Name _____ Class _____ Date _____

What is Newton's first law of motion?

Lesson Review

Write *true* if the statement is true. If the statement is false, change the underlined term to make the statement true. Write your answers in the spaces provided.

_____ **1.** Inertia is the tendency of an object to stay at rest or in motion.

_____ **2.** Balanced forces are needed to move a pencil across a desk.

_____ **3.** A chair will move by itself because of its inertia.

_____ **4.** Newton's first law of motion explains how inertia affects moving objects.

_____ **5.** In a car accident, a passenger not wearing a seat belt may crash through a windshield because of his or her inertia.

_____ **6.** A balanced force does not change the velocity of an object.

_____ **7.** An object will remain at rest unless a balanced force acts upon it.

_____ **8.** In baseball, inertia makes it easy for a baseball player to make sharp turns at the bases.

Skill Challenge

Skills: *experimenting, analyzing*

Read the following description of an experiment. In the space provided, write a conclusion explaining the results of this experiment in terms of inertia.

> Shannon placed an uncooked egg on her desk. She gave the egg a gentle turn to start it spinning. She then stopped the egg from spinning for a moment, and quickly released it. When she released the egg, the egg began to spin again.

Conclusion: _____

_____

_____

_____

_____

_____

_____

Answer Key

What is Newton's first law of motion?

Lesson Review

1. true 2. Unbalanced 3. will not 4. true 5. true
6. true 7. an unbalanced 8. difficult

Skill Challenge

Because of inertia, the liquid inside the uncooked egg continued to spin when the egg was stopped for a moment. The moving liquid caused the egg to start spinning again when it was released.