Lin Howe Science Fair

<u>Projects are mandatory for 3rd-5th Graders,</u> but younger grades are welcome to participate.

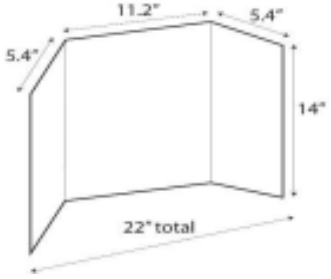
- The science project is **<u>student-created</u>** at home, with grown-ups acting as advisors or helpers where needed
- Students may work in a group (max. 3 kids per group) or individually. Partners don't have to be in the same class.
- ***Projects Due: Wednesday April 22, 2026***. Drop off in the cafeteria from 7:45 - 8:30 (Parent volunteers will help kids carry their projects in and set them up.)

<u>Guidelines:</u> Your science project can be one of the following choices:

- <u>An Invention</u>: (See the attached page for more invention info!)
- <u>An Experimental project</u>: this is the most common type of project, where the scientific method is used to propose and test a hypothesis about a topic. (See attached page for the steps of the Scientific Method)
- <u>Research project</u>: collect information about a topic and present your findings
- <u>Demonstration project</u>: a display of something scientifically interesting
- <u>Model project</u>: building a model to illustrate a concept or principle
- <u>Collection project</u>: displays a collection to illustrate a concept or topic

**Research, demonstration, model, or collection projects may be easier for younger students.*

<u>Directions for your Display:</u>



- Minimum size 14"x 22"; maximum size 32"x 42" (can use a cardboard box or a standard board (can be purchased at Dollar Tree)
- Must be free standing
- Put your name on the back of the project
- Projects should be described clearly and illustrated with drawings, photos, models, collections, charts, & graphs.
- All substances on display must be clearly labeled and in tightly closed containers (e.g., anything that you can touch that's sticky or icky, anything that smells).
- If you place a demonstration, model, or other materials in front of your display board, make sure to secure them to a base. You won't want them to go missing!
- Projects on display may get moved in order to make room for all the displays. Please make your project easy to move.
- ***Please- No live animals, food products, erupting volcanoes, or valuable items…. just bring in drawings or photographs*** ☺

Each class will have the opportunity to view the Science Fair projects during the week. Students with projects may present their project to their class. This is an excellent opportunity to practice clear public speaking and concise explanations. Please check with your teacher for more instructions.

Invention Information

Common Ways to think about Inventing:

- Improve upon a product.
- Change something and make it better. Combine ideas.
- Put two or more inventions together to create something new.
- Create a new use for an item.
- Create an original invention—a totally new product or idea.

Questions to Ask for Inventions:

- What does not work as well as you would like it to work?
- What problems would you like to have solved? At home? At school? Other (car, store, etc.)?
- If you could invent something to make your life easier, what would you invent?

Tips to Display your Invention:

- Make your display board clear & attractive
- Titles and subtitles should be large and clear.
- Include these sections:
    - Invention Title
    - Inventor Name
    - Problem
    - Procedure
    - Photos/drawings/diagrams
    - Conclusion & Reflections
- If possible, all information for the board should be typed and printed from a computer.
- Do not leave large empty spaces on the display board.
- BE CREATIVE!

Scientific Method (for experimental projects):

1. **Introduction**: How did you come up with your idea?
2. **Question**: What are you trying to find out? What do you want to know? Fun experimental questions often compare something to something else to see what's better, faster, bigger, etc. The experimental question should have a factor (variable) that you can change and something you can measure.
3. **Hypothesis**: What do you think the answer to your question will be? Make a guess. Why did you make that guess? Then don't change it! (even if you think it's wrong after you start the experiment.)
4. **Materials**: What did you use? List everything you used to do the experiment.
5. **Procedure**: What did you do to see if your guess is correct? List detailed step-by-step directions, from beginning to end, of what you did to do your experiment. Include pictures or drawings.
6. **Results**: Write down what happened when you did your experiment. Sometimes things happen that you did not think would happen. Use charts, tables, or graphs. Take photos or make drawings.
7. **Conclusion**: What is the answer to your question? Explain why you think it happened. How did the answer compare to your hypothesis? Did something happen that you didn't expect? How well did your experiment work? What could make the experiment better? What new questions about this topic do you have now? What did you learn?

***** *Experiments should <u>not</u> cause harm or stress to animals or humans.*