GATEway
c/o Northrop Community Education Center
201 NW Eighth Street • Rochester, MN 55901
rochester@mcgt.net • www.geocities.com/gateroch

Grade 2-6 GATEway Science Fair – February 28, 2009

Landow Atrium, Subway Level of Gonda Building, Mayo Clinic

Hosted by Mayo Foundation Chapter of Sigma Xi

Preparing Your Project. Read and follow the GATEway Science Fair Rules to keep you and your audience safe and to learn what can be displayed at the fair. The project entered in this science fair must be your own work but it can be the same as the one used for your school science fair or the Rochester Regional Science Fair.

Does Your Project Involve Liquids or Electricity?

(1) Liquids from the experiments, except for plain water, may not be brought to the fair without being approved by Diane Hanson (see below). Acidic substances, like vinegar, will not be allowed because of the risk of permanent damage to the marble floors. As a general rule, any liquid you would not want spilt on your own floor will not be allowed in the fair. Please display photos instead.
(2) Use of electrical outlets is not permitted.

NEW!!! Rochester Regional Fair Information Session for Parents in Geffen Auditorium. Parents whose students do not require direct supervision during their review time are invited to attend an information session about the Rochester Regional Science Fair. Come learn about what to expect when your student is in grades 6-12 and can participate in the next level of science fair.

Vintage T-Shirts! Buy t-shirts from past GATEway Science Fairs! $3 each, or 2 for $5!

Snacks. Snacks will be provided for students entered in the fair during Student Snack Break. Snacks for other family members may be purchased in the Cafeteria throughout the day.

What to Bring the Day of the Fair

- Project display board & any items you need to explain your project
- Money if buying extra snacks or vintage t-shirts
- Camera if you want your picture taken with your project

Parking. WHEN YOU ARRIVE, PARK IN THE DAMON RAMP AND TAKE THE ELEVATOR TO THE SUBWAY LEVEL TO ENTER THE FAIR. NO OTHER ACCESS IS AVAILABLE.

Group Assignment. Participants will be pre-assigned into groups. Entrants with the same last name and team members will automatically be assigned to the same group. If entrants with different last names need to be together for reasons of adult supervision, please e-mail Diane Hanson (see below) with the entrants' names.

Schedule

Note: Parents, you must be responsible for your children for the entire duration of the fair. GATEway can NOT provide any supervision or childcare.

12:30-1:30 PM	Check-in (paperwork, group assignment, t-shirt) and set up your project
1:30-2:30 PM	Group 1—Review Session (student must stay with project & explain it to reviewers) Optional Rochester Regional Fair Info Session for Parents (Geffen Auditorium)
	Group 2—Family Presentation by Science Museum of MN (Phillips Hall)
2:30-3:00 PM	Group 1—Student Snack Break (Patient Cafeteria)
	Group 2—Student Snack Break (Phillips Hall)
3:00-4:00 PM	Group 1—Family Presentation by Science Museum of MN (Phillips Hall)
	Group 2—Review Session (student must stay with project & explain it to reviewers) Optional Rochester Regional Fair Info Session for Parents (Geffen Auditorium)
4:00-4:30 PM	Open to the Public (students may also view each others' projects)
4:30 PM	Receive your reviews & pack up your project (projects not removed will be discarded)

