

Name _____

Science Explanation (CER) Student Rubric

	4 (Strong)	3 (Good)	2 (Fair)	1 (Weak)	0 (missing)
Claim (Thesis or Topic Sentence)	- The claim clearly and correctly answers the question. - Claim does not include explanation.	- The claim correctly answers the question but is not clear. - The claim includes a brief explanation.	- The claim is not completely correct. - The claim includes a lengthy explanation.	- The claim is incorrect or unclear. - The claim seems to ramble on.	No Claim
Evidence	- All evidence is relevant data or observations from an experiment or scientific investigation. - Experiment is briefly described to provide context. - Multiple pieces of evidence are used to back up the claim. - All data are specific and accurate.	- Most evidence is relevant data or observations from an experiment or scientific investigation. - Experiment is described, but in too much detail. - One piece of additional evidence is needed to back up the claim. - Data are accurate but not specific.	- Some evidence is relevant data or observations from an experiment or scientific investigation. - Experiment is briefly described, but not in enough detail. - More pieces of evidence are needed to back up the claim. - Data are specific but not accurate.	- Evidence is not relevant data or observations from an experiment or scientific investigation or not relevant. - Experiment is not described. - Many more pieces of evidence are needed to back up the claim. - Data are neither specific nor accurate.	No Evidence
Reasoning (Analysis)	- Explicit reasoning is provided that links all evidence to the claim. - Scientific principles are correctly explained to show how and why the evidence supports the claim. - The claim is clearly referenced throughout the reasoning.	- Reasoning links most pieces of evidence to the claim. - Scientific principles are correctly explained but need more detail. - The claim is referenced, but not throughout the reasoning.	- Reasoning links some evidence to the claim. - Scientific principles are explained but slightly incorrect. - The claim is referenced, but not clearly.	- Reasoning is weak and does not make a connection between the evidence and the claim. - Scientific principles are not explained or explained incorrectly. - The claim is not referenced.	No Reasoning
Overall	- All parts of the prompt are answered. - Science vocabulary words are used appropriately and correctly. - Appropriate Science tone (impersonal passive tone). - The organization of the response is logical (claim comes first, then evidence and reasoning). - Uses transitions to improve the flow of the writing. - There are no spelling, grammar, or punctuation issues that hinder meaning.	- Most parts of the prompt are answered. - Science vocabulary words are used, but slightly incorrectly. - Tone is mostly scientific. - The order of the response is mostly logical. - Uses some transitions to improve the flow of the writing. - The paragraph is mostly free of spelling, grammar, and punctuation problems.	- Some parts of the prompt are answered. - Few science vocabulary words are used correctly. - Tone is scientific except for pronouns like “we,” “you,” or “I.” - The order of the response is somewhat logical. - Uses few transitions to improve the flow of the writing. - The paragraph has several spelling, grammar, and punctuation problems.	- Little of the prompt is answered. - Science vocabulary words are not used or are used incorrectly. - Tone is unscientific. - The order of the response is not logical. - The flow of the writing is choppy and needs transitions. - Spelling and punctuation problems make it challenging to understand the paragraph.	The prompt is not answered. It is impossible to understand the response.