



Global Studies

Impact of Global Warming

Leveled Assessment: ____/4

Name:

Section:

Score: ____/5

Directions: You will use the scientific method to carry out an experiment on the effects of global warming on the rise of sea levels. In this experiment you will be looking at which type of melting will have the greatest impact on the earth, the melting of sea ice, or the melting of land ice and glaciers.

Step 1: Purpose

Explain the problem and state the question you are trying to answer

Step 2: Hypothesis

Predict the outcome of your experiment

Step 3: Experiment

Follow the procedural steps below to conduct your experiment

- Use the clay to build "land" on one half of each tub. Form the clay to represent land rising out of the ocean. Label one tub "Ice on Land" and the other "Floating Ice."
- Place stick pins close to the edge of each land mass.
- Place four ice cubes on top of the land mass in one tub and on the bottom of the other tub.
- Pour water into the Floating Ice tub until the ice floats. Be sure to add enough water so the ice is floating, not resting on the bottom.
- Pour water into the Ice on Land tub with the ice resting on the clay (be careful not to disturb the ice cubes) until the water levels in the two containers are equal.
- Set the tubs side by side
- Wait for the ice to melt. Take photos of the changes in the level of the water in the tubs or note changes in the levels in a chart.
- When all the ice has melted mark the new water level on each tub. Note the change(s)



Step 4: Analysis

Record the findings of your experiment

Step 5: Conclusion

Connect your data to your hypothesis. Expand your findings to connect back to your purpose.