



Global Warming Skit

Grades 3-5

Lesson Summary

Students will participate in a very basic greenhouse effect demonstration in order to introduce the topic of global warming.

Prior Knowledge & Skills

- Basic knowledge about the sun's warming effects on the Earth

AAAS Science Benchmarks

The Physical Setting

Energy Transformations

Common Themes

Models

NSES Science Standards

Physical Science

Light, Heat, Electricity, Magnetism

Science in Personal and Social Perspectives

Types of Resources

Teaching Time: ~30 minutes

Materials

- Cardboard or posterboard
- String
- Hole punch
- Marking pens or crayons in assorted colors

Advanced Planning

Preparation Time: ~10 minutes

1. Review the instructions
2. Gather the necessary supplies.

Recommended Reading:

Editor's Suggestion:

For advanced students, you may want to teach the class the basic idea of the greenhouse effect and have them write their own scripts.

Climate Change, Wildlife, and Wildlands

Science Activity — Global Warming Skit

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Cast

Atmosphere

Cars (two)

Earth

First Heat

Greenhouse Gases (three)

Narrator

Plane

Second Heat

Space

Sun

We encourage you to adapt, refine, and expand the skit to fit your children and their audience. You might, for example, want to introduce a new segment mentioning the Industrial Revolution and how it may have increased the greenhouse gases in the atmosphere.

Suggested Script

Actors will perform actions as they are spoken by the narrator.

What is the Greenhouse Effect?

Narrator: What is the greenhouse effect? How does it work? Well, first of all, the sun warms the Earth.

Enter Sun. Enter Earth. Enter two Heats. The Sun sends both Heats toward the Earth.

Sun: I'm the sun, and I warm the Earth.

Narrator: Without the sun, people wouldn't be able to live here. But too much heat from the sun isn't good, either. The Earth sends some heat into space and that helps keep the Earth from getting too hot.

Enter Space. One Heat goes toward Space.

First Heat: I'm heat, and I go back into space.

Space: I'm space, and some of the heat comes back to me.

Narrator: Most of the Earth's heat is trapped by the atmosphere. Like the glass roof of a greenhouse, the atmosphere keeps most of the heat from going back into space.

Enter Atmosphere. The Atmosphere traps most of the second Heat.

Atmosphere: I'm atmosphere, and I keep most of the heat from going back into space.

Second Heat: I'm most of the heat, and I stay in the atmosphere and warm it.

Narrator: The atmosphere contains substances called gases.

Enter Greenhouse Gases (three).

Greenhouse Gases: (in unison)
We're greenhouse gases, and we trap heat from the sun.

Narrator: Some of the gases also trap heat from the sun. Because those gases cause the greenhouse effect, they are called "greenhouse gases." Some greenhouse gases are produced by human activities, such as driving and flying.



Climate Change, Wildlife, and Wildlands

Science Activity — Global Warming Skit

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*Enter two Cars and Plane.
The Cars "drive" and Plane "flies."*

Cars: We're cars, and we make greenhouse gases.

Plane: I'm a plane, and I do, too.

Narrator: We make greenhouse gases by using fuels such as gasoline. Fuel is important. We need fuel to drive cars, fly planes, and heat our homes. But when we use fuel, gases go into the air and add to the greenhouse effect. The greenhouse effect helps to warm the Earth.

*Greenhouse Gases follow Cars and Plane,
and then move toward the Atmosphere.*

*Now, when the Heat moves toward
the Atmosphere, it's trapped by the
Greenhouse Gases.*

**Greenhouse
Gases:** We go into the atmosphere, and we trap the heat when it comes up to the atmosphere.

All: We help make the greenhouse effect!