Energy and Motion

Grade 4 Science Worksheet - Challenge Me

Name _____ Date _____

Read the investigation. Write the answer on the line.

READ THIS FIRST

A ramp and block test

Sam let a toy car roll down a ramp and crash into a foam block. He used a low, a middle and a high ramp, and measured how far the block was pushed each time.

Low ramp: 6 cm
Middle ramp: 15 cm
High ramp: 28 cm

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

_____

2. Which gives the car more energy of motion: the low ramp or the middle ramp? Write the word.

_____

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

_____

4. A faster car hits the foam block. Will the block be pushed farther or not as far? Write farther or not as far.

_____

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

6. After the car hits and stops, some of its energy turns into sound and heat. Did all of its energy go to the block? 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 car even more speed than in the fastest trial. Will the result be more than 28 cm or less than 28 cm? Write more or less.

_____

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Answer Key - Grade 4 Science Worksheet - Challenge Me

Read the investigation. Write the answer on the line.

READ THIS FIRST

A ramp and block test

Sam let a toy car roll down a ramp and crash into a foam block. He used a low, a middle and a high ramp, and measured how far the block was pushed each time.

Low ramp: 6 cm
Middle ramp: 15 cm
High ramp: 28 cm

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

ramp height

2. Which gives the car more energy of motion: the low ramp or the middle ramp? Write the word.

middle

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

28

4. A faster car hits the foam block. Will the block be pushed farther or not as far? Write farther or not as far.

farther

5. When the car hits the block, some of its energy of motion moves to the block . Write the word.

6. After the car hits and stops, some of its energy turns into sound and heat. Did all of its energy go to the block? 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 car even more speed than in the fastest trial. Will the result be more than 28 cm or less than 28 cm? Write more or less.

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