ACTIVITY ONE
WHERE IN THE WORLD IS THE ARCTIC?

Subjects: Geography: Landforms, maps, globes

LEARNING OBJECTIVES:
• Identify the Arctic region and some of its key geographic features on a globe and a world map.
• Compare ways information is presented on globes and maps.
• Record and discuss prior knowledge and perceptions of the Arctic.

MATERIALS:
• Photos of the Arctic
• Globe
• “Arctic Map” student page
• Red Pencils
• “What I Know About the Arctic” Student Page
• Pencils

BACKGROUND:
Longitude and latitude are imaginary lines on a map or globe that help us describe the location of any place on Earth. Latitude lines measure the distance north or south of the Equator. Longitude lines measure the distance east or west of the prime meridian. Both are measured in terms of the 360 degrees of a circle. The Arctic is a circumpolar ecosystem (an ecosystem that spans the globe around the pole). It generally falls above 66° N (north) latitude.

It includes northern parts of Asia, North America, and eight countries within Europe. The North Pole is located in the Arctic, at 90° N latitude.

The Arctic consists of ice-covered ocean that is nearly surrounded by land masses. Animals that live here include polar bears, reindeer, caribou, lemmings, and snowy owls. Antarctica is at the opposite end of the Earth. It consists mostly of ice-covered land surrounded by ocean. Few animals live in Antarctica. Those that do include penguins, squid, and krill. Note: Polar bears live only in the Arctic; penguins live only in the southern hemisphere.

WHAT YOU DO:
1. Divide students into small groups and give each group a set of photos of the Arctic. Tell students that today they are going to learn about a special place. Have each group look through its photos and jot down answers to these questions:
• What does this place look like?
• How would you describe its climate?
• What is this place called?

Invite groups to share their answers with the class. Then tell students that they are going on a mapping adventure to find the place pictured—the Arctic.

2. Using a globe, show students the Arctic region. Point out the areas that are ice-covered and those that are land masses. Ask the class: If you divide the Earth in half along the Equator, in which hemisphere is the Arctic?

3. Distribute copies of the student page called “Arctic Map.” Have students spend a few minutes studying the map. Explain to them that the Arctic Circle is at 66° north latitude and that everything above that imaginary line is considered the Arctic region. Have students draw in the Arctic Circle with a red pencil or marker. Then ask them to complete the “Arctic Map” student page independently or in small groups. After everyone has completed the page, discuss the answers to the questions on the “Arctic Map” page. Then ask students:

• What are the differences between globes and maps?
• Which tool would you use to see the best model of the entire Earth?

4. Distribute copies of the student page called “What I Know About the Arctic.” Give students ample time to record what they know about the Arctic in the chart on this page.

5. Collect the completed pages. At the end of this teaching unit, return the pages to your students and have them compare their initial Arctic knowledge with their current knowledge.

ADAPTATIONS:
For younger students. Adaptation.
For older students. Adaptation.

USEFUL LINKS:
Photos of the Arctic can be found at www.climateclassroomkids.org/galleries
Directions: Use these maps to answer the following questions.

1. If you divide the Earth in half along the Equator, in which hemisphere is the Arctic region?
2. What continents have land in the Arctic region?
3. What is the name of the ocean found there?
4. Find the North Pole on the map below. Put a red “X” over it.
5. What is the latitude of the North Pole?
STUDENT PAGE

WHAT I KNOW ABOUT THE ARCTIC

Directions: Record things you know about the Arctic region in the spaces below.

Climate

Animals

Plants

People

Other