Name _____

Exploring Kinetic Energy: Objects in Motion

Open-Ended Response Questions

1. Discuss the relationship between an object's mass and its kinetic energy. How does mass affect an object's ability to perform work when in motion?

2. Explore the importance of kinetic energy in transportation, citing examples such as cars, bicycles, and trains. How is kinetic energy harnessed for these modes of transport?

3. Imagine you are designing a new toy that showcases kinetic energy. Describe your toy, how it operates, and what makes it exciting for children to play with.

4. Investigate the concept of kinetic energy conversion. Provide an example where potential energy is transformed into kinetic energy and vice versa, explaining the process and energy changes involved.