

Base Rubric for Claims, Evidence, Reasoning, Rebuttal

Taken From Supporting Grade 5-8 Students in Constructing Explanations in Science: The Claim, Evidence, and Reasoning Framework for Talk and Writing by Katherine McNeill and Joseph Krajcik (2012).

Component	Level		
	0	1	2
Claim A statement or conclusion that answers the question asked or the problem posed.	Does not make a claim, or makes an inaccurate claim.	Makes an accurate but incomplete claim.	Makes an accurate and complete claim.
Evidence Scientific data that supports the claim. The data needs to be appropriate and sufficient to support the claim.	Does not provide evidence, or only provides inappropriate evidence that does not support claim.	Provides appropriate, but insufficient evidence to support claim. May include some inappropriate evidence.	Provides <u>appropriate</u> and <u>sufficient</u> evidence to support claim.
Reasoning A justification that connects the evidence to the claim. It shows <i>why data counts as evidence</i> by using appropriate and sufficient scientific principles.	Does not provide reasoning, or only provides reasoning that does not link evidence to the claim.	Provides reasoning that links the claim and evidence. Repeats the evidence and/or includes some scientific principles, but not sufficient.	Provides reasoning that links evidence to claim. Includes <u>appropriate</u> and <u>sufficient</u> scientific principles.
Rebuttal Recognizes and describes alternative explanations, and provides counter evidence and reasoning for why the alternative explanation is not appropriate.	Does not recognize that an alternative explanation exists and does not provide a rebuttal or makes an inaccurate rebuttal.	Recognizes alternative explanations and provides appropriate but insufficient counter evidence and reasoning in making a rebuttal.	Recognizes alternative explanations and provides <u>appropriate</u> and <u>sufficient</u> counter evidence and reasoning when making rebuttals.