

STEMIST SCIENCE FAIR

GUIDE AND RUBRIC



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SCIENCE FAIR GUIDE

SCORING RUBRIC

Judging and Scoring

All STEMist science fair projects will be reviewed and graded by the Oklahoma 4-H STEMist team. The team consists of six STEMists who will work directly under the advisement of Carrie Winseltt, coordinator of Oklahoma 4-H STEAM and Dr. Jeff Sallee, STEAM extension specialist.

All projects will be judged and scored on a 200 point scale. All participants will receive a prize in the mail upon completion and the winner will receive recognition and an additional prize of an Amazon gift card!

Project Submission

All projects are due by August 4th via email (ok4hsteam@okstate.edu). Participants will be required to submit 3 different things in order to be judged. A word document or pdf of their full report, a picture of their presentation set up (poster board with report and journal), and a video presenting their information.

*Optional: if a participant would like to publish their project for other participants to view, it can be posted to Flipgrid.



Participant To-Do List:

- Determine topic
- Gather materials
- Conduct experiment (take notes along the way)
- Complete final report
- Design and complete poster
- Take picture of completed poster and report
- Film presentation
- Email picture, video, and report to ok4hsteam@okstate.edu by Aug. 4th

Questions?

If you have any questions, you can submit them to the Microsoft Form linked to the right or email ok4hsteam@okstate.edu. Or check out this interview with Dr. Jeff Sallee where he answers common questions about science fairs!

<https://youtu.be/k-6BSCyp66o>

PROBLEM (10 points)

- Question led to an investigation
- Question is clearly written in an easily understandable format
- A creative approach to problem-solving was used to formulate the question

RESEARCH (20 points)

- Research is applicable to project and presented clearly in report
- Sources are reliable sources

HYPOTHESIS (10 points)

- Hypothesis states possible outcome of the experiment
- Hypothesis must include an explanation or reason for the prediction

MATERIALS (10 points)

- All materials used in the experiment are listed
- All materials list the quantity needed

PROCEDURES (10 points)

- All steps are accurately stated and in sequential order
- Procedures indicate that repeated trials (at least 3) were conducted

VARIABLES (10 points)

- Independent variable, dependent variable, constant variables, and control group were correctly identified

RESULTS - DATA/GRAPHS (20 points)

- Data is correctly displayed in the form of a table or chart
- The appropriate type of graph is accurately constructed
- If a graph is not possible - journal entries or other visual display of results is present

RESULTS - WRITTEN SUMMARY (20 points)

- Explanation analyzes and summarizes the data to note patterns and trends between the independent and dependent variables
- Explanation interprets the graph

CONCLUSION (30 points)

- Conclusion answers original question asked
- A statement reflecting whether or not the hypothesis was supported is included
- Supporting data is used
- Any problems with the experiment, changes for the future, and additional research questions are mentioned.

BIBLIOGRAPHY (10 points)

- Sources are reliable and correctly cited

PRESENTATION (50 points)

- All parts of project are included and clearly labeled
- All parts are in correct order
- Presentation board is neat and attractive
- Very few or no spelling errors

