

Name \_\_\_\_\_

Date \_\_\_\_\_

Period \_\_\_\_\_

### Prove it!

1. After observing the Carbon Dioxide graph...

I notice \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I wonder \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

This reminds me of \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. Driving Question:

\_\_\_\_\_

\_\_\_\_\_

3. Now open the slide deck. Take notes on each piece of evidence that you evaluate.

a. Antarctica facts

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

b. Underwater Environment in Antarctica

\_\_\_\_\_

\_\_\_\_\_

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c. CO2 Graph

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d. Carbon Dioxide and temperature website

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e. Meet the Fish

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f. Energy budgets explained

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g. Dr. Todgham research set up:

h. Graph or survival rates:

What do you notice?

Patterns and trends?

i.

Trial(video) Number	Condition-	Heart Rate (Beats per minute)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

j.

4. State your claim(Your answer to the driving question)

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5. Organize your evidence-

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

6. Combine your Claim, Evidence and add your reasoning(explanation) in one organized paragraph.

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# Claim, Evidence, Reasoning Paragraph Rubric

<b>Conclusion</b> <i>Scientific Explanation</i>	<b>Claim</b> <i>Statement or conclusion that answers the original question/problem</i>	<b>0</b> Does not make a claim, or makes an inaccurate claim	<b>1</b> Makes an accurate but vague or incomplete claim	<b>2</b> Makes an accurate and complete claim
	<b>Evidence</b> <i>Scientific data that supports the claim. The data needs to be appropriate and sufficient to support the claim.</i>	<b>0</b> Does not provide evidence, or only provides inappropriate evidence (evidence that does not support the claim)	<b>1</b> Provides appropriate, but insufficient evidence to support claim. May include some inappropriate evidence.	<b>2</b> Provides appropriate and sufficient evidence to support claim.
	<b>Reasoning</b> <i>Justification that links the claim and evidence and includes appropriate and sufficient scientific principles to defend the claim and evidence</i>	<b>0</b> Does not provide reasoning, or only provides reasoning that does not link evidence to claim.	<b>2</b> Repeats evidence and <u>links</u> it to some scientific principles, but not sufficient.	<b>4</b> Provides accurate and complete reasoning that links evidence to claim. Includes appropriate and sufficient scientific principles.
		<b>0</b>	<b>2</b>	<b>4</b>

From ChemEd XChange: <https://www.chemedx.org/article/implementing-claim-evidence-reasoning-framework-chemistry-classroom>