

Contest Rules of the Fremont Unified School District 2017 Science Fair







GRADES K - 12

Fremont Unified School District 2017 Science Fair

This packet is provided to assist students and parents to understand the rules required for a Science project. These guidelines and ideas will assist students on how to carry out a Science Fair project based upon scientific investigation.

- This year, the Fremont Unified School District's Science Fair will be held on **Saturday**, **February 11**, 2017, in the **Centerville Junior High School Multi-purpose Room**, located at 37720 Fremont Blvd. Fremont, from 1:00 p.m. to 3:30 p.m.
- The February 11, 2017 date allows students in grades 6 through 12 to compete in the District's Science Fair before they enter the Alameda County Science Fair, to be held on Saturday, March 11, 2017.
- Each school site will determine the due date for school projects and the winners that will go on to compete in the District Science Fair. Please check with the teacher, newsletter, or principal for these important dates.
- It is the responsibility of the student and his/her parents to bring the projects to **Centerville Junior High School Multi-purpose Room** to be set up on **Friday, February 10, 2017 from 4:30 - 6:30 p.m.** unless arrangements have been made with the child's teacher. Projects delivered after this time will not be eligible for judging. <u>(Please Do Not arrive at the Multi-purpose Room before 4:30p.m.)</u>
- The ribbon ceremony will take place on **Saturday**, **February 11**, **2017 at 3:00 p.m**. District ribbons will be awarded for first, second, and third place winners at each grade level. All other projects will receive a participation ribbon.

IMPORTANT DEADLINES

Be sure to check with your teacher or the School Site Science Fair Coordinator for your school's deadlines.

My project is due at my school on _____

My School Site Science Fair is on______

Entry Forms are due to District on **February 6**, **2017**, **4:30** p.m.

<u>Questions?</u> Contact Nicole Bryant, Elementary Education, (510) 657-2350 ext. 12-605 or Karrie Ware, Science Coach, Secondary Education at (510) 659-2570 ext. 12-703.

THE PURPOSE OF A SCIENCE FAIR PROJECT IS TO:

- 1. Increase student knowledge of science.
- 2. Provide students an opportunity to use the scientific method.
- 3. Provide students an opportunity to do a finished piece of research.
- 4. Expand an area of a student's own personal interest in science.

Students may do projects either individually or in groups of two or three students.

<u>Elementary sites</u> may submit one project entry per grade level K-5 and 3 projects for grade 6, <u>per site</u>. <u>Junior</u> <u>high and high schools</u> may choose up to 10 project entries <u>per site</u>.

PROJECT CONSTRUCTION

The work on the project must be done by the student(s). Students may secure advice from whatever source is available. Parental help is encouraged at the **K-5 level**; yet the project is <u>not</u> a parent project and is to reflect the students' ability. Parental help such as construction requiring power tools or hazardous tools is permissible.

NOTE TO PARENTS: What can they do to help their child with the project?

- 1. Give moral support; give encouragement when things seem to be right.
- 2. Help him/her saw a piece of wood, bend wire, put duct tape on the poster, cut the cardboard; help with lettering and spelling.
- 3. Help him/her with ideas on where to find information in the library that pertains to the project.
- 4. Above all, DON'T DO THE PROJECT FOR THE STUDENT.

SCIENCE FAIR DI	VISIONS			
Kindergarten	Grade 2	Grade 4	Grade 6	High School
Grade 1	Grade 3	Grade 5	Junior High	

CHOOSING A PROJECT:

- 1. Choose an interesting project.
- 2. Choose a project with a clearly defined, testable question that can be answered by an experiment.
- 3. Choose a project that can be researched thoroughly in the time available.
- 4. Consider what materials are available when choosing a project.
- 5. Choose a project with an appropriate difficulty level.
- 6. Consider the project from the standpoint of how it can be handled in an original way.
- 7. You will find suggestions for PROJECTS TO AVOID at http://acsef.org/subpages/projectstoavoid.html.

STUDENT CHECKLIST FOR A GOOD PROJECT K through 12

- 1. A <u>PROJECT LOGBOOK</u> is mandatory, but should reflect the child's ability level. Pictures are allowed and encouraged for the younger grades. See http://www.sciencebuddies.org/science-fairprojects/printable_project_logbook.pdf.
- ____2. Make sure the project demonstrates what you are trying to prove.
- 3. The project should include all steps of the <u>scientific method</u>. See http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml.

STUDENT CHECKLIST FOR A GOOD PROJECT 6 through 12

- _____4. Project has a <u>control</u> (a "standard" group) to which all test groups will be compared.
- ____5. The project lists a minimum of 5 bibliographical references showing the student has done a literature review of projects related to the topic the student proposes to investigate.
- _____6. Each test group should contain a minimum of 5 objects being tested.
- ____7. Project must be repeatable. The best way to do this is to have several experimental sets (such as 3 control groups, 3 sets of A, 3 sets of B, etc. ...)
- _____8. A project abstract must be written. See <u>http://acsef.org/subpages/sampleabstract.html</u>.

