Environmental Impact
Pre-Visit Lesson

Grades: 6th - 12th grade  Class Time Needed: 45 minutes

Big Idea
Students will work together to consider how they would solve dilemmas that directly affect the environment and their communities.

Maryland Curriculum Standards

NGSS Earth and Space Science Framework

• Middle School: Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

• High School: Evaluate and refine a technological solution that reduces impacts of human activities on natural systems.

Materials Needed

Each student group needs:

• Environmental Dilemmas packet (3 pages)

• Writing utensils

Instructor needs:

• List of discussion questions for conclusion

• Timer
Lesson Procedure

Introduction:

Divide students into small groups. Explain that all the groups will be given a paper with several environmental dilemmas on it. Each group will be given 5 minutes to discuss what they would do and why. They can write their thoughts/answers on the paper if they choose. Once the timer has ended, each group will be asked to share what action they chose and why.
Direct Instruction (Student Activity):

Give each group the Environmental Dilemmas packet. Begin the 5 minute timer so group members can discuss Example 1. Once students have shared their answers, repeat with Examples 2 and 3.

Direct Instruction (Student Activity):

Ask the following questions for discussion

• Is littering, cutting down trees, or waste disposal a problem in our community?
• How does littering, cutting down trees or waste disposal affect your personal environment?
• What problem does littering, cutting down trees, and waste disposal create for people and animals in your community?
• What can you or other members of your community do about these problems?
Example 1:

One day you are walking through a park with a good friend, who is eating food out of a plastic bag. When your friend is finished eating, they drop the bag on the ground. You ask your friend to pick it up, but they refuse, with the reasoning that this is a public area and therefore it is not important to care about it.

In this situation, what would you do?

a) Again ask your friend to pick up the trash.

b) Pick up the trash yourself.

c) Use this as an educational opportunity to tell your friend about the problems that littering causes in the environment.

d) Do nothing.

e) Something else (be specific).

Write the reason for your answer below:
Example 2:

You live near a wooded area where you like to watch wildlife and enjoy the shade from the many tall trees. One day you discover that your neighbors are planning to cut down all the trees. You ask them nicely not to cut down the trees so the trees can serve both as shade and as home for different types of animals. They both laugh at you and say no.

In this situation, what would you do?

a) Plead with them again to preserve the area for wildlife, etc.

b) Move to a different place.

c) Replace the trees cut down with baby trees.

d) Use this as an educational opportunity to tell them about the importance of trees in the environment.

e) Do nothing.

f) Something else (be specific).

Write the reason for your answer below:
Example 3:

You are a builder/mason. You have recently been given a grant by an international organization to renovate a large city building. As part of the renovation, you are required to dispose of construction debris in an environmentally safe manner. However, there is no money specifically for this.

In this situation, what would you do?

a) Rent a truck and ship the construction debris to the official city landfill 10 miles away.

b) Take the debris to an unofficial, but commonly used, dumping site on the river 1 mile away.

c) Leave the debris piled near the renovate building.

d) Use this as an educational opportunity to tell them about the importance of trees in the environment.

e) Something else (be specific).

Write the reason for your answer below: