

Project name: _____ School: _____ Group members' names: _____

**Paterson Public Schools STEM Expo
Scientific Inquiry (8th Grade)**

	Attempted (1)	Proficient (2)	Well done (3)	Score (0 if missing)
Topic Selection/ Abstract	The idea is very typical, lacking originality. The question is not provocative or striving for new knowledge. Students do not seem excited by topic.	The experiment is based on a typical experiment, but alters it or modifies in a somewhat original way.	The experiment is original. It is unique and very thoughtful. Students seem genuinely excited and interested in topic.	
Introduction Info./ Research	The topic is not researched. Students know little about the area of study.	The topic is researched, students know some basic information about it.	Background information is fully researched and students seem to know a lot about their topic.	
Methods/ Procedure	The experiment was done only once or there are only one or two members of the experimental group, making the accuracy of the results highly questionable. There is no evidence of controls. The procedure is confusing or lacking.	The experiment was done more than once and/or there are more than 2 members of the experimental group; the accuracy of the results is probable, but not fully proven. At least one control is mentioned. The procedure is mostly complete but some steps are confusing or missing.	The experiment was done repeatedly (many, many, many times) to ensure as much accuracy as reasonably possible. The controls are clearly noted. The procedure is complete and clear.	
Results/ Data (Tables & graphs)	There is one chart or graph, though it is not easily understood because of lack of labeling, sloppiness, or other oversights. Data is not organized and is confusing.	There are one or two tables or charts that are labeled neatly and sufficiently display the data. Data is organized.	There are two or more graphs or charts that are easily read and understood and actually add insight into the results of the experiments. Data is organized and very easy to understand.	
Discussion/ Analysis	The results are merely displayed with very little analysis or insight. Does not attempt to explain the meaning of the data, does not try to generalize results, does not question veracity of the results or the methods of data collection.	Attempts to explain significance of results. Might discuss some, but not all of the following: meaning of results, generalizes results, veracity of results, methods of data collection, further research, etc.	Gives very thoughtful and insightful analysis into the meaning of the results. Generalizes the meaning of the experiment. Discusses any abnormalities in the data or factors in the data collection. Proposes future experiments.	
Display	Display board is confusing or lacking in content. Might not be labeled, might be sloppy, might be missing sections of the lab report, or grammar errors.	Display board is functional. It displays all segments of the lab report neatly.	Not only does display board present all information easily and neatly, but has a higher artistic value. Much time and care is evident.	
Elocution/ Poise	Student's/group's lack of elocution skills impede understanding of project: poor oratory skills (mumbling, talking softly), lack of eye contact, fidgeting, flippancy, lack of preparation /organization etc.	Student/group succeeds in presenting all information, though presentation skills need improvement (eye contact, fidgeting, mumbling, flippancy, etc.). Might lack enthusiasm or confidence.	Student/group presents all information confidently and assuredly. There is evidence that the group has planned who will say what (if applicable). Student(s) displays enthusiasm and interest in the project. Presentation skills are nearly flawless.	

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