

GUIDELINE FOR THE USE OF ANIMALS & HUMANS IN STUDENT SCIENCE PROJECTS

BEFORE the project begins, the student must complete an *Animal Proposal Certificate (FORM 1)*. This form is located in this handbook.

AFTER the project is complete, the adult supervisor will sign a *Completion Certificate For All Projects Involving Animals (FORM 2)*. This certificate **MUST** accompany each application for participation. Obtain this form from the MCOE website or the back of this handbook.

Any project not conducted in conformity with both Rules and Requirements and the humane laws of California will be eliminated from competition and display. There will be no exceptions to this rule.

RULES

1. To assure the humane treatment of animals, a qualified supervisor **MUST** assume responsibility for the condition of all living animals used. For all projects, this supervisor must be trained on the college or professional level in the proper care and handling of laboratory animals. For projects involving vertebrate animals, the supervisor **MUST** also have an earned doctoral degree in science or medicine, and **MUST** also be current in the techniques to be used. For projects involving invertebrates only, the sponsoring teacher may act as the supervisor.
2. The comfort of all animals used in any project shall be a prime concern. Animals must be obtained from a reliable source and the following basic needs **MUST** be assured: appropriate and comfortable quarters; adequate food and water; cleanliness and humane treatment; exercise when required for the species of animals used. Students **MUST** make arrangements to provide these basic needs at all times, including weekends, vacations, and holiday periods.
3. No vertebrate animal will be subjected to any procedure or condition, including nutritional deficiency experiments, which results, **EITHER BY INTENTION OR NEGLIGENCE**, in pain, distinct discomfort, abnormal behavior, injury or death (except terminal, non-experimental, humane euthanasia). The term "vertebrate animal" includes vertebrate embryos and fetuses, and fowl embryos within three days of hatching.
4. No surgery, including biopsy, will be performed on any living animal.
5. When planning the project, the student **MUST** arrange for the humane disposition of all animals involved after the project is completed. This may be done by placing them in an environment where they are assured of continued humane care, by releasing undomesticated species into a suitable wildlife environment. Students **MUST NOT** perform euthanasia of vertebrate animals under any circumstances. A complete account of the final disposition of all animals used **MUST** be included in the final report of all projects involving animals.

REQUIREMENTS

1. The basic aim of any project involving living animals should be to increase the knowledge or understanding of life processes. It should not include the demonstration or development of surgical techniques. All projects involving animals must, therefore, have a clearly defined objective, which requires the use of animals to demonstrate a biological principle or to answer a specific question.
2. A lower form of life should be selected for the project, rather than a higher form, whenever possible. Students are strongly urged to select invertebrate animals, plants, or tissue cultures. Invertebrate animals are especially suitable because of their wide variety and availability in large numbers.

GUIDELINE FOR THE USE OF ANIMALS IN STUDENT SCIENCE PROJECTS *(continued)*

REQUIREMENTS *(continued)*

3. Federal and California humane treatment laws specifically forbid the mistreatment or neglect of animals, including animals used in schools and school sponsored activities. Students, teachers, and supervisors must know and obey these laws. Any student research involving animals **must comply** with the requirements of the California Education Code and Code of Federal Regulations.

For All Projects Using Any Live Vertebrate Animal, Excluding Humans:

State of California Education Code §51540:

In the public elementary and high schools or in public elementary and high school school- sponsored activities and classes held elsewhere than on school premises, live vertebrate animals shall not, as part of a scientific experiment or any purpose whatsoever: (a) Be experimentally medicated or drugged in a manner to cause painful reactions or induce painful or lethal pathological conditions. (b) Be injured through any other treatments, including, but not limited to, anesthetization or electric shock. Live animals on the premises of a public elementary or high school shall be housed and cared for in a humane and safe manner. The provisions of this section are not intended to prohibit or constrain vocational instruction in the normal practices of animal husbandry.

