

Name: _____
 Date: _____
 Class: _____

1. What will happen if you're in a car, and the driver slams on the brake?

- a. You will stop moving.
- b. You will continue moving forward.
- c. You will gradually slow down.
- d. You will speed up.

2. According to Newton's first law, an object in motion will stay in motion unless:

- a. An opposing force acts on it.
- b. It's in outer space.
- c. It stops.
- d. It remains at rest.

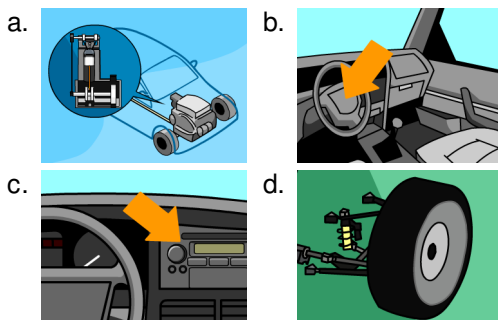
3. What might happen if you were in a braking car, and you weren't wearing your seat belt?

- a. You'd fly backward through the rear window.
- b. You'd be pressed backward into your seat.
- c. You'd fly forward through the windshield.
- d. You'd move sideways through the passenger door.

4. What causes a ball rolling across a rug to slow to a stop?

- a. The rug doesn't have enough force to hold the ball.
- b. Friction resists the ball's forward motion.
- c. The rug doesn't have enough momentum to keep the ball moving.
- d. The ball isn't moving fast enough.

5. What part(s) of a moving car experience the most friction? Choose the best answer.



6. Which of the following is an opinion about friction?

- a. It occurs any time two objects are in contact
- b. It always acts in the opposite direction as motion
- c. It slows objects down too much
- d. It prevents objects on earth from staying in motion forever

7. If an unbalanced force acts on an object, what will happen?

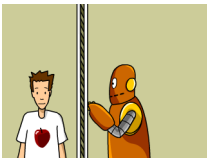
- a. It will not move at all.
- b. It will accelerate in the same direction as the force.
- c. It will accelerate in the opposite direction to the force.
- d. It will accelerate at an angle of 90 degrees to the force.

8. Ordinarily, gravity and the normal force counterbalance each other. In other words:

- a. They reinforce each other
- b. They have no effect on one another
- c. They act on you at all times
- d. They cancel each other out

9. What is net force?

- a. A force associated with the Internet
- b. The combined forces acting on a particular object
- c. The same thing as inertia
- d. The same thing as gravity

10.  According to Newton's third law, what happens when you push against a wall?

- a. The wall pushes back at you half as hard as you push against it.
- b. The wall doesn't resist at all.
- c. The wall pushes back at you with the same amount of force.
- d. The wall pushes back at you twice as hard as you push against it.