Name _____

Unlocking Energy: Understanding Potential and Kinetic Energy

Open-Ended Response Questions

1. Discuss the law of conservation of energy and explain how it relates to potential and kinetic energy. Provide examples to support your explanation.

2. Imagine you are on a playground swing. Explain how potential and kinetic energy change as you swing back and forth. Include details about the highest and lowest points of your swing.

3. Explore the practical applications of potential and kinetic energy in our lives, from transportation to renewable energy sources. Give specific examples of how these forms of energy are harnessed for various purposes.

4. Imagine you are designing a roller coaster. Describe how you would use potential and kinetic energy to create an exciting and safe ride. Include details about the coaster's features and design considerations.