

Teacher Guide Cobblestone, *Journey to the North Pole*

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Teacher Guide prepared by Lisa Greenberg. Lisa taught in international schools in Japan, Singapore, and Saudi Arabia. Her coffee table books SAUDI ARABIA (2007) and RUB AL KHALI (2008), photographs by Mohammed Babelli and text by Lisa, are enjoying success in the Middle East. Now that her four children are actively working adults, Lisa and her husband Jim are pursuing their interest in microfinance around the world.

Getting Ready:

Collect a number of text and photo resources on the North Pole and expeditions there. Show them to students and make them available for borrowing within the classroom. Display the front and back cover and ask what they already know about the North Pole and what they would like to find out. List these, if desired.

You may wish to review the listed vocabulary now or before reading each article. Vocabulary words can also be assigned as spelling words.

Into the Frozen North, pp. 2-5

Vocabulary: sledge, cache, ice pack, floe, Northwest Passage

Reading for Understanding:

1. Why have people explored the Arctic? *Europeans wanted a quicker route to the Far East and profitable markets; some wanted to claim land or resources; some wanted to trade in fur and whales; some sought adventure, fame, glory, and a place in history.*
2. What types of places do you like to explore and why?
3. Who was the first European explorer to tackle the Arctic? *Englishman Hugh Willoughby led an expedition in 1553, discovering Nova Zembla.*
4. Who discovered Baffin Island and how did that keep him from finding the North Pole? *Martin Frobisher discovered Baffin Island and thought there was gold on it; the ensuing gold rush distracted him from further exploration.*
5. Who was the first Dutch explorer? *Willem Barents sailed three times to the North as far as Nova Zembla and died there; however, his crew survived the winter and was rescued.*
6. How far did Henry Hudson sail and how long did his record stand? *In 1607 Henry Hudson tackled the Arctic and reached 80 degrees 23 minutes north before being trapped by ice; his record stood for 166 years.*
7. What was the most common reason for expeditions being stopped short of the pole? *Their ships were trapped by ice as happened to English explorers Constantine Phipps, William Scoresby, and David Buchan.*
8. Who solved the ice trap problem? *William Edward Parry used boats bound in iron that could also be pulled as sledges on the ice. However, when he was only 435 miles from the pole he realized that he was floating south almost as fast as he could go north and gave up the struggle.*
9. What was Dr. Elisha Kane's contribution to polar exploration and which later explorers did it influence? *Dr. Kane imitated the way of life of the local people and equipped his team with dogs and sledges, hired a native hunter to supply fresh meat for his team, and stocked supply caches along his route, and wore native dress for protection from the elements. His experience inspired both Frederick Cook and Robert Peary.*

10. What did explorers learn from George Washington DeLong's failed expedition? *They found that the polar ice pack in which he got caught drifted slowly east from the Bering Street to Greenland.*
11. How was Norwegian Fridtjof Nansen tricked by the polar currents? *He thought that the current turned north before going south, but in fact it went northwest, pulling his ice-trapped ship away from the Pole, although he set a new record, reaching 86 degrees 14 minutes after sledging 26 days across rough territory.*
12. What did Roald Amundsen discover in 1906? *Amundsen was the first to pinpoint the Northwest Passage, but did not reach the Pole.*

Group Projects:

1. Make a timeline of the expeditions mentioned in the article.
2. Illustrate one of the expeditions, noting its leader and achievements.

The Arctic World, pp. 7-12

Vocabulary: lead, lichen, permafrost

Group Discussion: Applying what you know

1. Identify the four different definitions of the Arctic. How do they differ? Which one makes the most sense to you and why?
2. How does the Arctic landscape change through the seasons? How do you think these seasonal changes affected the lifestyle of the native people? Modern man living and working in Alaska?
3. What is the relationship between glaciers and icebergs? How might global warming affect the Alaskan landscape?
4. When and where do Alaska's animals migrate? How do they protect themselves from seasonal change?
5. Why do you think different animals live in the Arctic and the Antarctic, since both are very cold regions of the world?

Call of the Arctic, pp. 10-12; Finding a Way, pp. 16-23; Mariapaluk, pp. 25-29

Vocabulary: ice pack, soundings,

Divide the class into small groups and have each group choose one of the following projects, using the text and the photos and, if desired, additional research:

1. Draft and give a lecture, as Robert Peary, on his first polar expedition – its successes and problems.
2. Compare and contrast Robert Peary's life in Nicaragua and life in the Arctic.
3. Write and perform a short play about Robert Peary OR create a poster board about his life.
4. Make a list of Robert Peary's inventions and explain how they helped his expeditions succeed?
5. Write an essay about Matthew Henson. You might use one of these titles or choose one of your own: Matthew Henson – A Man to Admire; A Negro Explorer at the North Pole; Henson – An Unusual Man for His Times.
6. Imagine a meeting between Peary and Cook at the Explorers Club. Illustrate, write, or act out the experience.

Minik's Story, pp.14-15

Values discussion:

After students read the article, on the chalkboard write Minik's words "Why am I no longer fit to live where I was born? Not fit to live where I was kidnapped?"

Discuss: How was Minik's life changed by being brought to the United States? How did he feel as a child and as an adult? Who was responsible for his feeling that way? Do students ever feel that they are caught between two societies or cultures? Do they know any one who feels that way? How do people resolve those issues in their own lives? What is an individual's responsibility toward a stranger to their culture?

Arctic Partner, pp. 22-23

Class Discussion:

1. Why do you think Josephine Peary accompanied Robert Peary on some of his expeditions?
2. What personal qualities helped her in the Arctic?
3. Why do you think she was given the National Geographic Society Medal of Achievement?
4. Would you have liked being a child in the Peary family? Why or why not?

Just Ask the Natives, pp. 30-32; Man's Best Friend, p. 33

Vocabulary: lashing

Class Project: Make a bulletin board showing how elements of the Inughuit traditional lifestyle, including clothing, posture, shelter, etc. made it possible for them to survive year-round in the Arctic. Students can choose different elements to illustrate and describe.

Studying Earth's Frozen Frontier, pp. 34-37; Working Together, pp. 37

Vocabulary: salinity, greenhouse gases, aurora borealis

What You Know and What You Wonder:

After reading the articles, have students work in pairs to list five new things they learned and a question they have about or from the article. Alternatively, do this as a whole class activity. Then use the questions to clarify or expand the ideas in the articles through discussion.

Whose Pole Is It, pp. 40-41

Use these pages as a springboard for discussion about the world's resources.

- What should be shared?
- How can it be shared equitably?
- What is a nation's responsibility with regard to shared resources?
- Are students aware of any other situations in which different nations or states want to claim a resource that might be better shared?

Wrap Up:

Have a short discussion of what they enjoyed learning. Review the questions from the warm-up activity and see if anyone can answer them.