

CER GRAPHIC ORGANIZER

Question:	
Claim:	Evidence:
Reasoning: The evidence shows: I know (relevant disciplinary ideas – i.e., scientific facts and concepts that help answer the question): I can apply (relevant crosscutting concepts – i.e., big ideas that connect the concepts and evidence): Therefore, I can conclude that:	

Claim-Evidence-Reasoning Rubric

	4 Advanced	3 Proficient	2 Progressing	1 Beginning
<p>Claim <i>A statement or conclusion that answers the original question/ problem.</i></p>	<ul style="list-style-type: none"> • Makes a claim that is relevant, accurate, and complete. • Contrasts the claim to an alternative claim. 	<p>Makes a claim that is...</p> <ul style="list-style-type: none"> • Relevant (Directly & clearly responds to question) • Accurate (Consistent with evidence and scientific principles) • Complete (Complete sentence that stands alone) 	<ul style="list-style-type: none"> • Makes a relevant and accurate but incomplete claim. 	<ul style="list-style-type: none"> • Does not make a claim, or makes an inaccurate or irrelevant claim.
<p>Evidence <i>Scientific data that supports the claim. The data needs to be appropriate and sufficient to support the claim.</i></p>	<ul style="list-style-type: none"> • Provides appropriate and sufficient evidence to support claim. • Discusses evidence that would support alternative claim. 	<p>Provides evidence to support the claim that is...</p> <ul style="list-style-type: none"> • Appropriate (Scientific data or information from observations, investigations, data analysis, or valid scientific sources) • Sufficient (Enough evidence to support the claim) 	<ul style="list-style-type: none"> • Provides appropriate, but insufficient evidence to support claim. May include some inappropriate evidence. 	<ul style="list-style-type: none"> • Does not provide evidence, or only provides inappropriate evidence (Evidence that does not support claim).
<p>Reasoning <i>A justification that connects the evidence to the claim. It shows why the data counts as evidence by using appropriate and sufficient scientific principles.</i></p>	<ul style="list-style-type: none"> • Provides reasoning that clearly connects the evidence to the claim. • Includes appropriate and sufficient scientific principles to explain why the evidence supports the claim. • Explains why the alternative claim is inaccurate. 	<p>Explanation provides reasoning that is...</p> <ul style="list-style-type: none"> • Clear (Clearly communicated and goes beyond repeating claim and evidence) • Connected (Explains why the evidence is important or why it is relevant) • Integrated (Links the evidence to an important disciplinary idea and crosscutting concept) 	<ul style="list-style-type: none"> • Provides reasoning that connects the evidence to the claim. May include some scientific principles or justification for why the evidence supports the claim, but not sufficient. 	<ul style="list-style-type: none"> • Does not provide reasoning, or only provides inappropriate reasoning.