Eutrophication Lab Rubric

Name: _____

Criteria	Extending	Proficient	Developing	Emerging
Questioning and Predicting *Purpose & Hypothesis*	The reason for doing this lab is described with *detail* Develops an *insightful* hypothesis using cause and effect reasoning	The reason for doing this lab is *logically* described Develops a *focused* hypothesis using cause and effect reasoning	The reason for doing this lab is described *at a basic level* Develops a *predictable* hypothesis using *limited* cause and effect reasoning	The reason for doing this lab is *vague* *Irrelevant* hypothesis with no cause-and-effect reasoning
Rough Data & Observations	*Skillfully* makes and records accurate and precise observations Organizes data and observations to *purposefully* enhance understanding and clarity Details that might affect the data and conclusions are noted	*Effectively* makes and records observations *Systematically* organizes data and observation Attempts are made to note details that might affect the data and conclusions	Makes and records *appropriate* observations Organizes data and observations *simplistically*	Makes and records *ineffective* observations *Disorganized* data and observations
Processing & Analyzing Data & Information *Results & Summary*	Draws *compelling* conclusions consistent with data using data and calculations as evidence	Draws *meaningful* conclusions consistent with data using data and calculations as evidence	Draws *obvious* conclusions consistent with data, *lacks evidence*	Draws *trivial* conclusions inconsistent with data, *no evidence used*

Criteria	Extending	Proficient	Developing	Emerging
Evaluating *Discussion* *- Results* *- Sources of Error* *- Improvements*	*Efficiently* summarizes and analyzes the main findings of the experiment using data, trends, and calculations as evidence *Skillfully* evaluates experiment method and conditions for validity: sources of error and their impact on data and findings are discussed using cause and effect reasoning Makes *significant* suggestions for future changes and adaptations for improvement or future work based on the findings in the experiment using cause and effect reasoning	*Effectively* summarizes the main findings of the experiment using data, trends, and calculations as evidence *Systematically* evaluates experiment method and conditions for validity: sources of error and their impact on data and findings are discussed using cause and effect reasoning. Makes *relevant* suggestions for future changes and adaptations for improvement or future work based on the findings in the experiment using cause and effect reasoning	*A workable* summary of the main findings of the experiment, evidence is lacking *Simplistic* evaluation experiment method for sources of error attempting to use cause-and-effect reasoning Makes *predictable* suggestions for future changes and adaptations attempting to use cause and effect reasoning	*Ineffectively* summarizes the main findings of the experiment *Ineffectively* evaluates experiment method and conditions for validity Makes *unrelated* suggestions for future changes and adaptations for improvement or future work
Communication & Presentation *Cognitive task through entire lab report*	*Skillfully* communicates scientific ideas, claims, and information using scientific language and conventions Constructs evidence-based arguments using cause and effect reasoning "if..., then...because" *Persuasive* data and findings within the lab used as evidence	*Effectively* communicates scientific ideas, claims, and information using scientific language and conventions. Constructs evidence-based arguments using cause and effect reasoning "if..., then..." *Credible* data and findings within the lab used as evidence	*Appropriately* communicates scientific ideas, claims, and information using scientific language and conventions. Constructs *simplistic* Arguments and *attempts* to use data and findings within the lab used as evidence	*Ineffective* communicates scientific ideas, claims, and information using Inappropriate scientific language and conventions. *Unsupported* evidence-based arguments

Feedback: