



Energy: Forms and Transfer

Name: _____

Date: _____

Grade: Grade 4

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: A cart resting at the top of a ramp has kinetic energy because it is up high.

Rewrite: _____

2. Fix the sentence: A ball flying through the air has potential energy from its motion.

Rewrite: _____

3. Fix the sentence: A book held high above the floor has no energy until you let it go.

Rewrite: _____

Part B: Fill in the Blank

Write the missing word or number on each line.

1. A cart rolling down a hill has _____ energy because it is moving.
2. A ball sitting on a high shelf has gravitational _____ energy.
3. When you stretch a rubber band, it stores _____ energy in its shape.
4. A swing moving back and forth shows _____ energy as it travels.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Explain the difference between kinetic and potential energy using a roller coaster as an example.

2. Why does a basketball held above your head have potential energy even when it is not moving?

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: A cart resting at the top of a ramp has kinetic energy because it is up high.

Rewrite: A cart resting at the top of a ramp has potential energy because it is up high.

2. Fix the sentence: A ball flying through the air has potential energy from its motion.

Rewrite: A ball flying through the air has kinetic energy from its motion.

3. Fix the sentence: A book held high above the floor has no energy until you let it go.

Rewrite: A book held high above the floor has potential energy even before you let it go.

Part B: Fill in the Blank

Write the missing word or number on each line.

1. A cart rolling down a hill has kinetic energy because it is moving.
2. A ball sitting on a high shelf has gravitational potential energy.
3. When you stretch a rubber band, it stores potential energy in its shape.
4. A swing moving back and forth shows kinetic energy as it travels.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Explain the difference between kinetic and potential energy using a roller coaster as an example.

A roller coaster has potential energy when it is at the top of a hill because the height stores energy. As it rolls down, that potential energy changes into kinetic energy of motion. The faster it moves, the more kinetic energy it has.

2. Why does a basketball held above your head have potential energy even when it is not moving?

The basketball has potential energy because it is raised up high. Gravity is pulling on it, so the height stores energy. If you let go, that stored energy will turn into kinetic energy as the ball falls down.
