



# CLASSROOM ACTIVITY

## Understanding Exploration

Investigate the history of exploration in Antarctica using the school resource center or library. Topics are listed below; your teacher will ask you to choose from these topics or will designate a topic for your team. Write your team's research topic and the due date in the space below and in your own journal.

TOPIC \_\_\_\_\_ DUE DATE \_\_\_\_\_

After you have completed the activity, respond to these questions in your journal.

- ▶ What were the different motivations for exploration? How did the motivations affect the outcome of exploration efforts?
- ▶ What were the most important technologies in the advancement of Antarctic exploration?

### POSSIBLE TOPICS

GROUP	TOPIC	EXPLORERS	
1	First Explorers	Ancient Greeks Early Asian explorers	Vikings Whalers, seal hunters
2	Explorers of 1700's and 1800's	James Cook Bull, Borchgrevnik, and Kristensen	Nathaniel Palmer
3	Explorers of early 1900's	Robert Falcon Scott Sir Vivian Fuchs	Roald Amundsen
4	Explorers of mid 1900's	Richard E. Byrd Sir Ernest Henry Shackleton	Sir Douglas Mawson
GROUP	TOPIC	ANTARCTICA TODAY	
5	Antarctica Today	International Geophysical Year Antarctic Treaty	
GROUP	TOPIC	TECHNOLOGICAL ADVANCES	
6	Travel	Compass Sextant	Astrolabe Chronometer
7	Travel	Dog sleds Steam engine Airplane	Motor sledge Ice breaker ships
8	Communication	Radio Photography	Telephone
9	Food and Clothes	Synthetic fibers Friction matches	Canning Rucksack frame
10	High Tech Technology	Electricity Computer Global Positioning System (GPS) Automatic Weather Stations (AWS)	Radar Satellite



**GROUP MEMBERS** \_\_\_\_\_

**CAPTAIN** \_\_\_\_\_ **NOTE TAKER** \_\_\_\_\_

1. Discuss the following: What might an explorer in Antarctica need to survive and conduct good research?

2. Consider your discussion as you frame your group’s research. Your team will work together to shed light on one aspect of exploration; either a group of explorers or a particular type of technological advance. Each team member researches one of the sub-topics listed under your topic. Then use your individual research projects as part of a group presentation. Divide the sub-topics and write your individual research assignments in the chart below and in your own journal. Use Worksheet #2 after completing your individual research projects.

<b>NAME OF TEAM MEMBER</b>	<b>RESEARCH TOPIC</b>

3. What questions do you have about your group topic and individual topics?



Congratulations on completing your individual research assignments. You and your team are ready to draw conclusions and plan your presentations. Choose a captain and a note taker for today. The captain makes sure everyone participates and writes a progress report and the note taker takes notes on this sheet.

**CAPTAIN** \_\_\_\_\_ **NOTE TAKER** \_\_\_\_\_

1. Your teacher may ask each student to complete additional assignments, such as a written essay or creative piece. Be aware of any special requirements for individual team members before going on. Write them in your notes or your journal and in the space below.
  
  
  
  
  
  
  
  
  
  
2. Your team will prepare a presentation together. This presentation will find a connection between all the sub-topics. Take a few minutes for each team member to discuss his/her research. Take notes on your discussion in the space below.

NAME OF TEAM MEMBER	MAJOR RESEARCH FINDINGS



**CLASSROOM  
ACTIVITY**

**Understanding Exploration**

**GROUP WORKSHEET 3  
ANTARCTIC TEAM**

3. Examine the major research findings that you have listed on the chart. What connections do you see between them?
  
4. Plan your presentation. Using the connections you discovered, write down the major points you will cover in the presentation. Each team member presents his/her major findings in a presentation of 3–5 minutes. Remember to explain clearly how all of your presentations are connected. You can do this with an introduction, with some connections in between or during each individual presentation and with a conclusion. Write down the major points for an introduction and conclusion below. Indicate who will be responsible for presenting these parts of the presentation.
  
5. Each team member creates a visual display about his/her research topic. The team can also prepare a visual display that shows the connection between your topics. Explain what you will prepare in the space below.

NAME OF TEAM MEMBER	DESCRIPTION OF ILLUSTRATION	EXPLANATION/PURPOSE FOR ILLUSTRATION

**CLASSROOM  
ACTIVITY****Understanding Exploration****GROUP WORKSHEET 4  
ANTARCTIC TEAM**

6. Finalize your notes by writing a general script for your presentation. Do not read your presentation. Instead, use notes that will help you present your findings in a clear and professional way without reading. Listed below are some questions that might help you structure your presentation.
- ▶ When was the technology invented?
  - ▶ How did this technology advance exploration in Antarctica?
  - ▶ What motivated this explorer? Why did he travel to Antarctica?
  - ▶ What technologies did this explorer have available?
  - ▶ To what area of Antarctica did this explorer go? How did technology make it possible?
  - ▶ Why were there no female explorers in Antarctica until recently?
7. Use the space below to write the outline (or general script) of your presentation.

**GROUP DYNAMICS**

Comment on how each group member participated in this activity.