

Peer Review

A major part of any scientist's research is having the work reviewed by their peers. In the research world this is often done before and after the paper has been published. The review will depend on the scope and type of research being done.

Peer review in the various stages of the scientific inquiry investigation is also very important. This can be done by one or several peers. Parents can count as peers and should complete a form for the project. Teachers will often have a minimum number of reviews they would like for you to get.

When choosing one or more of your peers for the review of the paper be careful in who you choose. Make sure you choose someone who understands scientific procedure and practices. They should be someone that will give constructive criticism. Do not choose a friend that will glance over it and say everything looks great. Someone that is in a grade ahead of you could be a good choice. The goal is to find areas that may be unclear that you can revise before the final paper is due. It is good to try to use the same peers as reviewers throughout the project. Sometimes something will come up so if you have to change one that is fine.

Your teacher may have a form that she would like for you to use a peer review or you can use the one provided here. You may also make up your own form but make sure it is easy to use and can give you valuable feedback. The peer review forms will not go in your logbook or be a part of your project. These forms are for your use only.

The form will cover your project from the beginning to the end. As you go through and plan each step give it to your reviewers for feedback. Do not wait until the end and have them fill it out. For example, once you have your research plan written give them the form to fill out that section and return. As you move to your data and analysis give them the form again and have them complete that section. If it easier break up each section and just give them a section at a time. If the teacher gives you a rubric for each part of your project you may want to include that with your peer review to see if you are on target.

**Peer Review Form
Scientific Inquiry Project**

Name of Peer Reviewer:

Directions: Fill out the form as asked in each section. Make sure that any comments made are clearly written and useful.

Research Plan Review: Fill in the table below

Ye s	N o	Descriptor
		The research question was clearly stated with both variables easily identified.
		The hypothesis was clearly stated. It was written in 3 rd person and the variables are easily identified.
		The rationale was clear and had real world connections or why it was important to explore this topic.
		Materials and amounts used as applicable were clearly listed
		The procedure was numbered, and each step was clear.
		The units used were metric and appropriate for the instrument used.
		The procedure would be easy for any person to follow.
		Safety issues and concerns were appropriately addressed.
		The qualitative and quantitative data was identified in the data analysis section.
		Any statistical analysis used was identified
		The research plan was written in present tense identifying what will be done.

If no was checked in any of the boxes above, please elaborate in the space below.

Data Collection-The peer reviewer will have to use the logbook for this section.

Ye s	N o	Descriptor-Before experimentation
		Data collected was correctly identified as qualitative and quantitative
		All collected data has been included.
		Data tables were correctly set up and labeled.
		Graphs were correctly set up and labeled with type of graph identified.

If no was checked in any of the boxes above, please elaborate in the space below.

Ye s	N o	Descriptor-After experimentation
		Data tables were complete
		Data tables were constructed and used for all data collected
		Appropriate graph was constructed from data
		Mean, Median and Mode was used for each type of data that required this statistic.
		Range and Frequency Distribution was used for each type of data that required this statistic.
		Data analysis was thorough and appropriate
		Patterns, trends and outliers were identified

If no was checked in any of the boxes above, please elaborate in the space below.

