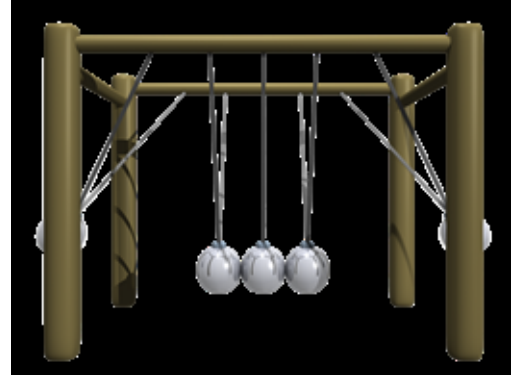


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Newton's Laws of Motion Challenge



Complete the activity.

- \_\_\_ 1. The rate velocity changes with time  
A. Gravity B. Mass C. Acceleration D. Velocity
- \_\_\_ 2. Every object persists in its state of rest or uniform motion in a straight line unless it is compelled to change that state by forces impressed on it.  
A. Velocity B. Speed C. Mass D. First Law of Motion
- \_\_\_ 3. Measure of gravitational attraction or force of gravity pulling one object toward the center of another object  
A. First Law of Motion B. Weight C. Acceleration D. Gravity
- \_\_\_ 4. For every action, there is an equal and opposite reaction  
A. Speed B. Mass C. Velocity D. Third Law of Motion
- \_\_\_ 5. Push or pull  
A. Force B. Second Law of Motion C. Motion D. Weight
- \_\_\_ 6. Speed of an object, but in a specific direction  
A. Gravity B. First Law of Motion C. Motion D. Velocity
- \_\_\_ 7. Distance traveled per unit time  
A. Motion B. Speed C. Force D. Weight
- \_\_\_ 8. The result of unbalanced forces  
A. Inertia B. Force C. Motion D. Mass
- \_\_\_ 9. Amount of matter in an object or a measure of the inertia of an object  
A. Mass B. Third Law of Motion C. First Law of Motion D. Weight
- \_\_\_ 10. Force is equal to the change in momentum ( $mV$ ) per change in time. For a constant mass, force equals mass times acceleration.  $F = m a$   
A. Inertia B. Motion C. Second Law of Motion D. Mass
- \_\_\_ 11. Resistance to change  
A. Force B. Inertia C. Second Law of Motion D. Gravity
- \_\_\_ 12. The force that pulls on objects and causes acceleration if the objects are not balanced by an opposing force  
A. Inertia B. Gravity C. First Law of Motion D. Third Law of Motion