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Finding Directions

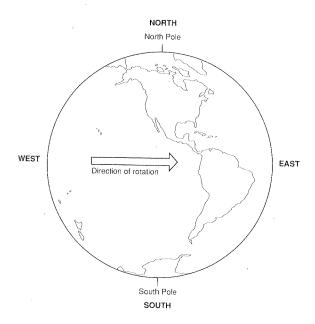
Objective: to use a compass rose or direction arrow to find directions on a map

Maps give you many different kinds of information. One kind of information that nearly all maps show is direction. When you read a map, look for an arrow or other pointer to help you find directions.

The four most important directions are called the cardinal directions. Two of the cardinal directions are north and south. What are the other two?

1._

The North Pole is the northernmost point on Earth. No matter where in the world you are standing, north is toward the North Pole. Likewise, the South Pole is the southernmost point on Earth. South is always toward the South Pole.



East is the direction that Earth turns. It is the direction of the sunrise. West is the direction opposite east, and is the direction of the sunset.

If you know one direction, you can figure out the others. When you face north, south is straight behind you. East is to your right. West is to your left.

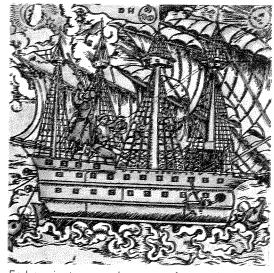
To describe directions that are not exactly north, south, east, or west, people combine these words. For example, the direction halfway between north and east is called northeast. The direction halfway between south and west is called southwest. Northeast, southeast, northwest, and southwest are intermediate directions.

Add all four intermediate directions to this diagram.





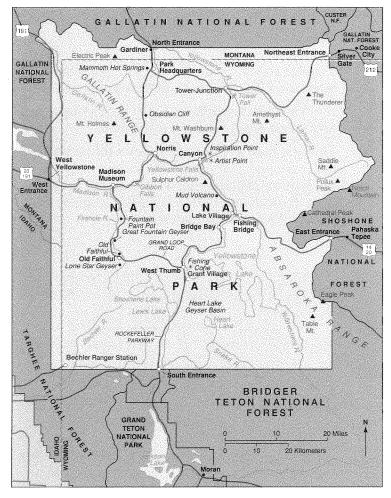
The drawing you have made is called a **compass rose**. Some maps have a compass rose to help you find all of these directions. Other maps have a pointer that shows only one direction, usually north. North is often at the top of the map—but not always! To be sure of directions, you should look for a north arrow or a compass rose.



Early navigators use placement of sun and stars to find directions.

Use the map of Yellowstone National Park to answer the following questions.

Yellowstone National Park



- 3. Find the north arrow on the map. Which edge of this map is the northern edge?
 - a. left
 - b. right
 - c. top
 - d. bottom
- 4. What state is on the northern boundary of Yellowstone National Park?
 - a. Idaho
 - b. Wyoming
 - c. Montana
 - d. Colorado

- 5. What national forests border Yellowstone on the west?
 - a. Shoshone and Teton National Forests
 - b. Gallatin and Targhee National Forests
 - c. Targhee and Teton National Forests
 - d. Gallatin and Shoshone National Forests
- 6. What direction do you travel to go from West Thumb to Old Faithful?
 - a. north
 - b. south
 - c. east
 - d. west
- 7. What river flows into Yellowstone Lake from the southeast?
 - a. Snake River
 - b. Bechler River
 - c. Yellowstone River
 - d. Madison River
- 8. Which one of these is located in the northwestern corner of the park?
 - a. Bechler
- c. Gallatin
- b. Silver Gate
- d. Pahaska Tepee
- 9. What mountain lies northeast of Inspiration Point?
 - a. Mt. Holmes
 - b. Amethyst Mt.
 - c. Saddle Mt.
 - d. Sulphur Mt.
- 10. If you come into the park's west entrance at West Yellowstone, what is the shortest way to West Thumb?
 - a. Go east to Madison Museum. Turn south to Old Faithful. Follow the Grand Loop Road east to West Thumb.
 - b. Go east to Madison Museum. Turn northeast to Norris. Take the Grand Loop Road through Canyon and Bridge Bay to West Thumb.
 - c. Go west on Highway 20 and 191. Turn north to Old Faithful. Follow the North Loop to West Thumb.
 - d. Go west on Highway 20 and 191. Follow the Grand Loop Road east to West Thumb.

