Claim-Evidence-Reasoning Statements

Model and Practice Scientific Explanations

- Model the behaviors of a scientist and model how to analyze the data using a framework.
- Create opportunities for students to practice (possible bell work activity) by providing relevant practice data sets for students to analyze, make a claim and support with evidence OR by providing a claim and evidence statement and students describe the data set that the evidence would require.
- Make connections between everyday discourse and science discourse.

Claim-Evidence-Reasoning Statements

Focus Question

CLAIM: A statement that answers the original focus question or problem.
What conclusions can you make about your original focus question or problem?

EVIDENCE: Scientific data that supports the claim. The data needs to be appropriate and sufficient to support the claim.
What data or observations do you have to support your claim?

REASONING: A justification that links the claim and evidence and includes appropriate and sufficient principles to defend the claim and evidence.
How does the data you used for evidence support your claim?

CER: Evidence-Based Response

CER = Claim + Evidence + Reasoning

Answer questions like an expert by providing your claim, evidence, and reasoning.

Claim
Your answer drawn from your observations

Evidence
Information from a reliable source/text

Reasoning
Your explanation of how evidence supports claim

How to Use CER

I: Claim

State a direct response to the question/prompt.

Helpful Hints:

Use key words and ideas provided in the question or prompt as you write your claim.

Avoid using openings such as "I think" or "I believe".

II: Evidence

Provide reliable information that supports the claim.

Helpful Hints:

Here are suggested sentence starters:
In the text...
The text states...
According to the passage...
One example from the text...
The author states...
One piece of evidence is...

III: Reasoning

Explain how the evidence supports the claim.

Helpful Hints:

This portion must offer new insight, analysis, acknowledgement of connections between ideas, etc.

Here is a suggested sentence starter:
Based on this evidence, we must conclude (rephrase your claim) because (your analysis).

More Sentence Starters for Your Reasoning

The most logical conclusion we can draw from this evidence is that (rephrase your claim) because (your analysis).

This is significant because (explain why in a way that directly relates to the claim).

The fact that (rephrase your evidence) illustrates that (rephrase your claim) because (your analysis).

Considered together, the fact that (rephrase one piece of evidence) and that (rephrase more evidence), clearly demonstrate that (rephrase your claim) because (your analysis).

These facts work together to build a case that (rephrase claim) because (your analysis).

(Rephrase your evidence) matters because (give your reason). Thus, (rephrase your claim) must be true because (your analysis). This (illustration/graph/statistic/etc.) is irrefutable evidence that (rephrase claim) because (your analysis).

All of this proves that (rephrase your claim) because (your analysis).