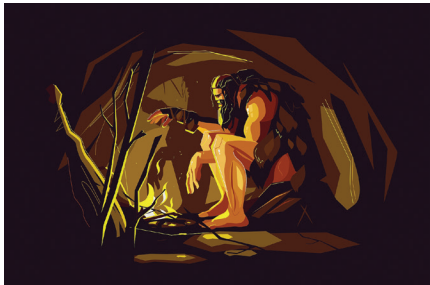
Description/Picture of Interaction	Circle/Highlight the Correct Interaction Described (Choose One)	Explain WHY You Chose This Response
 <p><a href="https://kullabs.com/class-miscellaneous/miscellaneous-subject/population-and-environment/human-dependency-on-the-environment">https://kullabs.com/class-miscellaneous/miscellaneous-subject/population-and-environment/human-dependency-on-the-environment</a></p>	<p>DEPEND</p> <p>MODIFY</p> <p>ADAPT</p>	


## Activity 2: Human-Environment Interaction (continued)

Description/Picture of Interaction	Circle/Highlight the Correct Interaction Described (Choose One)	Explain WHY You Chose This Response
 <p><a href="http://www.westerville.k12.oh.us/userfiles/4188/Classes/7526/humanforcesthatchchangeenvironment.pdf?id=448117humanforcesthatchchangeenvironment.pdf?id=448117humanforcesthatchchangeenvironment.pdf?id=448117humanforcesthatchchangeenvironment.pdf?id=448117">http://www.westerville.k12.oh.us/userfiles/4188/Classes/7526/humanforcesthatchchangeenvironment.pdf?id=448117humanforcesthatchchangeenvironment.pdf?id=448117humanforcesthatchchangeenvironment.pdf?id=448117humanforcesthatchchangeenvironment.pdf?id=448117</a></p>	<p><b>DEPEND</b></p> <p><b>MODIFY</b></p> <p><b>ADAPT</b></p>	

Description/Picture of Interaction	Circle/Highlight the Correct Interaction Described (Choose One)	Explain WHY You Chose This Response
 <p><a href="https://kullabs.com/class-miscellaneous/miscellaneous-subject/population-and-environment/human-dependency-on-the-environment">https://kullabs.com/class-miscellaneous/miscellaneous-subject/population-and-environment/human-dependency-on-the-environment</a></p>	<p><b>DEPEND</b></p> <p><b>MODIFY</b></p> <p><b>ADAPT</b></p>	

## Activity 2: Human-Environment Interaction (continued)

Description/Picture of Interaction	Circle/Highlight the Correct Interaction Described (Choose One)	Explain WHY You Chose This Response
 <p><a href="https://www.google.com/search?q=human+adapt+to+the+environment+t&amp;tbm=isch&amp;ved=2ahUKEwjX8ujk2-vsAhVLJd8KHYYIAC0sQ2-cCegQIABAA&amp;oq=human+adapt+to+the+environment+t&amp;gs_lcp=CgNpbWcQA-1CLiQFYi4kBYPMMAWgAcAB4AIABN4gBN5I-BATGYAQcGAAQgqAQtd3Mtd2l6LWltZ8ABAQ&amp;s-client=img&amp;ei=7RmkX5fIBsvK_AaCgazYBA&amp;bih=581&amp;biw=1242&amp;rlz=1C1GCEB_enUS926US926&amp;safe=strict#imgsrc=AelC2laseR5tgM">https://www.google.com/search?q=human+adapt+to+the+environment+t&amp;tbm=isch&amp;ved=2ahUKEwjX8ujk2-vsAhVLJd8KHYYIAC0sQ2-cCegQIABAA&amp;oq=human+adapt+to+the+environment+t&amp;gs_lcp=CgNpbWcQA-1CLiQFYi4kBYPMMAWgAcAB4AIABN4gBN5I-BATGYAQcGAAQgqAQtd3Mtd2l6LWltZ8ABAQ&amp;s-client=img&amp;ei=7RmkX5fIBsvK_AaCgazYBA&amp;bih=581&amp;biw=1242&amp;rlz=1C1GCEB_enUS926US926&amp;safe=strict#imgsrc=AelC2laseR5tgM</a></p>	<p>DEPEND</p> <p>MODIFY</p> <p>ADAPT</p>	

