## Scientific Explanation Rubric Concept \_\_\_\_\_Lab Name \_\_\_\_\_

Component	Level			
Component	2 Proficient	1 Gaining Skill	0 Novice	Criteria
Claim –  A conclusion that answers the original question.	Makes an accurate and complete claim.	Does not make a claim, or makes an inaccurate claim.		States the answer to the lab question.
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.	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 the claim.)	<ul> <li>Uses data directly from the data table.</li> <li>Statistically analyzes data</li> <li>Uses labels and units of measurement</li> <li>Measurements are in metrics</li> </ul>
Reasoning –  A justification that links the claim to the evidence. It shows why the data counts as evidence by using appropriate and sufficient scientific principles.	Provides reasoning that links evidence to claim. Includes appropriate and sufficient scientific principles	Provides reasoning that links the claim and evidence. Repeats the evidence and/or includes some scientific principles, not sufficient.	Does not provide reasoning, or only provides reasoning that does not link evidence to claim	<ul> <li>Uses critical vocabulary</li> <li>Addresses the concept of the unit of study</li> <li>Links to the claim</li> <li>Concise and to the point.</li> </ul>