



EARTH'S CHANGING CLIMATE

Food, Water, and Climate Change

In *Food, Water, and Climate Change*, learn how climate change affects the availability of food and water and how communities are responding to these changes.

What did you learn?

QUESTIONS

1. Which improvements in the 1700's and 1800's helped many people around the world?
 - a. Improved farming technology
 - b. Improved communication technology
 - c. Improved transportation technology
 - d. All of the above
2. Which of the following is NOT one of the four crops that supplies two-thirds of the world's food?
 - a. Corn (maize)
 - b. Wheat
 - c. Potatoes
 - d. Rice
3. Scientists are adding ___ to rice plants to combat the effects of climate change.
 - a. Genes
 - b. Cold air
 - c. Salt
 - d. Ice
4. Fish farms now supply about ___ of all the fish people eat.
 - a. One-quarter
 - b. Half
 - c. Three-quarters
 - d. 99 percent
5. How do rising temperatures threaten Arctic caribou?
6. In Cape Town, South Africa, what was "Day Zero" a code name for?

TRUE OR FALSE?

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| _____ 1. Between the years 1900 and 2000, the population of humans living on Earth grew from 1.5 billion to 2 billion. | _____ 4. A cow burps up to 50 gallons (200 liters) of nitrogen per day. |
| _____ 2. Flooding from rising sea levels threatens some farmlands. | _____ 5. More than a third of Earth's land is used to raise livestock. |
| _____ 3. Some indoor farms use hydroponics to grow plants. | _____ 6. Desalination plants collect fresh water and add salt to it. |

ANSWERS

- 1. d. All of the above.** On page 6, we learn that improved farming, communication, and transportation technology in the 1700's and 1800's helped many people.
- 2. c. Potatoes.** On page 10, we learn that corn, wheat, rice, and soybeans supply two-thirds of the world's food.
- 3. a. Genes.** On page 18, we learn that "Scientists are adding genes to rice to combat the effects of climate change."
- 4. b. Half.** On page 30, we learn that "Fish farms now supply about half of all the fish we eat."
- 5.** On page 26, we learn that "Higher temperatures encourage summer droughts and fires. These kill the lichens that caribou eat. Caribou rely on lichen to survive."
- 6.** On page 40, we learn that "'Day Zero' became a code name for the day when [Cape Town's] water systems would be completely shut off."

TRUE OR FALSE? ANSWERS

- 1. False.** On page 8, we learn that "Between the years 1900 and 2000, the population of humans living on Earth grew from 1.5 billion to 6 billion." So, the correct answer is False.
- 2. True.** On page 14, we learn that rising sea levels threaten to flood farmland along Thailand's coast. So, the correct answer is True.
- 3. True.** On page 16, we learn that "In indoor urban farms, plants are often grown using hydroponics." So, the correct answer is True.
- 4. False.** On page 22, we learn that "A cow emits up to 50 gallons (200 liters) of methane daily, mostly from burps." So, the correct answer is False.
- 5. True.** On page 28, we learn that "More than a third of Earth's land is used to raise livestock." So, the correct answer is True.
- 6. False.** On page 42, we learn that "[Desalination plants] collect sea water and remove the salt and other substances, turning it into drinkable water." So, the correct answer is False.