CER Template with Rubric

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
Claim *A statement or conclusion that answers the original question/ problem.*	• Makes a claim that is relevant, accurate, and complete. • Contrasts the claim to an alternative claim.	Makes a claim that is… • Relevant (Directly & clearly responds to question) • Accurate (Consistent with evidence and scientific principles) • Complete (Complete sentence that stands alone)	• Makes a relevant and accurate but incomplete claim.	• Does not make a claim, or makes an inaccurate or irrelevant claim.
Evidence *Scientific data that supports the claim. The data needs to be appropriate and sufficient to support the claim.*	• Provides appropriate and sufficient evidence to support claim. • Discusses evidence that would support alternative claim.	Provides evidence to support the claim that is… • Appropriate (Scientific data or information from observations, investigations, data analysis, or valid scientific sources) • Sufficient (Enough evidence to support the claim)	• Provides appropriate, but insufficient evidence to support claim. May include some inappropriate evidence.	• Does not provide evidence, or only provides inappropriate evidence (Evidence that does not support claim).
Reasoning *A justification that connects the evidence to the claim. It shows why the data counts as evidence by using appropriate and sufficient scientific principles.*	• 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.	Explanation provides reasoning that is… • 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)	• 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.	• Does not provide reasoning, or only provides inappropriate reasoning.

References:

Graphic Organizer & Supporting Information

Claim-Evidence-Reasoning Mini-tasks in the LDC Curriculum Library

CSQT Framework, Downloaded from: http://www.teacherweb.com/de/christianahighschool/corsello/csqt_dstp_prep.ppt

Llewelyn, D., & Rajesh, H. (2011). Fostering argumentation skills: Doing what real scientists really do. *Science Scope, 35* (1), 22-28.

Sampson, V., and Schleigh, S. (2012). *Scientific Argumentation in Biology, 30 Classroom Activities*. Arlington, VA: NSTA Press

Rubric Adapted from

McNeill, K.L., and Krajcik, J. (2012). *Supporting grade 5-8 students in constructing explanations in science: The claim, evidence, and reasoning framework for talk and writing.* Boston: Pearson.

Rewitz, W. (2011). *Make Your Probe Explanation Cl-Ev-R.* Downloaded from http://www.uncoveringstudentideas.org/resources/tips-and-strategies.

Sampson, V., and Schleigh, S. (2012). *Scientific Argumentation in Biology, 30 Classroom Activities*. Arlington, VA: NSTA Press.