

BENCHMARK SC.5.P.10.2

Reporting Category	Physical Science
Standard	Big Idea 10 Forms of Energy
Benchmark	SC.5.P.10.2 Investigate and explain that energy has the ability to cause motion or create change. (Also assesses SC.3.P.10.2, SC.4.P.10.2, and SC.4.P.10.4.)
Also Assesses	<p>SC.3.P.10.2 Recognize that energy has the ability to cause motion or create change.</p> <p>SC.4.P.10.2 Investigate and describe that energy has the ability to cause motion or create change.</p> <p>SC.4.P.10.4 Describe how moving water and air are sources of energy and can be used to move things.</p>
Benchmark Clarifications	<p>Students will explain that energy has the ability to cause motion or create change.</p> <p>Students will identify and/or describe examples where energy has caused motion or created changes.</p> <p>Students will describe and/or explain how water and/or air are sources of energy.</p>
Content Limit	Items will not assess sound and chemical energy.
Stimulus Attributes	<p>Comparative words such as <i>greater than</i>, <i>less than</i>, <i>faster</i>, or <i>slower</i> should be used when describing motion.</p> <p>Scenarios will not use weathering and/or erosion as a context.</p>
Response Attributes	None specified
Prior Knowledge	Items may require the student to apply science knowledge described in the NGSSS from lower grades. This benchmark requires prerequisite knowledge from SC.K.P.10.1, SC.K.P.12.1, SC.1.P.12.1 and SC.K.P.13.1, SC.1.P.13.1, and SC.2.P.13.1.

Sample Item 16 SC.4.P.10.2

Frank uses a bowling ball to demonstrate how energy can cause changes. Which of the following actions would NOT demonstrate a change caused by Frank applying energy to the ball?

- ★ A. He holds the bowling ball in both hands.
- B. He spins the bowling ball with one hand.
- C. He rolls the bowling ball across the floor.
- D. He lifts the bowling ball to place it on a shelf.