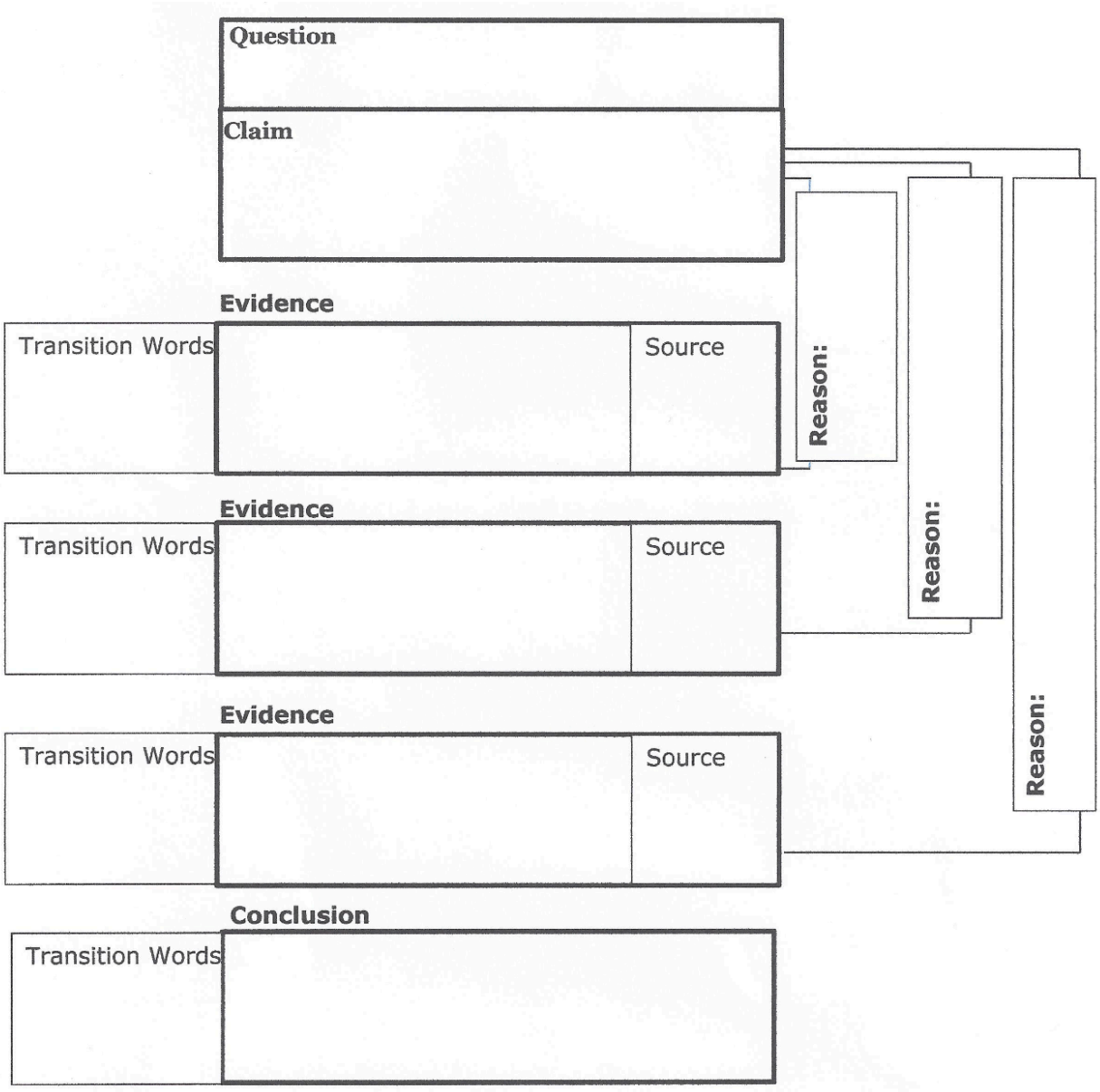
Name: Date: Period:

