

Middle School Science Fair



Information, Requirements, Grading Rubrics

Dear Parents/Guardians:

We are excited about the interest in this year's Science Fair, which will take place in the middle of May. A specific date will be communicated after the break.

A comprehensive packet accompanies this letter. Please read it with your child so both of you understand the purpose and the process of this project. If you have any questions, please contact your child's teacher.

We want our budding scientists to have fun and to be safe. It is strongly advised that you supervise any experiments; especially those involving chemicals, electricity, or that require sharp tools. Always insist upon safety gear. These precautions will assure that your child's inquiry into the magnificent world of science is safe.

As your child progresses through the scientific method of inquiry, here are a few suggestions:

- The emphasis on this science project is on the scientific method. Students should select a topic that centers on a **problem that is testable**, with **results that can be measured, counted, or recorded** through charts, graphs, and photographs. Demonstrations and reports (models of the solar system or volcanoes) are not acceptable. Parents are encouraged to provide guidance in the selection of a topic and assistance with planning. **However, the project must be the child's own work.**
- Check your child's project to make sure there are no safety hazards. Students may use small invertebrate animals (animals without backbones) such as earthworms or crickets. However, live animals may not be brought to school (photographs must be used instead). Students experimenting with plants should start the project immediately!
- Note: Faces of individuals are not permitted in any photography that is displayed.
- Experiments that involve plants or animals must be started immediately so the due date is met.
- Students should use computer generated illustrations (tables, graphs, charts, clip art, etc.) in order to communicate data and results on their display board. These visuals should also be used to aid in the overall presentation of the experiment.
- Finally, we encourage parental assistance; however, we do not support parents doing the project for their child. Students will be presenting their experiment in class and they will have to answer questions about their project. Remember, it is the student's project; we want him/her to take responsibility for it. Be there to help prioritize activities and effectively manage their time.

Thank you for your encouragement and support. We are certain that all children will have an everlasting learning experience because parents and teachers are so committed to working together for success.

Grading Guidelines

Attached are the rubrics that will explain, in detail, what the science fair project must include. Below are some other tips and helpful suggestions:

1. Remember that a good project is planned and developed over a period of time. Please don't wait until the last minute! Rushed work always looks rushed, be sure to present your best work.
2. Display boards may be purchased at office supply stores and teacher supply stores, such as ACE. Shop now, lots of people will be buying display boards. You don't want to wait until stores run out or color selections are slim.
3. When the experiment is presented, the display board will be used as a visual aide, so be sure the information is LARGE enough for the whole class to see. Be ready to answer questions from the class and the teacher.
4. The entire Science Fair project will be worth a ***project and an assessment grade***. Each part must be completed in on its due date or points will be deducted, as per the teacher's discretion.
 - Display Board (see attached rubric) & Oral Presentation (see attached rubric)***Please make sure you site your references based on your background research and materials/procedures if you chose a topic from the sciencebuddies.org website.***



Science Fair Display Board Rubric

_____ Title: The title is phrased as a question. **(2 points)**

_____ Problem Statement/Purpose: One or two sentences written on the display board telling what you studied. Tell why you picked your topic. **(5 points)**

_____ Hypothesis: One sentence written on the display board. It tells what you think will happen in your experiment... written as an "*if...then...*" **statement**. **(5 points)**

_____ Materials: All materials listed on the display board, including amounts and accurate units **(3 points)**

_____ Procedure: Tell what you did sequentially (step by step) **(5 points)**

_____ Data: graphs, pictures, charts, surveys, drawings. Results: what happened during your research? (No faces in the photos please...) **(5 points)**

_____ Conclusions: Did your results prove or disprove your hypothesis? Write one or two sentences on the display board and sharing this information. **(5 points)**

_____ Abstract/summary: A summary of the completed experiment. Include what you did and the results of your experiment. **(5 points)**

_____ Neatness and Appearance: Your Science Fair display board and visual display (sample experiment) should be neat and well organized. Information must be typed then added to your board. **(5 points)**

_____ Difficulty/Creativity: The project should be appropriate for the grade level and a challenge for the student. The Project presented an experiment with measurable outcomes. **(5 points)**

_____ Independently Completed: All work is completed by the student. **(5 points)**

Total:

_____ /50 points

Oral Presentation Rubric

_____ Discussed why you chose this experiment and explain the research you did for this project. **(5 points)**

_____ Tell us what your problem statement was. **(5 points)**

_____ State the hypothesis using an “if...then ...” statement. **(2 points)**

_____ Explained how you conducted the experiment including the materials you used. You do not have to be specific with the measurements for the oral presentation. **(10 points)**

_____ Tell us what the independent and dependent variable of your experiment were. **(3 points)**

_____ Make sure you have a clear understanding of the experiment and are able to tell others about it. **(10 points)**

_____ Explain the results of your experiment and relate it to the problem statement. **(5 points)**

_____ Tell us how your project can benefit others or how it can apply to a real life situation. **(5 points)**

_____ Make sure you engage in eye contact when presenting and do not read the board. **(5 points)**

Total:

_____/50 points