



# 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 slow truck has more kinetic energy than a fast bicycle of the same weight.

Rewrite: \_\_\_\_\_

2. Fix the sentence:

A small marble moving fast has more kinetic energy than a heavy bowling ball moving the same speed.

Rewrite: \_\_\_\_\_

3. Fix the sentence:

Two cars moving at the same speed always have exactly the same kinetic energy no matter their size.

Rewrite: \_\_\_\_\_

## Part B: Fill in the Blank

Write the missing word or number on each line.

1. When a car speeds up, its kinetic energy \_\_\_\_\_.
2. A heavy bowling ball has more kinetic energy than a light tennis ball when both move at the same \_\_\_\_\_.
3. Doubling the speed of a moving object makes its kinetic energy \_\_\_\_\_ than before.
4. A still object that is not moving has zero \_\_\_\_\_ energy.

## Part C: Short Answer

Answer each question in one or two complete sentences.

1. Why does a fast soccer ball hurt more when it hits you than a slow one of the same size?

\_\_\_\_\_  
\_\_\_\_\_

2. Compare a moving truck and a moving bicycle traveling at the same speed. Which has more kinetic energy and why?

### Part A: Fix the Sentence

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

1. Fix the sentence: A slow truck has more kinetic energy than a fast bicycle of the same weight.

Rewrite: A fast bicycle has more kinetic energy than a slow truck of the same weight.

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2. Fix the sentence:

A small marble moving fast has more kinetic energy than a heavy bowling ball moving the same speed.

Rewrite: A heavy bowling ball moving fast has more kinetic energy than a small marble moving the same speed.

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3. Fix the sentence:

Two cars moving at the same speed always have exactly the same kinetic energy no matter their size.

Rewrite: Two cars moving at the same speed have different kinetic energy if their sizes are different.

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### Part B: Fill in the Blank

Write the missing word or number on each line.

1. When a car speeds up, its kinetic energy increases.
2. A heavy bowling ball has more kinetic energy than a light tennis ball when both move at the same speed.
3. Doubling the speed of a moving object makes its kinetic energy greater than before.
4. A still object that is not moving has zero kinetic energy.

### Part C: Short Answer

Answer each question in one or two complete sentences.

1. Why does a fast soccer ball hurt more when it hits you than a slow one of the same size?

*The fast soccer ball has more kinetic energy because speed makes kinetic energy bigger. When it hits you, more energy transfers to your body. The slow ball carries less energy, so it does not push as hard.*

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2. Compare a moving truck and a moving bicycle traveling at the same speed. Which has more kinetic
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