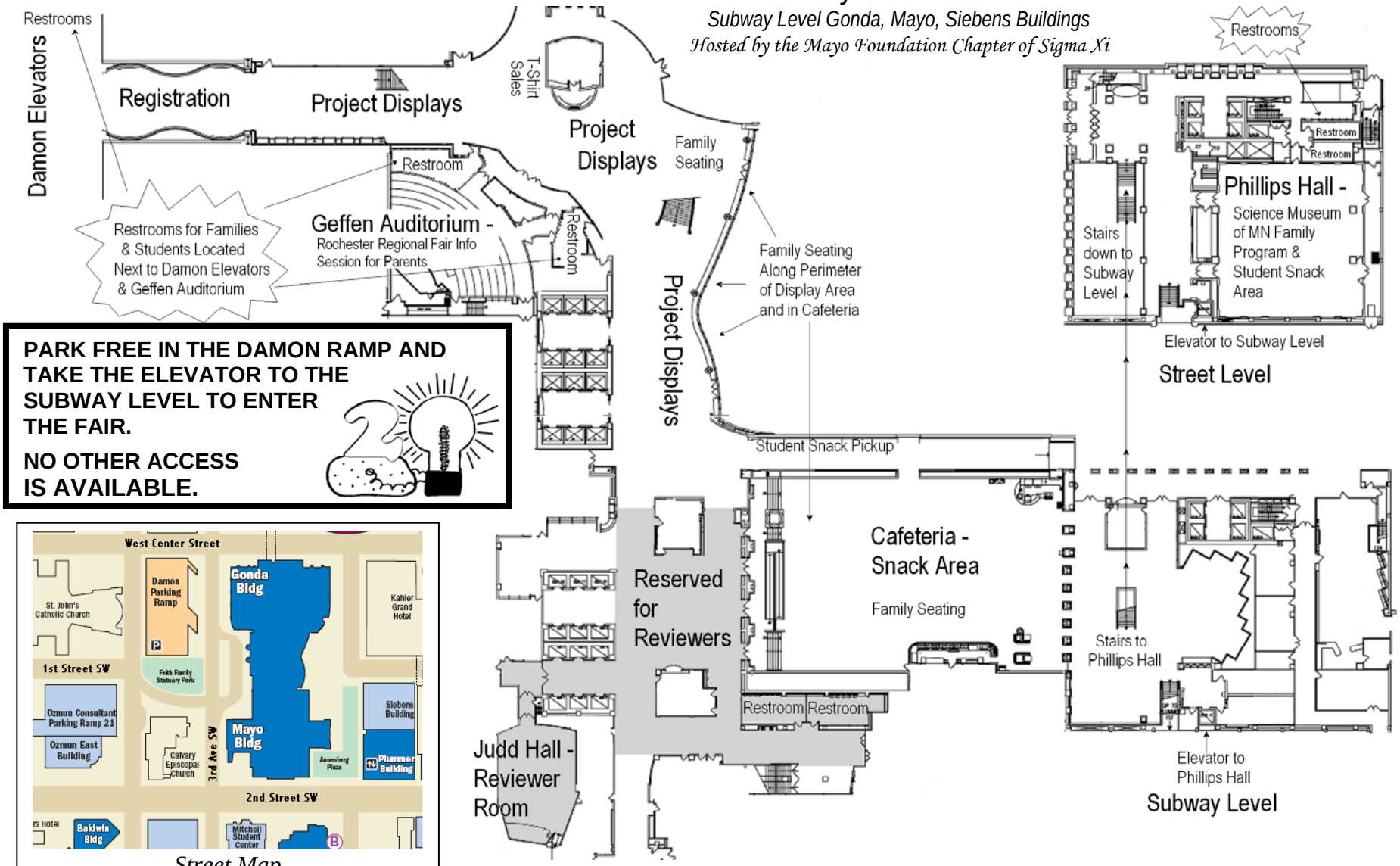
Adults, we need your help! General volunteers please contact Diane Hanson (see below). If you have a science background and can review projects contact Desiree Strom at dsstrom@charter.net.

Questions? Contact Diane Hanson, Science Fair Co-Chair, at 281-1498 or dianembh@yahoo.com

GATEway Science Fair 2009

Subway Level Gonda, Mayo, Siebens Buildings

Hosted by the Mayo Foundation Chapter of Sigma Xi



Street Map

Students interested in the SC/SW Regional Science Fair at Mankato State University -- Saturday, May 2, 2009 -- The SC/SW Regional Fair in Mankato is another opportunity for students in grades 3-6 to present their projects. It is a competitive fair and typically ribbons and/or prizes are awarded. This fair follows the Intel International Science and Engineering Fair (Intel ISEF) rules which require approval forms that must be completed BEFORE the student begins experimentation. These rules and forms can be found at http://www.mnsu.edu/sciencefair/studentparent/. Parents of interested students should e-mail Diane Hanson at dianembh@yahoo.com to receive further registration info. The registration form, copies of the approval forms (you keep originals), and appropriate fees must be received by GATEway by Friday, March 13th. Parents will be responsible for taking their own children to the fair and will need to coordinate with each other to pick up the GATEway group packet during check-in.

Science Fair Ideas & Tips

What is a Science Fair Project?

Anything which demonstrates the use of the Scientific Method:
• Recognition and statement of a problem
• Thinking of and testing a hypothesis (what you think is the answer to the problem)
• Collection of data through observation or experimentation
• Drawing conclusions through an analysis of your data

What is important to a good project?

• Clear statement of the problem and hypothesis
• Good design of the experiment in order to clearly test the hypothesis
• Detailed data collection and clear presentation of information in your exhibit

What kinds of projects might you do?

How about:
• Household product testing
• Effects of light, heat, water on plant growth
• Is it possible to learn while sleeping?
• What design of paper airplanes flies the farthest?
• Color preferences of gerbils
• Does sound affect plant growth?
• Does temperature affect crystal growth?
• Temperature's effect on seed germination
• Does color affect memory?