Penny Lab CER/Conclusion

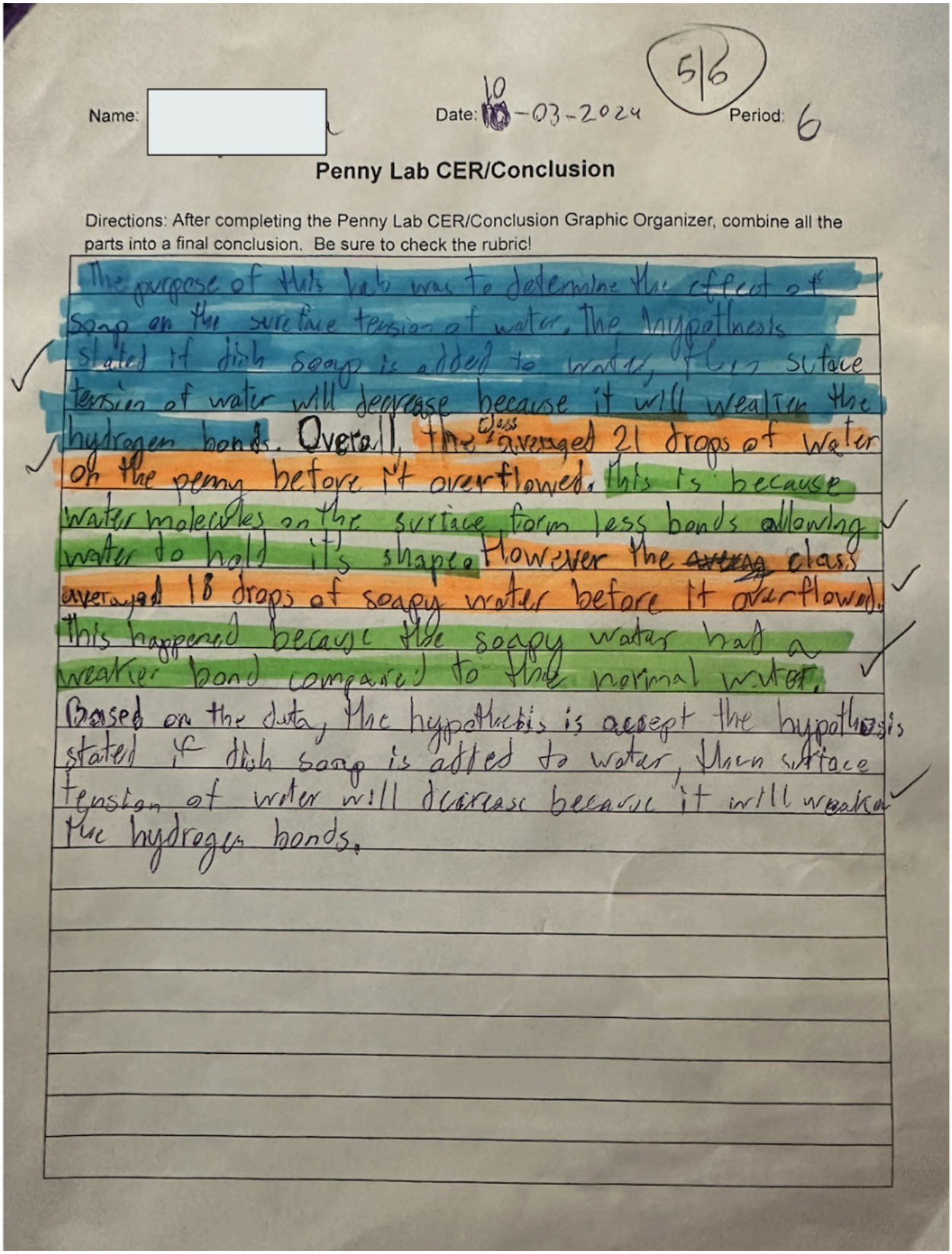
Directions: After completing the Penny Lab CER/Conclusion Graphic Organizer, combine all the parts into a final conclusion. Be sure to check the rubric!

	Emerging	Developing	Proficient	Advanced
CLAIM A conclusion that answers the question.	Does not answer the guiding question.	Answers the question with evidence without providing a clear claim.	Makes an accurate claim but includes some evidence and reasoning.	Makes an accurate and complete claim in one sentence.
EVIDENCE Scientific data (measurements, graphs, observations) that supports the claim.	Does not provide evidence OR does not provide evidence that supports this claim.	Includes inappropriate/ inaccurate evidence.	Provides accurate but insufficient evidence to support the claim.	Provides appropriate and sufficient evidence to support the claim.
REASONING A justification that links the claim with evidence. It shows why the data counts as evidence by using scientific concepts and principles.	Does not provide a reasoning OR reasoning is irrelevant or inaccurate	Attempts to provide reasoning Does not sufficiently explain how the evidence answers the guiding question using scientific principles.	Provides some reasoning that links the evidence to the claim. Includes some scientific principles but an insufficient amount.	Provides reasoning that links the evidence to the claim. Includes appropriate and sufficient scientific principles.
GRAMMAR & MECHANICS Uses proper capitalization, punctuation, and spelling. All responses are complete sentences. Does **not** use pronouns	Contains serious errors that interfere with the reader's understanding	Contains serious errors (>3) in grammar, punctuation, capitalization, and spelling, run on sentences and the use of pronouns	Contains 1 – 3 errors in grammar, punctuation, capitalization, and spelling, run-on sentences, and the use of pronouns	No errors in grammar, punctuation, capitalization, and spelling. Uses complete sentences.

Reviewed by _____


Question
Claim
Evidence
Transition Words
Source
Reason:
Evidence
Transition Words
Source
Reason:
Evidence
Transition Words
Source
Reason:
Conclusion
Transition Words

Student Samples:



Name:

Date: 10-03-2024

5/6

Period: 6

Penny Lab CER/Conclusion

Directions: After completing the Penny Lab CER/Conclusion Graphic Organizer, combine all the parts into a final conclusion. Be sure to check the rubric!

The purpose of this lab was to determine the effect of soap on the surface tension of water. The hypothesis stated if dish soap is added to water, then surface tension of water will decrease because it will weaken the hydrogen bonds. Overall, the class averaged 21 drops of water on the penny before it overflowed. This is because water molecules on the surface form less bonds allowing water to hold it's shape. However the ~~average~~ class averaged 18 drops of soapy water before it overflowed. This happened because the soapy water had a weaker bond compared to the normal water. Based on the data, the hypothesis is accept the hypothesis stated if dish soap is added to water, then surface tension of water will decrease because it will weaken the hydrogen bonds.

Name: [redacted] Date: 10/4/24 3.1/6 Period: 6

Penny Lab CER/Conclusion

Directions: After completing the Penny Lab CER/Conclusion Graphic Organizer, combine all the parts into a final conclusion. Be sure to check the rubric!

The Purpose of this lab was to determine the effect of Soap on the surface tension of water. The hypothesis stated, If ✓ dish Soap is added to water, then surface tension of water will decrease because it wouldn't have as much surface tension in the water. Overall, the class averaged ✓ 21 drops of water on the penny before it overflowed. ✓ This is because water molecules on the surface form less bonds allowing water to hold its shape. Based on the data, the hypothesis is accepted because by adding Soap to the water it decreased. And when adding the soap water to the penny it didn't have as much surface tension causing the penny to not hold the drops of water. Making the water weak.

Missing serand piece of evidence & reasoning