Graphing the Greenhouse

Summary

Students will analyze graphs to help understand the affect of CO2 concentrations on temperature. They will discover how graphs can be set up to help prove a point and occasionally mislead the uninformed.

Main Core Tie

Science - Earth Science

Standard 3 Objective 3

Time Frame

1 class periods of 60 minutes each

Group Size

Individual

Materials

- student worksheet
  (attached)
- handout of the graphs
  (attached)

Background for Teachers

Students know how of the greenhouse effect works and its positive affect on Earth. They should know that scientists and environmentalists are worried about the effects of increasing the levels of CO2 on Earths climate. The international scientific community has come out strongly with warnings to the public and governments of countries that they are concerned about greenhouse warming. Resistance to cutbacks of CO2 come from a variety of sources and often use the same data as scientists, but in a different format. Data can look very different depending on how it is displayed in a graph. It can be altered to show different amounts of time or a different scale of magnitude.

Instructional Procedures

Read through the introduction and sample graphs with students.
Read the instructions so that students know what they are looking for as they view the graphs.
Instruct students to look at all the graphs shown and begin to fill out the data table in the student sheet.
Chose a group of students to describe each graph and share their answers with the class.

Assessment Plan

Scoring Guide:

1. Students follow directions and carefully analyze graphs4
2. Students fill in data table and describe completely their reasoning..4
3. Students are able to report and support their data..4

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

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