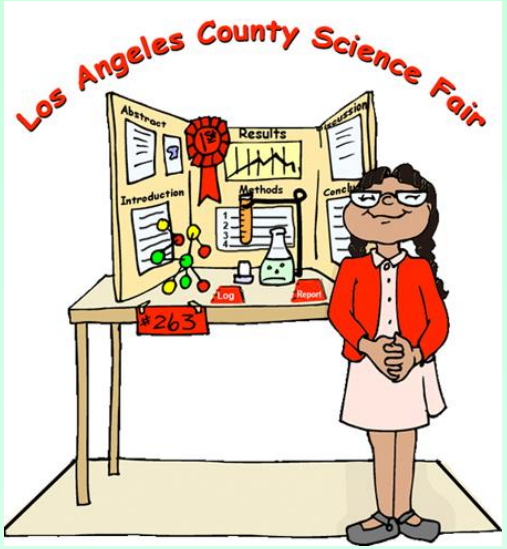
Project Pre-Approval Certification

For projects involving tissues/cell lines, human subjects, live vertebrate animals, hazardous materials or microbes

Fair Regulations

- If a project involves **tissues/cell lines, human subjects, vertebrate animals, hazardous chemicals or microbes,** proper paperwork must be submitted **ONLINE** and **pre-approved** by the LA County Science & Engineering Fair ***BEFORE*** beginning the research itself.

- ***Research design*** *must be based on scientific methodology or engineering principles.*



Reminder: PLAGIARISM

Plagiarized projects will fail to qualify for competition in affiliated Science Fairs.

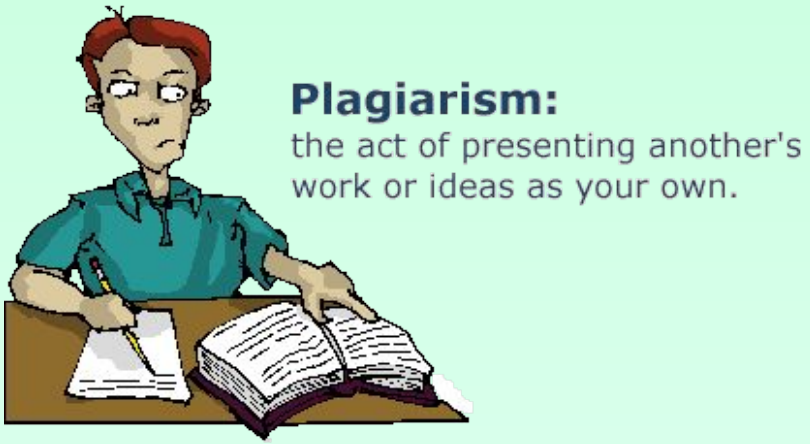
Students plagiarized if:

- Someone else wrote it first
- They copied it from somewhere
- They cannot explain what they submitted
- You cannot understand what they submitted
- They do not know the words that they used

Link to check for Plagiarism

Plagiarism

- Is NOT ethical
- Is LYING
- Is ILLEGAL
- Is against the RULES



Pre-approvals per School

- A maximum of **30 projects per school** **c**an be submitted. *Submit projects you know meet our guidelines.*
- When whittling down <u>many</u> pre-approval projects, consider the ***quality and caliber of the student(s) / project topic/ <u>uniqueness</u> of experiment.***
- If a **team** is requesting pre-approval, **only 1 student (the team captain) should submit the information.** *If all team members submit the same forms, that counts as 2 or 3 projects out of the 30 you are allowed.*

School Registration FIRST

1. Every LA County Middle School and High school receives a notice for entry to the LA County Science Fair **in early Aug.**

1. **Site Science Fair Coordinator** and **and online school registration** opens **Aug 14, 2023 to January 22, 2024.**

Every document will be posted and downloadable at http://www.lascifair.org

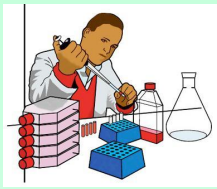
The SRC Committee

- **The LA County Science Review Committee (SRC)** is responsible for pre-approval of targeted student projects.
- A minimum of **3 persons** will pre-screen each Research Plan including:
  - *A **Biomedical Scientist** (Ph.D., M.D., etc.)*
  - *A **Science Teacher/Advisor** that is not sponsoring a project at the LACSEF.*
  - *A **Science Fair Committee member** that is not involved as a Teacher/Advisor or Animal Care Supervisor*

Supervisor Qualifications

- Section I of our Rules and Regulations details the **qualifications of Supervisors**. The SRC must check to make sure that all adults are qualified to fulfill the role(s) in which the students have listed them. *(Adults involved will receive auto-emails, to confirm they are supervising this project: **they need to respond**)*

  - The **Teacher/Advisor** is the student's **science teacher or lab researcher** in which the student is working.



