

LIVING GREEN

Oceans, Islands, and Polar Regions

Oceans, islands, and polar regions are highly connected to one another. Explore how human activities are disrupting the ecological balance of these vital ecosystems.

What did you learn?

QUESTIONS

- 1. The Blue Marble photograph gave the first view of the ...
 - a. South Polar Ice Pocket
 - b. Tropical Cap
 - c. South Polar Ice Cap
 - d. North Polar Ice Cap
- 2. In the deep ocean, the food chain is mostly based on falling bits and pieces of dead organisms from above, called ...
 - a. Marine snow
 - b. Marine dust
 - c. Underwater snow
 - d. Underwater dust
- 3. The brown tree snake is an invasive species that has caused much damage to the island of ...

- a. Borneo
- b. Madagascar
- c. Hawaii
- d. Guam
- 4. Ozone forms a layer that blocks harmful ...
 - a. Ultraviolet rays
 - b. Super violet rays
 - c. Ultrapurple rays
 - d. Super purple rays
- 5. What is global warming?
- 6. What is the greenhouse effect?

TRUE OR FALSE?							
	Besides wind, water temperature, salinity, the shape of the ocean bottom, and Earth's rotation influence ocean currents.	4. Tectonically formed islands are created by slow movements of immense pieces of Earth's crust called tectonic masses.					
	The reef consists of a limestone structure that is made by a group of jellyfishlike animals called polyps.	5. Both polar regions experience weeks of continuous daylight in summer, and weeks of darkness in winter.					
	 According to a United Nation's report, more than half the world's population lives within six miles of a coast. 	6. When the summer brings sunlight, the Arctic Ocean explodes with phytoplankton.					



ANSWERS

- 1. c. South Polar Ice Cap. According to section "Introduction" on page 5, we know that "The Blue Marble photograph gave the first view of the South Polar Ice Cap." So, the correct answer is C.
- **2. a. Marine snow.** According to section "The Ocean Bottom" on page 18, we know that "The food chain is mostly based on falling bits and pieces of dead organisms from above, called marine snow." So, the correct answer is A.
- **3. d. Guam.** According to section "Invasive Species" on page 33, we know that "The brown tree snake is an invasive species that has caused much damage to the island of Guam in the western Pacific Ocean." So, the correct answer is D.
- **4. a. Ultraviolet rays.** According to section "The Ozone Hole" on page 54, we know that

- "It forms a layer that blocks harmful ultraviolet rays from the sun." So, the correct answer is A.
- **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. True. According to section "What Is the Ocean?" on page 9, we know that "Other forces that influence currents are water temperature and salinity, the shape of the ocean bottom, and Earth's rotation." So, the correct answer is True.
- **2. True.** According to section "Coral Reefs" on page 12, we know that "The reefs consist of a limestone structure that is made by a group of jellyfishlike animals called polyps." So, the correct answer is True.
- **3. False.** According to section "Ocean Pollution" on page 23, we know that "According to a United Nations report, more than half the world's population lives within 62 miles of the coast." So, the correct answer is False.

- **4. False.** According to section "What Are Islands?" on page 27, we know that "Tectonically formed islands are created by slow movements of immense pieces of Earth's called tectonic plates." So, the correct answer is False.
- **5. True.** According to section "What Are the Polar Regions?" on page 38, we know that "Both experience weeks of continuous daylight in summer, and weeks of darkness in winter." So, the correct answer is True.
- **6. True.** According to section "Arctic Animals" on page 44, we know that "When the summer brings sunlight, the Arctic Ocean explodes with phytoplankton." So, the correct answer is True.

