

CLASSROOM ACTIVITY Antarctic Extreme Jeopardy

How much do you know about Antarctica and what's it like to live and work there? Test your knowledge of this polar continent by creating a trivia game in the style of the T.V. game show Jeopardy. Use your research on the hazards humans might encounter in Antarctica, as well as the technologies and other gear humans have developed to enable researchers to live and work there. Focus on the questions below. After you and your team have completed the activity, respond to these questions directly in your journal.

- ► What are the common needs of humans living and working in Antarctica?
- ► What are the specialized needs of different researchers living and working in Antarctica?
- ► What technologies have been developed to help human beings meet the challenges of living and working in such an extreme environment?

Gather with your team and choose a captain and a note taker for today. The captain appoints group members to collect the required materials while the rest of the group reviews today's procedure. Before beginning, the captain makes sure that the group has all required materials, and that everyone knows the day's procedure.

The note taker takes notes on the group's findings for your team. Remember to record your observations and explanations in your journal for your own research notes. Include drawings to illustrate your findings.

MATERIALS

- ► Letter to Stephanie (from her friend Carole): Antarctic Hazards
- ▶ index cards: at least one per group member
- ► resource materials on Antarctica (e.g. several copies of the Antarctic Support Associates Clothing List and a print-out or computer access for the Antarctic Support Associates Manual)



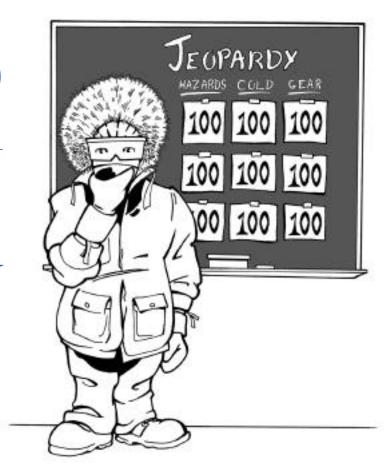
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PROCEDURE

- 1. Before beginning your research, consider what you already know about the types of hazards people might encounter in Antarctica. Jot down some notes on your discussion.
- 2. Create two columns, one for a list of the conditions humans would encounter in Antarctica (both in the field and at base camp) and one for the kind of equipment, clothing, and other gear they would need in order to survive those conditions. For each item in your lists, jot down a note explaining your reasoning.
- 3. If you haven't yet done so, read Letter to Stephanie (from her friend Carole): Antarctic Hazards (together or silently) and any other resource materials provided by your teacher or found in the library, online, etc. Make sure to check out the Antarctic Support Associates Manual. Discuss your discoveries. Record your discussion on the worksheet.

This certainly is a good review for my next trip to McMurdo!

I hope they put one about the fish that makes its own antifreeze!



WHAT HAZARDS DO HUMANS ENCOUNTER IN ANTARCTICA?



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- **4.** Using your research notes, each team member creates at least one Jeopardy-style question. For example, "This was the first type of prefabricated shelter used in Antarctica." Answer: "What is a tent?" Use the worksheet to record your questions. Then use the index cards to record your questions for the game itself—put the question on one side, the answer on the other.
- 5. For the game itself, your teacher may help to moderate—but each team will be responsible for posing its own questions. This way, no team will be able to answer its own questions. In this game, all questions are worth an equal amount; but each team should designate one of its questions as a daily double.
- 6. Before starting the game, someone in your class draw a chart on the board with as many squares as there are students in your class (or for the total number of questions prepared by all teams, as your class decides). Write 100 points on each square. The Daily Doubles will, of course, be a surprise! Your chart will have three categories—"Hazards to Humans," "Polar Gear," and "The Cold Facts," as explained on your worksheet. Remember, you are not only offering questions; you are also competing. So be sure you know your facts in all the categories!
- 7. Designate each square for a team, or just go in order until all the questions are used up. Each team should have an equal number of questions, though—otherwise you will have unequal opportunities to offer answers and thus to get points.
- 8. The teacher or a student moderator should keep track of the points on the side. Each time a team answers correctly, that team will be allowed to pick the next category. Decide in advance if you want to be able to discuss answers as a team or have individual team members responsible for their own answers.
- 9. Take notes! Your teacher may use your Jeopardy questions for a quiz!

ANTARCTICA

the farthest place close to home

WHAT HAZARDS DO HUMANS ENCOUNTER IN ANTARCTICA?



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GROUP MEMBERS _____

CAPTAIN_____NOTE TAKER _____

GROUP WORKSHEET 1
ANTARCTIC TEAM ___

I. After you conduct your research on the hazards of Antarctica, and the ways in which humans meet those challenges, use the chart below to record some of your discoveries.				
TYPE OF HAZARD	HOW HUMANS DO OR DON'T MEET THE CHALLENGE			

the farthest place close to home



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GROUP WORKSHEET 2
ANTARCTIC TEAM ___

2. Use these discoveries to create Jeopardy-style questions. Write your questions in the chart below; include the name of the team member who wrote each question. Make sure you have questions in each category.

HAZARDS TO HUMANS What conditions might humans living and working in Antarctica encounter?					
ANSWER	QUESTION	TEAM MEMBER RESPONSIBLE			
POLAR GEAR What technology (clothing, gear, living spaces, etc.) have humans developed in order to be able to not only survive, but live and work in Antarctica?					
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	ar, living spaces, etc.) have humar				
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order to be able to not or	ar, living spaces, etc.) have humar nly survive, but live and work in A	ntarctica? TEAM MEMBER			



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GROUP WORKSHEET 3
ANTARCTIC TEAM ___

General Antarctic facts, on everything you've studied, from conditions there to Antarctic organisms to maps and GPS to exploration.				
ANSWER	QUESTION	TEAM MEMBER RESPONSIBLE		

GROUP DYNAMICS

In the space below, the captain comments on how each group member participated in today's discussion.