  - The **Biomedical Scientist** should have a professional **degree (doctorate or Master's with related experience)** in the area of science that pertains to the student's project.

  - The **Designated Adult Supervisor** directly oversees the student's experiment. ***It can be the teacher or the parent.***

  - The **Animal Care Supervisor** must be familiar with proper care and handling of animals involved in research. This can be the ***Biomedical Scientist, Adult Supervisor, or animal care professional*** *or* ***Site Coordinator****.*

The SRC Committee also looks for:

- Compliance with **LACSEF guidelines**, **state and federal laws** and the **California Education Code** governing human subject, tissue/cell line, live vertebrate animal, hazardous materials and microbe research.

Continuation Projects

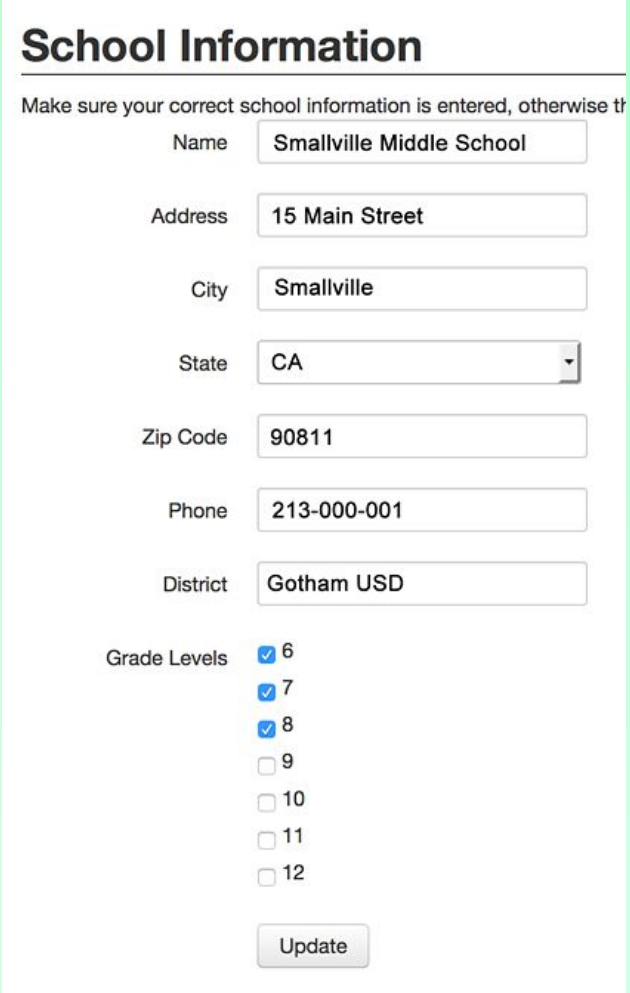
- If a project is a **continuation** of a previous LACSEF project, the **Research Plan** must **document how** this year's project is new and must contain at least **2/3 new information.**

- Repeating previous experimentation or increasing sample size is unacceptable.

- Displays must reflect the **current** year's work.

The Pre-approval Process

- **Site Coordinators must have previously registered their school.**
- If the school is not registered, email pre-approval@lascifair.org with the school's name as it will appear in the program and the SC's unique email address.
- ***The system will email a password within 48 hours.*** Use this password to log into our online registration system and fill in all Site Coordinator and School information.



The Pre-approval Process

- Before beginning the pre-approval process with students, please MAKE SURE TO CAREFULLY READ the "**Research Rules and Regulations**" page and sub-pages on regulations for projects involving:
  - ***tissue/cell lines***
  - ***human subjects***
  - ***live vertebrate animals***
  - ***hazardous materials*** ***and/or***
  - ***microbes***

Project Rules & Regulations

2023 LACSEF Rules & Regulations (view/print PDF)

Links to Safety Resources and Information

Flinn Safety Information/Tips: https://www.flinnsci.com/teacher-resources/safety/

DEA Controlled Substances: https://www.dea.gov/druginfo/ds.shtml

EPA TRI (Toxic Release Inventory) Chemicals: https://www.epa.gov/toxics-release-inventory-tri-program/tri-listed-chemicals

