



LIVING GREEN

Green Transportation

Explore the environmental impact of various modes of transportation and current efforts to green transportation through the development of alternative fuels and other technologies.

What did you learn?

QUESTIONS

1. According to the U.S. Environmental Protection Agency, the transportation of goods and people in the United States is responsible for about ...
 - a. 3% of carbon dioxide emissions
 - b. 15% of carbon dioxide emissions
 - c. 30% of carbon dioxide emissions
 - d. 60% of carbon dioxide emissions
2. Biodiesel is a type of ...
 - a. Pollutant
 - b. Biofuel
 - c. Biogas
 - d. Green gas
3. One train that does not need drivers because trains are controlled from a central facility, is the ...
 - a. LightTrain
 - b. SkyTrain
 - c. TubeTrain
 - d. SuperTrain
4. State governments could reduce fuel consumption by ...
 - a. Banning stop lights
 - b. Banning speed limits
 - c. Raising speed limits
 - d. Lowering speed limits
5. What is *global warming*?
6. What is the *greenhouse effect*?

TRUE OR FALSE?

- _____ 1. The American Lung Association reported in 2013 that only 4% of the people in the United States live in counties with unhealthy levels of ozone or particle pollution.
- _____ 2. Many U.S. citizens believe that biofuels may reduce the country's dependence on petroleum, which must be imported from other countries.
- _____ 3. Like gasoline engines, diesel engines commonly use the four-stroke combustion cycle, but they burn fuel without spark plugs, using intense pressure instead.
- _____ 4. Locomotive pollution tends to become concentrated in major rail hubs.
- _____ 5. Many of the solar-powered boats being designed today are hybrids.
- _____ 6. Batteries deliver far more energy per pound of weight than fossil fuels.

ANSWERS

1. c. 30% of carbon dioxide emissions.

According to section "Transportation: A Basic Human Need" on page 5, we know that "According to the U.S. Environmental Protection Agency, the transportation of goods and people in the United States is responsible for about 30 percent of the country's carbon dioxide emissions." So, the correct answer is D.

2. b. Biofuel. According to section "Motorcycles" on page 23, we know that "Biodiesel is a type of biofuel made from soybeans or other oil-producing plants." So, the correct answer is B.

3. b. SkyTrain. According to section "Trains for Mass Transit" on page 39, we know that "SkyTrain does not need drivers because trains are controlled from a central facility." So, the correct answer is B.

4. d. Lowering speed limits. According to section "What Governments Need to Do" on page 54, we know that "State governments could reduce fuel consumption by lowering speed limits." So, the correct answer is D.

5. According to page 60, *global warming* is "the gradual warming of Earth's surface, believed to be caused by a build-up of greenhouse gases in the atmosphere."

6. According to page 60, the *greenhouse effect* is "the process by which certain gases cause the Earth's atmosphere to warm."

TRUE OR FALSE? ANSWERS

1. False. According to section "Automobile Pollution" on page 11, we know that "The American Lung Association reported in 2013 that over 40 percent of the people in the United States live in counties with unhealthy levels of ozone or particle pollution." So, the correct answer is False.

2. True. According to section "Biofuels" on page 16, we know that "Many U.S. citizens believe that biofuels may reduce the country's dependence on petroleum, which must be imported from other countries." So, the correct answer is True.

3. True. According to section "Trucks" on page 28, we know that "Like gasoline engines, diesel engines commonly use the four-stroke combustion cycle, but they burn fuel without spark plugs, using intense pressure instead." So, the correct answer is True.

4. True. According to section "Trains" on page 34, we know that "Locomotive pollution tends to become concentrated in major rail hubs." So, the correct answer is True.

5. True. According to section "Solar-Sail Power" on page 44, we know that "For this reason, many of the solar-powered boats being designed today are hybrids." So, the correct answer is True.

6. False. According to section "Innovations in Aviation" on page 51, we know that "Batteries deliver far less energy per pound of weight than fossil fuels." So, the correct answer is False.