

# **NLCA SCIENCE FAIR**



## **Fair Set Up & Open House**

Tuesday – March 5

7:30 am to 8:30 am

## **Fair**

Tuesday – March 5

## **Tear Down**

Tuesday – March 5

2:00 pm to 3:30 pm

NOTE: Unless prior arrangement have been made with Mrs. Cole, any projects not picked up by Tuesday – March 5 will be the property of NLCA and will be disposed of.

## **Science Fair Categories**

Behavioral/Social Sciences  
Biochemistry/Microbiology  
Botany  
Computer Science  
Earth/Space Sciences  
Engineering  
Physics  
Medicine  
Anatomy  
Zoology  
Chemistry

### **Type**

Individual  
Pair  
Group/Class

For Pairs and Group/Class you need two presenters.

### **Level**

Grade Level the student is in.

### **Division**

Division I    Grades K-3  
Division II   Grades 4-5  
Division III   Grades 6-8  
Division IV   Grades 9-12

### **NOTE:**

ONLY Investigative Projects may go on to County Level.

Display projects may only be judged at the School Level.

Grades K-3 students are permitted to do a display project.

K-3 teachers have the option to do a class display project to teach the Scientific process.

## NICHOLAS COUNTY SCIENCE FAIR RULES

1. Participation in the Nicholas County Science Fair will be limited to the two best projects in each class in each category division from each school. One Grand Award will be given in each Division.
2. Contestants may enter only one project and all work on exhibits must be done by those individuals. **TEACHERS OR PARENTS MAY ADVISE, BUT MUST NOT CONSTRUCT ANY PART OF THE EXHIBIT.**
3. The identical replication of a previous year's project is not permitted. However, a student may exhibit work on a continuing research problem if the work demonstrates significant progress when compared to the previous year's project.
4. Project size is limited to 76 cm. (30 in.) deep (front to back), 122 cm. (48 in.) wide (side to side), and 274 cm. (108 in.) high (floor to top including table).
5. No exhibit shall consist of a poster project only. An independent variable **MUST** be used in all projects displayed at the county fair. (Experimental Design). At the school level, schools may choose to allow display only projects in Grades K-3. These projects should be assessed using the same scoresheet as the others with the exception of the deletion of the Experimental Design section (50 points).
6. Construction must be safe and durable, with all movable parts attached. Only 110 Volt power will be available and should not exceed 500 watts. Students who require electricity should provide their own grounded 20 foot extension cords as necessary to reach the power outlets. All electrical connectors, wiring, switches, extension cords, fuses, etc. must be UL-listed and meet safety standards including visible on/off switch or other means of disconnect from the 110 Volt power source.
7. Each exhibitor must assemble their own exhibit without outside help, except for transportation and unpacking. The exhibitor must supply all material and tools necessary for setting up the exhibit.
8. An abstract of the project, should be displayed with the exhibit. The abstract should summarize the purpose of the project, how it was done, and conclusion.  
For exhibits in Divisions I include the following information: **Question** (Can be answered only by performing an experiment. The experiment should measure some type of change.) **Materials**, **Scientific Guess** (what do I think will happen), **Experiment** (step-by-step directions of what you did), **Changes** (cause and effect), **Data/Measurements**, **Data Display**, and **Conclusion** (was my scientific guess correct?)  
For Exhibits in Divisions II, III, & IV include the following information: Title, Research Question, Hypothesis, Independent, Dependent, and Constant Variables, Data Collection, Charts/Tables, Data Analysis in the Form of Graphs, Conclusions, Materials Used, and Bibliography.
9. Anything that could be hazardous or offensive for public display is prohibited in the display. This includes:
  - a. Living organisms
  - b. Human or animal food

