



Key Concept Builder

LESSON 2

Energy Transformations

Key Concept What is the law of conservation of energy?

Directions: On each line, write the term from the word bank that correctly completes each energy transformation. Some terms will be used more than once.

electrical energy

radiant energy

sound energy

thermal energy

1. making toast in a toaster

_____ changed to _____

2. watching television

_____ changed to _____ and _____

3. using a curling iron to curl hair

_____ changed to _____

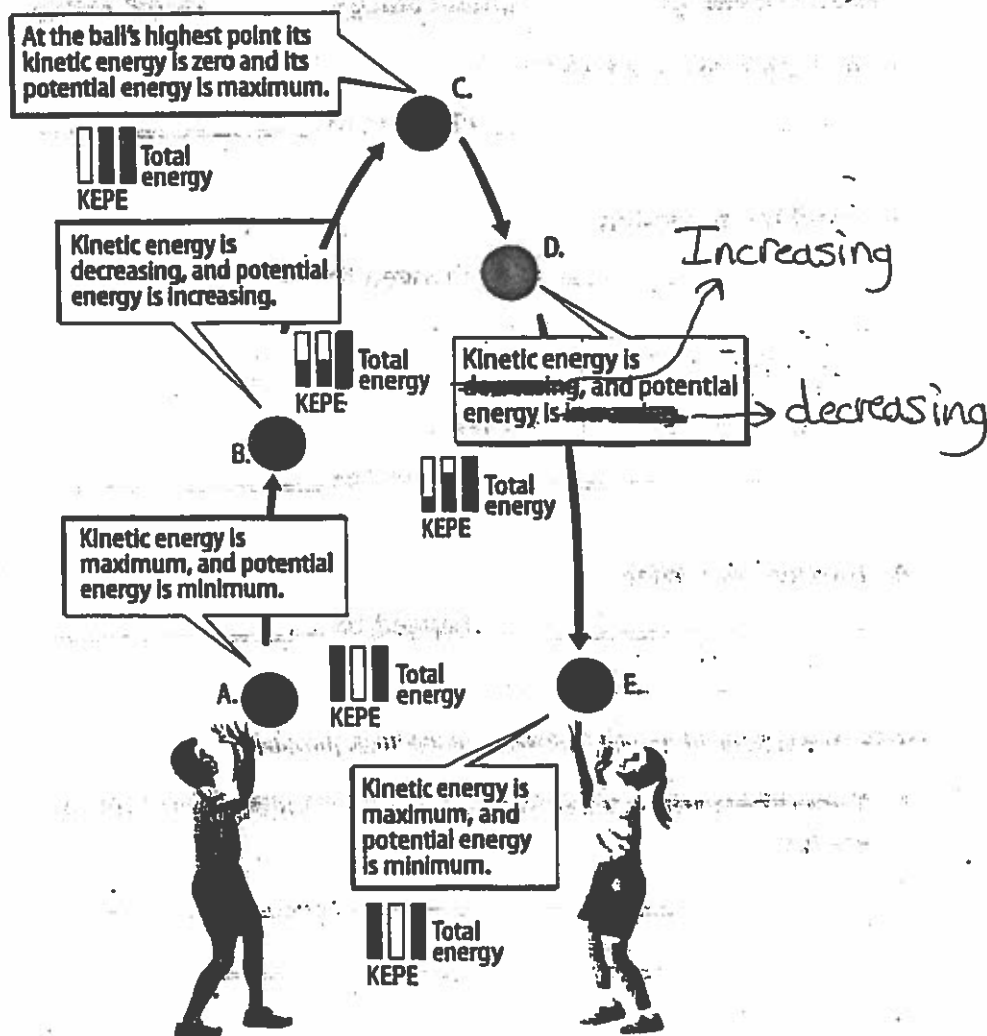
4. turning on a lamp

_____ changed to _____ and _____

Directions: Respond to each statement on the lines provided.

5. **Describe** another example of energy changing form that does not include electrical energy.

6. What are two statements you can make about energy based on the law of conservation of energy?

Key Concept Builder**LESSON 2****Energy Transformations****Key Concept** What is the law of conservation of energy?**Directions:** In the diagram below, a ball has just been thrown and is about to be caught. Use the diagram to answer each question.

1. At which stage is kinetic energy at the maximum value? _____
2. At which stage is potential energy at its minimum? _____
3. At which stage is the kinetic energy zero? _____
4. At which stage is the potential energy at the maximum value? _____
5. Which stage has increasing kinetic energy and decreasing potential energy? _____
6. Which stage has decreasing kinetic energy and increasing potential energy? _____