



CENTRAL • UTAH
STEM • FAIR

A program of the BYU-Public School Partnership



All students completing a science fair project in grades 7-8 in the Alpine, Charter School, Jordan, Nebo, Provo, or Wasatch District must complete this form, complying with safety and experimentation rules. Completion of this form does not guarantee advancement to the District Fair or Central Utah STEM Fair. School districts are required to submit student entry forms to Central Utah STEM Fair by March 1, 2017. Student finalists selected to advance to Central Utah STEM Fair are required to register online at <http://cusef.byu.edu> by March 1, 2017. For more information visit <http://cusef.byu.edu>

(One form required per project)

Junior Division (7-8 Grade)

School Information:

School Name: _____ School District: _____

Supervising Teacher Name: _____ Supervising Teacher email: _____

Student Information:

Team Project: Yes No | Number of Participants: 1 2 3

Student 1 Grade Level: 7 8 **Student 2** Grade Level: 7 8 **Student 3** Grade Level: 7 8

First Name: _____ First Name: _____ First Name: _____

First Name: _____ Last Name: _____ Last Name: _____

Project Category: Junior Division Category: (Select the category that best fits your project)

- | | | |
|--|---|---|
| <input type="checkbox"/> Animal & Plant Sciences | <input type="checkbox"/> Chemistry | <input type="checkbox"/> Engineering: Electrical & Computer Science |
| <input type="checkbox"/> Behavioral & Social Science | <input type="checkbox"/> Earth & Environmental Science | <input type="checkbox"/> Engineering: Materials & Mechanical |
| <input type="checkbox"/> Biology & Biochemistry | <input type="checkbox"/> Energy: Chemical & Physical | <input type="checkbox"/> Physics, Astronomy, & Mathematics |
| <input type="checkbox"/> Biomedical, Medicine, & Health Sciences | <input type="checkbox"/> Engineering: Civil & Environmental | |

Project Approval:

Certain projects require additional considerations and supervision. Read through each of the following restrictions carefully. Determine if any of these apply to your project. Some projects may be subject to multiple restrictions. If any of these restrictions apply to your project, check the 'Applies to this Project' box for that area. **If no restrictions apply** only the science teacher signature is required. **Before beginning experimenting, you will need to obtain any additional signatures listed in the restrictions.**

REQUIRED FOR ALL PROJECTS:

Science Teacher Signature: _____

Date: _____

Human Test Subjects (ex: survey, taste test, play a game, or interact with in any way)

A copy of the surveys or tests you intend to use must be attached.

Additional project review required.

During the review, if it is determined that there is more than minimal psychological or physical risk to the human subjects involved in the project, the student must receive written consent from each of the participants and **written parental consent for students under 18 years old**, signature pages **MUST** be included with registration form. If it is determined that there are unacceptable risks involved the student must revise his or her project.

Required Signatures:

Science Teacher **AND** a Psychologist, Medical Doctor, or Registered Nurse

Applies to this project

Non-Human Vertebrate Animals (ex: fish, rabbits, dogs, etc.)

Experiments involving laboratory animals (rats, mice, hamsters, gerbils, rabbits, etc) cannot be conducted in a student's home except for behavior studies on pets. Proper animal care must be provided daily, including weekends, holidays and vacations. Experimental procedures that cause unnecessary pain or discomfort are prohibited. Experiments designed to kill vertebrate animals are not permitted. Experiments with a death rate of 30 percent or higher are not permitted. Behavioral studies or supplemental nutritional studies involving pets or livestock may be done at home.

Required Signatures:

Science Teacher **AND** a Veterinarian or other Biomedical/Biological Scientist

Applies to this project

Bacteria, Mold, Fungi, Viruses or Parasites, Human or Animal Fresh Tissues, blood or body fluids, etc. (Potentially Hazardous Biological Agents)

Determine the level of biological containment available to the student researcher. Biosafety Level 1 projects can be performed in a school BSL-1 laboratory but are prohibited in the home environment.

Bacteria, mold, fungi or any other potentially hazardous biological agent CANNOT

be cultured at home. Standard microbiological practices must be used and all hazardous agents must be properly disposed of at the end of experimentation. The experiment must be supervised by a qualified scientist or a trained designated supervisor. For lab space or questions, please contact the Central Utah STEM Fair Office, admin@cusef.byu.edu

Required Signatures:

Science Teacher **AND** a Biomedical/Biological Scientist

Applies to this project

Prescription or Over the Counter Drugs, Alcohol, Tobacco

Students must adhere to all federal, state and local laws when acquiring and handling controlled substances. Only under the direction of a qualified scientist or designated supervisor may a student use federally controlled or experimental substances for therapy or experimentation. Students under 21 may not handle or purchase smokeless powder or black powder for science projects.

