

NAME: \_\_\_\_\_

## **WHAT DID YOU LEARN ABOUT HOW ENERGY WORKS?**

Share what you know about the influence of energy on the objects in the world around us.

- 1** The energy stored in an object due to its position or condition is known as \_\_\_\_\_.

  - A** Kinetic energy
  - B** Potential energy
  - C** Friction
  - D** All of the above
  
- 2** Mass, gravity, and height are the variables that shape \_\_\_\_\_.

  - A** Speed
  - B** Friction
  - C** Kinetic energy
  - D** Potential energy
  
- 3** Increasing an object's \_\_\_\_\_ will increase its potential energy.

  - A** Girth
  - B** Force
  - C** Width
  - D** Mass
  
- 4** Imagine two objects of the same mass sitting on a bookshelf. If you take one of them and move it to a lower shelf, you have \_\_\_\_\_.

  - A** Increased its potential energy
  - B** Decreased its potential energy
  - C** Caused no change in its potential energy
  - D** Removed all energy from the object
  
- 5** The energy of an object in motion is known as \_\_\_\_\_.

  - A** Potential energy
  - B** Kinetic energy
  - C** Mechanical energy
  - D** Nuclear energy
  
- 6** Speed and \_\_\_\_\_ are the factors that affect kinetic energy.

  - A** Height
  - B** Gravity
  - C** Mass
  - D** Temperature
  
- 7** True or false? Imagine a delivery truck is driving down the road and suddenly it loses half of its load. The truck's kinetic energy has decreased.

**A** True                      **B** False
  
- 8** The resistance that occurs when one surface rubs against another is called \_\_\_\_\_.

  - A** Friction
  - B** Free energy
  - C** Gravity
  - D** Acceleration
  
- 9** A racecar's brake rotors often glow red because friction generates \_\_\_\_\_.

  - A** Kinetic energy
  - B** Heat
  - C** Potential energy
  - D** Acceleration
  
- 10** Knowing about potential and kinetic energy helps racecar engineers \_\_\_\_\_.

  - A** Understand how the two are related
  - B** Design cars that go faster
  - C** Reduce the effects of friction
  - D** All of the above