

**1. What does speed measure?**

- a. How fast an object is going
- b. How far an object has traveled
- c. The rate at which an object slows down
- d. The rate at which an object speeds up

**2. Which of the following can be used to measure an object's speed?**

- a. Joules
- b. Newtons
- c. Miles per hour
- d. Kilometers per second per second

**3. What does acceleration measure?**

- a. How fast an object is going
- b. The fastest speed that an object can reach
- c. The force with which an object travels
- d. The rate at which speed or direction changes

**4. What is the difference between positive and negative acceleration?**

- a. Positive acceleration applies to fast objects; negative acceleration applies to slow objects.
- b. Positive acceleration occurs when objects speed up; negative acceleration occurs when objects slow down.
- c. Positive acceleration applies to objects traveling on earth; negative acceleration applies to objects traveling in space.
- d. Positive acceleration is expressed in meters per second; negative acceleration is expressed in kilometers per hour.

**5. Which of these is an example of acceleration?**

- a. A car coasts along at 40 km/hr
- b. A car is parked on the side of the road
- c. A speeding car brakes to a stop
- d. A car speeds along at 100 km/hr

**6. Which of these statements is true?**

- a. Acceleration in the direction of motion slows you down
- b. Acceleration in the direction of motion speeds you up
- c. Acceleration against the direction of motion has no effect on your speed
- d. Acceleration against the direction of motion speeds you up

**7. If you're sitting still in a chair reading this, what is your acceleration?**

- a. 0 m/s/s
- b. 1 m/s/s
- c. 2 m/s/s
- d. 3 m/s/s

**8. When would acceleration increase most?**

- a. Rolling along a flat plane
- b. Rolling down a steep hill
- c. Braking to a stop
- d. Rolling up a gently sloping hill

**9.  How does braking stop a bike?**

- a. It makes the wheels turn backwards a few times
- b. It pumps up the tires slightly so they cannot roll forward
- c. It causes a quick negative acceleration against the bike's forward motion
- d. It causes a quick positive acceleration against the bike's backward motion

**10. You're in a moving car. Which of the following changes would always mean there's been some acceleration?**

- a. A change in temperature
- b. A change in time
- c. A change in location
- d. A change in speed