Biosafety in Microbiological and Biomedical Laboratories (BMBL)- Downloadable Version: http://www.cdc.gov/biosafety/publications/bmbl5/bmbl.pdf

SDS Search: http://www.flinnsci.com/msds-search.aspx

California Science Safety Handbook – Downloadable Version: http://www.cde.ca.gov/pd/ca/sc/documents/scisafebook2014.pdf

Flinn Lab Safety Course: https://www.flinnsci.com/teacher-resources/misc-pages/professional-development/laboratory-safety-course/

OSHA Laboratory Safety Guidance booklet: https://www.osha.gov/sites/default/files/publications/OSHA3404laboratory-safety-guidance.pdf

SRC Pre-approval Timeline

- **Aug 21:** SRC project pre-approval OPENS
- **Sept 11: Deadline** for early SRC Project Pre-approval submissions.
- **Sept 11- 18:** SRC Reviews early projects.
- **Oct 30: NEW Deadline** for final SRC Project Pre-approval first submission

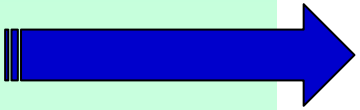
- **Oct 24-Nov 6:** SRC Reviews all first submission projects.
- **Nov 20: Deadline** for re-submission for Project Pre-approvals
- **Dec 1: Deadline** for notification for Project approval status to students
- **Jan 8: Deadline** for changes to approved projects (by email)
- **Jan 15:** Final approval/disapproval of changed projects.

Example: Certification Online Template (both Jr/Sr)

Enter online registration webpage here

https://app.lascifair.org/

Print out & complete all pages for teacher's review and OK before going online to submit proposal



Los Angeles County Science & Engineering Fair
Inspiring Student Discovery & Innovation

1107 Fair Oaks Ave. # 94, South Pasadena, CA 91030 www.lascifair.org

Research Plan for Experiments with Hazardous Materials

GUIDELINES FOR HAZARDOUS MATERIALS AND SAFETY PRECAUTIONS

Students planning research must complete and obtain LACSEF Scientific Review Committee (SRC) approval of the Certification of Hazardous Chemicals, Activities or Devices before starting experiments.

Following are examples of precautions that must be taken to prevent injury to persons or the environment. No list could possibly foresee all possible hazards, so teachers, parents and students must carefully plan and follow safe procedures specific to each study. The methods and materials section of the project description must contain explicit and detailed statements as to how and where experiments will be conducted.

1. Approved eye-protective devices should be used by all persons performing science activities involving hazards to the eyes. All persons in close proximity must be similarly equipped. Laboratory aprons and rubber or plastic gloves should be available and should be worn whenever hazards exist that could damage clothing, injure someone or irritate skin.
2. Eyes and skin must not be exposed to ultraviolet light experimentally or accidentally as part of a project.
3. The use of especially hazardous chemicals should be avoided and substitutes used. If the use of certain hazardous chemicals such as gel preparations of acrylamide, a neurotoxin, or ethidium bromide (a mutagen) cannot be avoided, extra precautions must be exercised and the supervisor must perform any procedures involving exposure to these hazards. Consult materials safety data sheets (SDS) prior to use of any hazardous chemicals. Student use or handling of ethidium bromide or gels stained with ethidium bromide is prohibited. If a necessary part of the experiment, they must be handled only by qualified lab personnel trained in the standards for their use. Care must be taken that the student does not come into contact with them.
4. The use of controlled substances (drugs, chemicals, anesthetics, narcotics, etc. which are regulated by the comprehensive Drug Abuse Prevention and Control Act of 1970) must be in accordance with existing local, state and federal laws. See your pharmacist or write the department of health for information about these laws. **The use of many such substances is prohibited by the LACSEF.**
5. Prohibited Research
   - A student may not directly handle Liquid Nitrogen: a trained adult may handle it for the student.
   - State law Education Code also prohibits students from possessing, using, or distributing Alcohol and Tobacco, prescription drugs and other controlled substances, firearms and explosives –including airsoft guns, paintball guns,

Online Pre-approval Directions

- Go to **https://app.lascifair.org/** and click on ***"Register a New Account"***
- **Select "Student" and then select "Pre-approval."**
- Enter all the information as requested. Students need to make sure to **CAPITALIZE** **t**he first letter in their First and Last name and provide an email that is *checked regularly*.
- The system will **send a password** to the email address they provide.

