Plan Fair Tests

Grade 4 Science Worksheet - Challenge Me

Name _____ Date _____

Read the investigation. Write the answer on the line.

READ THIS FIRST

A warm water test

Priya poured the same amount of hot water into three cups made of different materials. She put a lid on each cup. The water started at 60 degrees. She measured the water temperature 10 minutes later.

Foam cup: 54 degrees
Plastic cup: 49 degrees
Metal cup: 41 degrees

1. What was measured in each trial?

_____

2. Name one thing that stayed the same in every trial.

_____

3. How many more degrees was the biggest result than the smallest? Write the number.

_____

4. How many degrees did the water cool in the foam cup? Write the number.

_____

5. Which cup gave the second-biggest result?

_____

6. Priya leaves the lid off the metal cup but puts lids on the other cups. Is the test still fair? Write yes or no.

_____

7. What should the tester do to be more sure of the results? Write two or three words.

_____

8. Priya says, "Metal keeps water warm longest because it is strong." Which cup's result does not fit?

_____

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Answer Key - Grade 4 Science Worksheet - Challenge Me

Read the investigation. Write the answer on the line.

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Plastic cup: 49 degrees
Metal cup: 41 degrees

1. What was measured in each trial?

temperature

2. Name one thing that stayed the same in every trial.

amount of water

3. How many more degrees was the biggest result than the smallest? Write the number.

13

4. How many degrees did the water cool in the foam cup? Write the number.

6

5. Which cup gave the second-biggest result?

plastic

6. Priya leaves the lid off the metal cup but puts lids on the other cups. Is the test still fair? Write yes or no.

no

7. What should the tester do to be more sure of the results? Write two or three words.

repeat the test

8. Priya says, "Metal keeps water warm longest because it is strong." Which cup's result does not fit?

metal