Ask your school librarian for books that contain ideas for projects, or for books that might help you design an experiment once you have an idea in mind.

Possible Project Board Layout

This is just a suggestion for your project board layout. You can put things in different places, but it is best to label your sections (Purpose, Hypothesis, Procedure, Results, and Conclusions). If you are doing your project for school, follow the format your teacher gives instead. If you used resources (internet, books, or experts) to learn about the science of your project, add a Resources section to your board to list them.

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:** List of books, websites, or experts you used.

Websites

http://www.sciencebuddies.org
http://school.discovery.com/sciencefaircentral/
http://www.cdli.ca/sciencefairs/
http://www.ipl.org/div/kidspace/projectguide/
http://faculty.washington.edu/chudler/fair.html
http://www.isd77.k12.mn.us (select “For Kids” link under Resources, then click Cyberfair help)

GATEway Science Fair Rules

1. The GATEway Science Fair is open to all students in grades 2-6 in the Rochester area. Students can come from any public, private, or home school and do not have to be part of a gifted and talented program.
2. The project must be the work of the entrant(s).
3. All project-related expenses are the responsibility of the entrant.
4. A project should either be an experiment that tests a hypothesis (an educated guess about the outcome) or an engineering project that attempts to solve a design problem. Collections of items are not considered adequate for entry without an experiment. Manufactured science fair kits are not permitted.
5. Projects are to be completed at home and summarized in a tabletop display to be exhibited at the fair.
6. The entire exhibit should fit onto a tabletop display area 3 feet wide by 1.5 feet deep. We suggest a 3-panel poster board display standing upright on the table. These are available at local office supply stores. The exhibit should have a written description of the project as well as any photographs, charts, drawings or examples you wish to display.
7. Except for plants, LIVING ORGANISMS MAY NOT BE EXHIBITED AT THE FAIR.
8. The exhibition of human and animal parts is prohibited except: teeth, nails, animal bones, histological sections and liquid tissue slides properly acquired. Sealed insect displays are permitted.
9. Anything that may be contagious or communicable to humans or animals is strictly prohibited.
10. Photographs and other visual presentations of surgical techniques, dissection, necropsies and/or other laboratory techniques depicting vertebrate animals in other than normal conditions may not be displayed on the student's exhibit, but may be contained in an accompanying notebook. Photographs of special needs human subjects require signed consent, as per federal regulations.
11. Exhibiting spoiled foods, molds, bacteria, microorganisms or any other type of culture growth is not permitted, unless they are in a sealed plastic container.
12. Liquids that are part of the experiment other than plain water may not be brought to the fair without prior approval of a Science Fair Co-Chair (see contact info at bottom of page). VINEGAR and other ACIDIC substances are strictly prohibited. If spilled, these acidic substances will permanently damage the floor in the Gonda building, so please take pictures at home instead.
13. Electrical outlets may not be used during the fair. Electrical displays may use batteries of less than 12 volts DC. Open top cell batteries and car batteries are strictly prohibited.
14. Anything that could be hazardous in a public display is PROHIBITED in the display. Some of the things in the following list may be suitable for use in your project at home, but we ask that you bring only pictures of these items to the fair:
    a. Syringes, pipettes, scalpels and similar pointed/sharp devices.
    b. Any flames, open or concealed. Any apparatus producing temperatures that will cause physical burns.
    c. Any flammable or combustible solids, liquids, gases, or containers that have held such things.
    d. Hazardous chemicals like strong acids, caustics and oxidizers.
    e. Poisons, toxic and hazardous chemicals, drugs and other controlled substances.
    f. Dry ice or other sublimating solids.
    g. Compressed gas cylinders.
    h. Operation of class III or class IV lasers.
    i. Unshielded belts, pulleys, chains or moving parts with pinch points.
15. Each entrant is responsible for transporting his or her own project to and from the venue for the fair. GATEway assumes no responsibility for the materials displayed at the fair. The entrants should use good judgment about the pieces of their exhibit which are left unattended. One-of-a-kind items and/or things of monetary or personal value should not be left unattended with the exhibits.
16. The entrant MUST be available to talk to the reviewers during the reviewing period. Parents, the reviewers struggle to hear the students. Please move out of the project display area to the parent presentation, the perimeter, or the cafeteria during the review process and refrain from loud conversation.
17. Parents are responsible for their children for the entire duration of the fair. GATEway can NOT provide any supervision or childcare.
18. Projects not taken down at the completion of the fair will be discarded.
19. If you have any questions about the rules or the suitability of a project, please contact Diane Hanson, GATEway Science Fair Co-Chair, at 281-1498 or dianembh@yahoo.com.

Revised 01/21/09