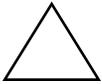

Section 1

Looking at Maps

Lesson 1

Which Way?

Vocabulary



compass rose: a direction finder on a map

magnetic north: the direction to which a compass needle points. The magnetic North Pole is not exactly in the same place as the true North Pole.

Did you know that the direction *east* is mentioned in twenty-four books of the Bible from Genesis to Revelation? In Bible times *east* was considered a very important direction.



Read “Which Way?” on pages 47-50.



Complete the sentences.

1. With your back to the sun at noon, the head of your shadow points _____.
2. When you face the sun as it is rising, you are facing _____.
3. When you face the North Star at night, you are facing _____.
4. If it is evening and the sun is to your left, you are facing _____.
5. The Big Dipper’s _____ stars point to the North Star.
6. Unless a map is marked differently, north is at the _____.



Write the letter of the description for each term.

- | | |
|-----------------------|---------------------------------------|
| 7. ____ compass | a. important direction in Bible times |
| 8. ____ east | b. added to mapmakers’ knowledge |
| 9. ____ explorers | c. map direction finder |
| 10. ____ compass rose | d. points to magnetic north |

Lesson 1



Write *true* if the sentence is true and *false* if the sentence is false.

11. _____ East and west meet if you travel far enough.
12. _____ North and south come to an end if you travel far enough.
13. _____ A compass rose and a regular compass look a lot alike.
14. _____ On a globe, north points to the North Pole.
15. _____ If you know one direction, you can figure out the other three.



Label the compass rose *north, south, east, and west*.

16. a. _____

b. _____



c. _____

d. _____



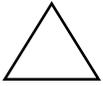
Use Matthew 2:1, 2, 9 to answer the questions.

17. Where did the wise men come from to see the King of the Jews? _____
18. Where had they seen His star? _____

Vocabulary

conic (kā' nīk): shaped like a cone

equator (i kwā' tər): an imaginary line running around the middle of the earth halfway between the North and South Poles. The equator divides the ball of the earth into two halves or hemispheres.



projection: a way of showing a rounded surface on a flat map

sphere (sfir): an object shaped like a ball



Read "Can You Make a Round Ball Flat?" on pages 50-53.



Complete the sentences.

- The earth is a _____.
- The imaginary line that encircles the earth halfway between the poles is the _____.
- The distance around the earth at the equator is about _____ miles.
- _____ was a European who wanted to show the whole world on a flat map.
- A map _____ is an imperfect way of showing a round surface on a flat map.
- Although mapmakers make many different kinds of _____, not one of them is _____.



Write the letter of the definition for each term.

- | | |
|-------------------------------|--------------------------------|
| 7. _____ globe | a. stretches land at the poles |
| 8. _____ sphere | b. cuts the earth in half |
| 9. _____ equator | c. flattened at the poles |
| 10. _____ conic projection | d. cone-shaped map projection |
| 11. _____ oblate | e. shaped like a ball |
| 12. _____ Mercator projection | f. best map of the world |

Lesson 2



Answer the question.

13. Why are map projections usually used instead of globes?

Looking Back



Write *true* if the sentence is true and *false* if the sentence is false. Correct any false statements.

14. _____ The pointer stars of the *Big Dipper* point to the North Star.

15. _____ Unless otherwise marked, *south* is at the top of a map.

16. _____ A *compass rose* always points to the magnetic north.

17. _____ An important direction in the Bible is *east*.



Underline the correct answers to complete each sentence.

18. Another name for the direction finder on a map is **compass, compass rose, magnetic north.**

19. East and west **never meet, meet at the Pacific Ocean, meet at the poles.**

20. A compass rose and a regular compass are **completely different, two names for the same object, similar looking.**

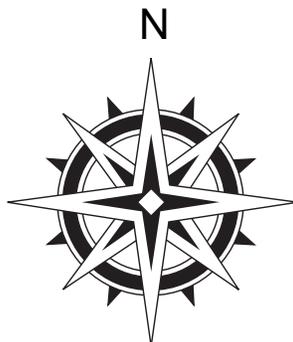
21. Early explorers **added to, hindered, had no effect on** mapmakers' knowledge.



