

## BASEF 2009 - Safety and Registration Reminders...

The Bay Area Science and Engineering Fair Safety Rules are very strict in every sense of the word in order to achieve the high standards of safety that not only we, at BASEF require for a project to be displayed, but also because we want a safe environment for students, parents, teacher, judges, volunteers and anyone else who comes to our fair. This is a reminder of some of the more important Rules we see people forgetting to follow each year.

Projects must be set up on Wednesday between 3:30 – 7:30 pm and at least one student must be present with the project.

Projects CANNOT be set up on Thursday!

Please be sure you bring the same project you registered, with the same Title. You may NOT bring another project!

Remember to bring your project abstract, and your workbook or journal, so the Judges can see it on Thursday morning.

**DISPLAYED MATERIALS MUST COMPLY WITH ALL SAFETY, ANIMAL CARE AND ETHICAL REGULATIONS. UNSAFE ITEMS SHOULD BE REPLACED BY A PHOTOGRAPH!**

**THE DISPLAY IS A VISUAL DISPLAY AND NEED NOT BE A WORKING EXPERIMENT!**

### ANIMALS, MOLDS, VIRUSES, BACTERIA, - PLANTS, FRUIT AND VEGETABLES

(Safety Inspector will determine if something is proper to be displayed)

The following may NOT be displayed:

- Biological toxins, bacteria, viruses and moulds
- Animals (vertebrate or invertebrate)
- Skeletal Parts with growing bacteria may not be displayed
- Unhealthy and dead plants are not to be displayed.
- Microorganisms (the use of mixed cultures obtained from the environment - e.g. soils, mouth swabs - is acceptable for experimentation, but not for display)
- No cultures are allowed for exhibition (photographs or simulated cultures may be used)
- No plants or plant tissue in any form, dead or alive. No soil or plant materials.
- Anything grown from animal or human source is not to be displayed.

### LASERS

- Only CERTIFIED ANSI 'Class 1' unmodified laser or laser diodes can be operated.
- Pre-manufactured lasers must be in completely enclosed apparatus such that the beam cannot be seen by an observer under any condition may be operated.
- Focused laser diodes may not be operated at the fair.

### ROCKETS AND PRESSURE SYSTEMS

- Pressurized canisters or compressed gas cylinders are not allowed.
- Firearms and explosive material must not be displayed (no rocket engines).
- All air and hydraulic systems that employ pressure pumps and or holding tanks must be non-operational, depressurized, open to the atmosphere and free of compressed gas or fluids.
- Powered aircraft may not be activated.

### EROSION EXPERIMENTS

- You may display unmodified dirt or gravel with nothing added to it. If you bring anything else we may ask you to take it home again with you.
- We do not want you to make mud, so we may not allow water at your project.

### CONCRETE BLOCKS

- It has to be stable (won't fall over), not too heavy. and without loose debris.
- NO crushing of materials is allowed. This apparatus must be disabled to be displayed.
- Operation of press creates a pinch point that can crush body parts. It must be disabled to be displayed.

#### WATER

- Electrical and liquid items must not be placed close to each other.
- Projects that use water must be handled in a safe manner, without any spillage allowed during filling, transporting, or emptying the container.
- We are unlikely to allow anything other than water to be present in liquid form as part of your display.

#### PRODUCT COMPARISONS

- Chemicals that are in nature: hazardous, flammable, explosive or highly toxic; carcinogens; mutagens and all pesticides may not be displayed. They are to be simulated.
- Dangerous, toxic, corrosive, etc. chemicals are not allowed such as prescription drugs, over-the-counter medication as well as many kitchen and laundry supplies. Empty and properly cleaned containers are allowed for display (Safety Inspectors will decide if the empty container is safe to display)
- Chemicals that come with hazard warning labels or have a MSDS sheet indicating any hazard are not to be brought to the Fair.
- Liquid samples are to be simulated using colored water or other non-designated substances.
- If you see the words danger or caution or warning for the usage of a material, we will likely NOT allow the material to be displayed.
- No project will be penalized because the key (but potentially dangerous) components were not on display.

#### WINDMILLS, ROBOTS, ROBOTIC ARMS, etc.

- Be sure you comply with all the mechanical, electrical, water and size limits!
- Consider a photograph as a substitute.

#### CLOUD CHAMBER

- If your project uses Dry ice and/or isopropanol, we consider these hazardous so do not bring them to the fair. Consider a photograph as a substitute.
- For medical reasons, strong magnets are not allowed for display. A simulated one can be used.

#### ELECTRICAL POWER

- Sometimes electrical power in the gyms we are using is limited.
- Therefore we may be asking students to NOT use display lighting on projects to ensure equipment needed for project demonstrations isn't affected by tripped circuit breakers.
- We will assess this in detail at project setup and let you know what is allowed.

#### GENERAL ITEMS:

- When preparing your lunch or snacks think of many people who have allergies.
- We strongly recommend that you use unbreakable, sealed containers for any materials we allow you to display at your project. Glass jars are not a good choice, no matter how much duct tape we use to fasten them to the tabletop so they won't fall. Replace glass jars with plastic jars.
- All wood, cardboard and plastic packing boxes must be removed from the display area and taken home, for fire safety reasons. Packing materials cannot be stored under the table if there is any risk of flammability.
- Any computers, tools or other items that the student leaves in the display area are left at their own risk. We suggest use of a security cable for valuable items.
- Apparatus that has health warnings may not be displayed.
- Consider a photograph as a substitute.

We feel it is very important to provide a very safe environment for the thousands of participants and visitors who will come to our fair. We thank you for your assistance and cooperation in helping us achieve this and wish you success at BASEF 2009.

Your BASEF 2009 Organizing Committee