Using Map Scale

Objective: to use the scale on a map to find and compare distances

Maps are scale drawings. Each inch on the map stands for a certain number of feet or miles on Earth's surface.

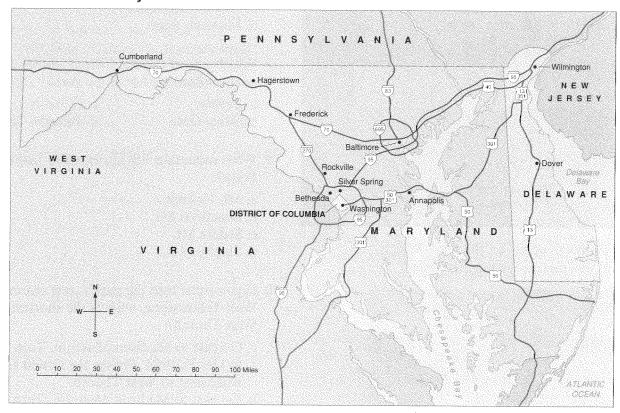
Most maps give you a scale bar to help you understand the distances shown on the map. To find out how far apart two places are, measure the distance between them with a ruler. Then use the scale bar to find how many miles that

distance stands for on Earth's surface. Some maps show scales in both miles and kilometers.

Every map has a different scale, depending upon how much area is shown on the map.

The first map in this lesson shows the states of Delaware and Maryland. The second map shows the District of Columbia. Look carefully at the scale markings on both maps and use them to answer the following questions.

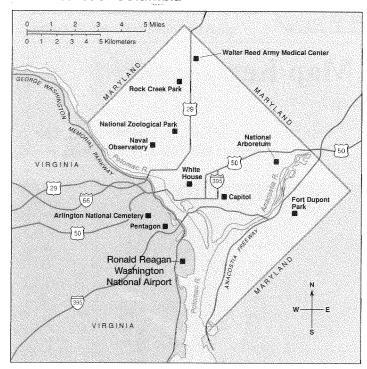
Delaware and Maryland



- 1. How many miles does the scale on the map of Delaware and Maryland represent?
 - a. 10 b. 50 c. 20 d. 100

- 2. How far is it from Baltimore, Maryland, to Washington, D.C.?
 - a. about 30 mi
- c. about 50 mi
- b. about 20 mi
- d. about 10 mi

The District of Columbia



- 3. How long is the western border of Delaware?
 - a. about 110 mi
 - b. about 87 mi
 - c. about 70 mi
 - d. about 123 mi
- 4. What is the distance between Hagerstown, Maryland, and Wilmington, Delaware, in a straight line?
 - a. about 85 mi
 - b. about 145 mi
 - c. about 35 mi
 - d. about 115 mi
- 5. Suppose you wanted to drive from Frederick to Wilmington by interstate highway. If you took highways 70, 695 and 95, how far would you have to drive?
 - a. about 105 mi
 - b. about 135 mi
 - c. about 65 mi
 - d. about 150 mi
- 6. How many kilometers does the scale on the map of the District of Columbia represent?
 - a. 5 b. 3 c. 15 d. 7

- 7. How many miles does the scale on the map of the District of Columbia represent?
 - a. 5

c. 15

b. 3

d. 7

- 8. About how many kilometers are there in 3 miles?
 - a. 4

c. 6

b. 5

d. 8

- 9. What is the distance from the Capitol to Fort Dupont Park?
 - a. 10 mi

c. 5 mi

b. 3 mi

d. 15 mi

10. What is the distance from the White House to the Walter Reed Army Medical Center?

a. 1.5 mi

c. 15 mi

b. 7.5 mi

d. 5.5 mi

- 11. On which map does an inch stand for more miles?
- 12. Which two cities are the farthest distance apart?
 - a. Washington and Baltimore
 - b. Frederick and Hagerstown
 - c. Hagerstown and Washington
 - d. Baltimore and Frederick



Visitors to Vietnam Memorial, Washington, D. C.