

Object Motion

Question 1 .

Henry wanted to know how fast his pet tortoise could walk.

First, he placed a nice leaf of lettuce at one end of his patio. Then, he placed his tortoise 5 meters away from the lettuce and recorded its position and time as it moved toward the lettuce.

The chart below shows Henry's observations.

Tortoise Distance and Time Results

Tortoise's Distance from Starting Point (in meters)	Elapsed Time (in seconds)
0 (at starting point)	0
1	12
2	24
3	36
4	48
5 (at lettuce)	60

What does Henry's data show about how fast the tortoise walked?

- A. The tortoise traveled 2 meters in 60 seconds.
- B. The tortoise traveled 3 meters in 60 seconds.
- C. The tortoise traveled 5 meters in 60 seconds.
- D. The tortoise traveled 4 meters in 60 seconds.

Question 2 .

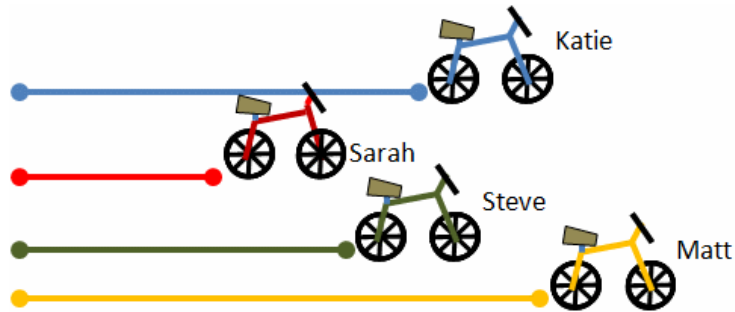
Charlie took 9 minutes to run a mile. His sister, Christina, took 12 minutes to run a mile. Which of the following is true?

- A. It cannot be determined who ran faster.
- B. Charlie and Christina ran at the same speed.
- C. Charlie ran faster than Christina.
- D. Christina ran faster than Charlie.

Question 3 .

Directions: Drag each tile to the correct box.

Katie, Matt, Sarah, and Steve were having a bicycle race. Five minutes after they started, everyone stopped because it began to storm. In the picture below, the length of each line stands for the distance traveled.



Put the riders in order from fastest to slowest.

Katie

Sarah

Steve

Matt

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Question 4 .

How can you tell if a car is moving?

- A. The car is changing its position.
- B. The car is in the driveway.
- C. The car has a motor.
- D. The car has wheels.

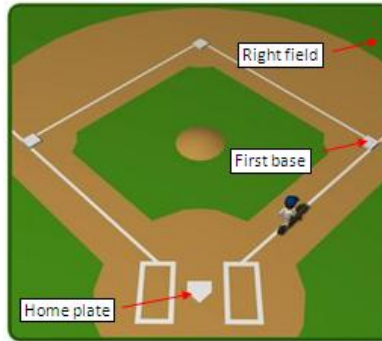
Question 5 .

Which measures a change in position over a period of time?

- A. force
- B. speed
- C. friction
- D. periodic motion

Question 6 .

Ming and his friends were playing baseball. Ming hit the ball only a few feet and then ran toward first base. The catcher, who was standing at home plate, picked up the ball and threw it to the player at first base.



After the catcher threw the ball, Ming and the ball were

- A. moving at exactly the same speed.
- B. moving in the same direction.
- C. moving toward the catcher.
- D. moving away from first base.

Question 7 .

Which means a change in position?

- A. force
- B. motion
- C. speed
- D. velocity

Question 8 .

When an object is in motion, its _____ is changing.

- A. mass
- B. position
- C. frame of reference
- D. weight

Question 9 .

Directions: Select the correct entry from the chart.

The table below lists four cars and their speeds. Which car will travel the farthest in two hours?

Car Speeds

Car Number	Speed
1	20 miles/hour
2	30 miles/hour
3	40 miles/hour
4	50 miles/hour

Question 10 .

Which of the following can be used to **measure** an object's motion?

- A. the time the object has been travelling
- B. the object's speed
- C. the distance the object has traveled
- D. all of these