Austin Energy Regional Science Festival 2013

ELEMENTARY PROJECT JUDGING

PROJECTS

A. EXHIBIT: Demonstration, Model, or Display

An exhibit can be a demonstration, a model or a display. A demonstration or model describes how or why something works. A display reveals details about the topic.

DISPLAY BOARD ELEMENTS

TITLE of Demonstration, Model or Display
RESEARCH REPORT gives background information about exhibit (may include diagrams and pictures)
EXPLANATION of what the exhibit shows
CONCLUSIONS
REFERENCES and ACKNOWLEDGEMENTS

CRITERIA FOR JUDGING

Exhibit: Demonstration, Model, or Display

	LEAST ← → HIGHEST				
• Title – Student states project title	1	2			
• Research Report – Student provides written background Information	1	2	3	4	5
• Exhibit Explanation – Student describes what the exhibit shows. (Pictures of the student doing each step are encouraged.)	1	2	3	4	5
• Conclusions – Student describes what was learned	1	2	3	4	5
• References and Acknowledgements – Student credits all sources	1	2	3	4	5

EXAMPLES

Demonstration

You might want to demonstrate how light reflects off different objects. For instance, you might arrange a set of Lucite mirrors (no glass) or even pieces of foil to show how a beam of light from a flashlight bounces from one reflective surface to another. Your report could explain that light travels in straight lines. Many demonstrations are found in books like "Mr. Wizard," which are available from the library.

Model

You might like to make a model of a bridge out of wood or sticks. Diagrams could show the parts, and your report could explain how a bridge is constructed.

Display

You might design a display about monkeys, showing pictures of different types of monkeys. Your report could explain where the monkeys live, what they eat, and describe some interesting habits.

Remember to check the list of prohibited/discouraged/allowed items in the "Elementary Division Rules for Participation".

Students should always plan on taking photographs of their project steps as a visual explanation of their effort.

(More on next page)

B. EXPERIMENT

An experiment is a test of a question to which you do not already know the answer. To test your question, you must follow the steps of the scientific method. The display board elements below lists these steps.

DISPLAY BOARD ELEMENTS

TITLE of experiment
PROBLEM: What question are you trying to answer?
DEFINITIONS: Explains the meanings of any special words stated in the "Problem."
HYPOTHESIS: This is what you think will happen before you start to test.
BACKGROUND INFORMATION: What do books, articles, and the Internet say about your topic? **EXPERIMENTAL MATERIALS:** What items do you need to perform your experiment? **EXPERIMENTAL PROCEDURE:** These are the steps you follow to test your problem.
RESULTS: What happened? (Use tables of data or graphs plus a description.)
CONCLUSION: What is the answer to the question in your "Problem?" How do you explain your results? **REFERENCES and ACKNOWLEDGEMENTS:** Books, resource people, articles (include the title and author) or specific Web sites (include the date the site was accessed). Neither search engines, such as Google and Yahoo, nor Wikipedia are scientific sources.

CRITERIA FOR JUDGING

Experiment	LEAST				HIGHEST
• Title of Project – Student states project title	1	2			
• Problem – Student asks a testable question or states his/her goal	1	2	3	4	5
• Definitions – Student knows the meaning of the words in the problem	1	2	3	4	5
• Hypothesis/Goal – Student predicts what the results will be or what they are trying to achieve	1	2	3	4	5
• Background Information – Student provides written research information of test	1	2	3	4	5
• Experimental Procedure – Student describes steps of test or construction	1	2	3	4	5
• Experimental Materials – Student lists items needed for test or construction	1	2	3	4	5
• Results – Student describes what happened; tables and graphs display data.	1	2	3	4	5
• Conclusion – Student answered the question posed in the problem or met their goal	1	2	3	4	5
• References and Acknowledgements – Student credits all sources	1	2	3	4	5

EXAMPLES

Do ants like diet soda? Do batteries of the same brand last the same amount of time? Does warm water freeze faster than cold water?

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