



RENEWABLE ENERGY IN AUSTRALIA

What is the Greenhouse Effect?

The greenhouse effect is the rise in temperature that the Earth experiences because certain gases (such as carbon dioxide, nitrous oxide, and methane) in the atmosphere trap energy from the sun.

Task

Work in pairs or small groups to create your own 'greenhouse effect'.

What you need

- Two glasses (same size)
- Cold water
- A large zip-lock bag (large enough to stand one of the glasses in)
- Two thermometers

Constructing the greenhouse

Step 1:

Pour equal amounts of cold water into each glass.

Step 2:

One person holds a zip-lock bag open while another person puts one glass of water into it and then seals the bag.

Step 3:

Put both glasses in direct sunlight.

Step 4:

Wait for two to three hours.

Step 5:

Take the temperature of the water in both glasses (using a different thermometer for each glass). Be careful when taking the temperature (do not touch the glass; it will be hot!)



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Name: _____

Questions

What was the temperature in each glass?

- Glass one (in zip-lock bag) _____°C
- Glass two _____°C

Which glass was warmer?

Why do you think there was a temperature difference between the glasses?

Does this experiment help you to understand what the greenhouse effect is? How?

