

Characteristics of Science Projects

Research Problem

_____ The science research question was clear, focused and testable using scientific methods

Design, Methodology & Data Collection

_____ Independent variables & dependent variables were described

_____ Experimental data was compared to a control group

_____ Constraints/Controls were in place (things that needed to be kept the same for all trials in order to have a fair test)

_____ Laboratory skills were used correctly

_____ Sample size &/or number of trials was large enough to support conclusions

_____ Charts &/or graphs were accurate, clear, detailed, labeled, and included a 1 sentence summary caption

_____ Appropriate analysis strategies (such as calculations and graphing) were used correctly

Conclusion included:

_____ An answer supported with evidence (data) from your experiment

_____ A discussion of possible errors that may have occurred and how they may have impacted the data

_____ New questions for future research

_____ Connections to the real world

Display

_____ Display was complete & organized

_____ Logbook was detailed, dated & complete (shows work from initial topic brainstorming through the conclusion)

_____ Abstract described the purpose for the research, general procedures, a summary of results and major conclusion(s).

Interview

_____ Researcher was able to answer the judges' questions with confidence

_____ Researcher was able to use scientific vocabulary related to their research project

Here's a link to some helpful resources.

<https://www.sciencebuddies.org/science-fair-projects/science-fair/steps-of-the-scientific-method>

We look forward to seeing you at the fair!