Energy and Motion

Grade 4 Science Worksheet - Challenge Me

Name _____ Date _____

Read the investigation. Write the answer on the line.

READ THIS FIRST

A skateboard test

A class pushed a skateboard along a hallway at three speeds so that it hit a stack of cardboard boxes. They timed each speed with a stopwatch and measured how far the boxes were pushed.

Slow run: 12 cm
Medium run: 40 cm
Fast run: 95 cm

1. What did the tester change to give the skateboard different amounts of energy of motion?

_____

2. Which gives the skateboard more energy of motion: the slow run or the medium run? Write the word.

_____

3. Which result shows the most energy of motion passed to the boxes? Write the number.

_____

4. A faster skateboard hits the stack of boxes. Will the boxes be pushed farther or not as far? Write farther or not as far.

_____

5. When the skateboard hits the boxes, some of its energy of motion moves to the _____ . Write the word.

6. After the skateboard hits and stops, some of its energy turns into sound and heat. Did all of its energy go to the boxes? Write yes or no.

_____

7. The faster an object moves, the _____ energy of motion it has. Write more or less.

8. The tester gives the skateboard even more speed than in the fastest trial. Will the result be more than 95 cm or less than 95 cm? Write more or less.

_____

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Answer Key - Grade 4 Science Worksheet - Challenge Me

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1. What did the tester change to give the skateboard different amounts of energy of motion?

speed

2. Which gives the skateboard more energy of motion: the slow run or the medium run? Write the word.

medium

3. Which result shows the most energy of motion passed to the boxes? Write the number.

95

4. A faster skateboard hits the stack of boxes. Will the boxes be pushed farther or not as far? Write farther or not as far.

farther

5. When the skateboard hits the boxes, some of its energy of motion moves to the **boxes** . Write the word.

6. After the skateboard hits and stops, some of its energy turns into sound and heat. Did all of its energy go to the boxes? Write yes or no.

no

7. The faster an object moves, the **more** energy of motion it has. Write more or less.

8. The tester gives the skateboard even more speed than in the fastest trial. Will the result be more than 95 cm or less than 95 cm? Write more or less.

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