

Review Quiz for Impact of Global Climate Change

Name: _____

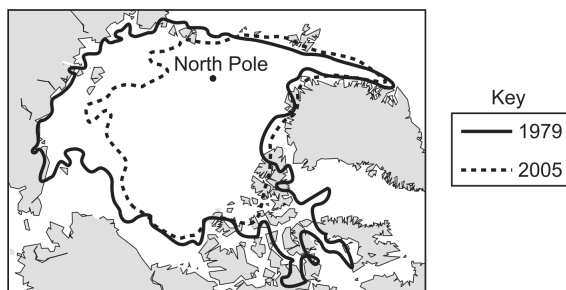
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1. The need for farmland in Brazil has led to the cutting of the rain forests in the Amazon.

Cutting trees in the Amazon rain forest might have a global effect by

- A. decreasing the amount of fresh water
- B. increasing the number of animal species
- C. decreasing the average yearly temperatures
- D. increasing carbon dioxide levels in the atmosphere because there will be less trees removing CO₂ from the atmosphere

2. The picture below shows the extent of summer Arctic Sea ice in 1979 and 2005.



Which hypothesis is *best* supported by the changes in sea-ice coverage?

- A. Earth's climate is gradually warming.
- B. Arctic Sea ice is migrating away from Earth's poles.
- C. Global warming is caused by human activity, not nature.
- D. Global warming occurs only at Earth's poles during the summer.

3. If the temperature of Earth rose over time, which of the following would occur?

- A. Sea level would fall, and the polar ice caps would decrease in size.
- B. Sea level would fall, and the polar ice caps would increase in size.
- C. Sea level would rise, and the polar ice caps would decrease in size.
- D. Sea level would rise, and the polar ice caps would increase in size.

4. A company has several factories around the world and has decided to transition from burning fossil fuels to using alternative energy resources.

How could a decrease in burning fossil fuels impact the atmosphere?

- A. It could decrease the oxygen levels of the atmosphere.
- B. It could increase the nitrogen levels of the atmosphere.
- C. It could decrease the carbon dioxide levels of the atmosphere.
- D. It could increase the sulfur dioxide levels of the atmosphere.

5. The mayor of a town wants to conserve resources and reduce global warming. A committee of engineers suggests building a hydropower plant instead of one that burns fossil fuels. A hydropower plant generates electricity by harnessing the force of flowing water.

Which justification for building the hydropower plant is logical and supports the mayor's wish?

- A. Water flowing through a hydropower plant is renewable and does not emit greenhouse gases.
 - B. The soil from which a dam is dug for a hydropower plant can be packaged and sold, providing extra income for the town.
 - C. A road can be built on top of the dam so that a separate bridge does not have to be built to connect the land on either side of the river.
 - D. A hydropower plant will cause more water to flow through rivers, increasing the water's renewability and helping fresh water reach wetland ecosystems.
6. Increased levels of carbon dioxide (CO₂) in the atmosphere contribute to global warming. Which of the following might reduce levels of CO₂?
- A. Burning fossil fuels
 - B. Burning wood
 - C. Deforestation
 - D. Planting trees
7. Since 1901, global surface temperatures have risen at an average rate of 0.13° F every ten years. In which way could the average increase in global temperatures influence Earth?
- A. by decreasing erosion within coastal ecosystems
 - B. by decreasing periods of drought in all water systems
 - C. by increasing the amount of flooding because of rising sea levels
 - D. by increasing the formation of sea ice within polar regions

8. Which of the following are actions that an individual can take to help reduce global climate change?

- A. Use mass transit, walk, or car pool more often.
- B. Keep the thermostat on a lower temperature and put on a sweater, instead.
- C. Help plant trees
- D. All of the above

9. As the human population increases, more fossil fuels are being used. The burning of fossil fuels produces greenhouse gases.

How might humans reduce greenhouse gases?

- A. Buy cars that use gasoline.
- B. Build power plants that use coal.
- C. Use renewable resources to generate power.
- D. Use nonrenewable resources to generate power.

10. What impact will melting glaciers have on the ocean?

- A. cause sea level to rise
- B. increase the density of sea water
- C. cause sea level to decrease
- D. all of the above