Break an Egg

About the Show

Though it's a very hot day, warping back to ice-cold Antarctica in 1911 isn't exactly what Joe, Sam, and Fred had in mind. There they encounter Robert Scott's Antarctic expedition, endure 47 degrees below zero weather, eat *hoosh* (seal meat) and discover that Mad Jack has brought them to the one place on earth that's too cold for *The Book* to work!

Introduction

Explorers are a favorite social studies topic. Arctic and Antarctic explorers give students new people, terrain, and animals to research. The men who explored the North and South Poles were scientists and they endured unimaginable hardship in pursuit of new discoveries. Students can compare these men to the explorers who came before and after them.

Historical Background

At the turn of the 20th century, explorers and scientists raced to be the first to reach the North and South Poles.

Robert Scott of Great Britain and Roald Amundsen of Norway both mounted expeditions to the South Pole in 1910. Captain Scott, a commander in the Royal Navy, planned to conduct scientific experiments and place an English flag at the Pole. Amundsen told his investors that he would just be studying the polar sea, but secretly planned to be the first to reach the South Pole. Amundsen announced his intentions by sending a telegram to Scott's ship: "Beg leave inform you [I am] proceeding [to the] Antarctic." The race was on. After arriving in Antarctica, both expeditions set up base camps. Amundsen's camp was closer to the South Pole, he did not carry heavy equipment to conduct scientific experiments,

Curriculum Connections

- Roald Amundsen
- Antarctica
- Frederick Cook
- explorers
- mountains
- North Pole
- penguins
- Robert Scott
- South Pole

Subject Areas

- art
- science
- social studies
- technology



Break an Egg

Historical Background *continued*

and he used dogs to pull his four sledges across the icecap. Able to travel quickly and carry less weight, Amundsen reached the South Pole on December 14, 1911.

Before Scott set out for the Pole, three members of his team undertook a separate "Winter Journey" to Cape Crozier. In Antarctica, winter starts in March and is a time of continuous darkness. No one had ever attempted a journey during the Antarctic winter, but Apsley Cherry-Garrard, Edward Wilson, and Henry "Birdie" Bowers set out in the dark. Their purpose was to collect emperor penguin eggs—laid only in winter—in an attempt to understand the origin of birds. The men pulled their own sledges 67 miles from base camp to Cape Crozier in temperatures as low as minus seventy degrees. Although they nearly perished, they made it back to base camp with the samples they needed.

Once the sun reappeared, Scott chose Wilson, Bowers, and several other men to accompany him for the final trek to the South Pole. Cherry-Garrard stayed behind. Scott tried using mechanical sledges to cross the ice. When these broke down, he had his men drag the heavy sledges themselves. After a valiant effort, Scott reached the Pole on January 17, 1912, only to find that Amundsen had gotten there before him. Tragically, Scott and his men died before they could return to their base camp.

Want students to get even more excited about history?



Check out the South Pole adventure for kids at

www.timewarptrio.com/adventures/southpole/

Put It Back, Jack! and other interactive games to play.

Plentifax 487—the ultimate time traveler's guide—tells how the Antarctic explorers lived and worked.

Cool Books that kids will love.

Activity 1

Make a Diorama

Students will research Antarctic wildlife and create a diorama and fact sheet to present their research to the class.

Instructions

1. Have students research facts about Antarctica, including the wildlife of the region.
2. As a class, make a list of the animals indigenious to the region, such as emperor and other types of penguins, seabirds, whales, and seals.
3. Ask each student to choose an animal that lives in Antarctica.
4. Each student will be making a diorama of a scene that shows the animal in its natural habitat. They will also create a fact sheet.
5. Ask students to answer the questions on the "Animals of Antarctica" handout. Then have them attach the sheets to the dioramas.
6. Ask students to present their dioramas by describing the scene they created and sharing facts about the animals they chose.
7. Set up an exhibition of the dioramas in the classroom and invite other classes to come view your Antarctica Museum.



Objectives

- to practice research skills
- to practice presentation skills

Materials

- art and writing supplies
- modeling clay
- shoebox for each student
- "Animals of Antarctica" handout

Curriculum Standards

- **NCSS**
  People, Places, and Environments: Students interpret, use, and distinguish various representations of the earth such as maps, globes and photographs.
- **NCTE/IRA**
  Students employ a wide range of strategies as they write and use different writing process elements to appropriately communicate with different audiences for a variety of purposes.

Animals of Antarctica Fill in the information about your animal then attach this handout to your diorama.

