



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

Grade 5 Unit 1: Matter and Its Interactions

Task 3 Prompt 1 Scored and Annotated Anchor Set

August 2024

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CASCIA Grade 5 EOU Assessment 1 Task 3: Change or Not?

Prompt 1 Score Point 3

Prompt 1 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1	No aspect of the response is correct	Response includes one (1) of the three (3) aspects	Response includes two (2) of the three (3) aspects	Response includes the following aspects: Part A • Circles “A new substance <u>IS</u> formed.” AND Part B • Describes the solutions in Jars A and B as being clear • Describes the solution in Jar C as forming a solid or white solid	NA

Score Point 3 (3/3 aspects met)

- Part A
 - Circles “A new substance IS formed.”
- Part B
 - Describes Jar A and Jar B solutions as clear.
 - Describes Jar C as forming a white solid (i.e., The student response includes “. . . it was white, so a new substance was formed.”).

Prompt 1

Mr. Carter has a solution of water and soda ash in Jar A and a solution of water and Epsom salt in Jar B. Mr. Carter slowly combines the solutions from Jar A and Jar B into Jar C.

Table 1 shows the students’ record of their observations.

Table 1. Record of Observations

Solution in Jar A	Solution in Jar B	Solution in Jar C
After mixing the soda ash and water, the solution is clear.	After mixing the Epsom salt and water, the solution is clear.	After mixing the two clear solutions together, a white solid is seen on the bottom of the jar.

Part A.

Did mixing the two solutions together cause a new substance to form? Circle your answer.

A new substance IS formed.

A new substance IS NOT formed.

Part B.

Use Table 1 showing the students’ observations of Jar A, Jar B, and Jar C to support your answer to Part A.

In Jar A they mixed soda ash and water and the solution was clear. In Jar B they mixed Epsom salt and water and the solution was clear. In Jar C they mixed both of those together it was white, so a new substance was formed.

CASCIA Grade 5 EOU Assessment 1 Task 3: Change or Not?

Prompt 1 Score Point 2

Prompt 1 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1	No aspect of the response is correct	Response includes one (1) of the three (3) aspects	Response includes two (2) of the three (3) aspects	Response includes the following aspects: Part A • Circles “A new substance <u>IS</u> formed.” AND Part B • Describes the solutions in Jars A and B as being clear • Describes the solution in Jar C as forming a solid or white solid	NA

Score Point 2 (2/3 aspects met)

- Part A
 - Circles “A new substance IS formed.”
- Part B
 - Does **NOT** describe Jars A and B as being clear.
 - Describes a solution as forming a solid.

NOTE: The student does not identify Jar C but does state that when mixing the two liquids, “. . . got a solid . . . forming a precipitate . . .”

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Part A.
Did mixing the two solutions together cause a new substance to form? Circle your answer.

☒ A new substance IS formed.
 ☐ A new substance IS NOT formed.

Part B.
Use Table 1 showing the students' observations of Jar A, Jar B, and Jar C to support your answer to Part A.

She mixed two liquids together and got a solid, so that is evidence of forming a precipitate, which is a new substance forming.

CASCIA Grade 5 EOU Assessment 1 Task 3: Change or Not?

Prompt 1 Score Point 1

Prompt 1 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1	No aspect of the response is correct	Response includes one (1) of the three (3) aspects	Response includes two (2) of the three (3) aspects	Response includes the following aspects: Part A • Circles “A new substance <u>IS</u> formed.” AND Part B • Describes the solutions in Jars A and B as being clear • Describes the solution in Jar C as forming a solid or white solid	NA

Score Point 1 (1/3 aspects met)

- Part A
 - Circles “A new substance IS formed.”
- Part B
 - Does **NOT** describe Jars A and B as being clear.
 - Does **NOT** describe Jar C as forming a solid or white solid (i.e., The student response includes “. . . form something.”).

Prompt 1

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Part A.

Did mixing the two solutions together cause a new substance to form? Circle your answer.

A new substance IS formed.

A new substance IS NOT formed.

Part B.

Use Table 1 showing the students’ observations of Jar A, Jar B, and Jar C to support your answer to Part A.

yes all of those things mix and form something

CASCIA Grade 5 EOU Assessment 1 Task 3: Change or Not?

Prompt 1 Score Point 0

Prompt 1 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1	No aspect of the response is correct	Response includes one (1) of the three (3) aspects	Response includes two (2) of the three (3) aspects	Response includes the following aspects: Part A - Circles “A new substance <u>IS</u> formed.” AND Part B - Describes the solutions in Jars A and B as being clear - Describes the solution in Jar C as forming a solid or white solid	NA

Score Point 0 (0/3 aspects met)

- Part A
 - Does **NOT** circle either of the answer choices.
- Part B
 - Does **NOT** describe Jars A and B as being clear.
 - Does **NOT** describe Jar C as forming a solid or white solid (i.e., The student response includes “. . . it forms bubbles.”).

Prompt 1

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Part A.

Did mixing the two solutions together cause a new substance to form? Circle your answer.

A new substance IS formed.

A new substance IS NOT formed.

Part B.

Use Table 1 showing the students' observations of Jar A, Jar B, and Jar C to support your answer to Part A.

I forms a new substens because it forms bubbles.