Online Pre-approval Directions

- **Once a student receives their password**, they need to **GO BACK** to **https://app.lascifair.org/** and enter their email address and password.
- After they log in, **click on "Project Pre-Approval"**
- Students select the form(s) their teacher has instructed them to fill out AND been reviewed by the teacher.

There may have more than one form that needs to be filled out - fill out one at a time.

Online Pre-approval Directions

- Fill in the **name** and **email address** of all required certification references.
- Each person listed will **get an email** *(at the email address you provided)* asking them to verify their role in the project.

- If the researcher types an **incorrect email,** then there will be no verification **and** ***the project will not be approved*.**
- ***References need to be contacted to check their email and verify*** *or approval of the project will be delayed.*

Human Consent

- ***Before* starting ANY project involving humans**, every participant and/or their parent/ guardian will need to receive a copy of the last 3 pages of the **Human Subject Research Form** and ***sign her or his consent at the bottom.*** Students will have to complete the **entire Human Subject Research form** **ONLINE** at the LACSEF pre-approval webpage.

Human Subjects form:

Human Consent Form

For your project, a Human Consent Form needs to be developed in consultation with your Site Science Fair Coordinator, Designated Supervisor, or Qualified Scientist. This form will provide information to your research subject (or parent/guardian) about your project and will document written informed consent, and/or parental permission. For project approval, we need to approve the main sections of the form here.

- Every participant and parent/guardian needs to receive this form and sign his or her consent at the bottom, both before starting the research project.
- You MUST identify that minors require written parental/guardian consent in order to participate.

LIST THE INFORMATION FOR YOUR PROPOSED FORM IN EACH BOX, FOR APPROVAL

Purpose of the Project

- Identify the goal of the project and why conducting the project is important.

If you participate, you will be asked to ('You' refers to your subjects, not yourself)

- Explain in detail exactly what your participants will be doing.

Time required for participation

- Identify the participant's total time commitment , how many trials will be done and how much time there will be between trials.

Your participation in this study is voluntary

You need to inform participants that their participation in this study is completely voluntary and that there will be NO negative consequences if they choose not to participate..

You need to inform participants that if they decide to participate, that they may stop participating at any time and may decide not to answer any specific question.

Risks to you ('You' refers to your subjects, not yourself)

- Explain what MIGHT happen, both psychologically and/or physically to the participant and how you will reduce the risk to keep your participants safe.

Benefits to you ('You' refers to your subjects, not yourself)

- Describe what the participant gets for participating. Financial compensation is not allowed. Think REAL benefits - there is always something.

Confidentiality of your name and any photos will be maintained by ('You' refers to your subjects, not yourself)

- STATE EXACTLY HOW CONFIDENTIALITY WILL BE MAINTAINED. (Example: use #'s or letters to refer to subjects in reports or display - only the researcher will know real names; no recognizable photos on board. etc.)

If you have any questions about this study, feel free to contact
Name of Adult Supervisor, Site Science Fair Coordinator, or Parent

