Sample Product Rubric
This rubric can be found in the *Assessing Projects* library.

	4	3	2	1
Research Problem	I describe my research question clearly, completely and in great detail. I make pertinent predictions that can be researched and tested. My hypothesis is based on conjectures with conditions.	I describe my research question clearly. I make reasonable predictions that can be researched and tested. My hypothesis is based on conjectures with some conditions.	I describe my research question but some elements are missing. My predictions may be difficult to research or test. My hypothesis lacks some conjectures or conditions.	My research question is missing, flawed or incompletely described. My predictions are not testable. My hypothesis is missing or not based on conjectures.
Information Gathering	My collection of relevant scientific background information focuses on the research question. My search of the literature includes many diverse, relevant sources: books, magazines, Internet, interviews. My gathered information has been described completely, with	My collection of scientific background information is related to the research question. My search of the literature includes an adequate amount of relevant, diverse sources. My gathered information has been described completely, with only minor content errors,	My collection of scientific background information includes some information that is not relevant to the research question. My search of the literature includes some diversity of sources and/or the quantity is minimal. My gathered information has not been	My collection of scientific background information is not relevant to the research question. My search of literature is limited by lack of diversity and quantity of sources. I provide a limited description of the background

	no content errors, misstatements of fact, or misconceptions.	misstatements of fact, or misconceptions.	described completely or there are major content errors, misstatements of fact, or misconceptions.	information.
Experimental Investigation	My investigation is a well-constructed test of the hypothesis and includes a detailed experiment that answers the research question completely. I include a clear step-by-step description of the experimental procedures: • identify, address, and control all relevant independent and dependent variables. • include materials with labeled diagrams and drawings of any equipment used to carry out the experiment • describe safety measures in detail	My investigation is a reasonably-constructed test of the hypothesis and includes an experiment that answers the research question. I include a step-by-step description of the experimental procedures: • identify and address most of the independent and dependent variables; control of variables is included • include materials and diagrams and drawings, but not clearly labeled • mention safety measures employed	My investigation is an incompletely-constructed test of the hypothesis which has small errors or answers the research question to some extent. I include a step-by-step description of the experimental procedure that misses some key details: • identify and address some of the independent and dependent variables; attention given to the control of variables • include materials; equipment might be mentioned, but not shown • describe some safety measures	My investigation is not relevant to the hypothesis or has serious errors. My description of the experimental procedure lacks key details: • fails to address key independent and dependent variables; does not provide adequate attention to control of variables • no mention of equipment used to carry out experiment • no mention of safety measures

	My investigation can be replicated exactly as described	I've organized the information so that the investigation can be replicated.	I've organized the information, but some parts are missing, making it difficult to replicate.	My information is not sufficient to replicate the investigation.
Data Collection and Display	I have a detailed description of my methods for collecting data and it has been collected in the most efficient and appropriate ways. My statistical analysis procedures are clearly organized and I explain my reasons for choosing them. All of my original data is included. My data is accurately recorded and displayed and all variables are labeled.	I have a description of my methods of collecting data and a reasonable amount of data has been collected in a sufficient manner. My statistical analysis procedures are valid and organized and contain few errors. Most of my original data is included. My data is recorded and displayed but my variables are unlabeled.	My description of the methods of data collection is incomplete and a minimum amount of data has been collected. I include some statistical analysis procedures and some original data. My data is recorded and displayed but may not include labels or legend.	My description of the methods of data collection is absent and insufficient data has been collected. I do not include statistical analysis of the data. My data has not been recorded or displayed or it has been done so incorrectly.
Analysis and Conclusion	My conclusion includes a restatement of the hypothesis, supports or refutes it and explains the role	My conclusion includes a restatement of the hypothesis and supports or refutes it.	My conclusion provides some relationship to the hypothesis. My analysis refers to data	My conclusion shows no relationship to the hypothesis.

of the experiment in making the decision.

My analysis includes identification of patterns, concepts, meanings or structures in the data and is used as evidence to support my statements.

My analysis includes identification of sources of error and explains the effect on results.

My conclusion includes comparisons, interpretations, inferences or deductions from the research information and prior knowledge.

I recognize and discuss the scientific or societal implications of my research, propose solutions, and recommend new avenues of experimentation. | My analysis uses data in support of statements.

My analysis includes identification of sources of error.

My conclusion includes comparisons and interpretations and makes some inferences or deductions.

I discuss how the research is useful and propose solutions or recommend new avenues of experimentation. | in the body of the report as support.

My analysis suggests the possibility of error but identifies no sources.

My conclusion compares or interprets some of the information, but does not make inferences or deductions.

I state that the research is useful, but provide no reasoning and I suggest some solutions or further investigations, but they may not completely relate to the conclusion. | My analysis does not use data to support my arguments

My analysis does not address the possibility of error.

My conclusion does not interpret information or make inferences or deductions.

I do not discuss the usefulness of the research and do not recognize solutions which follow from the knowledge gained. |