

Checkout Questions

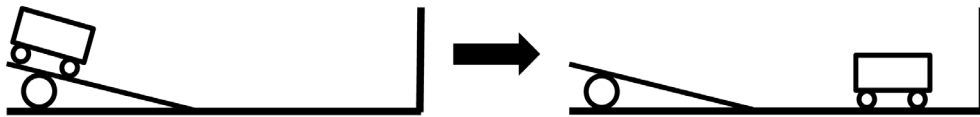
Lab 14. Potential Energy

How Can You Make an Action Figure Jump Higher?

1. What is potential energy?

2. What is kinetic energy?

3. A student is trying to get a cart to reach the wall at the end of the system pictured below. He uses a ramp to get the cart some energy to cover that distance. However, as shown below, using the ramp as constructed, he was not able to reach the wall.



a. What can the student change to get the cart to reach the wall?

b. How do you know?

4. The law of conservation of energy describes how energy exists in physical systems but not why it acts in certain ways.
- a. I agree with this statement.
 - b. I disagree with this statement.

Explain your answer, using an example from your investigation about potential energy.

5. Science only relies on experiments to understand the physical world.
- a. I agree with this statement.
 - b. I disagree with this statement.

Explain your answer, using an example from your investigation about potential energy.

6. Scientists often have to define the boundaries of physical systems and use them to create models to test ideas. Explain why defining systems and models is important in science, using an example from your investigation about potential energy.

7. It is important to track how energy flows into, out of, and within a system during an investigation. Explain why it is important to keep track of energy when studying a system, using an example from your investigation about potential energy.