



## Judging

The panel will have background in science, engineering, and technology will judge the Energy Fair. Each competitor will have an interview with two or more judges.

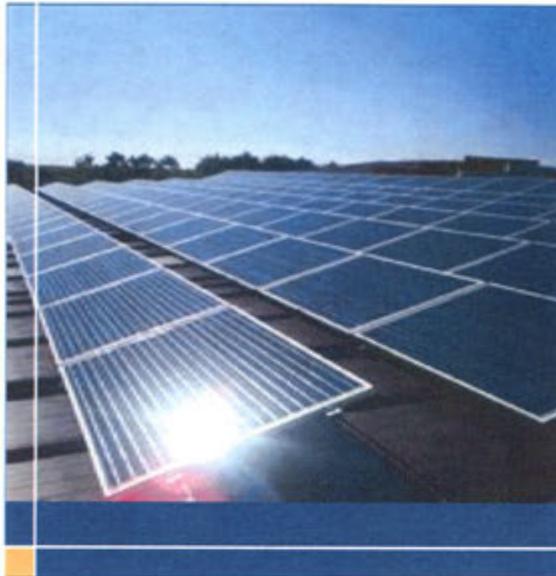
During judging, competitors will be asked to describe their investigation and the experimental process they carried out. Additional questions will be asked.

Special attention is placed on knowledge and enthusiasm for the project, as well as the student's oral presentation skills. The judges will evaluate the student's:

- Ability to communicate the Purpose
- Experimental Plan
- Ability to identify essential experimental components (I.V., D.V. & constants)
- Methodology for data collection
- Conclusion drawn from data

Other key areas evaluated are:

- Originality of idea,
- Quality of exhibit display, &
- Clarity of exhibit



**When:** Saturday, September 7, 2013  
**Where:** Navajo Energy EXPO Tent  
**What Time:** 2:00pm until 6:00pm

**DEADLINE** to submit Application Form is Friday  
August 30, 2013 at 5:00PM

**PRIZES WILL BE GIVEN AWAY!**

The Navajo Nation, Special Events Office, Energy Advisory Committee, and the Event Coordinator and team members will not be held responsible for any loss due to accidents, theft, bodily injury, personal injury and including loss of property.



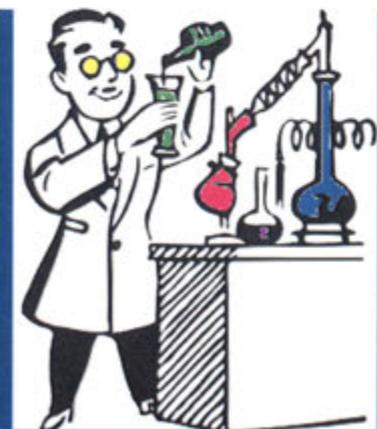
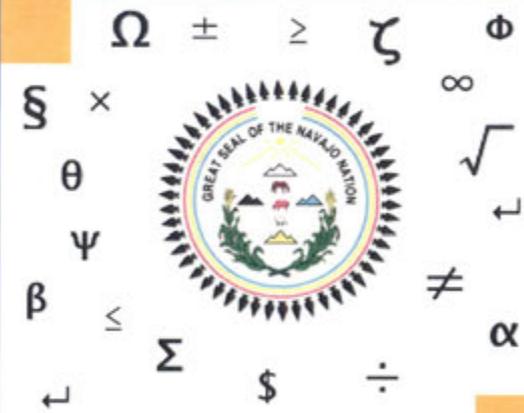
### Navajo Energy EXPO 2013

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michellehenry@navajo-nsn.gov  
www.navajonationfair.com

# 67<sup>th</sup> Navajo Nation Fair

## Navajo Energy EXPO Science Competition

Science, Engineering, and  
Technology Competition and  
Demonstration



## The 67<sup>th</sup> Annual Navajo Nation Fair – Science

### Fair Competition

The Energy EXPO at the 67<sup>th</sup> Annual Navajo Nation Fair will host a Science Fair Competition.

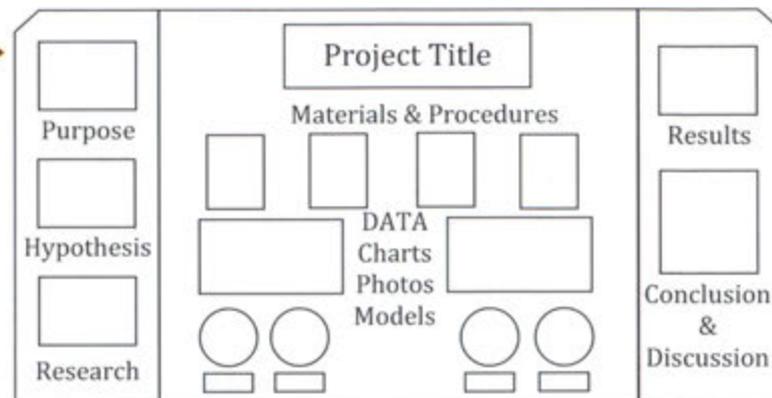
The Science Fair is conducted for the purpose of motivating and encouraging youth and adults in science, engineering, and technology.

