Student Checklist (1A)

This form is required for ALL projects.

1) a. Student/Team Leader: _____ Grade: _____

Email: _____ Phone: _____

b. Team Member: _____ c. Team Member: _____

2) Title of Project: _____

_____

3) School: _____ School Phone: _____

School Address: _____

_____

4) Adult Sponsor: _____ Phone/Email: _____

5) Is this a continuation from a previous year? ☐ Yes ☐ No

If Yes:

a) Attach the previous year's ☐ **Abstract** ☐ **Form 1A and** ☐ **Research Plan**

b) Explain how this project is new and different from previous years on ☐ **Continuation Form (7)**

6) **This year's** laboratory experiment/data collection will begin: **(must be stated (mm/dd/yy)**

Projected Start Date: _____ Projected End Date: _____
(Projected dates are required for projects that require SRC/IRB prior review)

ACTUAL Start Date: _____ ACTUAL End Date: _____

7) Where will you conduct your experimentation? (check all that apply)

☐ Research Institution ☐ School ☐ Field ☐ Home ☐ Other: _____

8) List name and address of all non-school work site(s):

Name: _____ _____

Address: _____ _____

_____ _____

Phone: _____ _____

9) **Complete a Research Plan as described on page 31 and attach to this form.**

10) **An abstract is required for all projects after experimentation (see page 28).**

Research Plan

REQUIRED for ALL Projects Before Experimentation
A complete research plan must accompany Checklist for Student (1A)

Provide a typed research plan and attach to Student Checklist (1A).

The research plan for ALL projects is to include the following:

A. Question being addressed

B. Hypothesis/Problem/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.)

- **Procedures:** Detail all procedures and experimental design to be used for data collection
- **Data Analysis:** Describe the procedures you will use to analyze the data that answer research question or hypothesis

D. Bibliography: List at least 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.
  - Choose one style and use it consistently to reference the literature used in the research plan
  - Guidelines can be found in the Student Handbook.

These are guidelines and should be followed where applicable. *Refer to Items 1-4 below.

1. **Human subjects research** (See instructions on p. 13 of the International Rules):
   - Detail all procedures, include what the participants are asked to do (see p. 13)
   - Describe Risk Assessment process and how risks will be minimized
     - Include strategies used to protect privacy and confidentiality
   - Describe Study Sample/Human Subjects
     - Number of human subjects and estimated demographics (may include information such as: age, male/female, cultural background breakdown, socio-economic status)
     - Recruitment procedures (where and how subjects are recruited)
     - Procedures for obtaining informed consent must include statement about informing potential human subjects about voluntary nature of participation and right to withdraw at any time
   - Include survey or questionnaires if used, and critically evaluate the risk
     - List and describe the measures (questionnaires, surveys) used and how you measure the variable of interest (behavioral observations, time, length). Attach the questionnaire/survey
     - Consider emotional stress and potential consequences
   - Describe any physical activities or procedures, if used, and critically evaluate the risks
     - Type, duration of exercise or physical activity
     - Ingestion method, amount, intervals, etc.

2. **Vertebrate animal research** (See instructions on p.17 of the International Rules):
   - Briefly discuss **POTENTIAL ALTERNATIVES** and present a detailed justification for use of vertebrate animals
   - Explain potential impact or contribution this research may have
   - Detail all procedures to be used
     - Include methods used to minimize potential discomfort, distress, pain and injury to the animals during the course of experimentation
     - Detailed chemical concentrations and drug dosages
   - Detail animal numbers, species, strain, sex, age, etc.
     - Include justification of the numbers planned for the research
   - Describe housing and oversight of daily care
   - Discuss disposition of the animals at the termination of the study

3. **Potentially Hazardous Biological Agents** (See instructions on p.21 of the International Rules):
   - Describe Biosafety Level Assessment process and resultant BSL determination
   - Give source of agent, source of specific cell line, etc.
   - Detail safety precautions
   - Discuss methods of disposal

4. **Hazardous Chemicals, Activities & Devices** (See instructions on p.25 of the International Rules):
   - Describe Risk Assessment process and results
   - Detail chemical concentrations and drug dosages
   - Describe safety precautions and procedures to minimize risk
   - Discuss methods of disposal