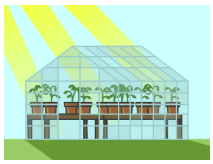
Greenhouse Effect Quiz

Name: _____
Date: _____
Class: _____

1. Which of the following is a greenhouse gas?

a. Oxygen
b. Nitrogen
c. Methane
d. Hydrogen

2. 

What's one major difference between the earth's greenhouse effect and an actual greenhouse?

a. Heat escapes from a greenhouse more easily than it does from Earth's atmosphere
b. The glass in a greenhouse traps heat, while greenhouse gases in the atmosphere absorb and recycle heat
c. Actual greenhouses are cold in winter, while the greenhouse effect has led to warm winters across the earth
d. There is no significant difference; both work pretty much the same way

3. What happens to most solar radiation when it reaches the surface of the earth?

a. It reflects right back into space
b. It's collected in solar panels
c. It's soaked up by land, water, and plants
d. It disperses throughout the earth's atmosphere

4. In what form is radiation emitted from the earth's surface back into the atmosphere?

a. As light
b. As greenhouse gases
c. As gamma rays
d. As heat

5. What might happen if the greenhouse effect didn't exist?

a. It would be too cold for humans to survive on the earth
b. The earth's temperature would be much more comfortable
c. The sun's rays would never reach the surface of the earth
d. The earth wouldn't have an atmosphere

6. What can you infer from the fact that global warming has only been a problem for the last 100 years or so?

a. Prior to 100 years ago, the greenhouse effect on the earth was too minor to be detected.
b. The earth moved significantly closer to the sun about 100 years ago.
c. People have only been pumping large quantities of greenhouse gases into the atmosphere for 100 years or so.
d. The movement of glaciers was a major problem for people 100 years ago.

7. 

How can global warming cause sea levels to rise? Choose the best answer.

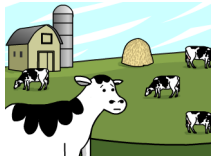
a. By causing it to rain more often
b. By melting glaciers and polar ice caps
c. By increasing the number of undersea volcanic eruptions
d. By creating bigger and more powerful hurricanes

8. Why does cutting down trees increase global warming?

a. Trees soak up carbon dioxide from the air.
b. Trees provide shade, which counteracts global warming.
c. Trees absorb the sun's energy without radiating it back into the atmosphere.
d. Trees drain greenhouse gases like methane from the soil.

9. Which of the following is an example of a fossil fuel?

a. Firewood
b. Dead leaves
c. Seashells
d. Gasoline

10. 

What effect do cows and other livestock have on global warming? Choose the best answer.

a. They eat trees and grass, which adds to global warming
b. Their digestive systems produce methane, a powerful greenhouse gas
c. Humans use lots of fossil fuels to cook the meat they produce, adding to global warming
d. Livestock have high body temperatures and emit infrared radiation, adding to global warming