

# Smoky Row Science Fair 2022

Smoky Row Elementary hosts a Science Fair with the best projects being selected to represent our school at the Central Indiana Region Science and Engineering Fair (CIRSEF) live at Marion University on Saturday, March 19<sup>th</sup>. This year the Smoky Row Science Fair will be in person on Tuesday, February 1<sup>st</sup>.



The following is important info for this year's (2022) Science Fair.

- **PROJECT PROPOSAL: DUE 1/14/2022**
- **BACKGROUND RESEARCH, HYPOTHESIS, MATERIALS AND METHODS**
- **CONDUCT EXPERIMENT AND COLLECT DATA, RESULTS AND GRAPHICS**
- **DRAW CONCLUSIONS AND CREATE POSTER**
- **SCIENCE FAIR: 2/1/2022**

**CENTRAL INDIANA REGIONAL SCIENCE AND ENGINEERING FAIR: MARCH 19, 2022**

Marion University is pleased to once again host the Central Indiana Regional Science and Engineering Fair (CIRSEF) sponsored by the [Science Education Foundation of Indiana](#) (SEFI). The 2022 fair will be held in-person March 19 for students in grades 4 through 12.

**Contact any Science Fair Committee Member with questions**

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**Please read the SEFI rules page in this packet before you begin your project!**

# Science Fair Agenda

**Tuesday, February 1st, 2022-SRE Cafeteria/Gym**

**5:30 p.m. Student drop-off** and check-in; project board set-up

6:00 p.m. Parents leave (or wait in the media center) during judging

Judging begins

7:00 p.m. Recognition ceremony

Winners of the 2020 SRE Science Fair will proudly represent our school at the Central Indiana Regional Science and Engineering Fair (CIRSEF) on Saturday, March 19<sup>th</sup> 2020 at Marian University in Indianapolis.

## **PARENTS:**

1. Plan for your student to eat dinner early or late this night. No food is provided for students.
2. You will drop your child off in the cafeteria (Door No. 6 on the school's east parking lot) at 5:30 p.m. and pick them up at 7:15 p.m.
3. Parents will not be present during the judging process (starting at 6:00 p.m.).

## **SCIENTISTS:**

Check-in:

1. You will check in at the registration table in the cafeteria, attach a number card to your board and bring your project to the assigned table number.
2. Make sure your board is labeled with your name on front and your teacher's name on the back.
3. Set-up: Bring only your display board; leave large experimental items at home. There will be up to 6 projects per table, so please make room for your neighbors

Judging:

1. There will be a few minutes of announcements and the judging process will begin at 6:00 p.m.
2. You will be visited by two judges, who will read through your project and ask you a few questions about your work. This will only take a few minutes each time. That means there will be a lot of waiting around!
3. Bring a quiet activity to do independently (preferably some homework to do or a book to read). You are allowed to bring a personal electronic device so long as it doesn't distract others, but YOU ALONE are responsible for its safety.
4. Following the initial round of judging, we will hold a recognition ceremony (starting at around 7:00 p.m.), where each scientist will be acknowledged on stage and presented a certificate.
5. Parents arrive at 7:15 p.m.

