

Environmental Science Issues: Classroom Lesson Plan

Lesson Topic:

Identifying and Crafting Solutions to Environmental Science Issues

Lesson Objective:

Students will be able to describe some issues the environment is facing and explain steps they can take to lessen these impacts.

Materials:

- Copies of Vocabulary Word List
- Copies of Ways That I Can Help the Environment
- Dictionaries
- Writing utensils
- Projector or other method to watch the video
- Chart paper, optional

Advanced Preparation:

- Preview the video before sharing it with your students [4:38].
- Make copies of Vocabulary Word List and Ways That I Can Help the Environment.

Warm-up Activity:

1. Tell students they will be learning more about the environment and steps they can take to have a positive impact on it.



- 2. Introduce the **Vocabulary Word List** from the video. Have students circle the terms they are familiar with and look up the definitions of those they are not familiar with. Direct students to record their own definitions for the words they are familiar with and the dictionary definitions for those they are not.
- 3. For each term, have students work together to generate sentences or draw pictures that demonstrate their understanding of the vocabulary word in context (e.g., "My cat's environment is my house," or, "The environment is very important to all the plants and animals that live in it." For students that choose to draw pictures, the word environment may be represented by many things including a beach, forest, field, or the planet.).
- 4. Use this opportunity to clear up any misconceptions regarding word meanings as they relate to the environment and environmental issues.
- 5. Pass out the Ways That I Can Help the Environment worksheet. Have students work in pairs or small groups to brainstorm things they can do to help the environment. Circulate as needed to assist students that are struggling. Depending on the students' prior knowledge and classroom management needs, this activity can also be done independently.

View the Video: "Environmental Science Issues"

- 1. Tell students they will be watching the video titled, "Environmental Science Issues".
- 2. Explain that the video presents role models talking about ways to have a positive impact on the environment and challenges that humans may face in the future.
- 3. Help students understand that there are several environmental challenges the Earth is facing including resource scarcity and



- climate change. However, there are concrete ways that everyone can work together to help solve these challenges.
- 4. View the video together and have students listen for the role models to use the vocabulary words they just reviewed.
- 5. View the video again; this time, invite students to formulate questions or comments about the ideas discussed in the video and to be prepared to discuss these after viewing the video.

Video Follow-up:

- 1. Ask students to offer their questions, comments, reactions, and responses to the video.
- 2. Direct students to use a different color pen to add new ideas they have to their **Ways That I Can Help the Environment** worksheet independently. These could be ideas from the video or simply other ideas the student has.
- 3. Using the whiteboard, an overhead projector, or chart paper, bring the class together to create a class list of ways to help the environment. This list can include the small groups' ideas, ideas from the video, and ideas from class discussion.
- 4. Guide students to complete the final section of the Ways I Can Help the Environment worksheet by modeling the steps that you might take to put one of the class's ideas into action. Then direct students to work independently to complete the "bonus" section of the worksheet.
- 5. Encourage students to discuss what they learned in class with their parents or guardians. Students should take their **Ways I Can Help the Environment** worksheet home to share with their family.



Extension Activities:

- 1. Use the class list of ways to help the environment to inspire individual student projects or a larger class project in a future lesson.
- 2. Use the "Related Questions to Explore" as discussion springboards or writing prompts to help students further explore the environment and environmental issues.

Related Questions to Explore:

- What is your environment? How do you know?
- What do you already do to take care of your environment? How do these things help keep you healthy and happy?
- The health of our planet impacts us all. Should everyone be equally responsible for taking care of the planet or should some people be more responsible than others? Why?
- Do the choices that you make in your environment impact other environments in your community? What about environments in other parts of the world?
- One role model said that girls "have the ability to be role models to those around them." What kind of role model are you? What can you say or do to help the environment that might inspire others?



Vocabulary Word List from "Environmental Science Issues" Video:

Environment	
Recycling	
Scarcity	
Sustainability	
Climate Change	
Resilience	



Ways That I Can Help the Environment

Use the lines below to list things that you can do to help the environment:
Now, use a different color pen to add any new ideas you have after watching the video.
BONUS:
Select one idea to help the environment from today's lesson.
The idea I picked is
What steps could you take this week to put this idea into action?



Ideas for Future Lessons/Activities Related to the Environment and Environmental Issues:

- 1. What Can Science Tell Us? Exploring the Research and Statistics Behind Environmental Challenges
- 2. Conducting and Recording Interviews about the Environment with Real Life Inspiring Women
- 3. Environmental Challenges We Have Overcome: Researching Past Environmental Challenges
- 4. Environmental Issues in Cinema: The Lorax, Wall-E, and Over the Hedge
- 5. What Should We Do? Challenging Environmental Scenarios and Possible Solutions for Students to Explore and Discuss
- 6. Focus on Our Community: Identifying Environmental Challenges in Our Own Backyards
- 7. What Does the Future Hold? Creative Writing About Our Future World
- 8. Mapping and Measuring: What Does Sea Level Rise Mean and What Communities Might It Impact?