For All Projects Involving Humans as the Subject of Research:

The Code of Federal Regulations 45 CFR 46 §46.102 defines

“Human Subject” means a living individual about whom an investigator (whether professional or student) conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information. In order for obtaining of private information to constitute research involving human subjects, the identity of the subject must be readily associated with the information.

“Minimal Risk” means that the risks of harm anticipated in the research are not greater, considering probability and magnitude, than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

Examples of unacceptable risks include: (1) ingestion or physical contact with any potentially hazardous materials including toxic chemicals, known or suspected pathogens or carcinogens, or exposure to ionizing radiation; (2) intentionally inducing emotional stress through questioning or invasion of privacy; (3) physical stress to pregnant women or anyone suffering debilitating physical illness; and (4) psychological stress to the mentally handicapped or those suffering psychiatric disorders. This list is intended to be illustrative, not exhaustive.

The regulations of the Fair are intended to protect human subjects, both physically and psychologically. The regulations supplement, and do not supplant, relevant State and Federal regulations dealing with such protection.

For All Projects Involving Tissue Samples:

Live tissue samples must be taken from either a continuously maintained tissue culture line already available to institutional researchers, or from animals already being used in an on-going institutional research project.

Students may not be involved in the direct acquisition of these samples from living human or vertebrate animals.

Students should read the *GUIDELINE FOR THE USE OF ANIMALS IN STUDENT SCIENCE PROJECTS* and complete the *Animal Proposal Certificate* (FORM 1) and the *Completion Certificate for all Projects Involving Animals* (FORM 2). Students should provide a copy of the Guidelines to the supervisor.

Mendocino County Science Fair

Animal Proposal Certificate

FORM 1

This form must be completed **PRIOR** to beginning your experimentation involving any living thing that is NOT a plant. This form must be included in your science fair documentation. The *Completion Certificate for All Projects Involving Animals (Form #2)* must be completed **AFTER** the experiment and submitted along with this form when the project is brought to the Science Fair.

Current Date:

Student Name(s):

This is to certify that I, _____
(type or print name of supervisor)

have reviewed and approved the proposal of the above named student(s) and that I hereby accept the responsibility for the condition and humane disposition of all living animals used in the project and after its completion. I further certify that, to my personal knowledge, the above-named student(s) have read and understand the *Guidelines for the Use of Animals in Student Science Projects*; that I will be responsible for the student's compliance with these guidelines, and that I, myself, have been trained on the college or professional level in the proper care and handling of laboratory animals.

Signature _____

Date _____

Address _____

Telephone: _____

List degree or professional experience working with animals: _____

Students should read the *GUIDELINE FOR THE USE OF ANIMALS IN STUDENT SCIENCE PROJECTS* and complete the *Animal Proposal Certificate* (FORM 1) and the *Completion Certificate for all Projects Involving Animals* (FORM 2). Students should provide a copy of the Guidelines to the supervisor.

Mendocino County Science Fair

**Completion Certificate for all
Projects Involving Animals**
FORM 2

This form must be completed **AFTER** your experimentation involving any living thing that is NOT a plant. This form must be included in your science fair documentation. The *Animal Proposal Certificate* (FORM 1) must be submitted along with this form when the project is brought to the science fair.

Current Date: _____

Student Name(s):

This is to certify that I, _____
(typed or print name of supervisor)

have supervised the entire project submitted by the above named student(s) and that I have accepted responsibility for the condition of all animals used in the project, both during and after its completion; that the project has been conducted in full compliance with the **GUIDELINE FOR THE USE OF ANIMALS IN STUDENT SCIENCE PROJECTS** and that the student is prepared to defend orally, before competent judges, the use of animals in the project. I further certify that all living animals used in the project have been treated humanely and that, to my personal knowledge, all such animals have been humanely disposed of as follows:

(Exact disposition: if living, give location and condition of animals; if euthanasia, give specific method, date and name and title of person performing it.)

Signature of Supervisor: _____

The signature above should be the same person who began the supervision of the project. If not, state the reason below and the date the substitute person began supervising this project.