LAB 17

Checkout Questions

Lab 17. Factors That Affect Global Temperature: How Do Cloud Cover and Greenhouse Gas Concentration in the Atmosphere Affect the Surface Temperature of Earth?

1. Continued use of fossil fuels adds more greenhouse gases to the atmosphere each year. Does this have an impact on short-term temperature changes? In other words, will tomorrow be hotter than today because there will be more greenhouse gases in the atmosphere tomorrow?

2. Does human activity contribute to increased cloud cover? Explain your answer.

- 3. There are several different types of questions that scientists can ask as part of their investigations.
 - a. I agree with this statement.
 - b. I disagree with this statement.

Explain your answer, using an example from your investigation about greenhouse gases and cloud cover.

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- 4. Scientific knowledge can change over time.
 - a. I agree with this statement.
 - b. I disagree with this statement.

Explain your answer, using an example from your investigation about greenhouse gases and cloud cover.

5. In science, it is critical to understand what makes a system stable or unstable and what controls rates of change in a system. Explain whether the system determining Earth's temperature is stable or unstable. Also, indicate what controls rates of change in Earth's temperature.

6. In science, it is important to track how energy moves into, within, and out of a system. Explain how energy moves into, out of, and within Earth's surface and atmosphere. It may help to draw a diagram. Also, indicate if there is a net gain or loss in energy for Earth's surface and for Earth's atmosphere.