

Name _____

Springing into Action: Exploring Elastic Potential Energy

Multiple Choice Questions

1. What is elastic potential energy primarily associated with?
 - a) An object's height above the ground
 - b) An object's speed in motion
 - c) An object's deformation due to stretching or compression
 - d) An object's color

2. When is elastic potential energy present?
 - a) When an object is at rest
 - b) When an object is in motion
 - c) When an object is stretched or compressed
 - d) When an object is floating in water

3. Which law explains the relationship between the force applied to a spring and its deformation?
 - a) Newton's First Law
 - b) Hooke's Law
 - c) Kepler's Law
 - d) Archimedes' Law

4. In Hooke's Law ($F = kx$), what does "x" represent?
 - a) The force applied to the spring
 - b) The deformation of the spring
 - c) The time duration of the spring's deformation
 - d) The color of the spring

5. Where can we observe the presence of elastic potential energy in everyday life?
 - a) While driving a car
 - b) While swimming in a pool
 - c) In objects like trampolines and bows
 - d) When cooking in the kitchen

