socrative by MasteryConnect

Motion, Speed, Velocity Score:

1. A moving car takes more and more time to pass mile markers along a highway. Which best describes the motion of the car?

(A) speeding up
(B) slowing down
(C) changing directions
(D) moving at same speed

2. Which best explains the difference between speed and velocity?

(A) Velocity requires direction, and speed does not.
(B) Speed requires momentum, and velocity does not.
(C) Velocity refers to living motion, and speed refers to nonliving motion.
(D) Speed deals with upward motion, and velocity deals with forward motion.

3. On a graph showing distance versus time, which type of line indicates no motion?

(A) vertical line
(B) horizontal line
(C) upward curving line
(D) downward curving line

4. How might the speed of a vehicle be determined if is its speedometer broken?

(A) by measuring velocity and time
(B) by measuring distance and time
(C) by measuring velocity and distance
(D) by measuring acceleration and distance

5. When a roller coaster makes sudden turns, why is a person's body thrown from side to side?

(A) because of the speed of the roller coaster
(B) because of the inertia of the person's body
(C) because of the friction of the roller coaster on its tracks
(D) because of the deceleration of the roller coaster as it turns

6. **Which term describes the tendency of an object to resist changes in motion?**

A) force

B) friction

C) inertia

D) velocity

7. **A student standing outside does not feel Earth moving in space. What is the reference point that shows Earth is moving?**

A) wind

B) the Sun

C) the Student

D) a moving car

8. **What of the following would typically be used to express speed?**

A) miles per hour

B) degrees per liter

C) centimeters per mile

D) grams per liter

9. **A river flows south at 10 meters per second. A canoe set out from the river's eastern shore straight across toward the other side. Which best describes the canoe's path?**

A) The canoe's path will be a straight line from east to west.

B) The canoe's path will be a straight line from north to south

C) The canoe's path will be a diagonal line from northeast to southwest

D) The canoe's path will be a diagonal line from southeast to northwest

10. **When a car goes around a corner at 20 mph, why do we say it accelerates?**

A) The car is accelerating because the velocity is constant.

B) The car accelerates because it's going 20 mph.

C) Cars accelerate when they are in motion.

D) The car is accelerating because it's changing direction.