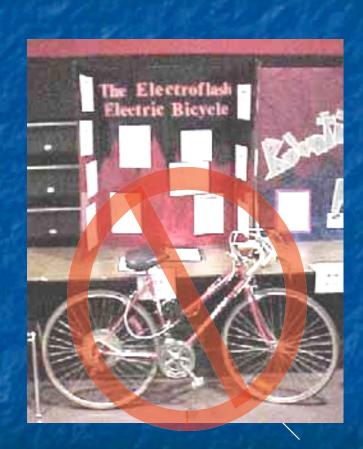
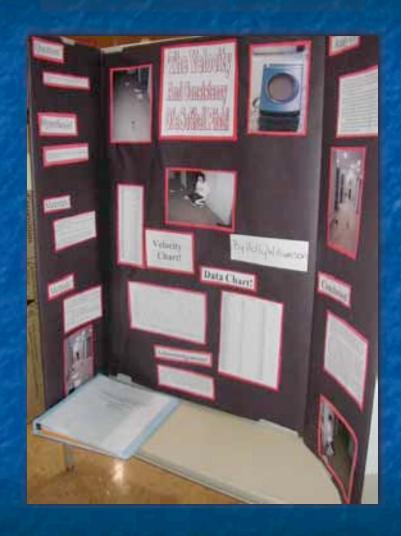
#### Display

- Exhibit size is limited to 76 cm (30") front to back, 122 cm (48") side to side, and 274 cm (108") top to bottom.
- The exhibit is self-standing and stable, with no sharp edges, corners, etc. <u>All</u> materials must fit within the display area.
- A project that does not fit in the space allotment must be modified.
- Suggest a photograph as a substitute (we will have a digital camera and printer available).



#### Backboards



- Adjacent walls may not be used for support of the backboard
- Light or unstable displays can be secured to the table with tape
- The display should have no loose items that can fall
- Materials attached to the backboard should be securely attached
- Awards or medals from other fairs may not be displayed



#### Displays

#### May NOT contain the following:

- Live animals or plants or dried plants.
- Food materials (NO EXCEPTIONS.)
- Soil, solutions, chemicals, household products or water, dry ice or other sublimating solids.
- Drugs or drug look alikes.
- Microorganisms, algae, mold, bacteria, or protists.
- Preserved animal parts. (Teeth fingernails, feathers, hair and bones may be OK if preserved and sealed in plastic.)
- Photos of animals in surgical or lab procedures.

Remember: the display is a visual display and not a working experiment



# Displays

#### May NOT contain the following:

- Exposed electrical apparatus or open batteries; wiring must be insulated.
- Flammable gases or open flames
- Unshielded fans, light bulbs, belts, pulleys, chains or moving parts with tension or pinch points.
- Sharp items such as needles, scissors, or glass tubing, syringes, pipettes.
- Awards, medals, flags, business cards or student name.
- Display of clean, empty containers is acceptable.

Remember: the display is a visual display and not a working experiment



#### Apparatus



- The participant must supply all equipment except display tables.
- Apparatus can be run <u>only if</u> <u>approved</u> and its operation can not injure anyone.
- Project as displayed must be self supporting and not subject to falling.
  - Moving exhibits are to fit within the display space.

-Consider a photograph as a substitute.

Powered aircraft may not be activated.

## Apparatus

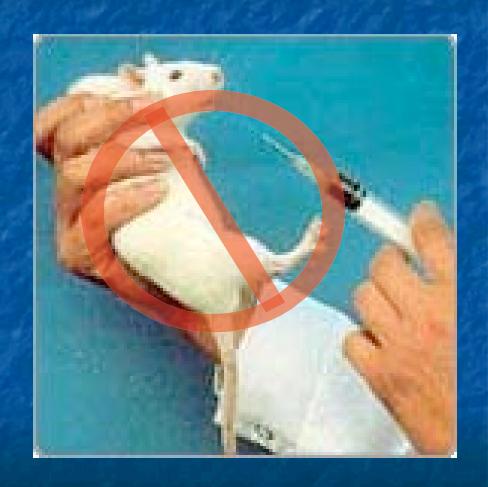


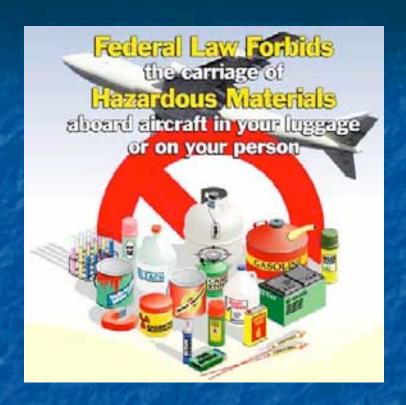


 Gears and moving parts that could be dangerous should be guarded.

