SECTION 10.2 | ENERGY CAN CHANGE FORMS BUT IS NEVER LOST.

Reading Study Guide B

BIG IDEA Energy has different forms, but it is always conserved.

KEY CONCEPT Energy can change forms but is never lost.

Review

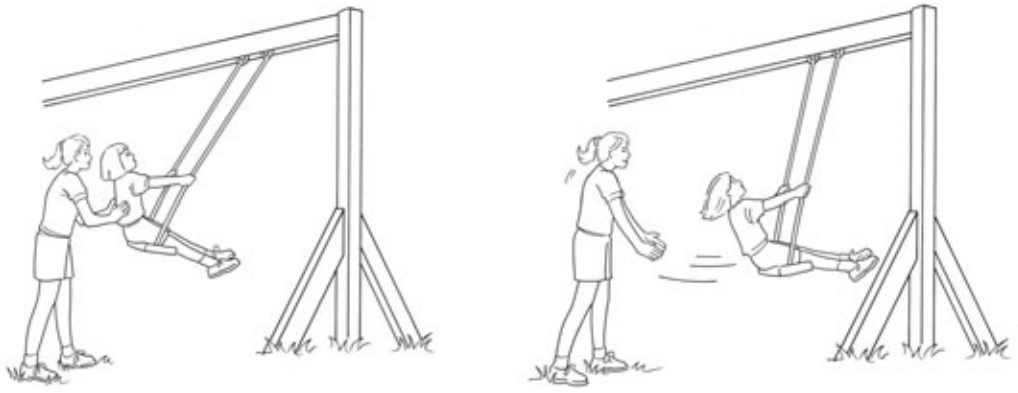
Energy has different forms.

Take Notes

I. Energy changes forms.

A. Conversions Between Potential Energy and Kinetic Energy

1. In which diagram does the child on the swing have the most potential energy due to gravity? Explain your answer.



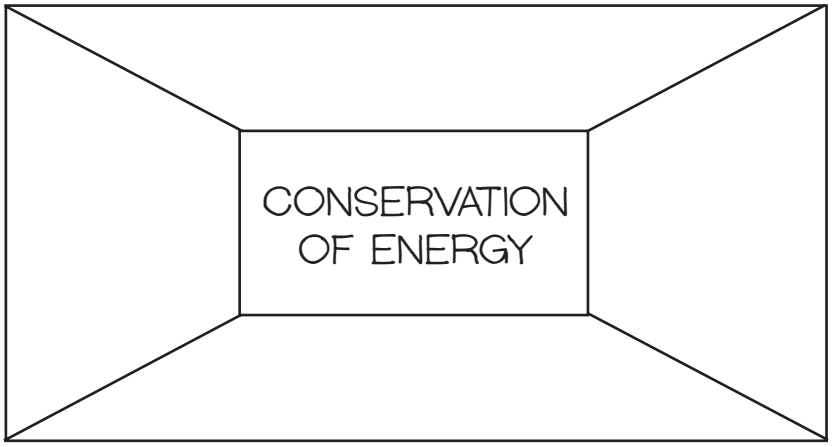
B. Using Energy Conversions

2. In the space below, draw a labeled diagram showing each of the four steps to convert water in a dam into electrical energy. Explain each step.

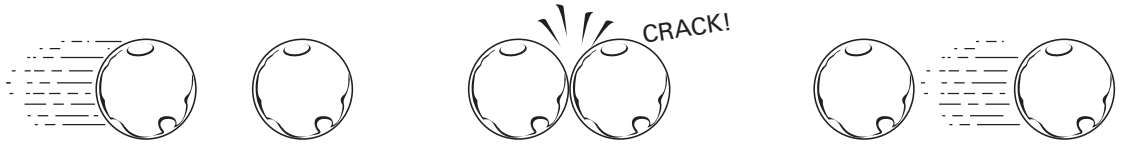
3. How is the Sun related to different sources of energy on Earth?

II. Energy is always conserved.

4. Fill in the frame game with a definition and characteristics for conservation of energy.



5. In the diagram below, one ball hits another. When the balls collide, they produce a loud sound. A small amount of heat is produced. The first ball stops moving, and the second ball starts moving. What has happened to the kinetic energy of the first ball?



III. Energy conversions may produce unwanted forms of energy.

6. What does energy efficiency mean? How does it relate to appliances in the home?