



Name: _____
Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet Inertia

I. Directions: Read and analyze each question carefully. Choose the letter of the correct answer. Write your answer in the space provided.

- _____ 1. Which of the following does NOT involve the law of inertia?
 - A. accelerating car
 - B. box at rest
 - C. table with zero net force
 - D. ball with constant velocity
- _____ 2. Which of the following masses has the greatest inertia?
 - A. 2 kg
 - B. 3 kg
 - C. 4 kg
 - D. 5 kg
- _____ 3. Which of the following causes an object to change its state of motion?
 - A. friction
 - B. gravity
 - C. unbalanced force
 - D. contact force
- _____ 4. Which quantity is the measure of the object's mass?
 - A. acceleration
 - B. inertia
 - C. velocity
 - D. none of these
- _____ 5. If the same force is applied to an object with a large mass, what happens to the acceleration of the object?
 - A. It decreases.
 - B. It increases.
 - C. It remains the same.
 - D. It is equal to the mass.

II. Direction. Write **True** if the statement is correct and **False** if it is not.

- _____ 1. Inertia is the measure of an object's resistance to changes in its state of motion or rest.
- _____ 2. If acceleration is zero, then the forces are balanced
- _____ 3. The inertia of an object is measured by its acceleration
- _____ 4. Sir Isaac Newton formulated the law of inertia
- _____ 5. The law of inertia is also a cause-and-effect relationship between an observed change in motion and the presence of an unbalanced or net force.