#### Animals

- Live animals are not to be displayed.
- Pictures that could be interpreted as harm or distress to animals may not be displayed.
  - Displayed materials must comply with all safety, animal care and ethical regulations.



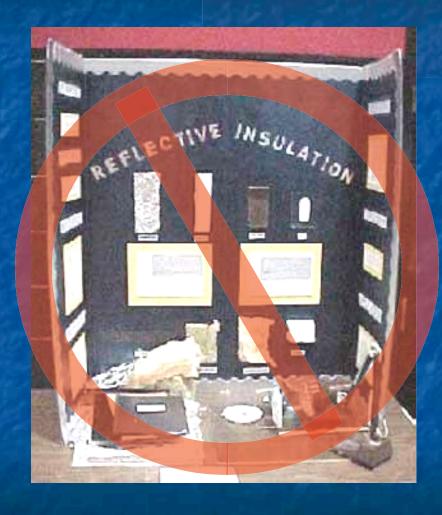




#### **Chemical Safety**

- Chemicals that are: hazardous, flammable, explosive or highly toxic; carcinogens; mutagens or pesticides may not be displayed. They are to be simulated.
- Dangerous chemicals are not allowed this includes prescription drugs, over-the-counter medication and many kitchen and laundry supplies.
  - Chemicals that come with hazard warning labels or have a MSDS sheet indicating any hazard are not to be displayed at the Fair.

## **Chemical Safety**



Exposed insulation is a fibrous material that can be inhaled, resulting in lung damage. It should not be included in any display.

#### Electrical



- Only UL-approved, 3 wire extension in good condition shall be used.
- 110-volt AC circuits must have UL approved cord (9' minimum) and grounded plug; bare wire and knife switches used only on circuits of 12 volts or less.
- All electrical connectors, wiring, switches, fuses, etc. must be UL-listed and must be appropriate for the load and equipment.
  - All electrical cords to be set up in a manner that they do not create tripping hazards.
- High voltage equipment must have grounded metal shield or cage; high voltage wiring, switches, etc. must have insulation and overload safety.



Listed Power Yentiletor For Rectaurant Exhaust Appliances 13G3 Maximum Operating Temperature

#### - IMPORTANT-

ELECTRICAL - If fan motor is NOT thermally profected, remote overfoad protection must be installed having dequate rating as to voltage, frequency, horsepower, and full load surrent per phase. Where connected to a circuit protected by histe, use time detay fuses. For supply connection use wires rated for at least 90°C(194°F).

INSTALLATION - When connecting electrical power to this fan, do not restrict motor movement for possible future bett or wheel adjustment.

46444

#### **Electrical**



- High voltage electrical projects such as Van de Graff Generators, spark gaps, etc. for display must be disabled so that they are non-operational.
- Cell or battery-fed circuits are to be safe in design and operation.
- Displays producing high temperatures must be insulated from surroundings.
- Large vacuum tubes and ray-generating devices must be shielded.

Electrical





These both require being disabled.

# **Light Emitting Devices**

- Class II lasers only if operated only during judging by the participant and labeled with a sign reading "Laser Radiation: Do Not Look into Beam" and enclosed in protective housing that prevents physical and visual access to the beam. Laser should be disconnected when not operating.
- Lasers are to be affixed to the apparatus. (not removable)
- Lasers are not to point upward or into the viewing arena.
- Lenses, mirrors, etc. are to be securely mounted to maintain a fixed orientation.
- A fixed beam stop is present, to prevent the beam from escaping into the viewing arena.
- Pre-manufactured lasers in completely enclosed apparatus such that the beam cannot be seen by an observer under any condition may be operated.



# Light Emitting Devices

- Class III and IV lasers are allowed <u>for display only</u> and may not be operated.
- L.E.D. (non focused light emitting diodes) are not lasers and are acceptable for operation.
- Any <u>lights used as a heat</u>
  <u>source</u> must be thermally guarded.







#### Living or Non-living organisms



The following may not be displayed:

- Cultures of microbes, algae, mold, bacteria or protists
- Biological toxins
- Microorganisms (the use of mixed cultures obtained from the environment - e.g. soils, mouth swabs - is acceptable for experimentation, but not for display.)

The display of clean, empty containers is acceptable.

# Living or Non-living organisms



The following may not be displayed:

- Non living decomposing plant tissue or soil.
- Plant materials (living, dead, or preserved) which are in their raw, unprocessed, or nonmanufactured state.

(Exception: manufactured construction materials used in building the project or display.)

# Pressure Systems - Explosives

- 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.
- Pressurized vessels should have a safety valve.
- Pressurized canisters or compressed gas cylinders are not allowed.
- Firearms and explosive material must not be displayed.
- Pictures may be used.