## NICHOLAS COUNTY SCIENCE FAIR RULES

- c. Human/animal parts or body fluid (for example: blood, urine). Exhibition of human or animal parts other than teeth, hair, nails, bones or histological sections if prohibited
  - d. Laboratory chemicals
  - e. Poisons, drugs, controlled substances, hazardous substances or devices (for example: firearms, weapons, ammunition)
  - f. Dry ice or other sublimating material
  - g. Sharp items (for example: syringes, needles, knives)
  - h. Flames or highly flammable material
  - i. Batteries with open-top cells
  - j. Awards, medals, business cards, flags, endorsements and/or acknowledgements
  - k. Photographs or other visual presentations depicting vertebrate animals in surgical techniques, dissections, necropsies, or other lab procedures. Drawings, photographs, charts, and graphs presenting results of research involving vertebrates may be displayed unless they depict such animals in other than normal conditions. Photographs of human subjects require the signed consent of the subject.
  - l. Active Internet or e-mail connections
  - m. Any apparatus deemed to be unsafe by the Scientific Review Committee (for example: large vacuum tubes or dangerous ray generating devices, empty tanks that previously contained combustible liquids or gases, pressurized tanks, uninsulated electrical wires carrying more than 12 volts, uninsulated temperatures above 100 degrees Celsius, etc.)
  - n. Waste samples
  - o. Class III or IV lasers (may be displayed but not operated)
  - p. Any apparatus with unshielded belts, pulleys, chains, or moving parts with tension or pinch parts (may be displayed but not operated)
10. During judging the exhibit area is closed except judges and other authorized personnel. Exhibitors must be present at their projects during judging.
11. All exhibitors must be interviewed by the judges in order to qualify for awards. This includes all members of a group project. The purpose of the interview is to determine the exhibitor's familiarity with the project and the science involved, and to give the student an opportunity to meet with the judges, react to questions, and discuss their work.
12. The Science Fair Committee assumes no responsibility for exhibits. The public may view the projects upon completion and the awarding of prizes.
13. The Science Fair Committee reserves the right to reclassify any project.
14. Group projects are judged and awarded separately from exhibits by individuals. All rules and regulations apply to group and individual projects.



V. MATERIALS

---



---



---



---



---



---



---



---



---



---



---



---

VI. CONCLUSIONS

---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---

This is an Official Abstract and needed for scoring by the Judges.  
If more space is needed, attach additional papers.

# Science Project Record

---

Title/Topic

**Research Question:**

What you want to find out.

**Hypothesis:**

If.....then.....

**Variables:**

What you changed.

What you measured.

What you kept the same.

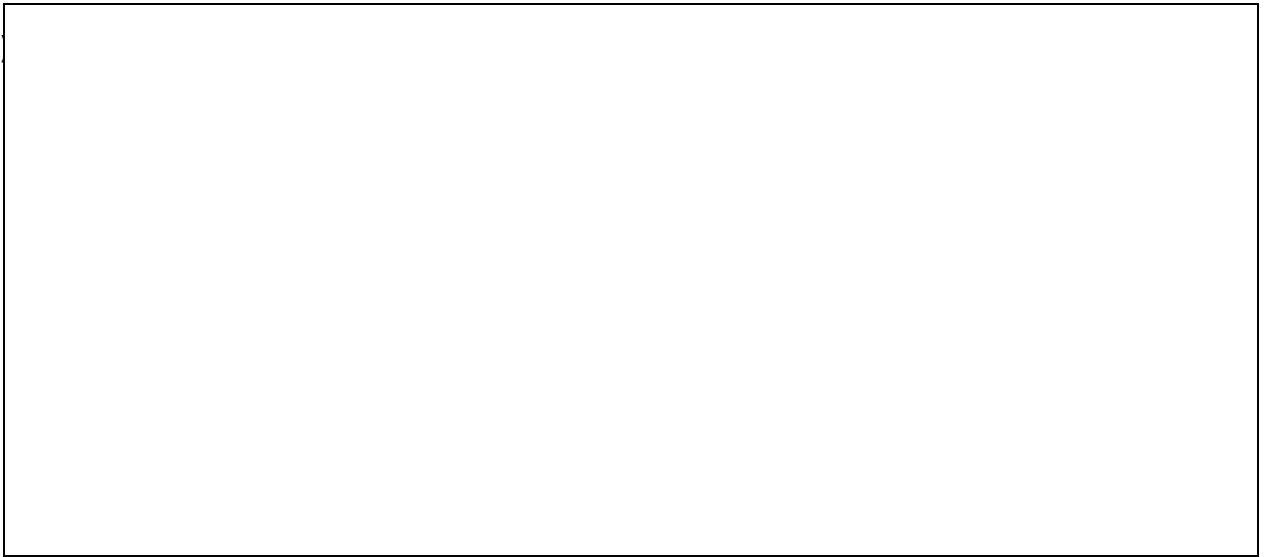
What you changed.	What you measured.	What you kept the same.

**Control:**

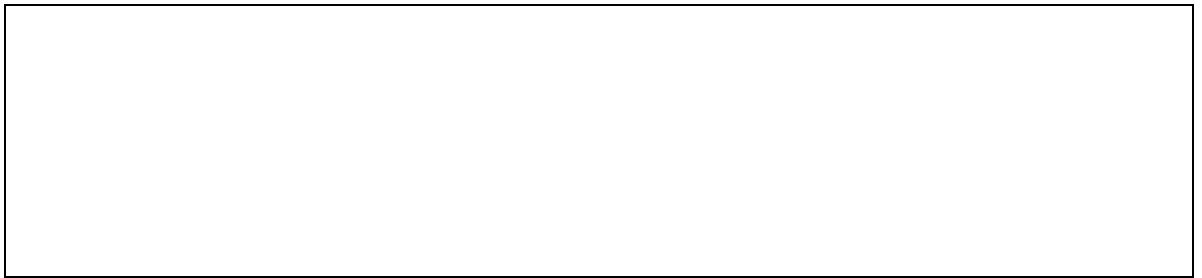
The original before making changes.

