

SIM Science & Engineering Fair

DISPLAY AND SAFETY REGULATIONS

The SIM Science & Engineering Fair Display and Safety Committee is the final authority on display and safety issues for projects approved by the Scientific Review Committee (SRC) to compete in the SIM Science & Engineering Fair. The SIM Science & Engineering Fair Display and Safety Committee may require students to make revisions to conform to display and safety regulations.

All displays will be inspected for compliance: projects not meeting compliance with SIM Science & Engineering Fair Safety Rules will be disqualified and not displayed.

Loss or Damage - Valuable equipment such as technology may only be part of the display if the student accepts full responsibility. These should only be used during actual judging periods. SIM Science & Engineering Fair assumes no responsibility for loss or damage to any project or part.

The regulations that follow have been divided into two main categories to separate those that deal specifically with display regulations and those that pertain to safety regulations.

I. Display Regulations

The following regulations must be adhered to at SIM Science & Engineering Fair:

Maximum Size of Project:

- Depth (front to back): 2.5 feet or 76 centimeters
- Width (side to side): 4 feet or 122 centimeters
- Height (table): 6.5 feet or 198 centimeters
- Height (floor): 9 feet or 274 centimeters

Please be aware when ordering posters that the mechanism that supports the poster should conform to the maximum size limitations stated above.

1. All project materials and support mechanisms must fit within the project dimensions.
2. Projects displayed on tables are the preferred standard. Projects which require floor access may utilize a table for a portion of their display, but the entire display must still fit within the width and depth limitations specified above. Projects with floor displays may be placed out of numerical sequence and possibly away from other projects in the same subject category.
3. All projects must fit within these prescribed space limitations. This includes elements of the project that may extend or protrude. Displays which are admitted, but are later augmented to exceed the space limitations will be disqualified until brought into conformance. Using the aisle between projects as additional display space, even temporarily during interviews, is cause for disqualification.

Display Content for Regulated Research Institution and/or Continuation Projects

1. Regulated Research Institution Projects
The display must reflect on the work conducted by the student.
 - Minimal reference to mentor's or other researcher's work must only reflect background information or be used to clarify differences between student's and others' work.

2. Continuation Projects

The display board should summarize ONLY the CURRENT year's work.

- The Title may include the duration of the project (for example, "Year Two of an Ongoing Study").
- Minimum reference to conclusions of previous years' work may be shown without any specific data being displayed.

Audio Visual Presentations

Students using audio-visual or multi-media presentations (for example 35mm slides, videotapes, images, graphics, animations, etc., displayed on computer monitors; or other non-print presentation methods) must be prepared to show the entire presentation to the Display and Safety Inspectors before the project is approved.

Any photograph/visual image/chart/table and/or graph is allowed if:

1. It is not deemed offensive or inappropriate (which includes images/photographs showing invertebrate or vertebrate animals/humans in surgical, necrotizing or dissection situations) by the Review Committee, the Display and Safety Committee, or San Bernardino County Superintendent of Schools Office. The decision made by any one of the groups mentioned above is final.
2. It has a credit line of origin ("Photograph taken by..." or "Image taken from..." or "Graph/Chart/Table taken from..."). If all images, etc. being displayed were taken or created by the student or are from the same source, one credit line prominently and vertically displayed on the backboard/poster or tabletop is sufficient.
3. It is from the Internet, magazine, newspaper, journal, etc., and a credit line is attached. If all photographs, etc. are from the same source, one credit prominently and vertically displayed is sufficient.
4. It is a photograph or visual depiction of the student.
5. It is a photograph or visual depiction for which a signed consent form is at the project or in the booth.

