

Science Night is Coming!

Friday, April 29, 2011

Students, Start Your Projects!

*Are you interested in science? Curious about how things work?
Now it's YOUR turn to be the scientist!*

All students, grades K through 6th, are encouraged to take part in Science Fair!

📍 (Your teacher will let you know if doing a project is required in your class)

A successful science fair project does not have to be expensive or time-consuming. However, it does require some planning. Some projects (for example, growing plants) require weeks to get results, or you may need to try your experiment more than once. Project boards will be due at school on or before April 29th and will be displayed all around the gym that night, to show off your great work!

📁 Guidelines -- You May Choose To Do ...

Grades K-2: Collection, Model, Invention, Experiment

Grades 3 & 4: Model, Invention, Experiment

Grades 5 & 6: Invention or Experiment using the Scientific Method

** there will also be an Egg Drop Contest open to all grades (more info to come later)

📁 Do you need an idea? See the back of this sheet for some ideas and questions to get you started. The PTA website, www.brooksidepta.org, has links to many websites to help you come up with a project. Also check out our school library or your neighborhood public library for science fair "how to" books.

📁 Free display boards! PTA has purchased cardboard tri-fold display boards for students to use. Once your science fair project is underway, simply send back the form below and we will give you your free board to make your display.

Questions? Contact Kira Lynch: Lynch.Kira@epamail.epa.gov

YES! I'm doing a Science Fair project.

Please send home a display board so I can show off what I've done.

Student Name: _____

Grade: _____ Teacher: _____

Parent Signature: _____ Date: _____

RETURN FORM TO YOUR CLASSROOM TEACHER / PTA

Brookside Elementary Science Fair: April 29, 2011

Project Guidelines:

Students may work individually, in pairs, or in small groups, unless your teacher tells you otherwise. Most of the work on science fair projects will be done at home, outside of school time. Students, please get parent approval for your project (teacher approval may be required in some classes). The idea is for students to have a meaningful learning experience, so please choose a project that fits with student age-level and abilities.

Project Ideas -- You May Choose To Do One of the Following:

Collection (grades K-2): A collection is a gathering together and presentation of similar things. Science collections show materials in an organized way, with labels. For example, you could: collect bird feathers and identify the birds they came from; photograph and label different cloud formations; research different types of animal habitat and list plants and animals that live in each, or display a shell collection including labels of where and what animal each shell is from. The collection doesn't have to be from nature, for example, you could gather and display recyclable materials, or products made from a certain mineral or compound or type of technology.

Model (grades K-4): A model or a demonstration is a "show and tell" display about a natural system or technology. You may build a model or a simulation or show the real object. Your demonstration must include an explanation of how the system works. For example, you could: build a model of an atom; create a display that explains how a microscope magnifies an object; diagram how a weather system, such as a tornado, works; or construct a spider web out of string.

Invention (grades K-6): An invention is a new way to do something that fixes a problem or is a new useful, fun or interesting idea. Think of something that needs to be fixed or improved or a new idea, then think of a way to fix it, do it or make it. For your display, you should build it or describe it, showing how it would work, and describe what it is made of, what it would do, and why.

Experiment (grades K-6): An experiment or an investigation is a way to answer a question by using the scientific method. Science investigations involve posing a question, predicting the outcome, testing the question, making observations, and presenting the results. A good, testable scientific question can usually be stated in the form: "How does _____ affect _____?" Some topics you might consider are: physical properties (such as hardness, temperature, size, texture, etc.), motion of objects (think of flying, rolling, dropping, etc.), wave behavior (sound, water, light), energy (heat, light, chemical, food), earth materials (questions about rocks, soil, water, air), or living organisms (characteristics of plants and animals).

For 5th and 6th grades: See also the separate handout on the scientific method.

SAFETY NOTE: The following are **NOT ALLOWED** to be displayed at the Science Fair (you may show photographs): open flames; flammable chemicals; live animals; preserved animals or their body parts; microbial cultures or fungi; food; needles or other sharp or dangerous objects; drugs; radioactive, toxic, poisonous, corrosive or reactive materials; or open top batteries. ***You need adult supervision to work with any of these materials!***