



WORKSHEET



CLIMATE ACTION LEARNING & LEADERSHIP

Where in the world and in what habitats are these animals found?

Greater One-horned Rhino

Polar Bear

Blanding's Turtle

What are the ways that climate change is affecting the animals that you saw?

Greater One-horned
Rhino

Polar Bear

Blanding's Turtle

What can you do in your home or class to help take action on climate change?

@tzcallproject



GREENHOUSE EFFECT EXPERIMENT

The greenhouse effect is a natural phenomenon that makes life on earth possible. Greenhouse gases trap solar radiation and heat the earth's surface to an average global temperature of 15°C. However, human activity has increased the level of greenhouse gases, particularly carbon dioxide (CO₂), resulting in an increase in the amount of heat trapped in our atmosphere.

Try this experiment to see the effects increased CO₂ has on temperature.

You will need:

- Two thermometers
- Two sealable glass jars with a hole punched in the lid for the thermometers
- Water
- Alka-Seltzer tablets
- A light source (sunlight will work, but a desk lamp is better)
- Pen and paper to record results



Fill each jar ¾ of the way full of water. Close the first jar and insert the thermometer making sure to keep the bottom of the thermometer in the air in the jar and out of the water (you can use tape, an elastic or plasticine to position the thermometer properly in the hole). Open the Alka-Seltzer tablets and drop them in the second jar and close the lid quickly. Insert the second thermometer in the second jar identical to the first. The Alka-Seltzer is producing carbon dioxide when placed in the water. Mark your second jar to ensure you know it is the high CO₂ jar. Place both jars in direct sunlight or under the light of a desk lamp and track the temperature change over time.

What did you learn from your experiment?

Research online how CO₂ has increased over time and the effects of an increased global temperature.

- Which jar has a higher temperature and why?
- What can we do to decrease CO₂ emissions?

Be a part of the C.A.L.L.!

Make a pledge with your friends and classmates to take some actions to decrease your greenhouse effect

@tzcallproject