Required Signatures:

Science Teacher **AND** a Biomedical/Biological Scientist

Applies to this project

Hazardous Chemicals, Weapons/Firearms, Lasers, Radiation, etc.

Students must adhere to federal and state regulations governing hazardous substances or devices. An adult must directly supervise the experiments. Students working with hazardous substances or devices must follow proper safety procedures for each chemical or device used in the research.

Required Signatures:

Science Teacher **AND** a School Administrator

Applies to this project

Additional Signature:

Name: _____

Position: _____

Signature: _____

Date: _____ Email: _____

If more than one additional Signature is required, please use an additional copy of this form.

Research Plan:

State the question or problem: _____

Summarize background research: What have others done related to this question or problem? What conclusions and results related to this question or problem were found?

State your hypothesis or proposed solution: Remember, a strong hypothesis includes what you expect to happen AND a supporting reason.

Materials List: List any materials and supplies that you will need to complete your research or project.

Adult Supervisor's Name: _____ **email or phone #:** _____

Students must have an adult supervising them when they are working on their project. This is usually a parent or guardian.

Research Locations: Please list the names, addresses, and type of location for each place you plan to conduct your research or work on your problem.

Location 1:

Facility Type: Home Public/Charter/Private School University Public Facility (Park, Library, Etc) Other

Location 2:

Facility Type: Home Public/Charter/Private School University Public Facility (Park, Library, Etc) Other

Project Summary/Research Plan/Problem Solving Process: Please write a detailed explanation about what you plan to do for your experiment. Include all safety precautions that will be in place for you and your test subjects.

NOTE: If you are part of a team, **this page** must be completed by **each student** and their parent/guardian.

Display & Size Rules

Project display board can be **no larger** than 30" deep, 48" wide (side to side), and 108" tall.

A display board and journal are the ONLY items allowed for display.

Optional: A small electronic device may be used to display photos or videos for the judges. Video is limited to 1 minute and must be approved by fair personnel.

Central Utah STEM Fair, and the participating school districts, reserve the right to remove any additional items displayed with your project.

Do NOT bring items from your experiment -- take pictures of your experiment and include them on your board OR in your journal.

When creating your display board, do NOT include the following:

1. Living organisms, including plant material
2. Taxidermy specimens or parts
3. Preserved animals – includes embryos
4. Food (empty containers may be secured to the display)
5. Human or animal parts or body fluids
6. Soil, sand or waste samples
7. Laboratory/household chemicals – including water
8. Poisons, drugs, hazardous substances or devices
9. Sharp items – pipettes, glass, syringes, needles
10. Highly flammable display materials (NO matches)
11. Empty tanks that previously contained combustible liquids or gases
12. Batteries with open top cells
13. Photographs of people other than yourself or your family without their written permission (must have signatures from others).
14. Photographs or other visual presentations depicting vertebrate animals in surgical techniques, dissection, necropsies, other lab techniques, improper handling methods, improper housing conditions etc.

Student & Parent/Guardian Signatures

I certify that my science project complies with all of the experimental rules of the Central Utah STEM Fair. I understand that if I have not complied with these rules that my project could fail to qualify for competition. I have also read and I understand the display and safety rules. If I display any of the objects listed above, I am aware that they will be removed and returned at the conclusion of the science fair. If I am selected to participate at the Central Utah STEM Fair, I agree to set up my project **on the appointed day prior to my competition** and I will leave my project on display until the designated time for project tear down. I understand that **I must be present for judging during the designated competition date and time.**

Signature of Student

Signature of Parent/Guardian

Date

Teacher Signature

I have reviewed and approved this student's research plan prior to experimentation and certify that they will comply with all of the experimental rules of the Central Utah STEM Fair in compliance with the BYU-Public School Partnership and Governing Board.

Teacher Signature

Date

Central Utah STEM Approval

Completed by Central Utah STEM upon advancement to Fair

Regional SRC Approval

Date

Every effort will be made to protect exhibits from loss or damage. However, since the exhibition of projects is open to the public, the Central Utah STEM Committee, Brigham Young University or the BYU-Public School Partnership school districts cannot and will not accept any liability or responsibility of any nature for any theft, loss or damage to any exhibit or any other property of any Central Utah STEM Fair participant. Accordingly, it is recommended that each participant should secure and guard his/her project and take all prudent precautions to prevent any theft, loss or damage to their project.

For more information please visit our website <http://cusef.byu.edu>

The Central Utah STEM Fair is presented by the BYU David O. McKay School of Education and the BYU-Public School Partnership