

801 Frontage Road NW Byron, Minnesota 55920 (507)775-2037 FAX (507)775-2040

Zumbro Education District Science Fair Rules & Guidelines

Only experimental projects using the scientific method will be allowed in the ZED Science Fair. Individual schools may choose to allow students to do demonstrations or research papers for their district science fair, however only those using the scientific method can advance to the ZED Science Fair. Following are the rules and guidelines for the ZED Science Fair:

- 1. The ZED Science Fair is open to all students in grades 4-6.
- 2. The project must be the work of the student.
- 3. Only individual and not partner projects will be accepted.
- 4. The project must be an experiment that tests a hypothesis and follows the steps of the Scientific method. General steps for preparing a science fair project: (Details on following pages)
 - A. Pick an experiment that interests you. A few examples include:
 - "What are the effects of light, heat, water on plant growth?"
 - "Does temperature affect crystal growth?"
 - "Is it possible to learn while sleeping?"
 - "What design of paper airplanes flies the farthest?"
 - "Is memory affected by color?"
 - B. Predict what will happen. This is your hypothesis.
 - C. Do the experiment, collect data, and record the results.
 - D. Prepare a display board for your experiment.
 - E. Explain your display board to the science fair judges.
- 5. The entire exhibit should fit on a tabletop display area 3 feet wide by 1.5 feet deep. A 3-panel display board works best. If extra space is needed, the student needs permission to display it.

6. The exhibit should have a written description of the project as well as any photographs, charts, drawings or examples students wish to display. Here is a possible project board layout. Be sure to label your sections as "Purpose," "Hypothesis," "Procedure," Results," and "Conclusions." If you are using resources (internet, books, experts, etc.), add a Resources section.

Purpose:
Describe the question or problem you are trying to answer.

Hypothesis: Tell what you

think will happen.

Procedure:

Give a list of your materials and the step by step procedure you used.

Project Title

Your Name, School & Grade

Pictures

Data Tables & Graphs

Results:

Describe what happened.

Conclusions:

Tell why you think you got the results you got. Tell whether or not your hypothesis was right.

Resources: (optional) List of books, websites, or experts you used.

- 7. Except for plants, living organisms may not be exhibited.
- 8. Exhibiting spoiled foods, molds, bacteria, microorganisms or any other type of culture growth must be in a sealed plastic container.
- 9. Anything that could be hazardous is prohibited. Bring pictures of the following:

Syringes, scalpels and similar pointed/sharp devices

Any flames, open or concealed

Hazardous chemicals like strong acids.

Poisons, toxic and hazardous chemicals, drugs and other controlled substances Dry ice or other sublimating solids

Compressed gas cylinders

Unshielded belts, pulleys, chains or moving parts with pinch points

11. If you have any questions about the guidelines or rules, please contact Becky Remmele at the Zumbro Education District (507) 775-2037 or bremmele@zumbroed.org.