



All Around the Globe – Using Cardinal Directions

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Grade: 4

Geographic Theme

- Cardinal directions
- Creating and orienting a compass rose

Purpose

To begin, students should have a clear understanding of front, back, right and left. This will allow for them to use transferring as a way of learning and turn directions into the cardinal directions of north, south, east and west. Students will begin with a game that will direct them to the concept of a fixed point of reference and an understanding of why we need cardinal directions. Students will also learn that the North Pole is the point of reference most commonly used. Students will also learn that north is always the same no matter where they are on Earth. Students will create their own compass roses. Students will use their compass roses to identify objects as being north, south, east, or west. Students will practice using their compass roses and reinforce their understanding of cardinal directions by playing a game where they are to locate a hidden treasure by following clues based on the cardinal directions. Finally, the students will show they have mastered the skill of understanding cardinal directions by listening to a story, following directions on a map and marking certain locations.

Objectives

- To understand the need for a fixed reference point in giving directions.

- To understand that the North Pole is most often used as a point of reference when using cardinal directions.
- To understand that a compass rose is a tool used to identify north, south, east, and west.
- To develop the skill of using a compass rose.
- To use cardinal directions to locate places on a map.

Materials

- Reproducible of pg. 97 (to create a compass rose) (from Hands-On Geography by Scholastic)
- Crayons or markers
- Objects for hidden treasure activity
- Sentence stripes
- Globes
- Reproducible of pg. 98 (county fair map) (from Hands-On Geography by Scholastic)
- Scissors
- Glue

Time

- Initiating activity 5-10 minutes
- Globe activity 10 minutes
- Creating Compass Roses 10-15 minutes
- Compass Rose activity 10-15 minutes
- Culminating activity 15 minutes
- Evaluation 10-15 minutes

Procedures

- A. **Initiating Activity:** Begin with an activity to help lead students to understand that using a point of reference will better define directions.

Have the students stand and face randomly in many different directions. Tell them that the object of the game is to end up with the whole class facing the same direction. The rules are as follows: The only commands that can be used are to tell someone to turn right or left. No one can be called by their name. The commands may be: "Everyone with yellow boots, turn right," or "The person with glasses turn left," and so on. The teacher can start the game by giving the first few commands. Then allow the students to take turns giving commands. The situation will, and should, become highly confused. After the activity discuss with the students better ways of instructing them to face in one direction. They should arrive at the concept of a fixed point of reference even if they are not able to articulate it. Ask if anyone can think of one direction that, if broadcast all around the Earth, would make everyone face toward the same place. If no one says "north," "south," "east," or "west," write the words on the board. Explain at this point that the North Pole is most often used as a point of reference and describe that cardinal directions are referred to as north, south, east, and west.

- B. **Strategies:** Introduce the concept of the North Pole by using a globe. Ask a student to locate the North Pole on the globe. Have the student locate the United States and then again locate the North Pole. Repeat this using various places on the globe. Ask the student in what direction he or she is moving when they locate the North Pole. Repeat the same procedure to teach south and the South Pole. Ask if anyone can name two other directions. If they cannot name east and west, tell them that there are two other main directions and name them. Explain that when you face north, east is on their right and west is on their left.

Creating and Orienting A Compass Rose

Reference

Hands-On Geography by Scholastic- pg.45

Begin by using a compass to identify true north in the classroom and label it on the wall with the word "north." Distribute copies of Reproducible 97 and help the children identify the compass roses and north arrows at the bottom of the page. Tell them that they are going to create and use their own compass roses now. Have children find north on the drawing of the Earth on Reproducible 97, then create their

designs using the drawing of the Earth as the center of their compass roses. To correctly orient their compass roses, have the students turn their artwork until their north arrows point to the north sign in the room. Allowing flexible seating will make this activity easier to do. Have the students identify objects within the classroom as being north, south, east, or west of them using their compass roses. Culminate the activity by having them create labels to show south, east, and west in the classroom. Display these labels in their appropriate places, encouraging the children to refer to them often for the rest of the year.

Extension Activity: Have all of the students stand and face north. Have them hold their compass roses pointed towards north. Tell the students you are going to give them verbal directions to observe if they respond the same way. Give them commands like, everyone take three steps west, everyone take two steps south, everyone take four steps east, and so on. The students should remember to make sure that their compass roses continue to face north even though they may be moving. The students will discover that because they were all facing north when they started they all could move easily around without colliding into each other.

Culminating Activities: Divide the group into groups of 4 or 5. Let one group hide a "treasure" in the classroom and direct another group of children to find it by following clues based on the cardinal directions. When the group finds the treasure, they can hide it again and provide the clues to find it.

Evaluation

This activity will allow students to use a map that has a compass rose and identify certain locations. Give each student a copy of Reproducible 98. This map will be used to identify places by the use of cardinal directions. Students will listen to a story and follow directions given to find the correct places on their map.

Willy and the Four Directions (revised)

Read:

Willy has four special friends named "West," "South," "East," and "North." As a group they are called the "Four Directions." These friends will help Willy find his way, wherever he wants to go.

Today is the Geotown County Fair and Willy asks to go. "All right," says Willy's mom, "but you must stay with your friends, the Four Directions, for they will show you the way." So off they go to the fairground- Willy and his four friends, West, South, East, and North.

* Find the entrance to the fair. This is where the story begins. Draw a red smile at the entrance to the fair.

The first thing Willy wants to see is which rabbits won a prize this year. North leads the way, saying, "North we'll go and then you'll know." And so, north they go. They stop at the first tent.

*Walk north from the entrance and stop at the first tent. Draw a brown R for rabbit there.

Then, on a loudspeaker, Willy hears, "Attention please, it's geese feeding time in the east tent." "Follow me," says East, "to the geese feast." And so they turn their backs on the rabbits and walk east across the fairgrounds.

*Now you go east and put a black G in the tent at the end of the road.

Willy now wants to see the little pigs race. Their race track is north of where he is, but Willy isn't sure which way that is. North says, "Follow me and you will see." And so off to the north they go, all the way to the end of the road.

*Now you go north and place a red P at the end of the road.

The racing pigs were loads of fun and Willy's favorite won. Now Willy wants to see which sheep weighs the most this year. West says, "I'll take you west to find which sheep's the best." And so west they go, all the way to the end of the road.

*Now you go west and put a Capital S at the end of the road.

The day was fun, but it's just about done. Willy is ready to start for home. But which way will bring Willy back to where he had begun?

*Pause so the students can discover which way to go. So South says, "Follow me south and you'll get back where you started from." And so south they go the way they had begun.

You may wish to give the students a chance to compare their maps and the placement of the markings, and let them color in the rest of the fair.

