

Forces ▪ 10.3 Review and Reinforce**Newton's First and Second Laws****Understanding Main Ideas**

Answer the following question in the space provided.

1. Newton's second law of motion describes the relationship among force, mass, and acceleration. Write the equation.
- _____

Write the letter of the correct answer on the line at the left.

- _____ 2. If you increase the force on an object, its acceleration
a. decreases. b. stays the same.
c. also increases. d. stops.
- _____ 3. If you increase the mass on an object, its acceleration
a. decreases. b. stays the same.
c. also increases. d. stops.
- _____ 4. How much force is needed to accelerate a 3 kg skateboard at 5 m/s^2 ?
a. 8 N b. 0.6 N
c. 1.6 N d. 15 N
- _____ 5. A resistance to a change in motion is
a. acceleration. b. inertia.
c. gravity. d. velocity.
- _____ 6. The amount of inertia an object has depends on its
a. speed. b. volume.
c. mass. d. length.

Building Vocabulary Skills

Answer the following question in the space provided.

7. Define the term *inertia*.
- _____
- _____