

## The Anatomy of an Experiment Rubric

Requirements	Points	Earned Points
<b>Background/Question/Hypothesis</b>		
Question/problem statement is completely and accurately stated.	2	
Experimental hypothesis is written as an “if” and “then” statement, clearly shows relationship between variables, and is testable.	2	
Three (3) documented sources are provided in background as support for hypothesis.	4	
<b>Procedure</b>		
Manipulated and responding variables, constants, experimental and control groups are accurately identified.	4	
Complete, detailed list of materials.	2	
Detailed, step-by-step procedure that includes multiple trials and explicitly states to “record” specific data.	4	
Safety concerns and possible sources of error addressed.	2	
<b>Data</b>		
Observations are organized and recorded. Data are recorded in tables. Tables are complete, appropriate, and clearly labeled (inc. units).	4	
Data are analyzed using a graph (if appropriate) <b>and</b> additional written interpretation. NO ATTEMPT is made to explain WHY (as in a conclusion).	4	
<b>Conclusion</b>		
Conclusion states whether observations support or reject hypothesis.	2	
Relationship between variables is <u>supported by relevant data</u> .	2	
Experimental errors indicated and effects are discussed.	2	
Refers back to sources discussed in background	2	
Suggests relevant and reasonable future research.	2	
Report is neat and legible with no spelling or grammar mistakes.	2	
Raw Score	40	
Final Score (÷ Weight factor of _____)		