

Motion and Energy ▪ 9.4 Review and Reinforce**Motion and Energy****Understanding Main Ideas**

Study the illustration above and then read the following statements. If the statement is true, write **true**. If it is false, change the underlined word or words to make the statement true.

- _____ 1. An energy transformation is occurring only at point 3.
- _____ 2. In this example, the law of conservation of energy says that the ball never loses kinetic energy.
- _____ 3. As the ball rises from point 1 to point 3, it slows down.
- _____ 4. The ball has the most potential energy at point 3.
- _____ 5. The ball has the most kinetic energy at point 2.

Building Vocabulary

Match each term with its definition by writing the letter of the correct definition in the right column on the line beside the term in the left column.

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| _____ 6. energy | a. energy that depends on height |
| _____ 7. kinetic energy | b. ability to do work or cause change |
| _____ 8. potential energy | c. energy associated with objects that can be stretched or compressed |
| _____ 9. gravitational potential energy | d. an object's energy due to its motion |
| _____ 10. elastic potential energy | e. any type of stored energy due to an object's position or shape |