Phone number of Adult Supervisor, Site Science Fair Coordinator, or Parent

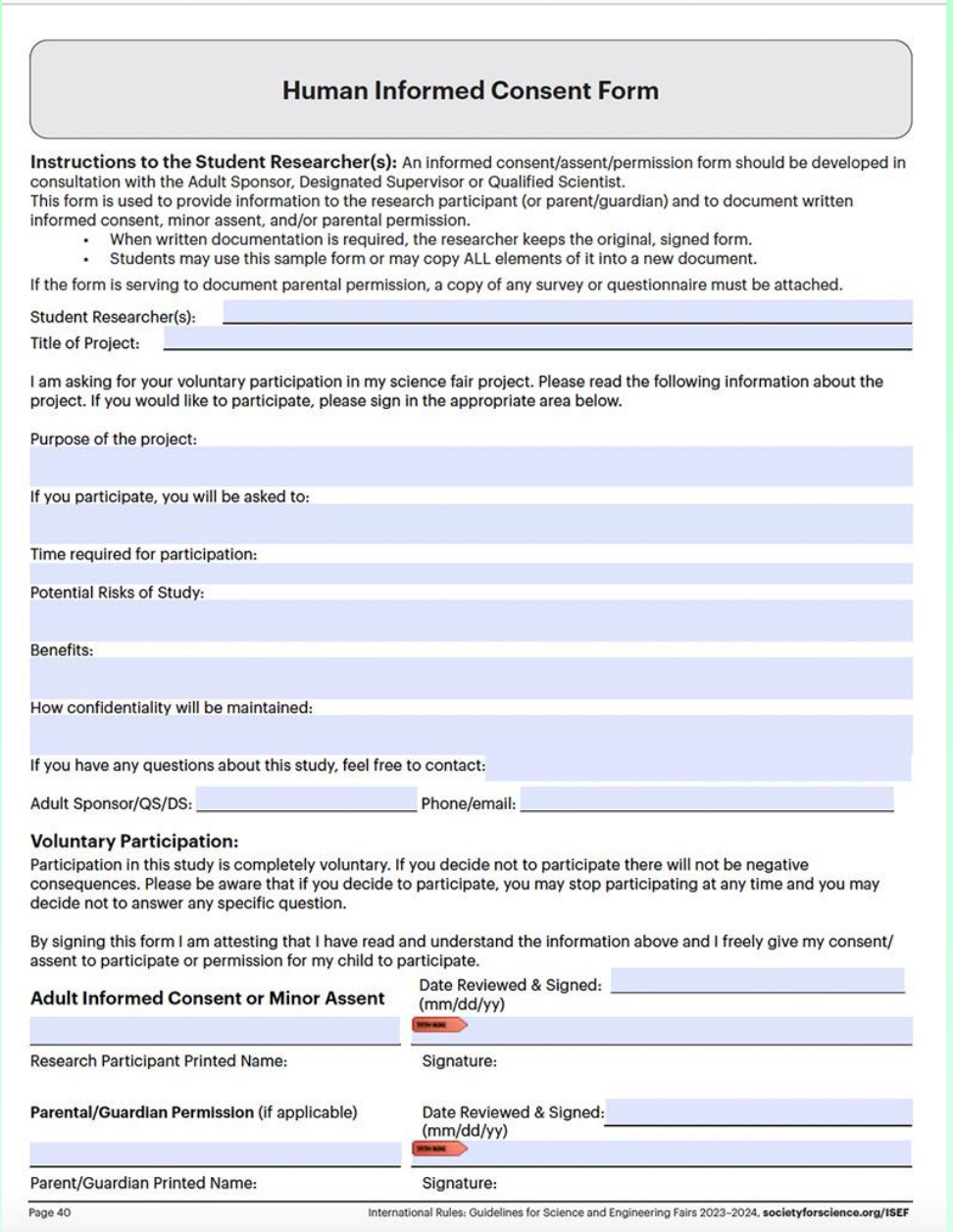
Email address of Adult Supervisor, Site Science Fair Coordinator, or Parent

Certification References

Please provide the email addresses for the people who will be serving the following roles in your experiment. An email will be sent to each address with a link for the person to certify your project. You can see what qualifications each person needs on our website.

Sr Division Human Consent Forms

In addition, **Senior Division** students need to complete the fillable **ISEF Human Consent form** found here. All participant forms have to be ***brought to the fair,*** with signatures.



Human Informed Consent Form

Instructions to the Student Researcher(s): An informed consent/assent/permission form should be developed in consultation with the Adult Sponsor, Designated Supervisor or Qualified Scientist.
This form is used to provide information to the research participant (or parent/guardian) and to document written informed consent, minor assent, and/or parental permission.

- When written documentation is required, the researcher keeps the original, signed form.
- Students may use this sample form or may copy ALL elements of it into a new document.

If the form is serving to document parental permission, a copy of any survey or questionnaire must be attached.

Student Researcher(s): _____

Title of Project: _____

I am asking for your voluntary participation in my science fair project. Please read the following information about the project. If you would like to participate, please sign in the appropriate area below.

Purpose of the project:

If you participate, you will be asked to:

Time required for participation:

Potential Risks of Study:

Benefits:

How confidentiality will be maintained:

If you have any questions about this study, feel free to contact:

Adult Sponsor/QS/DS: _____ Phone/email: _____

Voluntary Participation:
Participation in this study is completely voluntary. If you decide not to participate there will not be negative consequences. Please be aware that if you decide to participate, you may stop participating at any time and you may decide not to answer any specific question.

By signing this form I am attesting that I have read and understand the information above and I freely give my consent/assent to participate or permission for my child to participate.

