

Dear Parents and Students,

Come one! Come all! You are invited to participate in 5th Annual Science Fair at Grayling Elementary. This event will be held at 5:30 PM on Wednesday, February 16th. A short awards ceremony will be held at the end of the event. Inquiry is part of our state's mandate for science. The purpose of the Science Fair is to give students an opportunity to explore and learn more about science using inquiry.

Third graders will be able to choose from 4 major types of projects: create a critter, simple machines, experiment or demonstration. Further details about each type will be included in this packet. Students may choose to work individually or in small groups as designated by their teacher.

Fourth and fifth grade students will be able to choose to do project work in two major categories: experiment or demonstration. If the student chooses the experiment project type, then the Scientific Method approach should be followed. This type of project work is to be done when a student wishes to test out an idea about something. More information about how to proceed with this type of project will be included in this packet. Fifth grade students will be expected to include the identification of specific variables within their experiments; the manipulating or independent variable (the one thing that is changed within their experiment,) the dependent variable (what is being measured,) and the control variables (those things or conditions that are kept the same.) A detailed description of how to use the Scientific Method will be included in this packet, as well as some suggested links for help will be included. You can also link up to additional information via the CASD website at casdk12.net. Go to schools, Grayling Elementary, Little Vikes and then the Science Fair. Project boards will be available next month for a nominal fee of about \$2.00. Students may work individually or in pairs. Students wishing to work in pairs need project approval from their teacher(s) beforehand.

The other major type of project that a student may choose to do is a demonstration project. This type of project is for the student who would like to explore or learn more about a given science topic and present their findings. This type of project is not an experiment. When choosing this project, a student will be asked to share everything they learned. It will also be important in sharing why they chose the topic, how it works, and where it might be useful. The more detail the student can share about what they learned, the better. These project titles also need to be posed in the form of a question. See the list below for possible topic ideas or examples.

What is solar power?

How do solar cells work?

What is the Digestion System?

How does gravity work?

What is the Circulatory System?

What is white light?

What is a rainbow?

As you can see the possibilities are endless! It is under this category that inventions could also be included. For example, can I build a better mousetrap? Can I build a working alarm system? Again, there is a multitude of possible ideas. They can see their teacher for further detail.

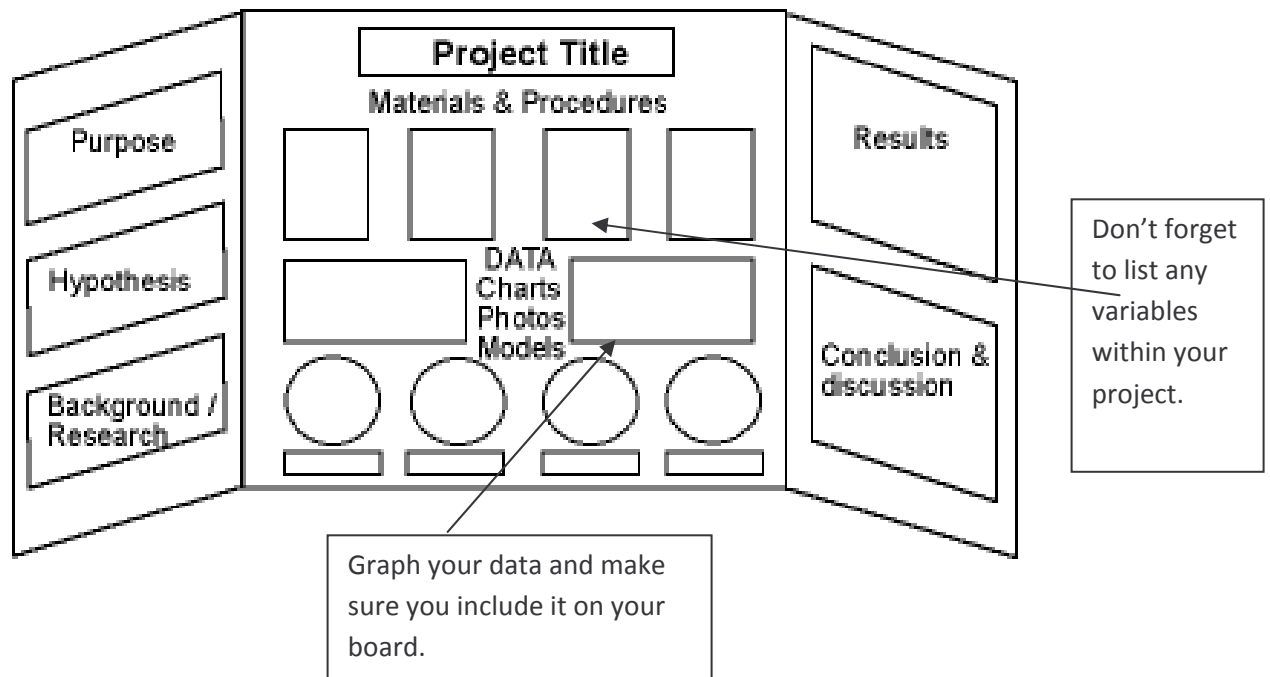
Judging takes place earlier on the day of the event. This year we are asking that the children do not place their names anywhere on their projects. They will be identified by project number on a brochure you can get at the door. Our judges are honor students from the high school, educators, administrators, school board and community members. Students present their projects to the judges the day of the Science Fair earlier at school. They are scored by two separate teams, and those scores are used to determine awards.

We would also like to thank our sponsors. The Kohl's team in Gaylord has very generously donated \$500 through a grant. The Kohl's team also has volunteers that come and help to judge our third grade projects. BP, through Scott Johnston, has granted us another \$600. Thanks to these very generous companies, we have the monies to pay for the event. Thank you to all of the parents, teachers, staff, and community members that help students to participate in our fair. With everyone's help and support, our students reap the benefits.

Sincerely,

The GES Science Fair Committee

Example Display Board: See the following pages for more detailed examples of components.



*** Please, do not put names on your project boards and/or reports. Students will be identified by project number only.

Take a look here for ideas:

<http://www.sciencebuddies.org/>

<http://nces.ed.gov/nceskids/CreateAGraph/default.aspx>

<http://school.discoveryeducation.com/sciencefaircentral>

The Scientific Method

Problem – What are you trying to figure out? Write this in the form of a question.

Hypothesis – What do you think you are going to find out? This should be posed as an “if..., then...” statement.

Materials – List the materials you will use in the experiment.

Variables- Cite, list or identify the variables.

Procedures – Make a detailed list of the steps in your experiment.

Results – What did you observe when you performed the experiment? Describe what happened during your experiment. Insert charts, pictures, tables or graphs of the data you collected.

Conclusion – From what you observed, how did you answer your original question? What did you learn?

Do you have any new questions as a result of your project?

References/ Bibliography- List any sources you used.
