



## Jackson Elementary School Science Fair

Everyone (Grades 1-5) is invited to participate!

Friday, March 15, 2024

### IMPORTANT DATES

- **Friday, March 8, 2024:** Entry forms due by the end of the day (yes, you can submit your form up until 11:59 PM, if that suits you). Entry forms may be submitted online at [www.jacksonedhpto.org/science-fair](http://www.jacksonedhpto.org/science-fair)
- **Friday, March 15, 2024:** All projects and notebooks\* due in Ruppel Center by 8:55 AM (before school starts; doors will be open at 8:30 AM)

\*Notebooks are required for Grades 3-5 only

**Judges Needed!** If you are in a STEM career (or have a STEM background) and are interested in being a judge at the Science Fair, please contact Stacy Vorster: [STEM@jacksonedhpto.org](mailto:STEM@jacksonedhpto.org)

**Volunteers Needed!** If you are interested in volunteering for the event, contact Stacy at the email above. **We need your help to make the Science Fair a success!**

**More Info, Entry Form, & Tips on the PTO Website:** [www.jacksonedhpto.org/science-fair](http://www.jacksonedhpto.org/science-fair)

## HOW DO I PARTICIPATE?

**\*\*Participation is voluntary, and students will not be graded on Science Fair work unless told otherwise by your teacher(s)\*\***

The Entry Form is available here: [www.jacksonedhpto.org/science-fair](http://www.jacksonedhpto.org/science-fair)

Students may work in pairs if desired. If your student is working as a pair, please only submit one entry form, but both names must be included on the form.

Once you have submitted the entry form, follow these easy steps:

**Step 1:** Get a notebook. This is where you are going to record all your notes and data for your project. It's like keeping a diary of your work. The judges will be looking at all your information in this notebook. A few extra notebooks are in the office, if needed. Grades 1 and 2 are not *required* to keep a notebook, but it is helpful for organization and to follow through with the scientific process.

**Step 2:** Ask a question! Is there something that you are interested in learning about? Feel free to do some research in books and the Internet for science fair project ideas.

**Step 3:** Conduct your experiment. There are two types of formats:

- Grades 1-2: Learn and Explain. These projects are not "judged", but students will still have the opportunity to explain what they learned to the judging panel.
- Grades 3-5: Scientific Experiment. Students explain their experiments and what they learned to the judging panel and are scored based on their use of scientific method and thought, presentation (display board and interview with judges), and journal/notebook.

*(See following pages for descriptions of each format.)*

**Step 4:** Communicate your results! Get a display board to make your presentation. Ensure your **full name, grade and teacher's name, are written on the back of your board** prior to submitting. A few extra boards are in the office.

**Step 5:** Bring your completed board and notebook to school. All grades will display their projects in the Ruppel Center. *All projects must be dropped off in the Ruppel Center before school on Friday, March 15.*

**Step 6:** Attend the Science Fair with your class and enjoy the experience!

## THE SCIENCE FAIR FORMATS

### **Grades 1-2: Learn and Explain**

Students using this format are not judged or eligible for awards. “Learn and Explain” is a great way to get excited about science and other STEM fields and participate in the fair without the pressure of being judged. Also, there is no required hypothesis to challenge. It is just how it sounds—the student learns something and then explains it!

#### ***Required elements for Learn and Explain projects:***

- *Background:* Provide information about the scientific concept you are exploring.
- *Procedure:* List materials and describe how you explored your idea. This could be a model, a survey, artwork, or other ways of presenting your concept.
- *Observations:* Describe what happened when you tested your concept or built your model.
- *Conclusion:* Describe what you learned from this project and how it could be used in real life. Discuss any problems you encountered and how you overcame them.

### **Grades 3-5: Scientific Experiment**

Projects that are “Scientific Experiment” entries will be interviewed by our judging panel and scored on three components: Part A: Use of Scientific Method and Thought (50%), Part B: Presentation (i.e., interview and display board - 25%), and Part C: Journal (25%). Our judging panel comprises friends, family members, and other members of our community with STEM careers or STEM backgrounds. Judges will ask questions in a friendly, constructive manner and will show genuine interest in the students and what they learned.

Students must maintain a lab notebook that contains everything from initial ideas, to the experiment, and conclusions.

#### ***Required elements for Scientific Experiment projects:***

1. Introduction
  - *Purpose:* Explain what you are trying to prove or why you are doing the experiment.
  - *Investigative Question:* What do you want to know?
  - *Hypothesis:* Explain what you think will happen in the experiment and why.

2. Procedure
  - Materials: Make a list (with exact amounts and units if possible).
  - Method: Explain how the experiment is set up, and the steps you took to perform the experiment.
3. Data: Describe or show observations and display actual measurements (in graphs, tables, photos, etc.).
4. Results: Summarize your test results and explain how the results pertain to the objectives or purpose.
5. Conclusion: Discuss how the results support (or don't support) your hypothesis. Discuss possibilities for errors, how the experiment could be improved, future possible steps, and real-life applications.
6. Bibliography: List all websites, books, or other sources that you used to do this experiment.

**Note: The interview portion is just part of the judging process –make sure everything you want to say is on your board and in your notebook!**

### **OTHER HELPFUL LINKS FOR PROJECT IDEAS AND TIPS**

- <http://www.sacstemfair.org/>
- <http://www.all-science-fair-projects.com>
- <http://www.juliantrubin.com/fairencyclopedia.html>
- <https://ca.pbslearningmedia.org/collection/zoom/#.YBHnvS1h1u>
- <http://www.sciencebuddies.org>
- <https://www.titledmax.com/engineering-games-and-projects-from-titledmax-com/>