This competition will have five "PROJECT CATEGORIES" and each participant is challenged to utilize the scientific method to conduct a controlled investigation.

While competitors are encouraged to seek assistance from parents, guardians, teachers, and community members in choosing a topic, conducting research, and gathering materials, projects are expected to reflect the work, thoughts, and efforts of the competitors.

## DISPLAY BOARD

- Projects must be displayed on a standard stand-alone tri-fold board
- Boards should be neat and attractive
- Matting the headings and information on colorful paper is encouraged
- Label all parts of the project
- No living organism (mold, plants, etc.)
- No props attached. No free standing items



## PROJECTS CAN BE EXPERIMENTS OR DEMONSTRATION PROJECTS PROCESS

### Essential Parts of a Successful project

Each project must follow Scientific Method and must include the following:

- **Problem** – *What do you want to find out?*
- **Purpose** – *Why do you want to do this project?*
- **Hypothesis** – *What do you think will happen?*
- **Materials** – *What do you need to test?*
- **Procedure** – *How can you test what will happen?*
- **Results** – *What happened?*
- **Conclusion** – *What did the experiment show?*

### PROBLEM

The problem is the scientific question to be solved or demonstrated. It also serves as the title of the project.

### PURPOSE

The purpose is a written statement that explains why the topic was chosen and what the student hopes to learn.

### HYPOTHESIS

The hypothesis should be based on a cause and effect relationship and should be written as an "If...then"

statement.

### MATERIALS

All materials being used in the experiment should be identified in list form. Include quantities and sizes.

### PROCEDURES

Procedures should be written as a step-by-step description of the investigation. Independent and dependent variables along the constants should be identified in this section.

### RESULTS

Observations made and data collected during the investigation are presented in the Results section. Competitors must use tables, charts, graphs, and diagrams to show and explain their results.

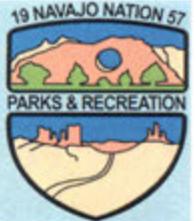
### CONCLUSION

The conclusion is a written statement confirming what was learned during the investigation. In your conclusion, tell if your hypothesis was supported or not supported. Be sure to tell what could be done to improve the experiment.





Navajo Nation Energy Expo 2013  
67<sup>th</sup> Annual Navajo Nation Fair  
"Honoring Navajo Language"  
**ENTRY FORM**



**GRADE LEVEL**

**STUDENT INFORMATION**

- 1st–3th Grade
- 4th–6th Grade
- 7th–9th Grade
- 10th–12th Grade
- Open (College, Novice, etc.)

Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Cellphone: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
 Parent/Guardian: \_\_\_\_\_

**PROJECT INFORMATION**

**PROJECT CATEGORIES**

Project Title: \_\_\_\_\_  
 School: \_\_\_\_\_ Grade: \_\_\_\_\_  
 Teacher: \_\_\_\_\_  
 Advisor: \_\_\_\_\_

- Science (General)
- Math/Statistics
- Natural Resources (Energy Dev./ Prod.)
- Technology/Engineering
- Computer Applications

**Application Deadline: Friday August 30, 2013 at 5:00pm**

**STUDENT AND PARENT/GUARDIAN SIGNATURE**

I certify that my science project complies with all of the experimental rules of the Navajo Energy Expo 2013. I understand that if I have not complied with these rules that my project could fail to qualify for competition. I have also read and I understand the display and safety rules. I agree to set up my project on the appointed day prior to my competition and I will leave my project on display until the designated time for project tear down.

Signature of Student \_\_\_\_\_ Signature of Parent/Guardian \_\_\_\_\_ Date \_\_\_\_\_

I give my permission to allow appropriate information about my child to be used for publicity purposes. This includes photographs submitted by me or my child as well as any photographs, videos or likenesses that will be used by the Navajo Nation Fair, Special Events Office, Energy Advisory Committee, Navajo Energy Expo, or the sponsors of awards for the purposes of illustration, advertising or publication in any manner. I also consent to the use of my child's name in connection therewith.

Signature of Parent/Guardian \_\_\_\_\_ Date \_\_\_\_\_

For more information please contact: **Michelle Henry, email: michellehenry@navajo-nsn.gov or Phone: (928) 871-7947**

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