Name_____ **Title of Lab**_____

NFHS Science Department Inquiry-Based Grading Rubric

	Self	Actual
PROBLEM DEFINITION		
• The problem and a testable hypothesis are stated clearly. Hypothesis reflects problem and rationale is provided.		4
• The problem and a testable hypothesis are stated clearly. Hypothesis reflects problem.		3
• The problem and a testable hypothesis are stated adequately. Hypothesis shows limited reflection of problem.		2
• The problem and a testable hypothesis are poorly stated.		1
• The statement of the problem is very limited or missing altogether.		0
VARIABLE IDENTIFICATION		
• Clear and accurate identification of independent, dependent, and constant variables.		3
• Clear and accurate identification of at least two variables.		2
• Clear and accurate identification of at least one variable.		1
• Identification of variables is missing or inaccurate.		0
EXPERIMENTAL DESIGN		
• The experimental design matches the stated problem. The procedures are clear, complete and replicable. A control is included when appropriate.		3
• The experimental design generally matches the stated problem. Procedures are generally complete. Minor modifications or clarifications may be needed. A control is not included when appropriate.		2
• The experimental design matches the stated problem to some extent. Procedures are incomplete. Major modifications or clarifications may be needed.		1
• The experimental design does not match the stated problem, is very incomplete or missing.		0
DATA PRESENTATION		
• Data are well organized and presented in an appropriate data table and graph including title, labels and units of measure.		3
• Data are organized and presented in an appropriate data table and graph minor omissions.		2
• Data table and graph are poorly organized or one has been omitted.		1
• Data are very poorly organized or presented in an inappropriate manner or missing altogether.		0
CONCLUSIONS		
• Conclusions are related to the stated problem and hypothesis and supported by data and scientific concepts.		4
• Conclusions are related to the stated problem and hypothesis and supported by data.		3
• Conclusions are generally related to the stated problem and hypothesis and supported by data to a limited extent. Minor errors in interpretation of results may be present.		2
• Conclusions are related to the stated problem and poorly supported by data to a limited extent. Major errors in interpretation of results may be present.		1
• Conclusions are not related to the stated problem, not supported by data or are missing.		0
VALIDITY		
• Validity is discussed in terms of what was done and could have been done to make the experiment more valid.		3
• Discussion of validity of conclusion is limited.		2
• There is little discussion of validity of conclusions.		1
• There is no discussion of validity of conclusions.		0
REAL-LIFE APPLICATION		
• Connection is made and clearly explained		3
• Connection is made but explanation is limited.		2
• There is little discussion of connection and/or explanation.		1
• There is no Real-Life connection made.		0
QUESTIONS AND CALCULATIONS (Total possible points:_____)		

Total = _____