**INVESTIGATION PRESENTATION RUBRIC**

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| . | Beginning1 | Developing2 | Accomplished3 | Excellent4 | Score |
| Project Organization | Disorganized, no understanding of how to proceed from one step to the next | Lacks organization, constantly checking with teacher and/or other groups on how to proceed in each step | Organized, requires minimal guidance on how to proceed on each step of the project. | Excellent organizational skills, proceeded through the project without needing guidance. | . |
| Guiding Question | Does not know how to form a research question and requires continual guidance | Is able to form a research question with guidance throughout the process | Efficient at forming a research question, may require some guidance on making the question narrow enough for investigation | Excellent ability to form a research question without needing guidance. | . |
| Hypothesis | Is unable or unwilling to form a testable hypothesis without continuous guidance | Is able to to form a testable hypothesis with some guidances; and included in notebook | Proficient at forming a testable hypothesis with minimal guidance; and included in notebook | Excellent at forming a testable hypothesis without guidance; and included in notebook | . |
| Materials and Experimental Procedure | Provides no description of the steps of testing procedure in notebook and requires intensive assistance throughout the procedure writing process | Includes a limited description of testing steps in the notebook; can complete the process with guidance | Includes a complete description of testing steps in the notebook; can complete the process with minimal guidance | Includes a complete description of testing steps in the notebook; can complete the process without any guidance | . |
| Selection of Variables and Data Collection | Unable to determine the appropriate variables for measurement without continuous assistance; is unable to accurately record experimental data without assistance | Able to determine the appropriate variables for measurement with some assistance; is able to accurately record experimental data with minimal assistance | Determines the appropriate variables for measurement with minimal assistance; is able to accurately record experimental data without assistance | Determines the appropriate variables for measurement without assistance; is able to accurately record experimental data without assistance | . |
| Data Analysis and Conclusions | Provided no analysis of the data and had very weak conclusions | Data analysis was limited and did not address validity of data, provided conclusions on the inquiry | Data analysis was well-done but did not fully address error; good conclusion on the inquiry and provided applications for future experiments | Data analysis well-done and addresses source of error; excellent conclusion and provided application for future experients | . |
| Presentation Quality | Demonstration is poor: statement of question and/or hypothesis not given; speakers unprepared and unsure of testing process; showed no evidence of practice; no notes for the presentation | Demonstration is fair-to-good: statement of question and/or hypothesis incomplete or unclear; speakers somewhat prepared and confident of testing process; showed some evidence of practice; few notes for the presentation | Demonstration is good-to-very good: statement of question and or hypothesis complete; speakers were prepared and confident of testing process; showed evidence of practice; good notes for the presentation | Demonstration is very good-to- excellent: statement of question and hypothesis complete; speakers were prepared and confident of testing process; showed evidence of practice; excellent notes for the presentation | . |