- **Name of animal** _____
- **Where does it live?**

_____

- **What does it eat?**

_____

- **What type of shelter does it require?**

_____

_____

- **How does it breed?**

_____

_____

- **What interesting behaviors does it exhibit?**

_____

_____

- **Is the animal threatened or endangered? Explain.**

_____

_____

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Activity 2

Explorer's Journal

In "Break an Egg," Joe, Fred, and Sam encounter the explorer Apsley Cherry-Garrard on his "Winter Journey" to Cape Crozier. The Trio help Cherry-Garrard on his quest to find emperor penguin eggs. Much of what is known about Antarctic expeditions comes from the journals of the explorers themselves. Students will enjoy creating a journal of their own.

Instructions

1. Discuss the organization, structure, and characteristics of an explorer's journal. Point out that explorers were often scientists trying to provide detailed descriptions of the new lands and animals they encountered. Show students samples of journal entries from various explorers. For example, you may want to use the journals of Lewis and Clark.
2. Working individually or in pairs, have students research a specific expedition, led by Peary, Scott, Amundsen, Shackleton, or Mawson.
3. Have each student write a journal entry (with an illustration or collage) from the point of view of a team member on a specific expedition. They must incorporate at least five facts they have learned about the expedition into their writing.
4. Collect and copy the journal entries and create a class book for students to enjoy.



Objectives

- to practice research skills
- to use a journal format

Materials

- art and writing supplies
- one piece of white construction paper per student (9" X 12")

Curriculum Standards

- **NCSS**
  Individuals, Groups, & Institutions: The students will analyze examples of conflict, cooperation, and interdependence among groups, societies, and nations.
- **NCTE/IRA**
  Students employ a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts.

Resources

Recommended Books

For Teachers

Antarctica: The Blue Continent by David McGonigal and Dr. Lynn Woodworth. (Firefly Books Ltd, 2003)
This beautifully illustrated guide to Antarctica tells the tales of the explorers who tried to conquer this frozen land.

Cherry: A Life of Apsley Cherry-Garrard by Sara Wheeler, (Random House, 2002)
Using excerpts from Cherry-Garrard's book, *The Worst Journey in the World,* as well as accounts from the other men on the voyage, this tells of Cherry-Garrard's adventures.

Penguins of the World by Wayne Lynch. (Firefly Books Ltd, 1997)
This book contains numerous facts and beautiful photographs of various species of penguins.

Tom Crean: Unsung Hero of the Scott and Shackleton Antarctic Expeditions by Michael Smith. (Mountaineers Books, 2002)
Tom Crean accompanied explorers Scott and Shackleton on journeys to Antarctica, but received little or no recognition for it.

The Worst Journey in the World by Apsley Cherry-Garrard (Stackpole Books, 2001)
As the only surviving member of Scott's attempt to be the first explorer to the South Pole, Cherry-Garrard gives a detailed account of the extraordinary trip he took to recover emperor penguin eggs.

For Students

Fiction

The Antarctic Scoop by Lucy Jane Bledsoe. (Holiday House, 2003)
Victoria is miserable—her parents are divorced and she gets teased for being a science geek. When she gets a chance to go to Antarctica, she doesn't realize that it is the chance of a lifetime.

Gus and Gertie and the Lucky Charms by Joan Lowery Nixon. (SeaStar Books, 2001)
Two hopeful penguins, Gus and Gertie, arrive at the Olympics only to find that there is no synchronized swim event in the winter games!

The Little Penguin by A. J. Wood. (Dutton, 2001)
As a baby penguin heads for the sea, he gets separated from his family and worries that he may never get all the way to the ocean.

Mr. Popper's Penguins by Richard and Florence Atwater. (Little Brown, 1938)
In this modern classic, Mr. Popper is a house painter who dreams of traveling the world but ends up with 12 penguins instead.

Penguin Puzzle by Judith Bauer Stamper. (Scholastic, 2001)
The Magic School Bus series. Ms. Frizzle and the gang travel to Antarctica.

Something to Tell the Grandcows by Eileen Spinelli. (Eerdmans, 2004)
Emmadine the cow travels to the South Pole with Admiral Byrd and she returns with great stories to tell. For younger readers.

The Stone Idol by Franklin W. Dixon. (Simon & Schuster, 1981)
The Hardy Boys series. Amateur detectives Joe and Frank Hardy are tracking a stolen sculpture when they receive an emergency call from their father. He is investigating a spy ring in Antarctica and needs help.

