



EARTH'S CHANGING CLIMATE

Living with Climate Change

In *Living with Climate Change*, learn how global warming affects communities around the world and how people are responding to the challenges it presents.

What did you learn?

QUESTIONS

1. Carbon dioxide is made up of the elements carbon and ____.
 - a. Hydrogen
 - b. Methane
 - c. Nitrogen
 - d. Oxygen
2. Malaria is a tropical disease caused by a parasite carried by ____.
 - a. Ants
 - b. Bees
 - c. Mosquitoes
 - d. Spiders
3. What is the name for removing carbon dioxide from the atmosphere by using machines that absorb it from the air?
 - a. Direct air capture
 - b. Mineral storage
 - c. Recycling
 - d. Wind power
4. What is biochar?
 - a. A material used to block the sunlight
 - b. A material used to cook food
 - c. A material used to trap carbon
 - d. A food topping made from wood
5. What are some benefits of building wind turbines offshore instead of on land?
6. What is carbon capture and storage (CCS)?

TRUE OR FALSE?

- | | |
|---|--|
| _____ 1. A hybrid electric vehicle uses an electric motor and a gasoline engine. | _____ 4. A climate migrant is a person who leaves their home because of changes in the climate. |
| _____ 2. The two most important ways to produce power without emitting greenhouse gases are through nuclear power and wind power. | _____ 5. Geoengineering means making changes to Earth to counteract the threats from climate change. |
| _____ 3. We should reuse things only when we cannot recycle them. | _____ 6. A carbon-neutral fuel adds a lot more CO ₂ to the atmosphere. |

ANSWERS

- 1. d. Oxygen.** On page 6, we learn that one molecule of carbon dioxide is made up of one carbon atom and two oxygen atoms.
- 2. c. Mosquitoes.** On page 22, we learn that “[Malaria] is caused by a parasite carried by mosquitoes.”
- 3. a. Direct air capture.** On page 38, we learn that direct air capture (DAC) removes carbon dioxide from the atmosphere by using machines that absorb CO₂ from the air.
- 4. c. A material used to trap carbon.** On page 40, we learn that biochar is a material that traps carbon so that it cannot be released as CO₂ into the atmosphere.
- 5.** On page 16, we learn that offshore wind turbines can be larger than land turbines; that they are dangerous to fewer kinds of birds; and that they are less disturbing to people.
- 6.** On page 32, we learn that “At power plants and other factories, special devices called scrubbers can separate CO₂ from other exhaust gases. The CO₂ is then stored to keep it out of the atmosphere. This process is called carbon capture and storage (CCS).”

TRUE OR FALSE? ANSWERS

- 1. True.** On page 8, we learn that a hybrid electric vehicle is a vehicle that uses an electric motor as well as a gasoline engine. So, the correct answer is True.
- 2. False.** On page 14, we learn that “There are many ways to produce power without emitting greenhouse gases, but the two most important are solar power and wind power.” So, the correct answer is False.
- 3. False.** On pages 18 and 19, we learn that although recycling is important, it is better to try to reuse items first. So, the correct answer is False.
- 4. True.** On page 28, we learn that “People who leave their homes because of changes in the climate are called climate migrants.” So, the correct answer is True.
- 5. True.** On page 36, we learn that “Geoengineering means making changes to Earth to counteract the threats from climate change.” So, the correct answer is True.
- 6. False.** On page 38, we learn that a carbon-neutral fuel does not add any CO₂ to the atmosphere in total. So, the correct answer is False.