Critoria	Level			
	$0 \mathrm{pt}$	Poor (1 pt)	Fair (2 pts)	Good (3 pts)
Section 1: What were you trying to explain and why?				
1. The author describes the under- lying concept and its importance in science.	No discussion of concept.	The concept is defined, but not explored in terms of its meaning within the scientific community.	The concept is defined and dis- cussed briefly in terms of its meaning within the scientific community.	The concept is defined and fully dis- cussed in terms of its meaning within the scientific community.
2. The author clearly relates the re- search question and goals of the investigation to the concept.	Research ques- tion is not stated.	The specific problem under inves- tigation is stated, but not related to the concept.	The specific problem under inves- tigation is stated and briefly dis- cussed in terms of the concept.	The specific problem under investiga- tion is discussed; its relationship to the concept is discussed in detail.
Section 2: How did you go about	your work and w			
1. The author provides an adequate description of how the investi- gation was done, including mea- sures taken to reduce error.	not described.	The author provides partial de- scription of the method.	The author provides adequate de- scription of how the investigation was done but insufficient informa- tion on techniques employed to reduce error.	The author provides adequate de- scription of how the investigation was done including appropriate methods to reduce experimental error.
2. The author provides a meaningful rationale for why the experiment	No rationale for the method.	The author provides minimal or partial rationale for the experi-	The author provides good ratio- nale for some aspects of the ex-	The author provides rationale for all aspects of the experiment.
Section 2. The Angument		ment.	perment but not an.	
1. The author provides a sufficient answer to the research question.	Question not an- swered.	Brief answer to the question that lacks detail.	Detailed answer to the question.	Detailed answer to the question that also relates the answer to the concept.
2. The author provides valid and reliable data and presents the data in an organized format.	No data pre- sented.	The author presents insufficient data or data is unorganized.	The author presents sufficient data in an organized chart but la- bels, units, and/or significant fig- ures are missing or incorrect.	The author presents sufficient data in an organized chart with correct la- bels, units, and significant figures.
3. The author uses the experimen- tal data as evidence to support his/her claim.	Does not sup- port claim with evidence.	The author provides support but used evidence based on unreliable or invalid data.	The author provides support for all of his/her ideas using valid and reliable data BUT uses only some of data.	The author provides support for all of his/her ideas using valid and reliable data AND uses most of the data.
4. The author provides a rationale that explains why the evidence is relevant and why the evidence supports the claim.	No rationale provided.	The rationale does not support the claim.	The author only explains why the evidence is relevant OR why the evidence supports the claim, but not both.	The author explains why the evidence is relevant AND why the evidence supports the claim.
5. The author's claim is consistent with known values and/or with other groups in his/her lab sec- tion.	No comparison and conclusion was inaccurate.	The conclusion is correct, but no comparison with other groups was included.	The conclusion is partially cor- rect, but comparison with other groups was used to explain error in values.	The conclusion is correct and the val- ues were compared in a meaning- ful way with the values of the other groups or with known values.
1 Organization and Sontango Flu Not Applicable The writing lacks scherence and The evenall structure of the new The evening tion of the multime on				
1. Organization and Sentence Flu- ency. The writing has a sense of purpose and structure.	Not Applicable	organization. The writing is diffi- cult to follow. Sentences tend to be incomplete, rambling, or very awkward.	The overall structure of the re- port is inconsistent or skele- tal. Occasional awkward sen- tence constructions may force the reader to slow down or reread.	hances the central idea and its devel- opment. The writing has an easy flow and rhythm.
2. Word Choice. The author used appropriate words to express his or her ideas.	Not Applicable	The writing includes many mis- used words and/or phrases not used in scientific report, such as "it is proven" or "it's correct."	The writing includes a variety of generic words with no inappropri- ate phrases. One to two instances of misused terminology.	The writing includes a broad range of words that have been carefully cho- sen. All terminology is correctly used.
3. Conventions. The author used appropriate grammar, spelling, punctuation, paragraphing, capi- talization and formatting (super- scripts and subscripts).	Not Applicable	The author made multiple tech- nical writing errors.	The author made two or three technical writing errors.	The author used appropriate gram- mar, spelling, punctuation, para- graphing, capitalization and format- ting.