

CERTIFICATION OF HUMANE TREATMENT OF LIVE VERTEBRATE ANIMALS

This form must be completed and signed for all projects involving vertebrate animals BEFORE the project is begun. In addition, students must submit their research plan & certification form to the OCSEF [Scientific Review Committee \(SRC\)](#) for review BEFORE starting experiments or risk not being accepted to the OCSEF.

PLEASE TYPE OR PRINT	
Name of Entrant (Last Name, First Name)	School Name
Project Title	

HUMANE TREATMENT OF ANIMALS: [State of California Education Code Title 2, Division 2, Part 28, Chapter 4, Article 5, 51540](#). In the public elementary and high schools or in public elementary and high 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 whatever:

- (a) Be experimentally medicated or drugged in a manner to cause painful reaction 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 practice of animal husbandry.

INTERNATIONAL SCIENCE AND ENGINEERING FAIR REGULATIONS FOR EXPERIMENTS WITH ANIMALS

1. The basic aims of experiments involving animals are to achieve an understanding of life processes and to further knowledge. They do not include the development of new or refinement of existing surgical techniques or experiments in toxicological studies.
2. Experiments involving vertebrate animals must have clearly defined objectives requiring the use of animals to demonstrate a biological principle or answer scientific propositions. Such experiments must be conducted with respect for life and an appreciation of humane considerations. Vertebrate animals are defined as:
 - Live, nonhuman vertebrate mammalian embryos or fetuses
 - Tadpoles
 - Bird and reptile eggs within three days (72 hours) of hatching
 - All other nonhuman vertebrates (including fish) after hatching or birth.Exception: Because of their delayed cognitive neural development, zebrafish embryos are not considered vertebrate animals until 7 days (168 hours) post-fertilization.
3. The use of protista and other invertebrates is to be encouraged for most research involving animals. Their wide variety and the feasibility of using larger numbers than is usually possible with vertebrates make them especially suitable.
4. To provide for humane treatment of animals, an animal care supervisor knowledgeable in the proper care and handling of experimental animals must assume primary responsibility for the conditions under which the animals are maintained. If the school facility includes no one with adequate training in this area, the services of a qualified consultant must be obtained.
5. All live or preserved animals must be lawfully acquired from an approved source and their care and use must be in compliance with local, state, and Federal laws.
6. The comfort of the animals shall be a prime concern. No research using live vertebrate animals shall be attempted unless the animals are obtained from a reliable source and the following conditions can be assured: appropriate, comfortable quarters, adequate food and water; humane treatment and gentle handling. Care must be provided at all times, including weekends and vacation periods. An experiment in nutritional

deficiency may proceed only to the point where symptoms of the deficiency appear. Appropriate measures shall be taken to correct the deficiency.

7. No experiment involving anesthetics, drugs, thermal procedures, physical stress, organisms pathogenic to humans or other vertebrates, ionizing radiation, carcinogens, or surgical procedures, may be undertaken except under the direct supervision of an experienced and qualified scientist or designated adult supervisor. **These procedures should be conducted in regulated institutions and certified by a qualified scientist in advance.**
8. Experiments involving any procedures listed in paragraph 7 which are not in violation of the "painful reaction" or "injured" restrictions of the California Education Code are permitted if certified by a qualified scientist prior to the beginning of the investigation. It is required for the student and the designated adult supervisor to consult with a qualified scientist to obtain detailed instructions and guidance in the techniques to be used by the student under the direct continuous supervision of the designated adult supervisor (for research not conducted in a qualified scientist's laboratory). In this instance the designated adult supervisor will be required to certify in writing jointly with the qualified scientist.

Either the qualified scientist or the designated adult supervisor must provide continuing supervision to assure compliance with the protocol. The qualified scientist or adult supervisor must be in the same locality as the student for the duration of the experimental work except for short trips.

Major deviations from the approved protocol may be implemented only with the written approval of the qualified scientist.

A qualified scientist is defined as one who possesses an earned doctoral or professional degree in science or in a scientific discipline related to the research under consideration and has current working knowledge of the techniques to be performed.

A designated adult supervisor is defined as an individual who has been properly trained in the techniques and procedures to be used in the investigation.

The qualified scientist must certify that the designated adult supervisor has been so trained.

RESEARCH PLAN

Project Purpose	Starting Date
Common name (or Genus species) and number of animals to be used..	
Describe proposed animal Care method. (i.e., cage dimensions, type of bedding used, temperature range of cage/ room, and frequency of feeding, watering, and cage cleaning.)	
Name & Address of site where investigation/ experimentation will take place.	
List experiment objectives. Describe fully the methods and techniques involved (including but not limited to, planned use of anesthetics , drugs , thermal procedures, physical stress, organisms pathogenic to humans & other vertebrates, radiation , carcinogens or surgical procedures .).	

CERTIFICATIONS FOR PROJECTS INVOLVING VERTEBRATE ANIMALS

OBTAIN THE FOLLOWING CERTIFICATIONS, IN THE ORDER LISTED, FOR ALL PROJECTS INVOLVING LIVE VERTEBRATE ANIMALS **BEFORE** YOU BEGIN THE PROJECT.

CERTIFICATION BY STUDENT

I certify that this plan will adhere to the [State of California Education Code Title 2, Division 2, Part 28, Chapter 4, Article 5](#): Humane Treatment of Animals, and the [International Science and Engineering Fair Regulations for Experimentation with Animals](#).

I understand that this form must be approved and signed by all parties BEFORE the project can begin, and I will comply with this regulation.

Student Name (Print)	Student Signature
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CERTIFICATION BY TEACHER/ ADVISOR

I certify that I have reviewed and approved the Research Plan and agree to sponsor the above named student and assume responsibility for compliance with the existing rules and regulations pertaining to experiments with vertebrate animals cited above.

Teacher/ Advisor Name (Print)	Signature of Teacher / Advisor	
School Name	Position	Date Signed
School Address	School Phone	

CERTIFICATION BY ANIMAL CARE/ DESIGNATED ADULT SUPERVISOR (May be Teacher or Parent)

I certify that I have reviewed and approved the Research Plan and will supervise and accept primary responsibility for the quality of care and handling of the live vertebrate animals used by the designated student. I certify that I have been trained in the techniques to be used by this student and will provide direct supervision for the research.

Animal Care / Designated Adult Supervisor Name (Print)	Signature of Animal Care/ Designated Adult Supervisor	
Institution Name	Position	Date Signed
Institution Address (Leave blank if home address)	Institution Phone (Leave blank if home phone)	

CERTIFICATION BY QUALIFIED SCIENTIST

I certify that I have reviewed and approved the Research Plan before the student began the project; that if the student or animal care/designated adult supervisor is not trained in necessary procedures I will ensure his/her training; that I will assure that the requirements of the [State of California Education Code Title 2, Division 2, Part 28, Chapter 4, Article 5, Humane Treatment of Animals](#), and the [International Science and Engineering Fair Regulations for Experimentation with Animals](#) are fully met; that I will provide advice and supervision personally or through a designated adult supervisor throughout the project; and that I am a qualified scientist with a working knowledge of the techniques to be used in this research

Qualified Scientist Name (Print)	Signature of Qualified Scientist	
Institution Name	Position	Date Signed
Institution Address	Institution Phone	
Brief Summary of Experience Related to This Topic		