STUDENT CHECKLIST FOR A GOOD PROJECT DISPLAY

- 1. <u>Size</u> of the project can be a three-panel display or as small as a shoebox or a grocery box. It may be **no larger than 36" high x 48" wide** and it <u>must stand-alone</u> or it will be disqualified.
- ____2. The display should be colorful (paint, colored paper, etc.)
- 3. The title should be in large letters clearly seen and should describe your project (approximately two-inch-high letters).
- 4. Attach the card provided on the backside of the center panel of the project. Be sure the student's name, school and grade level are written clearly. A pre-approval certificate is attached to those projects requiring it.
- 5. Pictures, charts, graphs, or tables that help explain your project should be neatly displayed with your project.
- ____6. Do not bring items that could pose an allergic reaction to other people attending the fair such as mold and mildew. You may use photos of mold and mildew only no actual samples are allowed at the Science Fair.
- ____7. Projects with dangerous materials will cause the project to be disqualified!

SUGGESTIONS PROJECT CARE - ATTENTION PARENTS!

Normal wear and tear on projects is to be expected during the time the Science Fair is open to the public. Each exhibitor, therefore, is advised to protect his/her project as completely as possible. <u>Note:</u> Beware of using expensive and/or movable equipment. Be sure it is securely fasten the logbook to the project. You should retain a copy of the book in case the original is misplaced or lost. The Science Fair Committee will not be responsible for losses! Exhibitor must assume all risks as to damage of his/her project or parts thereon. We will provide minimal security.

PROJECTS REQUIRING PRE-APPROVAL

These projects **MUST** have pre-approval before they are performed by the student. Project using:

- Human test subjects (this includes surveys)Vertebrate test subjects (animals with backbones)
- Tissues of a vertebrate
- Microorganisms (bacteria, viruses, and fungus)
- Research that was started or performed in a university or professional lab
- Lab-grade chemicals
- Prescription drugs
- Alcohol
- Tobacco
- Devices that could shock, burn or wound the student
- Activities that involved a level of risk above and beyond what a student of that age would encounter

It is the responsibility of the Science Fair Coordinator and the student's parent/guardian to make sure the project gets pre-approval before the student engages in the project. Projects requiring pre-approval must display their approval certificate on the back of the project board at the time of display.

The written procedures show evidence of:

- Proper adult supervision
- Proper research techniques
- Humane treatment of animals
- Compliance with rules and laws governing the proper care and housing of animals
- Compliance with rules regarding potentially hazardous biological agents

For human research subjects:

- Survey questions would not cause stress to test subject
- Evidence of informed consent was obtained before the experiment was conducted

Student's name, school, and teacher's/coordinator's name must appear with their submission.

For Students Grades K-5 (and students grades 6-12 who will not participate in the County Fair) Any student with research that must get pre-approval will need to write up their research proposal and submit it to FUSD, attention: Karrie Ware, Secondary Science Coach, kware @fusd.k12.ca.us). It has to be reviewed by our district review council. Students must get approval before they carry out the experiment.

For Students Grades 6-12 who plan on entering the County Fair

If their project needs pre-approval, they will submit their proposal <u>directly to the Alameda</u> <u>County Science Fair</u> committee. Follow the County's timeline to keep up with their deadlines.



Materials that can be used for the project panels are three sides of a large cardboard box, heavy cardboard, 1/2 or 1/4 inch Masonite, peg board, plywood, Scholar Science Display Board (2-ply board with prescored foldout panels), or wall paneling.

Strong backing and sides are necessary and must be supplied by the exhibitor. The project <u>must stand</u> by <u>itself</u> and can not be fastened to the table or walls. Projects that do not <u>stand</u> by <u>themselves</u> or are <u>oversized</u> - larger than 36" height x 48" width - (when fully unfolded) will be disqualified. Project display can be as <u>small</u> as a shoebox.

Provide a suitable battery for projects requiring electricity. <u>Electrical outlets will not be available to you.</u>

Projects requiring participation by visitors (push buttons, levers, etc.) will be acceptable, but they must be so designed that they do not require operation or explanation by the exhibitor. All items must be firmly attached so that they can not be easily picked up and carried away by visitors.

Dangerous chemicals, drugs, open flames, explosives, high voltage electricity, strong acids, strong bases, or volatile chemicals, or bio-hazardous materials such as blood agar, molds and mildew must not be exhibited. Do not bring hypodermic needles, syringes, etc. for your project display. If any of these items are displayed, the project will be disqualified. <u>Projects with dangerous materials will be</u> <u>disqualified.</u>

Fremont Unified School District 2017 Science Fair				
This form is to be glued to the back of your display				
Science Project Entry Information Form				
Name of Student:				
School:				
Grade:				
Classroom Teacher:				
Science Teacher:				
Title of Science Project:				