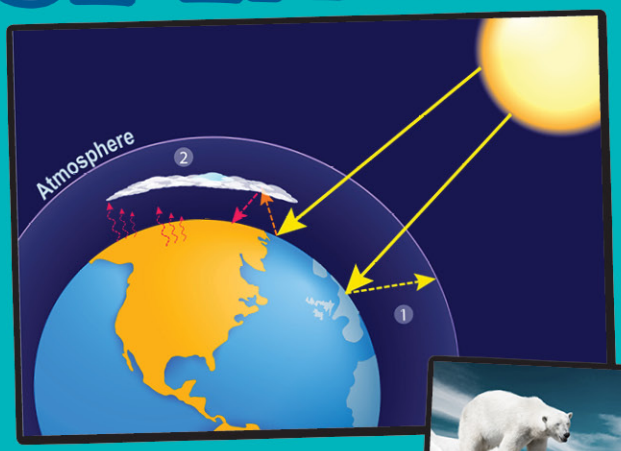
RECREATING THE GREENHOUSE EFFECT

The Earth's climate has changed many times in the past. Subtropical forests have spread from the south into more temperate or milder, cooler climates areas. Millions of years later, ice sheets spread from the north covering much of the northern United States, Europe and Asia with great glaciers. Today, nearly all scientists believe human beings are changing the climate. How can that be?

Over the past few centuries, people have been burning more amounts of fuels such as wood, coal, oil, natural gas and gasoline. The gases formed by the burning, such as carbon dioxide, are building up in the atmosphere. They act like greenhouse glass. The result, experts believe, is that the Earth is heating up and undergoing global warming.



HOW CAN YOU SHOW THE GREENHOUSE EFFECT?

WHAT YOU'LL NEED

- Two identical glass jars
- 4 cups cold water
- 10 ice cubes
- One clear plastic bag
- Thermometer

WHAT TO DO

1. Take two identical glass jars each containing 2 cups of cold water.
2. Add 5 ice cubes to each jar.
3. Wrap one in a plastic bag (this is the greenhouse glass).
4. Leave both jars in the sun for one hour.
5. Measure the temperature of the water in each jar.

WHAT YOU'LL DISCOVER!

In bright sunshine, the air inside a greenhouse becomes warm. The greenhouse glass lets in the sun's light energy and some of its heat energy. This heat builds up inside the greenhouse. You have just shown a Small greenhouse effect. What do you think could happen if this greenhouse effect changed the Earth's climate?

Another version of a greenhouse is what happens inside an automobile parked in the sun. The sun's light and heat gets into the vehicle and is trapped inside, like the plastic bag around the jar. The temperature inside a car can get over 49 degrees Celsius.