Resources

Nonfiction

After the Last Dog Died: the True-Life, Hair-Raising Adventure of Douglas Mawson and His 1911–1914 Antarctic Expedition
by Carmen Bredeson.
(National Geographic, 2003)
In 1911, an Australian geology teacher turned polar explorer led a scientific expedition to map the interior of Antarctica.

Antarctic Journal, Four Months at the Bottom of the World by Jennifer Owings Dewey. (HarperCollins, 2001)
Diary entries, letters home, sketches and color photographs record Dewey's time at the science labs at Palmer Station on Anvers Island on Antarctica.

Antarctica by Kelly McDonald.
(Heinemann, 1997)
Great Journeys series. Explores the history and geography of Antarctica, details several of the South Pole expeditions, and provides information about emperor penguins and other animals that live in the region.

Arctic & Antarctic by Barbara Taylor.
(Knopf, 1995)
Eyewitness Books series. Information on the sea life, animals, and plants that live in two of the most extreme climates on earth, as well as the humans who live in and explore the North and South Poles.

Greetings from Antarctica by Sara Wheeler. (Peter Bedrick Books, 1999)
Letters to her godson and her own photographs tell about Sara Wheeler's experiences in Antarctica.

Icy Antarctic Waters by Wendy Pfeffer. (Marshall Cavendish, 2003)
Close-up photographs describe the animals and sea creatures that live in and near the freezing sea around Antarctica. For younger readers.

Polar Explorers by Stephen Currie.
(Lucent Books, 2002)
Short biographies and accounts of the travels of five explorers of the "golden age" of polar exploration.

Poles Apart by Elaine Scott.
(Viking, 2004)
This book explores the evolution, history, and scientific importance of the two regions.

The Race to the South Pole
by Rupert Mathews.
(Bookwright Press, 1989)
Details the many attempts of explorers (including Amundsen, Scott, and Shackleton) to be the first to reach the South Pole.

Roald Amundsen by Enid Broderick.
(World Almanac Library, 2002)
Norwegian Roald Amundsen found himself locked in a race with Robert Scott to be the first person to reach the South Pole.

Robert Scott, British Explorer of the South Pole by John Riddle and Robert Ingpen. (Mason Crest, 2003)
Scott was determined to reach the South Pole before Amundsen, but a series of poor decisions, miscalculations, and bad weather turned the expedition into a tragedy.

Shipwreck at the Bottom of the World: The Extraordinary Story of Shackleton and the Endurance
by Jennifer Armstrong. (Crown, 1998)
When Ernest Shackleton's expedition ends in 1916, Shackleton and his crew, despite incredible odds, have survived their ordeal in Antarctica.

Poetry

Antarctic Antics: A Book of Penguin Poems by Judy Sierra. (Harcourt, 1998)
A collection of ten light and humorous poems and three riddles, based on the lives and habits of emperor penguins.

Resources

Web Sites

ANTARCTIC EXPLORERS
www.enchantedlearning.com/explorers/antarctica.shtml
Brief, kid-friendly information about many Arctic and Antarctic explorers.

ANTARCTICA PICTURES, INFORMATION, AND TRAVEL
www.coolantarctica.com
Provides photographs and facts about Antarctica, including animals, climate, and explorers of the region.

ARCTIC AND ANTARCTIC HISTORY ON THE NET
www.south-pole.com
Detailed biographies of South Pole explorers, including Robert F. Scott and Roald Amundsen, plus excerpts from letters sent by the explorers.

EMPEROR PENGUIN PRINTOUT
www.enchantedlearning.com/subjects/birds/printouts/
Provides labeled drawing of and detailed information about emperor penguins. Scroll down until the emperor penguin illustration appears.

EMPEROR PENGUINS
www.nationalgeographic.com/kids/creature_feature/0101/penguins2.html
Explore links to penguin information, fun facts, a video, and articles from *National Geographic Kids.*

NEW SOUTH POLAR TIMES
205.174.118.254/nspt/home.htm
This newsletter, written by the staff of the Amundsen-Scott South Pole Station, provides students and teachers with information on Antarctica, scientific research, and life at the station.

SOME ANTARCTIC QUOTES
www.antarctic-circle.org/quotes.htm
Contains quotes from polar explorers, including Apsley Cherry-Garrard, leader of the "Winter Journey" to Cape Crozier.

Please note:
Although these sites were verified at the time of publication, Web site addresses and content are frequently subject to change.

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