

SCIENCE FAIR 2022

**Vintage Annual Science Fair**  
**All Grades *Optional***  
**(This Year)**

**Please see attached, including:**

**1. Important Dates**

**2. Category Descriptions**

**a. Testable questions examples**

**3. Category Rubrics**

**4. *Proposal Forms***

***a. Due Tuesday, March 29th.***

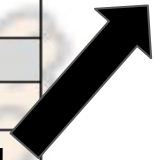
# SCIENCE FAIR 2022

## Vintage Annual Science Fair

No longer filming, after presentations to judges will be displayed in 3rd grade classrooms for NASA night.

### Important Dates:

Date:	
March 29th	Science Fair <u>Proposals</u> Due
May 16th	Science Fair <u>Projects</u> Due to the <u>classroom</u>
May 23rd-26th	Finalists <u>present</u> to Science Fair Judges
May 30th-June 1st	<del>Finalists present and film their projects in the auditorium</del>
June 3rd	<del>NASA Night (Finalists present their projects)</del>
June 6 (Tentative)	Assembly to award the winners (K-4 <sup>th</sup> )
June 7 (Tentative)	Assembly to award the winners (5 <sup>th</sup> )



Fill out the attached proposal form and return it to your teacher by March 29th, 2022.

Once your proposal has been approved, take some time to go over the rubric, in depth, for that category, which has been attached to this packet.

### RULES FOR THE SCIENCE FAIR

A Science Fair project must be a STUDENT project appropriate for the student's level of understanding and ability. While parents may help when necessary, the majority of the project must be completed and understood by the student. Adult help is limited to giving advice in preparing the display, assisting in conducting research, or handling equipment. Adult help must be included as a reference.

NO live or dead animals or moldy objects that contain bacteria may be displayed. Any work with animals or human subjects must be safe for the subjects and of a HUMANE and ethical nature. Animal dissection projects are not allowed at Vintage Magnet School Science Fair. NO dangerous or poisonous chemicals, explosives, or exposed electrical wires carrying a high voltage current may be displayed.

No written paragraphs downloaded from the Internet and pasted onto your display or report are allowed. Photos downloaded from the internet are permissible, but the source must be cited.

All experiments done by students in Grade 3 and above must be repeated three times or more. All references and sources used must be cited.

Students must demonstrate an understanding of the scientific concepts that they have investigated in their research.

- All projects will be evaluated against the criteria and rubrics given. All projects receiving an Overall Score of 4 with 3 or higher in every subsection will enter into the Science Fair.
- Plagiarism will result in disqualification from the Science Fair and will affect the project's grade.

# SCIENCE FAIR 2022

- All project finalists will be recorded on campus by an administrator, so their projects can be virtually displayed at NASA night on June 4th. The week before NASA Night, filming will take place from May 30th-June 1st.
- Science Fair optional for all grade levels (this year)
- Keep in mind that the students have only 6 weeks to complete the projects.
  - From the time proposals have been APPROVED → due date of projects
    - March 29th-May16th
- There are three different Science Fair categories, each with specific requirements.

Category	Description	Display Requirements
Experiment	<ul style="list-style-type: none"> <li>• Begins with a testable question or a purpose and follows the experimental process.</li> </ul>	<ul style="list-style-type: none"> <li>• Must be accompanied by a tri-fold display board.</li> <li>• Should also have the objects and materials used in the experiment on display.</li> </ul>
Invention	<ul style="list-style-type: none"> <li>• Begins with a purpose to invent a new object or to make improvements on something that already exists.</li> </ul>	<ul style="list-style-type: none"> <li>• The invention must be built. Detailed design diagrams must be drawn and clearly labeled.</li> <li>• Must be accompanied by Scientific Notes that explain the invention in detail and the process of building and designing it, and a tri-fold display board.</li> </ul>
Research Report	<ul style="list-style-type: none"> <li>• Begins with a scientific purpose for conducting research on a topic of interest.</li> </ul>	<ul style="list-style-type: none"> <li>• Written Report must be presented in a report folder.</li> <li>• Must use a minimum of three resources.</li> <li>• May be accompanied by a model, if desired.</li> </ul>

## Testable Science Fair Questions Examples (may not be used for science fair)

Experiment	Invention	Research Report
What happens when a piece of iron comes close to or touches a permanent magnet?	Which design is better for manufacturing long strings of lights—series or parallel?	How are fabrics different?
What is the effect on the force of attraction between two magnets as the distance between them changes?	How can we design a structure to keep water cool in sunshine?	What are typical weather conditions in our region?
What happens when objects collide?	How can you improve the design of a cart?	How do people deal with natural hazards such as floods?
How does start position affect how far a cart rolls?	What is the best design for a spinning top?	What makes a shadow?
How does surface area affect evaporation?	What is the best design for a solar water heater?	How do the parts of the solar system interact?
What is the relationship between the position of the Sun and the length and direction of the shadows?	How can you make a motor run faster using solar cells?	What is Earth's atmosphere?

Next up in this packet, you will see the rubrics and specific grading requirements for each category.