

# Chapter Review

## USING KEY TERMS

Complete each of the following sentences by choosing the correct term from the word bank.

mass                      gravity                      friction                      weight  
speed                      velocity                      net force                      newton

- \_\_\_\_\_ opposes motion between surfaces that are touching.
- The \_\_\_\_\_ is the unit of force.
- \_\_\_\_\_ is determined by combining forces.
- Acceleration is the rate at which \_\_\_\_\_ changes.
- \_\_\_\_\_ is a measure of the gravitational force on an object.

## UNDERSTANDING KEY IDEAS

### Multiple Choice

- \_\_\_\_\_ 6. If a student rides her bicycle on a straight road and does not speed up or slow down, she is traveling with a
  - constant acceleration.
  - constant velocity.
  - positive acceleration.
  - negative acceleration.
- \_\_\_\_\_ 7. A force
  - is expressed in newtons.
  - can cause an object to speed up, slow down, or change direction.
  - is a push or a pull.
  - All of the above
- \_\_\_\_\_ 8. If you are in a spacecraft that has been launched into space, your weight would
  - increase because gravitational force is increasing.
  - increase because gravitational force is decreasing.
  - decrease because gravitational force is decreasing.
  - decrease because gravitational force is increasing.

**Chapter Review** *continued*

- \_\_\_\_\_ **9.** The gravitational force between 1 kg of lead and Earth is \_\_\_\_\_ the gravitational force between 1 kg of marshmallows and Earth.
- a.** greater than
  - b.** less than
  - c.** the same as
  - d.** None of the above
- \_\_\_\_\_ **10.** Which of the following is a measurement of velocity?
- a.** 16 m east
  - b.** 25 m/s<sup>2</sup>
  - c.** 55 m/h south
  - d.** 60 km/h

**Short Answer**

**11.** Describe the relationship between motion and a reference point.

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**12.** How is it possible to be accelerating and traveling at a constant speed?

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**13.** Explain the difference between mass and weight.

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