Adult Informed Consent or Minor Assent Date Reviewed & Signed: (mm/dd/yy) _____

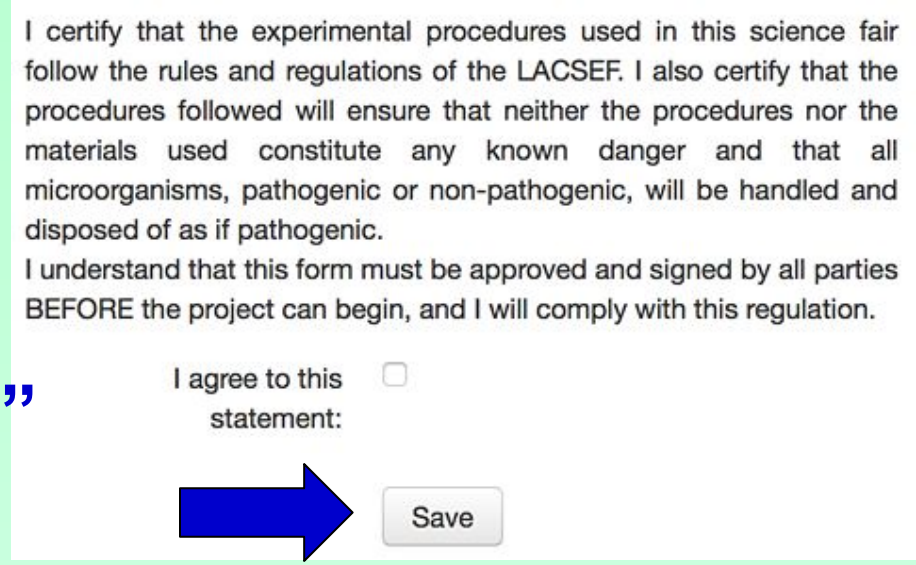
Research Participant Printed Name: Signature:

Parental/Guardian Permission (if applicable) Date Reviewed & Signed: (mm/dd/yy) _____

Parent/Guardian Printed Name: Signature:

Online Pre-approval Directions

- When students are finished submitting all information, the statements **and** agree to it, then **click on "save."**



- They will then be directed back to the **"Forms"** screen.
- **If there is another form they need to fill out**, they should click on it and follow the same directions as above.

Monitoring the Dashboard

- Once students have submitted a project for pre-approval, Site Coordinators and teachers should be **keeping track of the status of student submissions.**
  - Teachers can see what has been **submitted**,
  - what is **awaiting verification** from supervisors,
  - what has been **denied** and **pending resubmission**,
  - and what has been **denied a second time**.
- Teachers can go into the student submissions to **see what needs to be fixed** so they can advise the student.
- *This prevents projects that are denied by LACSEF because students **did not fix their proposals.***

New: Working With Invertebrates

- Most invertebrates do not require a pre-approval. However, we recommend that students look for alternatives before experimenting with **higher invertebrates** such as octopus, squid, nautilus, lobsters, crabs, hermit crabs, crayfish etc. Projects that **require amputation** on higher-level invertebrates, like cephalopods, should not be conducted.

- If you need further clarifications, please us at: pre-approval@lascifair.org with a complete project proposal.

Projects needing NO Pre-approval!

Check out "Project Categories" PPT for more ideas

Projects involving:

- plants, unless the species is toxic
- observing animal behavior in the wild, with no manipulation
- invertebrates (shellfish, insects, worms, jellies, etc.)
- plankton studies *(ALL animals must be treated humanely!)*
- ecological sampling, simply observing species diversity and numbers, with no human manipulation
- low-risk engineering, with no hazardous components
- lab kits for rockets with contained propellants or uses air pumps.

Projects needing NO Pre-approval!

Check out "Project Categories" PPT for more ideas

Projects involving:

- dry ice; common lab equipment: calorimeters, bunsen burners, hot plates, scales, saws, drills, hammers ***(with supervision)***
- plant tissue, cut hair samples, vertebrate tissue samples from businesses, food stores, restaurants or science supply companies
- most mathematical, computer coding/simulations
- geology (non-hazardous/non-toxic soils)
- astronomy, theoretical physics

When in Doubt, Pre-approve!

- There is **nothing worse** than having a student try to register their project and find out that it needed pre-approval **AND IT'S REJECTED.**

  - The Pre-approval process *ends* before Student Registration *begins*. **There are no exceptions.**
  - Make sure that you and the students have carefully read all the pages on ALL 5 categories of pre-approval.
    - If it involves human subjects (a student cannot perform experiments/surveys on themselves), it needs pre-approval….period.
    - Hazardous materials can be iffy - be careful!

- Alternatives can be experiments on plants or invertebrates or simple engineering.
- **WHEN IN DOUBT, SUBMIT A PRE-APPROVAL!!**

Developed by

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