



# Energy: Forms and Transfer

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Grade: Grade 4

## Part A: Multiple Choice

Circle the best answer for each question.

1. A solar-powered lamp captures sunlight during the day and lights a room at night. What is the FIRST energy form in this system?

- A) Light energy from the sun
- B) Electrical energy in wires
- C) Heat in the panel
- D) Sound from the bulb

2. After the solar panel captures sunlight, what is the NEXT step in the system?

- A) Light becomes sound
- B) Light is stored as electrical energy in a battery
- C) Light becomes potential energy
- D) Light disappears completely

3. When the lamp turns on at night, what energy transformations happen at the bulb?

- A) Sound becomes light
- B) Electrical energy becomes light and heat
- C) Heat becomes electrical
- D) Potential becomes kinetic

4. Which best describes the full energy path in this system?

- A) Sound to electrical to light
- B) Light to electrical to light and heat
- C) Heat to motion to sound
- D) Potential to kinetic to potential

## Part B: Fill in the Blank

Write the correct answer on each line.

1. In a solar lamp system, the original source of energy is the \_\_\_\_\_.
2. The solar panel transforms light energy into \_\_\_\_\_ energy.
3. Electrical energy is \_\_\_\_\_ in a battery for use later when the sun is not shining.
4. When the bulb glows, electrical energy transforms into both light and \_\_\_\_\_ energy.
5. Energy in this system is never destroyed; it only \_\_\_\_\_ from one form to another.

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### Part B: Fill in the Blank

Write the correct answer on each line.

1. In a solar lamp system, the original source of energy is the sun.
2. The solar panel transforms light energy into electrical energy.
3. Electrical energy is stored in a battery for use later when the sun is not shining.
4. When the bulb glows, electrical energy transforms into both light and heat energy.
5. Energy in this system is never destroyed; it only changes from one form to another.