




Lesson I: Global Climate Change


Appendix I:

Activity I - Greenhouse Effect Experiment

Recommended grades: 8th -12



The Greenhouse Effect



by Alicia Pinderhughes,
University of Michigan

<http://www.reachoutmichigan.org/funexperiments/agesubject/lessons/greenhouse.html>

(accessed September 28, 2008)
with modifications by Blake Gentry, UNA-SA

[Note to Instructors: the complete GHG Lab component contains graphics for a three stage experiment, a classroom project worksheet, and an evaluation sheet]

Activity Objectives:

- Identify what the greenhouse effect is.
- Determine why it happens.
- Postulate hypothesis about temperature differences
- Analyze results of temperature data from Greenhouse Gas Experiment

Concepts

Global warming is a natural process that keeps the planet warm and hospitable for living organisms. The greenhouse effect (understood to mean an *enhanced* greenhouse effect) is the warming of the earth beyond this natural process of global warming.

Principles

- Greenhouse gases are in the earth's atmosphere.
- Some solar radiation is absorbed by these greenhouse gases; some reaches the earth and is absorbed by its surfaces. In both cases, light is absorbed as heat.
- A hypothesis states expected results of an experiment.
- Analysis of the data measured from the experiment
- State actual results

