



#8785

## HEART OF ANTARCTICA: JOURNEY TO THE ICE

Grade Levels: 5-12  
20 minutes

TMW MEDIA GROUP 1998

### DESCRIPTION

A group of scientists visit a remote camp in Antarctica, a country larger than the United States and Mexico. Their video introduces the geography and climate of the continent and provides a brief glimpse of camp life during the summer months. Different people share snippets of information about life in this cold climate.

### INSTRUCTIONAL GOALS

1. To present the geography of Antarctica.
2. To depict what life is like on this polar continent.
3. To introduce Antarctica as a place of world importance.

### VOCABULARY

- |              |              |
|--------------|--------------|
| 1. blue ice  | 6. ice shelf |
| 2. Catabatic | 7. iceberg   |
| 3. crevasse  | 8. Nunatak   |
| 4. glacier   | 9. pack ice  |
| 5. ice sheet | 10. Sastrugi |



### BEFORE SHOWING

1. Locate Antarctica on a globe and on a flat map.
  - a. What are Antarctica's neighboring islands and continents?
  - b. What are possible travel routes to Antarctica?
  - c. How does north radiate out from the pole in every direction?
  - d. How do north, south, east and west look different on the flat map?
2. Review latitude and longitude.
  - a. What is located at 90 degrees south latitude?
  - b. What region does the Antarctic treaty protect?
3. Compare the Arctic and the Antarctic.
  - a. What are the differences in landmass?
  - b. What pole is located at either place?
  - c. What is the comparison in temperatures?
  - d. What animals are typically found there?
  - e. What are the seasons like in each location?
4. Review the solar system.

- a. How does the Earth rotate around the sun?
- b. How does the Earth's rotating affect the Earth's seasons? In Antarctica?

## AFTER SHOWING

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### Discussion Items and Questions



1. Discuss Antarctica.
  - a. In what way does Antarctica belong to every person in the world?
  - b. How big is Antarctica?
  - c. How is Antarctica different from other continents?
  - d. Who owns Antarctica?
  - e. What is the Antarctic Treaty?
2. Discuss the journey.
  - a. Why is flying to Antarctica done visually without the aid of modern conveniences like radar?
  - b. How might pilots make the decision to land on the skis in snow or to land on wheels on a natural blue ice runway?
  - c. Why is the Southern Ocean, which surrounds Antarctica, considered turbulent and dangerous?
  - d. What animal life lives along Antarctica's coastline?
  - e. Why would a landing next to Patriot Hills be long, loud and rough?
3. Discuss the camp.
  - a. Why is the sun still high in the sky at midnight?
  - b. Why are sunglasses a requirement throughout a stay in Antarctica?
  - c. Why is the Adventure Network Camp only open in the Antarctic summer season?
  - d. When is the summer season in Antarctica?
  - e. How vital are communications to the camp?
  - f. What methods of communication are used in the camps?
  - g. What is the kitchen tent like?
  - h. What would happen if communications were not possible in Antarctica?
  - i. What kind of interesting challenges are there to personal hygiene in Antarctica?
  - j. What are the bathrooms like in the camps?

### Applications and Activities

1. Plan a trip to Antarctica.
  - a. Determine if the purpose of the trip is tourism, scientific or mountain climbing.
  - b. Plan a route that includes flight to Punta Arenas, Chile. Decide if the rest of the voyage will be made by ship or by plane.
2. Hypothesize how the weather and needed clothing would enhance or inhibit sign communication.
3. Research Richard Byrd.
  - a. When did he travel to Antarctica?
  - b. What were his motivations for the trip?

- c. What was his journey like?
  - d. What did he accomplish in his trip?
  - e. What kind of communication did Byrd have with the outside world during his trip?
4. Investigate the thriving ecosystem of Antarctica.
    - a. What living things are able to survive in this climate?
    - b. Can polar bears and penguins exist together?
    - c. How is Antarctica like the Galapagos Islands?
  5. Research the Antarctic Treaty.
    - a. Which nations have made this agreement?
    - b. What might happen if this treaty were not in place?
  6. Build a sundial as built during the credit sequence. Hourly, mark the location of the pole's shadow. In Antarctica, the sundial showed an oval pattern over a 24-hour period.
    - a. How does the local sundial pattern differ from the Antarctic pattern?
    - b. How does the local pattern change in three months?
    - c. What is the explanation for these differences?
  7. Write a fictional account of a weeklong stay at an Antarctic camp. Describe bathing, eating, sleeping, communication with home and other daily activities.

## RELATED RESOURCES



### Captioned Media Program

- Artic: The Great White Desert #2251

### World Wide Web



The following Web sites complement the contents of this guide; they were selected by professionals who have experience in teaching deaf and hard of hearing students. Every effort was made to select accurate, educationally relevant, and "kid-safe" sites. However, teachers should preview them before use. The U.S. Department of Education, the National Association of the Deaf, and the Captioned Media Program do not endorse the sites and are not responsible for their content.

- **HEART OF ANTARCTICA**  
<http://www.sonrisa.com/antarctica.htm>
- **BLUE ICE: FOCUS ON ANTARCTICA**  
<http://www.onlineclass.com/BI/blueice.html>
- **GLACIER**  
<http://www.glacier.rice.edu/>
- **GATEWAY ANTARCTICA HOMEPAGE**  
<http://www.icair.iac.org.nz/>