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Prohibited Items/materials (not allowed at project)

The following items cannot be displayed/included at the project:

1. Any items that are acknowledgements, self-promotions or external endorsements (such as naming the research institution, mentor or patent pending statements) and/or are intended for distribution including:
 - a. Any disks, CDs, business cards, printed materials, etc., (including unofficial abstracts) designed to be distributed to judges or the public.
 - b. Flash drives, brochures, booklets, endorsements and additional give-away items including, but not limited to, pins, key chains, food, etc.
2. Postal addresses, World Wide Web, email and/or social media addresses, QR codes, telephone and/or fax numbers of a project or student.
3. Awards won in previous competitions.
4. Active internet or email connections as part of displaying or operating the project at the SIM Science & Engineering Fair.
5. Prior year's written material or visual depictions on the vertical display board *(Exception: The project title displayed in the student's booth may mention duration of the project. For example, year two on an ongoing study).

**Any attempt to replenish or return removed items from the above list is a violation and will result in items being confiscated by the Display and Safety Committee and may result in the project failing to qualify for competition.*

Other Display Regulations

1. No changes, modifications, or additions to projects may be made after approval by the Display and Safety Committee and the Review Committee. Participants who do not adhere to this regulation will fail to qualify for competition.
2. If a project fails to qualify and is not removed by the student, fair officials will remove the project in the safest manner possible and is not responsible for damage to the project.
3. It is highly recommended that your name, school, grade and district be placed on all notebooks or materials that are left with your project. A project data book and research paper are not required but are highly recommended.

II. Safety Regulations

The following regulations must be adhered to when a student exhibits a project at the SIM Science & Engineering Fair:

Not Allowed on Judging Floor

1. Any living organism inclusive of all animals, plants and studied collections of microscopic life forms such as bacteria, fungi and molds. Displays of preserved animals are not permitted. Projects may not display photographs of procedures detrimental to the health and well-being of vertebrate animals.
2. Soil, sand, rock, cement and/or waste samples, even if permanently encased in a slab of acrylic.
3. Taxidermy specimens or parts.
4. Preserved vertebrate or invertebrate animals.
5. Human or animal food as part of the exhibitor demonstration of the project.
6. Human/animal parts or body fluids (Example: blood, urine).
7. Plant materials (living, dead, or preserved) that are in their raw, unprocessed, or non-manufactured state (Exception: manufactured construction materials used in building the project or display).
8. All chemicals including water or other liquids (projects may not use water in any form in a demonstration.)
9. All hazardous substances or devices (Example: poisons, drugs, firearms, weapons, ammunition, reloading devices and lasers).
10. Items that may have contained or been in contact with hazardous chemicals (Exception: item may be permitted if professionally cleaned and documented for such cleaning is available).
11. 3-D printers.
12. Dry ice or other sublimating solids.
13. Sharp items (Example: syringes, needles, pipettes, knives).
14. Weapons or weapon paraphernalia of any kind.
15. Flames or highly flammable materials (including magnified light sources):
 - a. A Fresnel Lens cannot be used in conjunction with a light source – it becomes an open flame.
16. Batteries with open-top cells or wet cells.
17. Glass or glass objects unless deemed by the Display and Safety Committee to be an integral and necessary part of the project (Example: glass that is an integral part of a commercial product such as a computer screen).
18. Any apparatus deemed unsafe by the Scientific Review Committee, the Display and Safety Committee, or San Bernardino County Superintendent of Schools' officials (Example: large vacuum tubes or dangerous ray-generating devices, empty tanks that previously contained combustible liquids or gases, pressurized tanks, 3D prints, etc.).

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Electrical regulations at the SIM Science & Engineering Fair

1. Electrical power supplied to the project is 120 volt. Surge protectors are permitted, but not provided.
2. Electrical devices must be protectively enclosed. Any enclosure must be non-combustible. All external non-current carrying metal parts must be grounded.
3. Energized wiring, switches and metal parts must have adequate insulation and over-current safety devices (such as fuses) and must be inaccessible to anyone other than the student. Exposed electrical equipment or metal that possibly may be energized must be shielded with a non-conducting material or with a grounded metal box to prevent accidental contact.
4. Decorative lighting or illumination is discouraged. If used, lighting must be as low a voltage as possible and must be LED lighting that does not generate heat. Light bulbs are prohibited. When student is not at the exhibit, all electrical power must be disconnected, or power bars must be switched off (Exception: during pre-judging audio visual displays may be available).
5. No exposed live circuits over 36 volts are allowed.
6. There must be an accessible, clearly visible on/off switch or other means of quickly disconnecting from the 120-volt power source.

