

Nova Dwight D. Eisenhower Elementary Schools Elementary Science Fair: Grades K – 5

Philosophy

Students at the elementary school level need to become science literate and proficient in order to compete and survive in a rapidly changing, highly technical world. Teaching students how to do science projects can develop process skills and problem solving techniques. Learning how to set up an experiment in the primary grades and solving science problems in an organized manner in the intermediate grades, gives students life long skills that will enable them to compete in state and national competitions in middle and high school.

REQUIRED ASSIGNMENT FOR 3RD – 5TH GRADES

Intermediate students are required by Florida State Standards to be able to “plan and investigate an experiment that defines a problem, proposes a solution, identifies variables, collects and organizes data in tables, charts and graphs, analyzes information, makes predications and presents and supports finding.”

Our last quarter requirement for science will be a **SCIENCE FAIR EXPERIMENT**. This project will be presented on a mini-board, which will be provided by your child’s homeroom teacher. All parts of the experiment must be securely attached to the mini-board and NO separate notebook is required. The mini-board is meant to reflect important information directly related to the experiment. Students may use pictures and clipart that is properly cited, but remember that photographs should **not show any faces**.

This year, Mandatory Science Fair Projects will be completed as follows:

- **K-2nd Grade**: in class, whole class experiment
 - A student **MAY** submit an individual project, if they wish
- **3rd Grade**: **in class** assignment completed in small groups
 - A student **MAY** submit an individual project, if they wish
- **4th Grade**: **in class** assignment completed individually or in pairs
 - A student **MAY** submit an individual project, if they wish
- **5th Grade**: **out of class** assignment completed individually
 - ALL students **MUST** submit an individual project

Whether completing the project in class or individually, the project requirements are the same for everyone and may be found in this packet. The skills required for completing a science fair project have been practiced in class and students will be shown samples of science fair experiments that have been completed on mini-boards.

ALL SCIENCE FAIR PROJECTS ARE DUE ON FRIDAY, APRIL 16, 2010.

Each homeroom teacher will assess the science fair projects from his / her class and select the six best projects to represent the class and to be displayed on the class's bulletin board in the main hallways for final judging by a varied panel of school judges.

IMPORTANT INFORMATION

To assist you at home, please refer to:

- **Scoring Rubric**: this will be used to assess the student 's project. The rubric must be attached to the back of the mini-board.
- **Bibliography**: Please review the sample of the required format for the bibliography, which is provided in this packet. Mrs. Zimmerman is a wonderful media specialist who is willing to guide your child in selecting research information. Please make arrangements with her if this interests you.
 - **K – 2nd grade students are required to use one resource**
 - **3rd grade students are required to use at least 2 resources**
 - **4th and 5th grade students are required to use at least 3 resources**
- **Background Research**:
 - **K – 3rd Grade**: a one paragraph summary **MUST** be labeled and attached to the front of the mini-board. It should explain clearly what area of science this experiment falls under and why it is important. Your homeroom teacher can guide you with this assignment.
 - **4th Grade**:
 - Written or typed, **1 page expository paper** about your topic attached to the **BACK** of the mini-board. It must be written in the student's voice. It should explain clearly what area of science this experiment falls under, why it is important and why you selected it. Your homeroom teacher can guide you with this assignment.
 - A one-paragraph summary of your research paper **MUST** be labeled and attached to the front of the mini-board
 - **5th Grade**:
 - Written or typed, **1-2 page ONLY research paper** about your topic attached to the **BACK** of the mini-board. It must be

written in the student's voice. It should explain clearly what strand this experiment falls under and why it is important. Your homeroom teacher can guide you with this assignment.

- A one-paragraph summary of your research paper **MUST** be labeled and attached to the front of the mini-board
- **Experiment Label**: Remember that each part of the process must be clearly labeled. There are labels available on-line, if you need them.

Please be aware that projects involving an animal or using vertebrate animals (including people) must be approved by your child's science teacher PRIOR to beginning the experiment. A **mandatory verification form**, which may be obtained from your child's science teacher, must be signed and placed on the back of the display board.

Finally, this is a Science Fair **EXPERIMENT**. The following are examples of projects that are **NOT** experiments:

- **Surveys**: The number of people who have brown eyes in the classroom.
- **Models**: Volcanoes, planets, solar system, rockets, etc.
- **Demonstrations**: How celery absorbs food dye.
- **Research Paper**: Report on the different kinds of rocks.

Experiments can begin with a demonstration BUT must advance to TESTING VARIABLES. For example, you may test if celery absorbs more food coloring in hot or cold water. At least three (3) trials should be done in which all variables are controlled except for one. Data should be collected and a conclusion reached based on the student's observations and records.

Thank you for your support of our Science Fair. Should you have any further questions or need more information, please check our school's web site at www.NovaEisenhower.com to download templates, project guidelines and layout ideas or to view pictures of previous science fair projects. You may also check out our Science FCAT web site for a list of sites that offer science fair ideas and resources at www.Quia.com/pages/sciencefcats.html . You may also direct questions to your child's science teacher via your child's planner, school telephone or e-mail address.

Thank you again ... and have fun with your project!