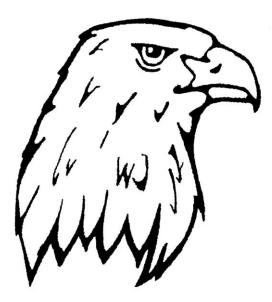
# Mitzi Bond Science Fair

Handbook



Thursday, February 20, 2020 Entries due by Tuesday, February 18, 2020

Available on school website

Dear Parents and Students,

The Science Fair Committee of Bond Elementary School invites you to participant in this year's Mitzi Bond Science Fair! As parent and child read through this booklet together, you will learn the steps and guidelines needed to create a project, to use the <u>scientific</u> <u>process</u>, and to know the judge's expectations.

Entry in the fair is voluntary; however, we hope many students will participate. Parental involvement is encouraged. Students may need to complete the projects outside of the classroom setting.

The science fair is a competitive event with judging criteria developed to maintain a fair contest. Every student who enters may receive a ribbon (sweepstakes, 1st, 2nd, or 3<sup>rd</sup>). Judging is a single judge format per child.

The science fair provides students with the opportunity to demonstrate:

Organizational skills Observational skills Knowledge in an area of interest Measuring skills Logic and reasoning Science application to daily life Ability to present a project

# Fill out an entry form and return it to your teacher or

Mr. Foster by February 18, 2020. We look forward to seeing you at this year's Mitzi Bond Science Fair! The fair is on February 20, 2020.

1.

What the judges are looking for!

# **Judging points**

1. (1-2 points) Neat and well organized display

2. (1-2 points) Stated title, purpose, and hypothesis

3. (1-2 points) Shows evidence of research (3 sources!)

4. (1-3 points) Explained/understood experimental process

5. (1-3 points) Collected measurable data from 3 trials

6. (1-3 points) Interpreted/explained data, graphs, and observations

7. (1-3 points) Explained results related to the conclusion

8. (1-3 points) Understanding of vocabulary and subject

9. (1-2 points) Applied concepts to daily living

10. (1-2 points) Effective topic elaboration and closure

11. (1-2 points) Creativity, originality, and merit level of topic

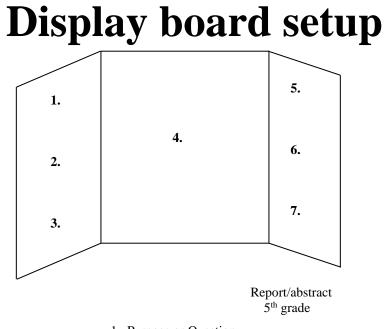
24-25 points = Sweepstakes 21-23 points = 1st place 17-20 points = 2nd place 1-16 points = 3rd place

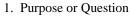
Fancy displays are only worth 2 points! Students ability to explain their science knowledge to the judge is the remaining 23 points!

#### Guidelines for participants (these are EPISD rules)

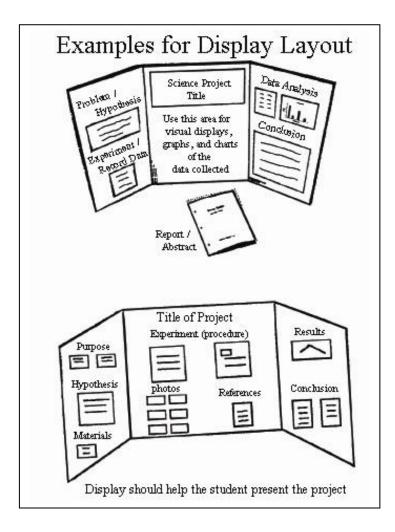
The following are guidelines for the Bond Science Fair:

- Backboards and a folder for journals and research ONLY. (pictures or drawings of project or experiment on backboard) - Write student name and section on back of display in dark visible letters.
- 2. No objects, models, equipment allowed.
- 3. No projects involving firearms, gun powder explosives, rocketry (except water or air propelled), pathogens, any illegal or controlled substances, drug or drug paraphernalia will be allowed.
- 4. Each participant is responsible for setting up and removing their display.
- 5. No electrical extension cords.
- 6. Sign the entry form agreement of participation by parent. and return before entry deadline.





- 2. Hypothesis
- 3. Research
- 4. Procedure (experiment)
- 5. Analysis (graph)
- 6. Conclusion
- 7. Sources



What the student needs to do!

# **The Scientific Method\***

- 1. Asking a measurable question
- 2. Doing research
- 3. Formulating a **hypothesis** (What you guess is the answer to the question)
- 4. Planning an **experiment** (materials and procedures)
- 5. Compile and record data
- 6. Organize results into tables and graphs
- 7. Form a **conclusion** relating to the hypothesis
- 8. Write what was learned and how it relates to the world around us

Simple projects do not impress judges, but the more unique and scientifically challenging the project, the more likely the project will receive a higher score. All judging can be subjective to some degree but the more knowledge that can be conveyed to the judge about the science, the higher the scores will be. Practice presenting to others before the fair! Fewer points are acquired when "reading" board instead of explaining to the judge.

### Seven Steps to a Great Science Fair Project

- 1. **Select a topic:** Choose something you are interested in. Use search engines like ajkids.com, google.com, family-source.com, education-world.com, and awesomelibrary.com. Type in SCIENCE FAIR PROJECTS. Ask librarians and teachers for help.
- 2. **Research:** Use the Internet, encyclopedias, books, TV, magazines, and experts to collect information on your project. 3 sources! Written report! (grades 5)
- 3. **Purpose and Hypothesis:** The purpose is a description of what you will do or the question you will answer. The is an educated guess as to what you think will happen.
- 4. **Experiment:** Plan and organize an experiment. List materials, procedures, and keep careful records and data. *Do the experiment at least 3 times.*
- 5. **Analysis and Conclusion:** Create a summary of your data. Make graphs and charts. Prepare a conclusion relating to hypothesis and everyday life. Be able to explain graphs!
- 6. **Exhibit:** This is the visual display of the project. Keep it neat and organized to help you and your judge.
- 7. **Judging:** Plan and **practice** how you will explain your project to the judge. Look neat, speak clearly, and smile!