Name _____

Energizing the World: Understanding Kinetic Energy

Open-Ended Response Questions

1. Imagine you have two identical cars, one moving at 30 miles per hour and the other at 60 miles per hour. Compare their kinetic energies and explain why one has more kinetic energy than the other.

2. Discuss real-world examples where kinetic energy is converted into other forms of energy, as explained by the law of conservation of energy.

3. Calculate the kinetic energy of a bicycle with a mass of 15 kilograms moving at a velocity of 8 meters per second. Show your work and include the unit of measurement.

4. Explore the importance of understanding kinetic energy in everyday life and various fields of science and technology. Provide examples to support your discussion.