

Name \_\_\_\_\_

## Springing into Action: Exploring Elastic Potential Energy

### Open-Ended Response Questions

1. Investigate and explain the safety precautions and engineering considerations when designing structures or equipment that rely on elastic potential energy, such as trampolines or bungee cords.
2. Imagine you are tasked with designing a device that maximizes the use of elastic potential energy in a practical way. Describe your design, its intended purpose, and how it harnesses elastic potential energy efficiently.
3. Reflect on the importance of understanding elastic potential energy in sports and recreational activities. How does this knowledge impact the design of sports equipment and the safety of athletes?
4. Analyze the real-world applications of elastic potential energy, such as in medical devices or industrial machinery, and discuss how it contributes to the efficiency and functionality of these applications.

