Name: _____ Period: _____

Claim • Evidence • Reasoning
Task

Due: _____

Question:

<u>The Task:</u>

You will create a claim, provide evidence from data, and reasoning using scientific principles to answer the question proposed in the lab.

Claim: *What Do You Know?*
A statement or conclusion that answers the original question/problem

Evidence: *How Do You Know This?*
Scientific data that supports the claim. The data needs to be appropriate and sufficient to support the claim

Includes:
- Observations made from lab (Qualitative Data)
- Data from lab (Quantitative Data)

Reasoning: *Why Does Your Evidence Support Your Claim?*
A justification that connects the evidence to the claim. It shows why the data counts as evidence by using appropriate and sufficient scientific principles

- Connect the evidence presented to your claim.
- Be sure to base your reasoning on sound scientific principles.
- Address potential arguments against your claim.

Additional Requirements:
- Formatted properly
  - Includes:
    - 12 pt. Times New Roman Font
    - 1 inch margins
    - 1.5 Spacing
    - Proper spacing between headings

- Cite sources in MLA format
- Spelling and Grammar

Claim • Evidence • Reasoning
Rubric

Name: _____

	Category	Beginning (0-2 pts)	Approaching (4pts)	Meets (6pts)	Exceeds (8 pts)
Conclusion: *Scientific Explanation*	**Claim**: *What Do You Know?* **A statement or conclusion that answers the original question/problem**	Does not make a claim or makes an inaccurate claim or claim is not related to lab done in class Unable to locate claim	Claim is unclear, does not relate to lab done in class Claim is difficult to locate	Claim is clear but does not relate to lab done in class Claim appears at top of report	Claim is clear and specific while relating to lab done in class Claim appears at top of report
	Evidence: *How Do You Know That?* **Scientific data from lab that supports the claim. The data needs to be appropriate and sufficient to support the claim**	Does not provide (enough) evidence, **OR** only provides inappropriate evidence (Evidence that does not support claim) **OR** only provides reasoning and no evidence from data	Provides appropriate but insufficient evidence to support claim. May include some inappropriate evidence that does not support claim. Includes some reasoning instead of evidence.	Evidence may be missing a few details but is still persuasive. Missing either qualitative or quantitative data	Evidence is detailed and persuasive Includes: qualitative data and quantitative data
	Reasoning: *Why Does Your Evidence Support Your Claim?* **A justification that connects the evidence to the claim. It shows why the data counts as evidence by using appropriate and sufficient scientific principles**	Does not provide reasoning linking evidence to claim **OR** only provides reasoning that does not link evidence to claim Reasoning is not from a reliable source Does not explain **_why_** the data from the lab was received	Provides reasoning that links claim and evidence. Repeats the evidence and/ or includes some scientific principles, but not sufficient. Reasoning may not be adequate or scientifically sound Reasoning is from a questionable source	Provides accurate and complete reasoning that links evidence to claim. Reasoning is sound but may not elaborate on evidence adequately - starting to explain **_why_** the data was received Reasoning is from a reliable source	Explanations and organization of reasoning strongly enhances communication of evidence. Reasoning is based on clear and sound scientific principles. Fully explains **_why_** the data was received Reasoning is from a reputable source
	Other	No sources are not cited Not Formatted properly Many misspelled words, no proper grammar	1 source is cited **OR** Sources are cited, but not properly Some of the formatting is done properly, few parts missing. Some misspelled words, some grammar errors	2 sources are cited **OR** Sources are cited but not properly Proper formatting is there, but missing some pieces. Couple spelling and grammar errors	Three or more sources are cited in MLA Format Formatted properly Includes: 12 pt. Times New Roman Font, 1 inch margins, 1.5 Spacing, Proper spacing between headings. No spelling or grammar errors
	Total				

/32

Claim • Evidence • Reasoning
Sentence Starters

Claim	• It is my opinion that after doing the lab _____ • After doing the lab, I believe that _____
Evidence	• From the _____ activity, evidence to support my claim is _____ • One piece of evidence to support my claim is _____ from the _____ activity. • A second piece of evidence to support my claim is _____ from the _____ activity • Another piece of evidence from the ____ activity is _____. • Additionally, _____ • From the _____ activity, evidence to support my claim is _____ • Furthermore…. • Another piece of evidence is... • Additional evidence states that… • From the _____ activity, evidence to support my claim is _____ • A third piece of evidence to support my claim is ____ from the _____ activity
Reasoning *(How/Why does your evidence support your claim?)*	• Evidence that _____ is important because _____. • This shows that _____. • This evidence suggests that _____. • If _____, then _____ • This proves _____ because ____ • This supports my claim because… • This confirms that_____ because_____
Conclusion (Restate the Claim)	• In conclusion, _____ • In sum, _____ • Therefore, _____

Claim • Evidence • Reasoning
Graphic Organizer

Name:	Period:

Include the Lab Name and Question in Final Write-Up. You do not need a paragraph to include what you did, the control, independent variable, dependent variable, or constants. This is just to help you lay out the lab.	Lab: Question:	What did you do in this lab? Control: Independent Variable: Dependent Variable: Constants:
This should be a statement to answer the question based off of your data from the lab	Claim:	

Keep all evidence together in one paragraph	Evidence #1: Observations made from lab (Qualitative Data)
	Evidence #2: Data from lab (Quantitative Data)

Keep all reasoning together in one paragraph.	Reasoning # 1 should explain Evidence #1.	Reasoning #1: What do these observations mean? Why were these observations made (from a science point – not from your point of view) Reliable Source(s) #1: Make sure your sources are from groups that don't have a political, religious, or economic stake in this issue.
	Reasoning #2 should explain Evidence #2	Reasoning #2: What do these results mean? Why were these the results of this lab (from a science point – not from your point of view) Reliable Source(s) #2: Make sure your sources are from groups that don't have a political, religious, or economic stake in this issue.