Description/Picture of Interaction	Circle/Highlight the Correct Interaction Described (Choose One)	Explain WHY You Chose This Response
 <p><a href="https://www.osler.com/en/resources/regulations/2016/renewable-energy-and-climate-change-canada-s-new">https://www.osler.com/en/resources/regulations/2016/renewable-energy-and-climate-change-canada-s-new</a></p>	<p>DEPEND</p> <p>MODIFY</p> <p>ADAPT</p>	

## Activity 2: LEARN ABOUT THE ISSUES

### A. Consequences of Adaptations and Modifications to the Environment

**DIRECTIONS:** Read each statement below. Check TRUE or FALSE and then provide evidence to support your answer.

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:

2. Human activities have been linked to climate change.

TRUE or FALSE

Evidence to support or refute the claim above:

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:

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

TRUE or FALSE

Evidence to support or refute the claim above:



## B. Be Inspired to do Something!

### Example 1:

In her book *Silent Spring* published in 1962, Rachel Carson warned about what might happen if the use of dangerous pesticides continued. Read the following passages and answer the questions below.

(Note: Pesticides are substances used to control plant or animal pests.)

...There was a strange stillness. The birds, for example—where had they gone? Many people spoke of them, puzzled and disturbed. The feeding stations in the backyards were deserted. The few birds seen anywhere were [dying]; they trembled violently and could not fly. It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens, and scores of other bird voices there was now no sound; only silence lay over the fields and woods and marsh....

....The roadsides, once so attractive, were now lined with browned and withered vegetation as though swept by fire. These, too, were silent, deserted by all living things.

....Even the streams were now lifeless. Anglers [fishermen] no longer visited them, for all the fish had died. In the gutters under the eaves and between the shingles of the roofs, a white granular powder [pesticide DDT] still showed a few patches; some weeks before it had fallen like snow upon the roofs and the lawns, the fields and streams....

Source: Rachel Carson, *Silent Spring* 1962, adapted by NYSED 2014

1. According to the passage on the previous page, how did the use of the pesticide DDT negatively impact the environment?

# I AM -Powered

...Silent Spring planted the seeds of a new activism that has grown into one of the great popular forces of all time. When Rachel Carson died, in the spring of 1964, it was becoming clear that her voice would never be silenced. She had awakened not only our nation but the world. The publication of Silent Spring can properly be seen as the beginning of the modern environmental movement....

Source: Vice President Al Gore, introduction to 1994 edition of Silent Spring,  
adapted by NYSED 2014

2. According to former Vice President, Al Gore, in what way did Rachel Carson's book make a difference?

Note: *Silent Spring* prompted the government to act. Laws were passed to restrict/control the use of all 6 dangerous chemicals mentioned in the book in addition to other changes. Carson testified before Congress, and was greeted with the words, "***You are the lady who started all this.***" She made a difference - so can you!

[http://www.environmentandsociety.org/exhibitions/rachel-carsons-silent-spring/us-federal-government-responds#:~:text=After%20Silent%20Spring%2C%20Congress%20revised,\(FIFRA\)%20served%20these%20goals.](http://www.environmentandsociety.org/exhibitions/rachel-carsons-silent-spring/us-federal-government-responds#:~:text=After%20Silent%20Spring%2C%20Congress%20revised,(FIFRA)%20served%20these%20goals.)

## Example 2:

Click on the link on the next page OR read details from the PSEG Long Island website below.

(Note: You will find the information in both places.)



### **The Majestic Osprey**

The more people know about osprey, the more they love them. A symbol of a healthy environment, this majestic raptor has mastery over the land, sea and air. Ospreys have made Long Island's coastlines and abundant fish populations their home. These powerful migratory hunters tend to come back to the same location each year to nest and raise their young.

Historically ospreys would nest near the water in dead trees. Now ospreys often choose other high locations such as telephone and utility poles, posing serious safety concerns for both the birds and our customers (PSEG Long Island).

1. According to the passage, identify the problem faced by the Osprey on Long Island due to human interaction with the environment.

Since the resurgence of the osprey population, PSEG Long Island and its dedicated team have identified best practices for when to move a nest, and when to create alternative safer nests for the ospreys. PSEG Long Island workers have safely relocated two dozen osprey nests in order to ensure they are out of harm's way from high voltage systems, and taken actions to make nests safe in place at an additional eight locations.

2. According to the passage, what has PSEG Long Island done to help protect the Osprey from danger associated with telephone and utility poles?

Check out the live osprey cam:

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

Steps for identifying a topic for further study on **conservation and protection of the environment**:

- Problem
- Solution
- Challenge/Action