Claim-Evidence-Reasoning (C-E-R) Graphic Organizer

| Graphic Organizer | | | | |
|-------------------|--|--|--|--|
| | ₹ Question: | | | |
| | | | | |
| | C | | | |
| | (Claim) | | | |
| | Write a statement that responds to the question. | | | |
| | E | | | |
| | (Evidence) | | | |
| | Provide scientific data to support your claim. Your evidence should be | | | |
| | appropriate (relevant) and sufficient (enough to convince someone that | | | |
| | your claim is correct). This can be bullet points instead of sentences. | | | |
| | (reasoning) | | | |
| | Use scientific principles and knowledge that you | | | |
| | have about the topic to explain <u>why</u> your evidence (data) supports your claim. | | | |
| | In other words, explain how your data proves | | | |



your point? (paragraph format)



Need help writing your REASONING?

Follow this path....

Step 1

• Re-state your claim.

Step 2

• Provide some scientific principles/knowledge that you already have about a topic.

Step 3

 Provide data from the activity (lab, gizmo, etc.) that connects to the scientific principles/knowledge you mentioned in Step 2. Show that your data can be used to prove your claim.

Step 4

 Wrap up your reasoning with a conclusion sentence that begins with a word such as "Therefore," "Hence," "Thus," "So," and re-state the claim.

Claim-Evidence-Reasoning Rubric

| | | 0 | 1 | 2 | 3 |
|--|--|--|---|--|--|
| | CLAIM A statement that answers the original question/problem. | Does not make a claim, or makes an inaccurate claim. | Makes an accurate but incomplete or vague claim. | Makes an accurate and complete claim. | X |
| | EVIDENCE Scientific data that supports the claim. Data needs to be appropriate and sufficient to support the claim. | Does not provide evidence, or only provides inappropriate evidence (evidence that does not support claim). | Provides appropriate but insufficient evidence to support claim. May include some inappropriate evidence. | Provides appropriate and sufficient evidence to support claim. | X |
| | REASONING Explain why your evidence supports your claim. This must include scientific principles/knowledge that you have about the topic to show why the data counts as evidence. | Does not provide reasoning or provides reasoning that does not link evidence to claim using scientific principles. | Provides reasoning that links claim to evidence, but does not include scientific principles. | Provides reasoning that links the claim and evidence using scientific principles, but not sufficient. | Provides reasoning that links evidence to claim. Includes appropriate and sufficient scientific principles. |

| | | | 7 |
|-------|----------|---------|---|
| Total | Possible | Points: | |

| Total Points | Earned: |
|---------------------|---------|
|---------------------|---------|

Grade: _____