**Materials:**

**Procedure:**  
(Step by Step)



**Conclusion:**  
(Hypothesis was or  
was not supported)



**Changes/Improvements/Extensions**

(What would you change if you did this experiment again? How could you make it better?)



**Who would be interested in your project?**



**Research you did on your topic.**





Project Name \_\_\_\_\_

**Knowledge (Oral Presentation)**

- Is the student knowledgeable about the subject \_\_\_\_\_ **10 Points**
- Were the judge's questions answered adequately \_\_\_\_\_ **5 Points**
- Within the 3-5 minutes limit \_\_\_\_\_ **5 Points**

**Creativity**

- How unique is it \_\_\_\_\_ **10 Points**
- Is it significant and unusual for the age of the student \_\_\_\_\_ **10 Points**

**Display**

- Are the following required elements present
- Hypothesis \_\_\_\_\_ **5 Points**
- Procedures \_\_\_\_\_ **5 Points**
- Materials \_\_\_\_\_ **5 Points**
- Data \_\_\_\_\_ **5 Points**
- Conclusion \_\_\_\_\_ **5 Points**
- Title (Does it match) \_\_\_\_\_ **5 Points**
- Is the project neat, organized \_\_\_\_\_ **5 Points**
- Is it free from grammatical mistakes \_\_\_\_\_ **5 Points**

**Abstract**

- Does the student have an abstract \_\_\_\_\_ **10 Points**
- Is the abstract complete \_\_\_\_\_ **5 Points**
- Is it free from grammatical mistakes \_\_\_\_\_ **5 Points**

**TOTAL** \_\_\_\_\_

**Judge's Comments:** \_\_\_\_\_

---



---



---



---



---



---



---



---



---



---

# INVESTIGATIVE SCIENCE PROJECT JUDGING FORM

Project Number:

Project Name:

Type:

Level:

Category:

I.	<b>EXPERIMENTAL DESIGN</b>	40 pts. possible	Pts. allowed
<input type="checkbox"/>	Hypothesis/Has student made an educated guess? _____	(5 points)	_____
<input type="checkbox"/>	Is there a control and can student identify it? _____	(5 points)	_____
<input type="checkbox"/>	Is there an independent variable and can student identify it? _____	(5 points)	_____
<input type="checkbox"/>	Is there a dependent variable and can student identify it? _____	(5 points)	_____
<input type="checkbox"/>	Is the dependent variable measureable? _____	(5 points)	_____
<input type="checkbox"/>	Did student repeat trials and does he know why he repeated them? _____	(5 points)	_____
<input type="checkbox"/>	Did student collect data? _____	(5 points)	_____
<input type="checkbox"/>	Did student form a conclusion? _____	(5 points)	_____
II.	<b>KNOWLEDGE (Oral Presentation)</b>	25 pts. possible	Pts. allowed
<input type="checkbox"/>	Is student knowledgeable about project during oral presentation? _____	(15 points)	_____
<input type="checkbox"/>	Were judge's questions answered adequately? _____	(10 points)	_____
III.	<b>CREATIVITY</b>	10 pts. possible	Pts. allowed
<input type="checkbox"/>	How unique is the project? _____	(5 points)	_____
<input type="checkbox"/>	Is the project significant and unusual for the age of the student? _____	(5 points)	_____
IV.	<b>DISPLAY</b>	10 pts. possible	Pts. allowed
<input type="checkbox"/>	Are required elements present? (Hypothesis, Procedures, Materials, Data, Conclusion, Title) _____	(5 points)	_____
<input type="checkbox"/>	Is the project neat, organized and grammatically correct? _____	(5 points)	_____
V.	<b>ABSTRACT</b>	15 pts. possible	Pts. allowed
<input type="checkbox"/>	Are required elements present? (Hypothesis, Procedures, Materials Data, Conclusion, Title) _____	(5 points)	_____
<input type="checkbox"/>	Is the project neat, organized and grammatically correct? _____	(5 points)	_____
<input type="checkbox"/>	Is the appropriate form used and are all parts complete? _____	(5 points)	_____

**Total Points** 100 pts. possible \_\_\_\_\_

## NOTE:

Judges, please check your addition and make certain your totals are correct before you rank your projects.

## JUDGE'S COMMENTS:

---

---

---