# INSTRUCTIONAL VIDEO LINKS

Testable Question & Research

<http://youtu.be/W3LoZkf9CR8>

Hypothesis & Experimental Design

<http://youtu.be/eYivkW4NNsU>

Conducting Experiment

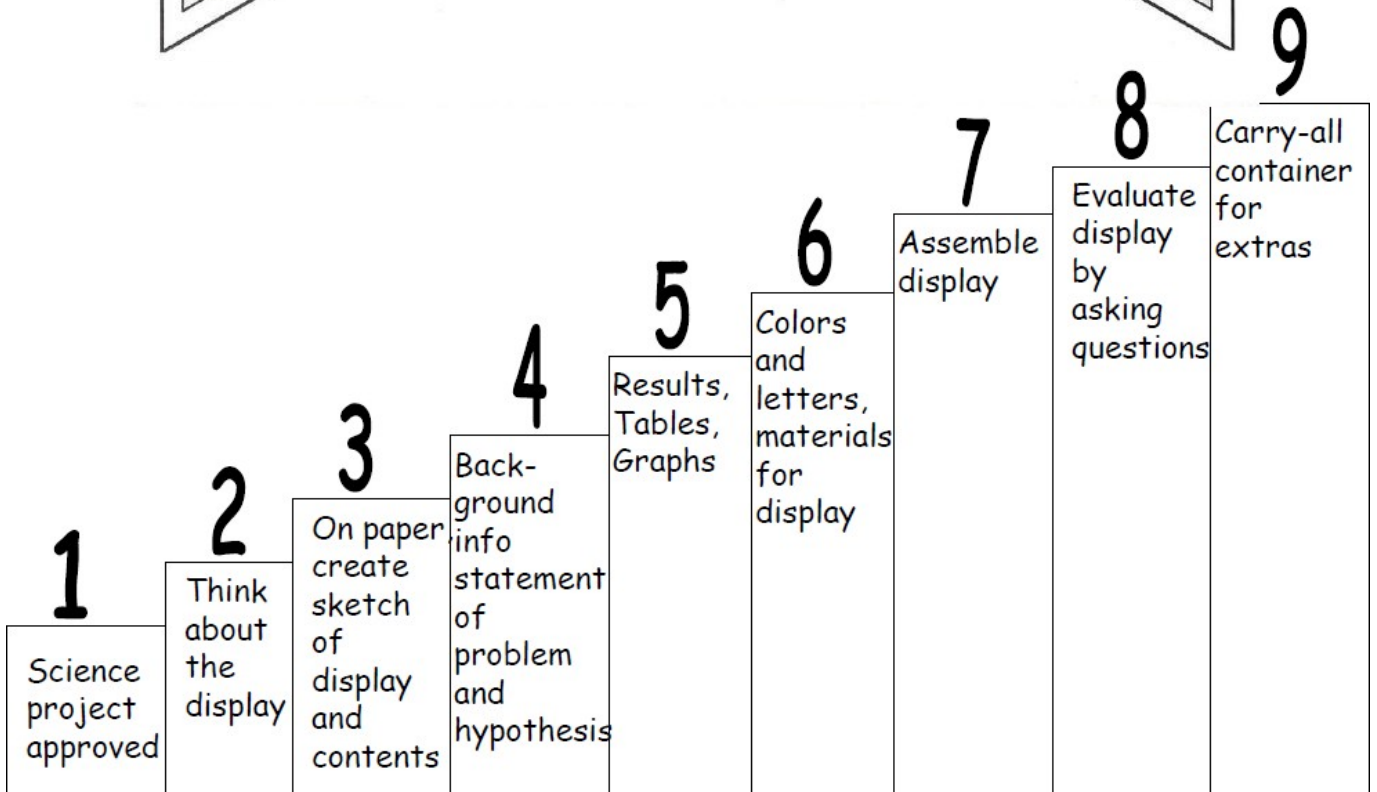
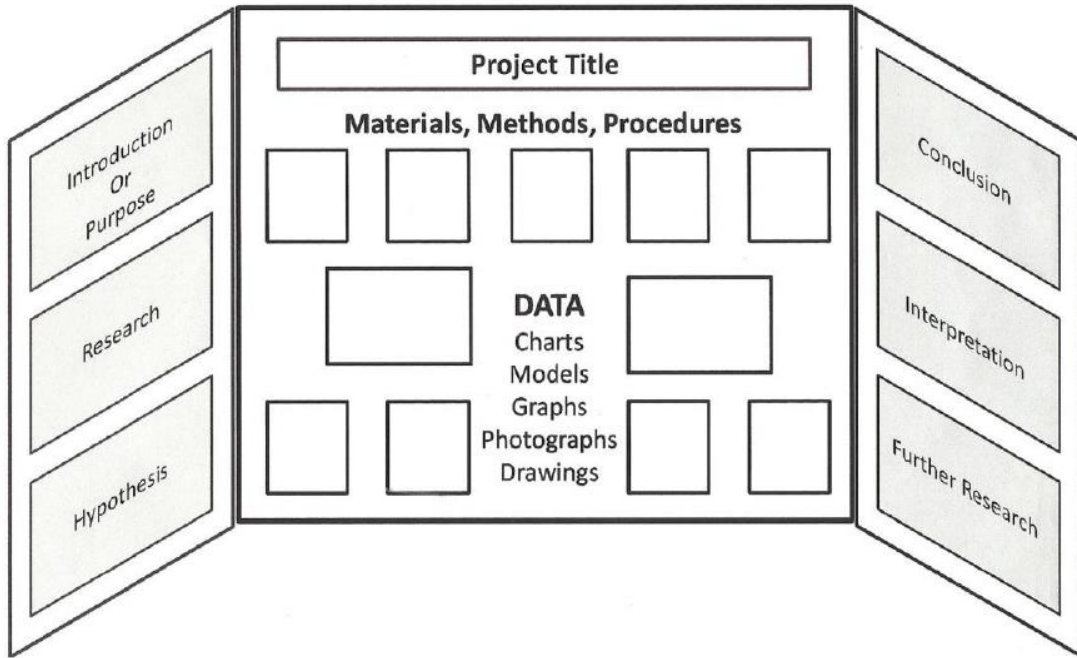
<http://youtu.be/9tWhYd33Ms0>

