

613 Exploring Polar Science

Interview Questions

Use two or three of these or similar standard questions as *part* of the interview judging process.

1. What is the biggest, most significant difference between the Arctic and Antarctica?
The Arctic (North Pole region) is ocean surrounded by land. Antarctica (South Pole region) is land surrounded by ocean. (page 9)
2. What is the primary human activity in Antarctica—hunting, scientific research, mining, or farming and ranching?
Antarctica has been set aside by an agreement among many nations as a scientific preserve. Scientific research is the primary human activity there. (page 13)
3. What do the layers in ice cores represent?
Each layer in an ice core represents one year. (pages 15 and 19)
4. Give at least one example of how glaciers can shape landscapes.
Possible answers include these: They scrape away soil and pick up plants and trees. They also carve the bedrock, including mountains. When they melt, the scraped up soil and rocks are deposited in new places, creating new landforms. (page 23)
5. What do you think are the best and worst things about living at the Antarctica?
Answers will vary. (page 26)
6. Are dogs allowed in Antarctica? Why or why not?
Even though dogs are known as man's best friend, they have not been allowed in Antarctica since 1994. Along with other non-native species, they are banned so that native animal species are protected from predation and disease. (page 27)
7. Everything in an Arctic food web (and all other food webs) is eventually eaten by what organism?
Bacteria. (pages 30 and 32)
8. Is it true that dinosaurs once lived in Antarctica? How do we know?
Yes, it is true. We know because of the fossils that have been found there. (page 34)
9. Which contributes more water to rising sea levels, melting sea ice or melting glaciers? Explain.
Melting glaciers contribute more water to rising sea levels because they are on land. When they melt, the water is additional water in the ocean. Sea ice is already in the ocean, so the affect of it melting is not as great. (page 41)
10. Describe the work of one of these people: diplomat, climatologist, glaciologist, oceanographer, ecologist, paleontologist, or hydrologist.

A diplomat represents their country to other countries; a climatologist studies Earth's atmosphere and climate; a glaciologist studies glaciers and their impact on the landscape; an oceanographer studies the ocean; an ecologist studies the relationships between organisms and their environments; a paleontologist studies the biological and geological history of the Earth through fossils; and a hydrologist studies water on Earth and other planets. (many pages)

