



Coherence and Alignment Among Science Curriculum, Instruction, and Assessment (CASCIA) Project

Grade 5 Unit 1: Matter and Its Interactions

Task 2 Prompt 2 Scored and Annotated Anchor Set

July 2024

Grade 5 Unit 1: Matter and Its Interactions, Task 2 Prompt 2 Scored and Annotated Anchor Set was developed with funding from the U.S. Department of Education under the Competitive Grants for State Assessments Program CFDA 84.368A. The contents of this paper do not represent the policy of the U.S. Department of Education, and no assumption of endorsement by the Federal government should be made.

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CASCIA Grade 5 EOU Assessment 1 Task 2: What Just Happened?

Prompt 2 Score Point 2

Prompt 2 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2	No aspect of the response is correct	Response includes one (1) of the two (2) aspects	Response includes the following aspects: Container C has the highest rate of heat flow - Explains how the data supports the conclusion	NA	NA

Score Point 2 (2/2 aspects met)

- Identifies Container C as having the highest rate of heat flow.
- Explains the conclusion with relevant supporting data.

Table 1 describes the observable properties of the three different drinking containers **A**, **B**, and **C**. It also shows the property of heat flow as the amount of heat lost by the water in each drinking container after 20 minutes.

Table 1. Properties of Drinking Containers

Drinking Container	Property of Material	Amount of Heat Lost (in Degrees Fahrenheit)
A	- clear, blue color - stiff	41°F
B	- white color - bends slightly - goes back into shape without breaking	38°F
C	- bright silver - bendable - bending results in a dent	48°F

Materials with high heat flow lose heat much faster than materials with low heat flow.

Use **Table 1** to identify the drinking container with the **highest** rate of heat flow. Compare data from all three drinking containers to explain your answer.

The drinking container with the **highest** rate of heat flow is C.

I know this because It lost the most amount of heat

CASCIA Grade 5 EOU Assessment 1 Task 2: What Just Happened?

Prompt 2 Score Point 1

Prompt 2 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2	No aspect of the response is correct	Response includes one (1) of the two (2) aspects	Response includes the following aspects: Container C has the highest rate of heat flow - Explains how the data supports the conclusion	NA	NA

Score Point 1 (1/2 aspects met)

- Identifies Container C as having the highest rate of heat flow.
- Does **NOT** explain the conclusion with relevant supporting data.

NOTE: The student explains using data related to the property of the material which is not a conclusive indicator of heat loss.

Table 1 describes the observable properties of the three different drinking containers **A**, **B**, and **C**. It also shows the property of heat flow as the amount of heat lost by the water in each drinking container after 20 minutes.

Table 1. Properties of Drinking Containers

Drinking Container	Property of Material	Amount of Heat Lost (in Degrees Fahrenheit)
<i>plastic</i> A	- clear, blue color - stiff	41°F
<i>foam</i> B	- white color - bends slightly - goes back into shape without breaking	38°F
<i>Metal</i> C	- bright silver - bendable - bending results in a dent	48°F

Materials with high heat flow lose heat much faster than materials with low heat flow.

Use **Table 1** to identify the drinking container with the **highest** rate of heat flow. Compare data from all three drinking containers to explain your answer.

The drinking container with the **highest** rate of heat flow is C.

I know this because its bright silver bendable Bends results in a dent

CASCIA Grade 5 EOU Assessment 1 Task 2: What Just Happened?

Prompt 2 Score Point 0

Prompt 2 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2	No aspect of the response is correct	Response includes one (1) of the two (2) aspects	Response includes the following aspects: Container C has the highest rate of heat flow - Explains how the data supports the conclusion	NA	NA

Score Point 0 (0/2 aspects met)

- Does **NOT** identify Container C as having the highest rate of heat flow.
- Does **NOT** explain the conclusion with relevant supporting data.

NOTE: The student is misinterpreting the data in Table 1.

Table 1 describes the observable properties of the three different drinking containers A, B, and C. It also shows the property of heat flow as the amount of heat lost by the water in each drinking container after 20 minutes.

Table 1. Properties of Drinking Containers

Drinking Container	Property of Material	Amount of Heat Lost (in Degrees Fahrenheit)
A	- clear, blue color - stiff	41°F
B	- white color - bends slightly - goes back into shape without breaking	38°F
C	- bright silver - bendable - bending results in a dent	48°F

Materials with high heat flow lose heat much faster than materials with low heat flow.

Use Table 1 to identify the drinking container with the **highest** rate of heat flow. Compare data from all three drinking containers to explain your answer.

The drinking container with the **highest** rate of heat flow is B.

I know this because the rate of heat being lost is less than A and C which means the other materials will lose heat faster.