



# Energy: Forms and Transfer

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

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

Grade: Grade 4

## Part A: Fill in the Blank

Write the missing word or number on each line.

1. When a moving cue ball hits a still eight ball, kinetic energy \_\_\_\_\_ from one ball to the other.
2. An object falling toward the ground gains kinetic energy because gravity changes its \_\_\_\_\_ energy into motion.
3. When a rock falls and hits soil, its kinetic energy spreads into the ground as a small amount of \_\_\_\_\_ and sound.
4. After two cars bump in a parking lot, some kinetic energy turns into \_\_\_\_\_ that you can hear as a crunch.
5. In a game of pool, a moving ball can \_\_\_\_\_ kinetic energy to several still balls in one collision.
6. When a hammer hits a nail, the kinetic energy of the hammer transfers into the nail as motion and a little \_\_\_\_\_.
7. A bowling ball rolling into pins shows how kinetic energy can \_\_\_\_\_ into many smaller objects at once.
8. When a book drops and hits the floor, its kinetic energy turns into sound, heat, and a tiny amount of \_\_\_\_\_ in the floor.
9. A swinging baseball bat transfers \_\_\_\_\_ energy into the ball, sending it flying across the field.

## Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

Cue ball strikes eight ball

→ \_\_\_\_\_

Kinetic shared between two balls

Apple falls and hits ground

→ \_\_\_\_\_

Kinetic becomes sound and heat in soil

**Part A: Fill in the Blank**

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Write the missing word or number on each line.

1. When a moving cue ball hits a still eight ball, kinetic energy transfers from one ball to the other.
2. An object falling toward the ground gains kinetic energy because gravity changes its potential energy into motion.
3. When a rock falls and hits soil, its kinetic energy spreads into the ground as a small amount of heat and sound.
4. After two cars bump in a parking lot, some kinetic energy turns into sound that you can hear as a crunch.
5. In a game of pool, a moving ball can transfer kinetic energy to several still balls in one collision.
6. When a hammer hits a nail, the kinetic energy of the hammer transfers into the nail as motion and a little heat .
7. A bowling ball rolling into pins shows how kinetic energy can transfer into many smaller objects at once.
8. When a book drops and hits the floor, its kinetic energy turns into sound, heat, and a tiny amount of vibration in the floor.
9. A swinging baseball bat transfers kinetic energy into the ball, sending it flying across the field.

**Part B: Matching**

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Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

Cue ball strikes eight ball	→	<u>Kinetic shared between two balls</u>	Kinetic shared between two balls
Apple falls and hits ground	→	<u>Kinetic becomes sound and heat in soil</u>	Kinetic becomes sound and heat in soil
Hammer drives a nail	→	<u>Kinetic transfers into nail and heat</u>	Kinetic transfers into nail and heat