The Greenhouse Effect

The whole earth is warmed by the greenhouse effect. What is it? This experiment must be done on a sunny day.

**What to do:** Put a thermometer into the plastic bag. Close the bag and place it on a sunny windowsill. Place the second thermometer on the same windowsill.

After 10 minutes, read both thermometers.

**What happens:** The thermometer inside the bag reads several degrees higher than the other one.

**Why:** The sun's rays pass through the bag easily. Once inside, however, they convert into heat, which cannot get out as easily. Therefore, the temperature inside the plastic rises. The bag warms up like a greenhouse, in which gardeners grow plants.

The sun's rays pass through earth's atmosphere in the same way. And when they convert into heat rays, they cannot get out easily. They are absorbed by the surface of the earth, warming it as if it were a large greenhouse.

Scientists on the Intergovernmental Panel on Climate Change believe that carbon dioxide in the air, from our industrial use of such fuels as oil and coal, have increased the greenhouse effect. Carbon dioxide absorbs heat rays, and so they are radiated back to the earth instead of escaping into space. According to current research, this will make the earth warmer, causing the ice at the North and South Poles to melt. That would cause sea level to rise and flood areas, changing our climate altogether and creating many problems.