

Name \_\_\_\_\_

## Factors Influencing Kinetic Energy: What Makes Things Move?

### Multiple Choice Questions

1. What is kinetic energy?
  - a) Energy of rest
  - b) Energy of motion
  - c) Energy of heat
  - d) Energy of light
  
2. How does mass affect an object's kinetic energy?
  - a) Mass has no impact on kinetic energy.
  - b) Greater mass increases kinetic energy.
  - c) Greater mass decreases kinetic energy.
  - d) Mass only affects potential energy.
  
3. What happens to an object's kinetic energy when it moves at a higher speed?
  - a) It decreases
  - b) It remains the same
  - c) It increases
  - d) It transforms into potential energy
  
4. Which of the following factors does NOT influence kinetic energy?
  - a) Mass
  - b) Speed
  - c) Direction of motion
  - d) Temperature
  
5. How is kinetic energy calculated?
  - a)  $KE = \text{mass} \times \text{speed}$
  - b)  $KE = \text{speed} / \text{mass}$
  - c)  $KE = 0.5 \times \text{mass} \times (\text{speed})^2$
  - d)  $KE = 2 \times \text{mass} \times \text{speed}$

