



A LOOK AT ... Icy Worlds

Explore Earth's coldest regions and the variety of ice formations that define these places. *Icy Worlds* examines the climate, landscape, and animal life of the polar regions to discover what these places can teach us about our planet, its past, and its future.

What did you learn?

QUESTIONS

1. The most recent ice age ended about ...
 - a. 10,000 years ago
 - b. 11,500 years ago
 - c. 12,000 years ago
 - d. 14,500 years ago
2. The name of the ship that struck an iceberg and sank was ...
 - a. The *Britannic*
 - b. The *Carpathia*
 - c. The *Titanic*
 - d. The *Santa Cruz*
3. The mountain range that crosses the entire Antarctic continent is the ...
 - a. Rocky Mountains
 - b. Himalaya
 - c. Alps
 - d. Transantarctic Mountains
4. Jupiter's largest moon and the moon with an appearance of an icy surface is ...
 - a. Europa
 - b. Io
 - c. Ganymede
 - d. Callisto
5. Who was the first person to fly over the South Pole?
6. What is *permafrost*?

TRUE OR FALSE?

- _____ 1. The parts of Earth farthest from the equator receive weaker, indirect rays of sunlight.
- _____ 2. Sea ice covers much of the Arctic Ocean's surface.
- _____ 3. Caribou live in the Arctic ocean.
- _____ 4. Scientists believe that Earth's average surface temperature rose by about 1.4 °F from the mid-1800's to the early 2000's.
- _____ 5. Robert F. Scott was the first person to reach the South Polar plateau.
- _____ 6. Antarctica has a permanent population.

ANSWERS

- 1. b. 11,500 years ago.** According to section "Ice Ages" on page 15, we know that "In the most recent ice age, which ended about 11,500 years ago, ice sheets covered vast areas in the Northern Hemisphere." So, the correct answer is B.
- 2. c. The *Titanic*.** According to section "Icebergs" on page 23, we know that "Running almost at top speed, the *Titanic* struck an iceberg in the North Atlantic Ocean about 400 miles (650 kilometers) southeast of Newfoundland. Within two and a half hours, the ship had unbroken in two and sunk." So, the correct answer is C.
- 3. d. Transantarctic Mountains.** According to section "Land and Seas of Antarctica" on page 39, we know that "The Transantarctic Mountains cross the entire Antarctic continent from the Weddell Sea to Ross Sea." So, the correct answer is D.
- 4. a. Europa.** According to section "Ice on Other World" on page 60, we know that "The giant planet Jupiter has more than 60 moons. Among the largest of these is Europa. Europa has a very interesting surface that looks like ice that has formed on a puddle after a cold night." So, the correct answer is A.
- 5.** According to page 43, Richard E. Byrd became the first person to fly over the South Pole in 1929.
- 6.** According to page 62, permafrost is "ground that is deeply frozen most or all of the time."

TRUE OR FALSE? ANSWERS

- 1. True.** According to section "Introducing Icy Worlds" on page 6, we know that "However, the parts of Earth farthest from the equator receive weaker, indirect rays of sunlight." So, the correct answer is True.
- 2. True.** According to section "Sea Ice" on page 21, we know that "Sea ice covers much of the Arctic Ocean's surface." So, the correct answer is True.
- 3. False.** According to section "Animal Life of the Arctic" on page 30, we know that "Many animals live on the Arctic tundra. Among them are the caribou, ermine (a member of the weasel family), musk oxen, reindeer, lemmings, snowy owls, and wolves." So, the correct answer is False.
- 4. True.** According to section "Sea Ice" on page 34, we know that "Scientists have strong evidence that Earth's average surface temperature rose by about 1.4 degrees Fahrenheit (0.76 degrees Celsius) from the mid-1800's to the early 2000's." So, the correct answer is True.
- 5. True.** According to section "Antarctic Explorers" on page 42, we know that "British Navy Captain Robert F. Scott, standing, became the first person to reach the South Polar plateau." So, the correct answer is True.
- 6. False.** According to section "Is Antarctica a Country?" on page 44, we know that "Antarctica has no permanent population and is not a country." So, the correct answer is False.