



Carbon Cycle Quiz

Name: _____

Date: _____

Class: _____

1. Where can you find carbon?

- a. Only in Earth's atmosphere
- b. Inside all water molecules
- c. Inside the sun
- d. Inside every living thing on Earth

2. How is the carbon cycle similar to the water cycle?

- a. Both involve liquid substances falling to Earth from the atmosphere.
- b. Neither process works at low temperatures.
- c. Both involve the transfer of substances between animals, plants, and the Earth.
- d. Both involve the transfer of substances between the earth and outer space.

3. How do animals add carbon dioxide to the atmosphere?

- a. Through breathing.
- b. Through evaporation.
- c. Through cellular respiration.
- d. Through transpiration.

4. What organisms in the ocean absorb the most carbon dioxide?

- a. Algae and marine plants
- b. Ocean mammals, like whales and dolphins
- c. Fish
- d. Coral

5. What is a carbon sink?

- a. Something that adds carbon to the atmosphere
- b. Something that removes carbon from the atmosphere
- c. Something that adds carbon to the earth's crust
- d. Something that removes carbon from the earth's crust

6. Which of these historical events led to a major imbalance in the carbon cycle?

- a. The American Civil War
- b. The American Revolution
- c. The Industrial Revolution
- d. The French Revolution

7. Using fewer fossil fuels could help restore equilibrium to the carbon cycle. What does "equilibrium" mean?

- a. Oxygen
- b. Balance
- c. Resources
- d. Sinks

8. How does carbon become locked inside the earth?

- a. Tree roots expel carbon into the soil as they grow
- b. Humans use machines to pump carbon dioxide into large underground tanks
- c. Rocks become richer in carbon as time goes on
- d. The carbon-rich bodies of plants and animals decay into the earth after they die

9. How do carbon emissions lead to global warming?

- a. By trapping the sun's heat in the atmosphere
- b. By causing very hot volcanic eruptions
- c. By catching fire within the atmosphere
- d. By increasing the amount of carbon in the earth's crust

10. Which of these is a factual statement about carbon?

- a. Humans use far too much carbon-based fuel
- b. Carbon is the fourth-most abundant element in the universe
- c. There is no relationship between carbon emissions and global climate change
- d. Burning rainforests helps restore equilibrium to the carbon cycle