Analyzing Data & Display Board

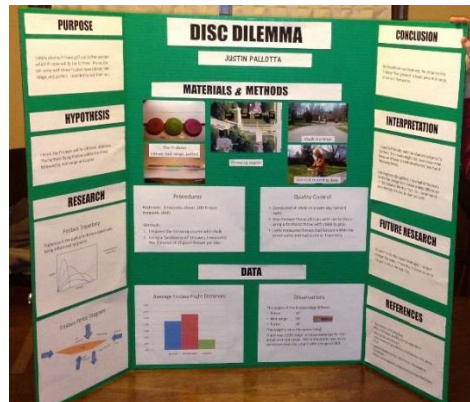
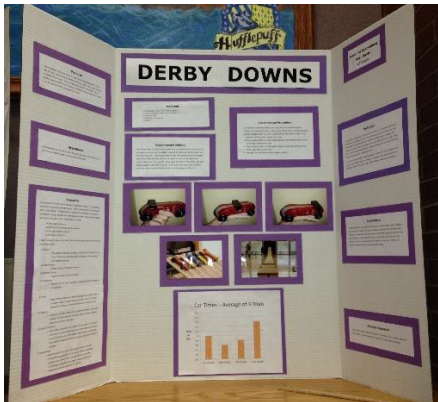
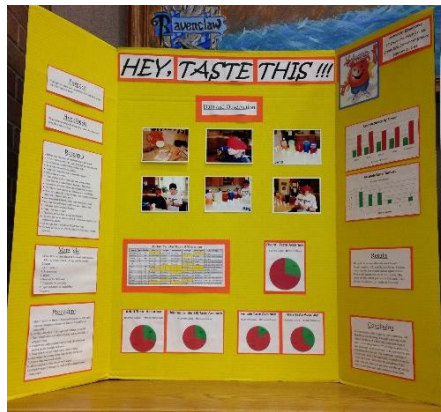
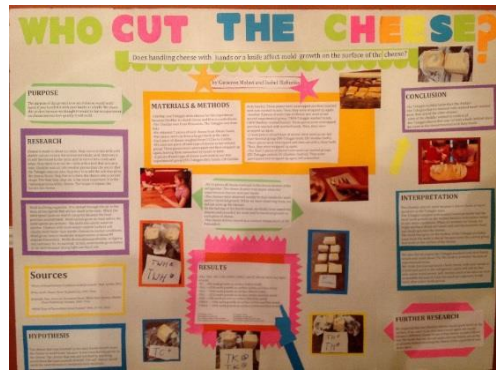
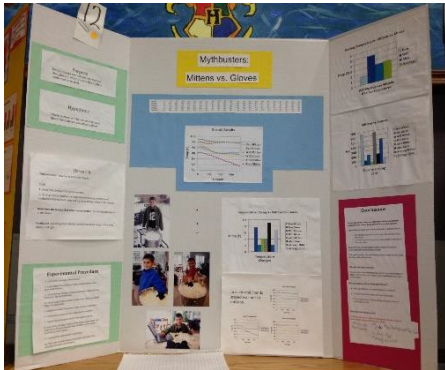
<http://youtu.be/HylQnotCshc>

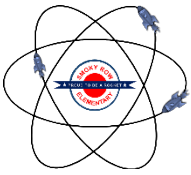
# SCIENCE FAIR DISPLAY

Below is an example of material normally included on a typical project display board.



