Name _____ Class _____ Date _____

Skills Worksheet

Directed Reading A

Section: Measuring Motion

1. Name something in motion that you cannot see moving.

_____

_____

_____

OBSERVING MOTION BY USING A REFERENCE POINT

_____ **2.** An object in motion is moving in relation to an object that appears to
- **a.** stay in place.
- **b.** keep moving.
- **c.** maintain constant velocity.
- **d.** maintain constant acceleration.

_____ **3.** When an object changes position over time relative to a reference point, the object is
- **a.** speeding.
- **b.** accelerating.
- **c.** decelerating.
- **d.** moving.

4. For determining motion, the surface of Earth is a common _____.

5. Why are buildings, trees, and mountains all useful reference points?

_____

_____

6. Can a moving object be used as a reference point? Explain.

_____

_____

_____

SPEED DEPENDS ON DISTANCE AND TIME

7. The speed of an object depends on the distance traveled and the _____ taken to travel that distance.

8. The SI unit for speed is _____.

9. Why is it useful to calculate average speed?

_____

10. Explain how to calculate average speed.

11. When a person drives for several hours, how does the distance traveled in one hour usually compare with the distance traveled in other hours? Explain.

12. Suppose that, on a graph showing speed, there are two lines. One line represents speed per hour, and the other line represents average speed. Will both lines be exactly alike and in the same place on the graph? Explain.

VELOCITY: DIRECTION MATTERS

13. Why wouldn't birds end up at the same destination if they are flying exactly the same speed at all times?

14. What is the difference between velocity and speed?