Causes, Effects, and Solutions

A Global Warming Lesson Plan

Purpose

The purpose of this lesson is to explore the causes and effects of global warming and to discuss possible solutions.

Duration

Two 45-minute periods

Student Objectives

- Identify three greenhouse gases.
- Identify two causes of global warming.
- Identify two effects of global warming.
- Identify four possible solutions to global warming.
- conduct a "green audit" of his/her household.
- List three changes that can be made within the household to help combat global warming.

Materials

- Computers with internet access. If computer access is not available for students, the teacher can print and distribute the information to the students.
- Four pieces of chart paper
- A different colored marker per group of 3 learners
- Tape

Instructions

Write one of the following questions on each piece of chart paper. Display the questions in

the room.

- What are the causes of global warming?
- What are the effects of global warming?
- What are some things we can do to stop global warming?
- President Bush did not sign the Kyoto Protocol because he believes it will hurt the U.S. economy. Share your thoughts on his actions.

Teacher Note: <u>This web site will give the teacher background information on the Kyoto Protocol.</u>

Day One

Briefly review the Greenhouse Effect and global warming. Pose the following questions to the learners and briefly discuss possible answers. What advantages/disadvantages would there be to the Earth's temperatures rising? Would you like the Earth to be hotter? Why or why not?

Form groups of three students each. Explain to the students that they will be researching the questions displayed on the chart paper. Review the questions with the class. Ask the groups to research information to answer the four questions posted on the chart paper.

Have students log on to the EPA website

and read the following sections:

- Can We Change the Climate? (causes)
- So What's the Big Deal? (effects)
- We Can Make a Difference (solutions)

Have students log on to the <u>Time for Kids</u> website and read at least two articles from the "Past Stories" section. If they have time, students may also look at the "Fix the World" section.

OR

Distribute print information about global warming for the students to use to complete the research.

Day Two

Tell students that they will be participating in a "Gallery Walk". Go over the procedures:

- Each group must use a different colored marker.
- Answers should not repeat.
- All members of the group should have the opportunity to write on a chart.
- 1. Display each piece of chart paper around the room.
- 2. In their research groups of three students, have the groups rotate around the room writing the responses to each question on the chart paper.
- 3. After all the writing is completed, ask the students to rotate to the charts one more time to read all the information that has been contributed by each group.
- 4. As a whole class, discuss/review each chart's contents. Add additional information as needed.

Assessment

Group answers (written in different colored markers) on the chart paper will be assessed along with the learners' participation in the discussion.

School/Home Connection

Learners and parents will conduct a "green audit" of their household and list three things they can do to help combat global warming.

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