NATIONAL GEOGRAPHIC

RESOURCE LIBRARY
ACTIVITY : 50 MINS

Explore Cardinal Directions

Students learn to identify cardinal directions using their own classroom, other locations in and near school, and maps and globes. Then they discuss differences in temperature due to location.

GRADES

K, 1, 2

SUBJECTS

Geography, Human Geography, Physical Geography

CONTENTS

1 Link

OVERVIEW

Students learn to identify cardinal directions using their own classroom, other locations in and near school, and maps and globes. Then they discuss differences in temperature due to location.

For the complete activity with media resources, visit:
http://www.nationalgeographic.org/activity/explore-cardinal-directions/

Program

DIRECTIONS

1. Have students use the cardinal directions to describe the location of objects in the room.
Using paper, markers, and a compass, accurately label each wall of the classroom north, south, east, or west. Then have students describe the location of objects in the classroom in terms of their direction. Ask:

- *What wall is the teacher's desk near?*
- *What's close to the south wall?*
- *What would I bump into if I walked toward the west wall?*

2. Extend the concept outside of the classroom by walking to different places in the school.
Explain to students that the directions extend beyond the four walls of the classroom. With students, walk to different places in the school, such as the cafeteria, playground, or gymnasium. At each place, have students turn to show what direction that place is from the classroom—north, south, east, or west.

3. Have students use a compass to practice finding the cardinal directions.
If possible, have students use a compass to practice locating the cardinal directions north, south, east, and west. They can practice inside or outside.

4. Check students' comprehension using maps and globes.
Using a globe or one of the large maps of the Americas from the Americas MapMaker Kit, point out north, south, east and west. Ask:

- *What countries make up the continent of North America?*
- *Which country is to the east of the northern part of the United States?*
- *Which country is immediately south of the United States?*

5. Discuss temperature differences at the Equator and the North and South Poles.
Explain to students that the Earth is cold at both ends—the North Pole and South Pole—and hot in the middle at the Equator. Tell students that this occurs because the Equator gets more sunshine year-round than the poles do. Point out the Equator and the North Pole on the Americas Mega Map. Gesture to indicate where the South Pole (not shown) would be on the map. Ask:

- *Which of the two big continents is closer to the North Pole?*
- *Which big continent is closer to the South Pole?*

6. Discuss differences in temperature due to location.
Have students think about differences in temperature depending on where people live. For example, on the first day of winter in Nova Scotia, students might wear boots, coats, hats, and mittens. On the same day, students in Puerto Rico might wear shorts and short-sleeved shirts. Ask: *Why would the students' clothes be so different on the same day?*

TipMapping

When doing physical activities with the cardinal directions, check to make sure that students do not equate north with "up" or south with "down."

Extending the Learning

Show students a globe, pointing out the cardinal directions, the Poles, and the Equator. Ask them to imagine their bodies represent a globe with the North Pole at their head and the South Pole at their feet. Play an adaptation of the game “Simon Says.”
Simon says:

- Put your hands on your Equator. (waist)
- Point to the North Pole. (head)
- Stomp your South Pole. (feet)
- Use your arms as latitude lines. (horizontal)
- Touch the neighbor directly west.
- Clap your hands to the south.

OBJECTIVES

Subjects & Disciplines

Geography

- Human Geography
- Physical Geography

Learning Objectives

Students will:

- recognize the cardinal directions north, south, east, and west and understand where these are in their classroom, school, or on a map or globe
- locate the Equator, the Poles, and the continents of North and South America on a map or globe
- describe how temperatures are higher at the Equator and lower at the Poles

Teaching Approach

- Learning-for-use

Teaching Methods

- Discussions
- Hands-on learning
- Simulations and games

Skills Summary

This activity targets the following skills:

- 21st Century Themes
  - Global Awareness
- Critical Thinking Skills
  - Analyzing
  - Understanding
- Geographic Skills
  - Acquiring Geographic Information

National Standards, Principles, and Practices

NATIONAL GEOGRAPHY STANDARDS

• **Standard 1:**
How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

Preparation

What You'll Need

MATERIALS YOU PROVIDE

- Compasses
- Globe
- Markers
- Paper

REQUIRED TECHNOLOGY

- Internet Access: Optional
- Tech Setup: 1 computer per classroom

PHYSICAL SPACE

- Classroom

GROUPING

- Large-group instruction

OTHER NOTES

Before starting this activity, assemble the Americas Mega Map.

BACKGROUND & VOCABULARY

Background Information

To know where places are in relation to one another, people use a system for telling direction. Cardinal directions are one set of directions that people around the world use. The four cardinal directions are north, south, east and west. These directions use the rising and setting

of the sun as reference points. Because the Earth rotates from west to east, the sun appears to rise in the east and set in the west. The Poles, North and South, also provide directional reference points.

Prior Knowledge

[]

Recommended Prior Activities

- None

Vocabulary

Term	Part of Speech	Definition
cardinal direction	*noun*	one of the four main points of a compass: north, east, south, west.
Equator	*noun*	imaginary line around the Earth, another planet, or star running east-west, 0 degrees latitude.
North Pole	*noun*	fixed point that, along with the South Pole, forms the axis on which the Earth spins.
South Pole	*noun*	fixed point that, along with the North Pole, forms the axis on which the Earth spins.