Fill in the missing directions.

22.

a. _____



b. _____

c. _____

Vocabulary

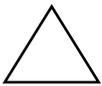
Arctic Circle: a line of latitude $66\frac{1}{2}$ degrees north of the equator. North of this line at a certain time in the summer the sun does not set; at a certain time in the winter the sun does not rise.

degree: when a circle is divided into 360 equal parts, each part is one degree. A degree is $\frac{1}{360}$ of a circle.

hemisphere (he' mə sfir): half of a sphere, half a ball

latitude: distance north or south of the equator, shown as circles drawn around the globe the same direction as the equator; east-west lines around the earth. Latitude is measured in degrees instead of miles.

parallel lines: lines that are always the same distance apart. Lines of latitude are always parallel.



Tropic of Cancer: a line of latitude $23\frac{1}{2}$ degrees north of the equator. North of this line the sun is never directly overhead.



Read "What Is Latitude?" on pages 54-56.



Write the words from the box beside the correct description.

hemisphere latitude degrees parallel lines

1. _____ units of latitude; $\frac{1}{360}$ of a circle
2. _____ lines measuring distance from the equator
3. _____ lines equal distance apart
4. _____ half a sphere



Write *true* if the sentence is true and *false* if the sentence is false.

6. _____ Ptolemy was a Greek man who described the equator.
6. _____ The equator is parallel with the Tropic of Cancer.
7. _____ All the lines of latitude are drawn on most maps.
8. _____ Two lines of latitude are always parallel.
9. _____ Parallels of latitude run east and west on a map.

Lesson 3



Underline the correct answer to complete each sentence.

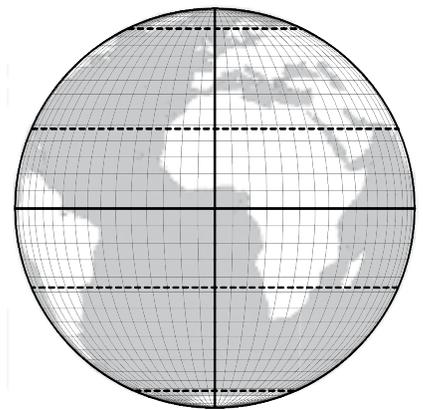
- 10. The latitude of the North Pole is **0°**, **45°N**, **90°N**.
- 11. The latitude of the equator is **0°**, **45°N**, **90°N**.
- 12. The raised circle in 45° stands for **miles**, **degrees**, **minutes**.
- 13. Lines of latitude measure distance north or south from **the equator**, **the North Pole**.



Do the activities.

- 14. Write the names of the poles and the five parallels of latitude from North to South.

90°N	_____
66½°N	_____
23½°N	_____
0°	_____
23½°S	_____
66½°S	_____
90°S	_____



© Map Resources

- 15. In the list above, write an X beside the two lines of latitude that run through the United States and Canada.



Use the map on page 72 to do these exercises.

- 16. Name the state that has 35° north latitude for its southern boundary.

- 17. Find Minnesota. The straight east-west line of its northern boundary is at 49° north latitude. Name the other four states west of Minnesota that have northern boundaries on the 49th parallel.

Looking Back



Write the letter of the correct answer to complete each sentence.

18. ____ All are true about the equator except ____.
- a. a line halfway between the poles
 - b. divides earth in half
 - c. imaginary line
 - d. can be seen with binoculars
19. ____ Gerhard Mercator was a European who ____.
- a. explored the Atlantic
 - b. made a map projection
 - c. invented the compass
 - d. invented latitude lines
20. ____ A map projection is ____.
- a. a perfect map of a round earth on a flat surface
 - b. an imperfect map of a round earth on a flat surface
 - c. a globe
21. ____ The best way to show the earth on a map is a ____.
- a. globe
 - b. conic projection
 - c. Mercator projection
22. ____ The earth is a ____.
- a. cone
 - b. cube
 - c. sphere