

Act Now! Save Planet Earth

Discipline: Science and Language Arts

Grade: Middle school levels

Time: Three 45 minute blocks



Introduction

The earth is an invaluable resource. Currently, it is the only planet that can sustain human life. Therefore, it is our responsibility to preserve and protect it from an assortment of threats.

Anticipated Student Learning Outcomes

- Students will understand challenges to the earth's environment.
- Students will investigate and research environmental concerns.
- Students will explore possible solutions for environmental concerns.

CRISPA

Connections

Risk-Taking

Imagination

Sensory Experience

Perceptivity

Active Engagement

Overview

This lesson examines the many threats to our environment and the need for preservation efforts. It relies on students to investigate the current dangers to our environment with a specific focus on one cause. After extensive research, students take place on a committee in which they need to vocalize their cause in an effort to gain support.

Materials

- Writing utensils
- Paper
- Image or photograph of earth
- Michael Stanwood's *Living Together on Planet Earth* song on his CD *Living Together on Planet Earth* (track 14)
- CD player or comparable device to play song
- Computer with internet access
- *Act Now! Save the Planet* handout
- Research materials

Evaluation

Students will be evaluated throughout the lesson in a variety of informal and formal ways. Student active engagement and participation in discussions provide an informal assessment of their understanding. The final product from the *Act Now! Save Planet Earth* assignment provides a more formal evaluation of student understanding.

Suggested Procedures

Introduction:

1. Explain to the students that they are going to engage in a brain flow session. During this session, students will listen to the provided prompt and have a minute to quickly and freely write, list, map, or outline their response. The focus of the brain flow is to have students brainstorm about a topic without any confinements or interruptions to their flow of knowledge.
 - Provide students blank paper to begin their brain flow.
 - Explain to students that you would like them to engage in a brain flow session about the positive attributes of planet earth.
 - When the minute is up, ask students to flip their paper over and engage in a brain flow session about the threats to planet earth.
2. Display a picture of planet earth from space. NASA has an impressive gallery that can be found at <http://visibleearth.nasa.gov/>
3. While students are looking at the image, play Michael Stanwood's *Living Together on Planet Earth* song from his CD *Living Together on Planet Earth* (track 14). Provide time for the students to really look at the image and engage with the music.
4. Once you feel that students have fully engaged with the image and music, play the song once more, this time providing the students an opportunity to add to their brain flow.
5. Ask students to discuss their brain flow ideas either with a partner or in small groups. Have each group of students report back to the class. You may wish to record their responses on the blackboard or on chart paper for the entire class to see.

Activity:

1. Explain to students that the earth is essential for life and that people are quickly using up or wasting the precious resources it provides us with. Refer back to the specific threats that students provided during their brain flow session. Explain to the students that there are many different organizations that are trying to protect aspects of the earth. Ask students if they know of any agencies and what their main cause is.
 - Examples include:
 - World Wildlife Fund <http://www.worldwildlife.org/home-full.html>
 - Protection of species and conservation
 - National Park Services <http://www.nps.gov/index.htm>
 - Conservation, Protection, Education
 - Sierra Club <http://www.sierraclub.org/>
 - Protect ecological communities, encourage smart energy solutions, and conservation
2. Divide students into small groups. Distribute the *Act Now, Save Planet Earth* handout. Read through the instructions together and answer any questions students may have. Assign each group of students a cause, committee, or topic to represent. Depending on your students, you

may want to leave the topics broad such as endangered species or narrow such as the grizzly bear.

- Possible causes may include:
 - Environmentally friendly products
 - Consumer goods such as clothing, make-up, toys
 - Oceans and waterways
 - Can focus on global or local water issues
 - National Park Services
 - Endangered Species
 - Sierra Club
 - Recycling Programs
 - World Wildlife Fund
 - Waste Management
 - Fuel Efficient Cars
 - Farming practices
 - Global Warming
- 3. Provide students time to work in their committees on their research and presentation.
- 4. Have students present their committee's creation.

Possible Extensions

1. Have students formally share their presentations with another class, the school, or community members.
2. Combine the lesson with a community service project.
3. Use the resources in your area to further enhance the lesson. For example, you could take a field trip to the zoo, a state or national park, a farm, or local businesses in the area.
4. Encourage students to experience with nature. Take the students outside and have them keep a journal of their experiences.
5. Conduct an artist study in which you select a famous artist who emphasized nature. This could include a landscape artist or an animal enthusiast. Have students study and analyze their work and then create their own.
 - Great Resource for landscape artist from PBS
<http://www.pbs.org/programs/landscapes-through-time/>
6. Watch the Discovery Channel's *Planet Earth* series <http://dsc.discovery.com/tv/planet-earth/>

Additional Resources

Websites:

<http://dsc.discovery.com/tv/planet-earth/>
<http://kidsforsavingearth.org/>
<http://www.epa.gov/superfund/kids/earthday.htm>

Books:

Heroes of the Environment: True Stories of People Who Are Helping to Protect Our Planet,
Harriet Rohmer (Aug 12, 2009)
365 Ways to Live Green for Kids: Saving the Environment at Home, School, or at Play-Every Day!
Sheri Amsel (Mar 18, 2009)
Our Earth: How Kids are Saving the Planet, Janet Wilson (Oct 1, 2010)
Save the Earth Science Experiments: Science Fair Projects for Eco-Kids, Elizabeth Snoke Harris
(Jan 6, 2009)

Appendix

Act Now! Save Planet Earth handout

Act Now! Save Planet Earth



Name: _____

Date: _____

You have been placed on a committee to protect one aspect of planet earth. While you understand and value all of the environmental concerns and the various committees and causes, your task is to make the public understand that it is vital to donate to and volunteer with your cause. How are you going to do this?

Some suggestions are:

- Write a persuasive pieces for the local newspaper
- Create a documentary
- Design an informative poster
- Invent a new marketing campaign with your cause as the focus
 - Example: Coca Cola and the polar bears
- Write a proposal to legislature
- Preform a pop song that highlights your cause
- Create museum exhibit focusing on your cause
- Investigate and demonstrate a science experiment that emphasizes your cause
- Do you have an idea of your own? Present it to your teacher for approval.

Whatever method you choose to spread the news about your cause, you must include the following:

- 🍏 Explanation of your cause
- 🍏 The various reasons for your concerns
- 🍏 Scientific evidence or research supporting your findings
- 🍏 Two to three possible solutions