# DISPLAY EXAMPLES





# JUDGING RUBRIC

## GRADES 4-5

Table Number

Project Number

Example Fair Judging Rubric

Project Title

Judge Name

**SCORING RANGE**

1-5

for each criterion listed below

- 1 = Doesn't meet requirements
- 2 = Meets at a minimum
- 3 = Easily meets to slightly exceeds
- 4 = Exceeds requirements
- 5 = Outstanding, remarkable

PROJECT ELEMENTS	DESCRIPTION OF CRITERIA	SCORE
<b>Overall</b>		
Creativity/Innovation	Original idea. Student demonstrates an understanding of the subject matter or innovative/creative way of approaching their project.	
Physical Display	Tells the story of the project. Appealing and neat. Shows all proper components.	
Oral Presentation	Gives clear explanations. Questions answered honestly and accurately.	
<b>Application of Scientific Method</b>		
Testable Question	Asks a specific, measurable, cause & effect question or clear purpose of project given.	
Background/Research	Describe why this project was selected and describe research from multiple sources. Shows evidence student understands topic.	
Hypothesis	Predicts a reasonable outcome as a result of a specific change.	
Procedure	Describe experimental process. High score would indicate that the project can be repeated after reading.	
Constant Conditions	Identify independent variable, dependent variable and constant conditions.	
Data and Identification	<ul style="list-style-type: none"> <li>At least 3 trials or samples are shown OR 3 observations made.</li> <li>Use photos/charts/graphs/illustrations to show data.</li> <li>All data clearly labeled.</li> <li>High score would show steps in the process throughout experiment or observation.</li> </ul>	
Conclusion & Reflection	Reflects what the student has learned and how it relates to hypothesis. Were there any surprises? What would you do differently or to continue the project?	
<b>TOTAL SCORE</b>		

# 2022 Regional Science Fair Rules

## Prohibited Exhibit Items

- **Water or other liquids**, even in a sealed container **CANNOT be part of the exhibit**, however, the student can use water or liquids for experiments and should consider **photographs, drawings, diagrams, or text** to describe the project in the display, not the prohibited materials themselves.
- Using photographs and drawings, instead of using living or prohibited items will **NOT** affect the judging of their project.

## Prohibited Project Items

- The following list of **PROHIBITED** items **cannot** be part of any Regional Science Fair:
  - Projects **CANNOT** involve unnecessary pain or discomfort to any vertebrate animals (e.g. mammals, birds, reptiles, amphibians, or fish). These are strictly prohibited! Conduct projects in a humane manner.
  - **Living or formerly living materials including:**
    - **Microbes (bacteria, molds, or algae)**
    - **Spoiled food or other decomposing organic matter**
    - **Microbial cultures**
    - **Soil or waste samples**
    - **Preserved plant or animal material including: dried plant material and taxidermy specimens or parts**
    - **Human or animal parts (exceptions: hair, teeth, nails, bones, histological sections and wet-mount tissue slides)**
    - **Human or animal food**
  - **Radioactive Substances**
  - **Sharp items**
  - **Flames or highly flammable materials**
  - **Tanks with any substance under pressure**
  - **Batteries with open-top cells**
  - **Hazardous Chemicals**
  - **Poisons, drugs, or controlled substances**
  - **Dry ice or other sublimating solids**
  - **Moving parts with unprotected belts and/or pulleys**
  - **Class III and IV lasers**
  - **Other items which in the judgment of the Safety Committee of the Regional Science Fair pose a threat to the health or safety of participants, judges, or spectators**

## Exhibit Requirements

- Exhibits will be confined to table space measuring 24" front to back, 48" side to side, and 72" tall.
- Students must stay with their project for the duration of the judging process
- **ALL** switches and cords must be equipped for maximum 110 volt/500 watt operation, and must be UL- approved. All electrical contacts and connections must be covered in a code approved manner.
- A need for electricity **MUST** be indicated on the entry form or the exhibit will be placed at a table without electrical service.
- Exhibits must remain on the exhibit floor until the end of the dinner break.