Laser Requirements

Any Class 1 or Class 2 lasers, along with only Class 3A or 3R lasers, are allowed to be used provided a student avoids indiscriminate exposure to other students, judges, or visitors (except if passed through magnifying optics such as microscopes and telephones, in which case they may not be used). No other lasers may be used or displayed.

1. Displays with lasers should have a warning sign: "LASER RADIATION-DO NOT STARE INTO BEAM."
2. Any laser must be labeled by the manufacturer so that power output can be inspected. Lasers without labels will NOT be "cleared."
3. LED's that consume over 1 watt, unless they are in a commercial light bulk/fixture or otherwise shielded, will not be allowed.
4. Lasers will be confiscated with no warning if not used in a safe manner. Serious offenses may result in failure to qualify.

Biofuels

1. Research regarding biofuel/alcohol production must conform to the U.S. Dept. of Treasury, Alcohol and Tobacco Trade Bureau regulations.
2. Permits must be obtained prior to the production of any alcohol fuel. Application and Regulation information for permits visit: www.ttb.gov/forms/f511074.pdf

Other Safety Regulations

1. Any inadequately insulated apparatus producing extreme temperatures that may cause physical burns is not allowed.
2. Any apparatus with unshielded belts, pulleys, chains, or moving parts with tension or pinch points must be for display only.
3. San Bernardino County Superintendent of Schools' officials, the Review Committee, and/or the Display and Safety Committee reserve the right to remove any project for safety reasons or to protect the integrity of the SIM Science & Engineering Fair and its rules and regulations.
4. Project sounds, lights, odors, or any other display items must not be distracting. Exceptions to this rule may be permitted for judging demonstrations. Approval must be given prior to judging.
5. Projects can be continued under the table, but it is not to be used for storage.

Firearms, Explosives and Projectiles

1. Fire regulations prohibit the use of highly flammable or combustible materials in project displays. Education Code, Section 48915. "Firearm" means any device designed to be used as a weapon from which a projectile is expelled through a barrel by the force of any explosion or other form of combustion. Examples of dangerous objects include but are not limited to: air soft guns, paint ball guns, BB guns, pellet guns, air rifles, brass knuckles, fist packs, nunchaku, slings shots, throwing stars, darts and any object likely to cause injury to person or property that has no reasonable use at school. Education Code 48900(b).
2. Projects involving the discharge of a single or multiple projectiles by mechanical, chemical or electromagnetic means are not permitted. Examples: Archery, tackle, air guns, firearms of any type, etc.
3. Rocket-propelled projectile or similar device with an engine greater than 0.60 inch in diameter.

Tobacco, Alcohol and Controlled Substances

GROUPS FOR IMMEDIATE DISQUALIFICATION

1. No project may use consumable tobacco, alcohol or illegally obtained narcotics and/or controlled substances. This includes surveys that compare use of the above substances; (e.g. smokers vs. non-smokers).
2. Controlled substances (drugs, chemicals, anesthetics, etc., the use of which is regulated by the Comprehensive Drug Abuse Prevention and Control Act of 1970) must conform to existing local, state and federal laws. Such substances may not be exhibited at the Fair.

Chemicals

1. Projects that use a chemical with a hazard rating of five or with asterisks are not permitted.
2. For help on chemical use, use The Science Safety Handbook for California Public Schools' (2014 edition) downloadable at: www.cde.ca.gov/pd/ca/sc/documents/scisafebook2014.pdf.