

2009-2010 NC Elementary and Middle School Science and Engineering Research Plan & Scientific Review Committee (SRC) Approval Form

NOTE: Grades 3-8 students must use this form OR the official ISEF Forms (1,1A, Research Plan, and 1B) to participate in NC Regional and State Science Fairs and be approved by a local SRC committee*.

Student's Name _____ Grade _____ Phone _____

Student or Parent Email: _____

Teacher's Name _____ Phone _____

Teacher's Email _____

School _____

School Address _____

Project Title _____

Where will the project be completed? _____ School _____ Field _____ Home _____ Research Institution _____

Parent or Guardian Signature _____ Date _____

Qualified Scientist/Adult Sponsor _____ Phone _____

A qualified scientist is someone working as a scientist or engineer in the field of study/research. (Complete if required)

All Students Must Write a Research Plan as Listed Below and Have the Plan Approved PRIOR to BEGINNING the Experiment! This Form and the Research Plan should be submitted to all Fairs!

Research Plan (complete on another sheet to turn in for review):

- A. Question or Problem being addressed
- B. Hypothesis/Engineering Goals
- C. Description in detail of method or procedures (The following are important and key items that should be included when formulating ANY AND ALL research plans.)
 - 1) **Procedures:** Detail all procedures and experimental design to be used for data collection
 - 2) **Safety Issues:** Detailed information on how any safety issues are addressed and who is monitoring these issues.
 - 3) **Data Analysis:** Describe the procedures you will use to analyze the data that answer research question or hypothesis
- D. **Bibliography:** List at least three (3) and preferably five (5) major references (e.g. science journal articles, books, internet sites) from your literature review. If you plan to use vertebrate animals, one of these references must be an animal care reference. (If using internet resources, suggest .edu and .gov sites for accuracy.)

Teacher Approval: _____ Date: _____

Teacher or Qualified Adult Supervisor may approve if projects **do not** involve any of the items listed below.

If you are working with ANY of the following items, you **MUST** have a "Qualified Scientist/Adult Sponsor" to supervise your work and **first be approved by a local SRC Committee: Non-Human vertebrate animals, Bacteria, Human/Animal Tissue, Recombinant DNA, Pathogens, Human Subjects, Controlled Substances, Hazardous Substances or Hazardous Devices.** You must also use the ISEF Rules Wizard at <http://www.sciserv.org/isef/students/wizard/index.asp> to determine other forms that may be required for your research and if approval is needed before beginning the experiment!

Any Projects using hazardous chemicals, activities or devices or using regulated substances and some potentially hazardous biological agents: Attach completed ISEF Form 3.

Projects involving Human Subjects: Attach an unsigned sample of the Consent Form and the completed ISEF Form 4 – Human Subjects and Informed Consent Form.

Projects involving Vertebrate Animals: Attach completed ISEF Form 5(A and/or B) – Vertebrate Animal Form to show that the project is approved if needed, supervised by animal care expert.

Projects involving Potentially Hazardous Biological Agents: Attach completed ISEF Form 6A and/or 6B.

Local SRC Approval: _____ Date: _____

(REQUIRED IF ANY OF THE ABOVE MATERIALS ARE USED!)

SRC Comments/Requirements:

* NC Fairs require students to follow the ISEF Rules and Regulations. Detailed information can be found at <http://www.societyforscience.org/isef/document/index.asp>.

**If the local committee has questions, please contact the regional director, NC state director, or any of the ISEF SRC Officials listed at http://www.sciserv.org/isef/aff_fairs/aff_review.asp