

# 2023-2024 Research Enrichment Program Science Fair Checklist and Packet - Logistics

Meets Fridays after school 1:30-2:30

Fair web site: <https://ba-leeds.org/science-fair/>

Version 4.0 Updated October 2023 (Post-COVID)

Research Enrichment is an after school program that supports all research projects, but is designed to help students enter the Contra Costa County Science and Engineering Fair. We recommend following the CCCSEF timeline even if you do not enter the science fair.

## **Contra Costa Science Fair Info**

Pre-approval deadline : **December 8, 2023**

Paperwork application due: **January 15, 2024**

Fair is usually mid- March. **March 7, 8, 9 2024**

**March 7 - set up poster, safety review**

**March 8 - Poster judging AM, in-person interviews PM**

**March 9 - awards ceremony**

Abstracts due after experiment is done but **before March 7**

**Main contact for the fair: Janice Fuji. [jjfujii9@att.net](mailto:jjfujii9@att.net)**

Assistance is available most Fridays after school.

The after school program usually provides a tri-fold poster, poster printer, entry fee, and limited reimbursement for supplies if you cannot afford them. If there is a large group we may arrange for a bus on the day of judging. Reimbursements are approved by Mr. Adkins in advance and come from ACE student fundraising.

Non ACE students may attend the after school program.

## **Step 1. August- September.**

Get an idea and clear it with an ACE teacher.

For ideas, try [www.sciencebuddies.org](http://www.sciencebuddies.org).

Your idea will either be a research project (including data, hypothesis, conclusion, etc.) or an engineering project (making a thing to solve a problem.). Try the Topic Selection Wizard if you want ideas pitched to you according to your interests.

## **Step 2. October.**

Complete a draft research plan. This involves background research, and clearing the plan with an ACE teacher so you know it is possible to do the project. You should have 4-5 formal references recorded in MLA format like a paper for English class. The plan states the hypothesis and procedure to be used. For engineering it states the problem and how your creation will solve it. There is some guidance on the ISEF forms (see below).

## **Step 3: October.**

Use the ISEF Wizard at the link

<https://ruleswizard.societyforscience.org>

to describe your project. it will tell you which forms you need. Fill out the forms and obtain necessary signatures. Print out the results of the wizard and include it with your application. Generally speaking, if you interact with humans, vertebrate animals, or there is the slightest risk involved in your project (say, with acids) you need pre-approval. The wizard will tell you.

#### **Step 4: October.**

Give your project a title. Don't change the title! It's how they track your project. The title can either be a mini hypothesis ("The Effect of This on That," or a pun (typically) "Breaking Wind: Hurricane Damage as a Function of Architectural Choices")

#### **Step 5: November - February**

Do the experiment. If you need pre-approval, wait for the approval.

Collecting data

Analyzing data

Apply statistics to find a conclusion

Creation of a poster (that's a whole other topic)

Writing and practicing your "speech"

**Step 6: BEFORE December deadline for pre-approval projects, by January for others. AFTER you have written your research plan but BEFORE you begin doing the research. You will need your hypothesis, procedure, background research, and everyone's name and email to begin the process.**

#### Complete Online Application

Go to <https://ba-leeds.org/science-fair/> and click on Student Registration Website. It walk you through the following steps:

#### Steps you should already have done:

1. Select a Project Topic
2. Write a Research Plan

#### Steps you do when ready to register:

3. Complete the Rules Wizard. Download the forms it asks for and fill them out. Complete ISEF Appropriate Paper Forms as specified by the WIZARD. <https://ruleswizard.societyforscience.org> The minimum set is below. You may have more than this.
  3. ISEF Form 1\*
  5. ISEF Form 1A\*
  6. Completed Research Plan (instructions provided on page 2 of Form 1A)\*
  7. ISEF Form 1B (one for each member of a team)\*
  8. ANY OTHER forms the wizard told you about such as informed consent, etc.
  9. INCLUDE A COPY of the wizard's list.

#### Complete CCCSEF-specific forms

10. CCCSEF Photo/Video/Website Release Form (one for each member of a team)\*
11. CCCSEF Hold Harmless Form (one for each member of a team). Please complete the interactive forms online prior to printing. \*
4. Submit your documents (some may need signatures!)
5. Register for the fair
6. Pay registration fee (usually the school pays this for you so don't send money at this time.)

\*Adkins will have copies of these forms. Links to the forms will be posted in Teams when they are updated for the current year.

**Step 8: NOT LATER THAN December 9 or January 13: depending on pre-approval.**

Submit your forms as google docs as specified on the science fair web site. In the past we mailed this form. This year they're all submitted electronically. Be early!! If you need to troubleshoot it's never easy or quick.

**Step 9: January-Early March**

- Prepare a poster
- Practice your speech
- Try to predict questions

**Step 10: Week of the Fair November 11,12,13 -**

Thursday of the week of the fair after school:

Get yourself to LMC and set up your poster after school as soon as possible.

Friday of the week of the fair:

Judges inspect posters. Starting in the afternoon you are interviewed.

Saturday of the week of the fair

Attend the award ceremony (usually in the morning.)

Poster guidance (see attached generic form)

Special rules to watch out for

1. If you speak to a person you need a signed permission form. (Harder than it sounds)
2. NO dangerous chemicals
3. No chemicals or exposed materials on display; models ok, but generally make the poster the focus.
4. No experimentation on vertebrate animals; no harm to animals or people allowed.
5. Don't put name or school or teacher or identifying info on board.

What you will likely be asked when interviewed

1. Tell me about your project (1-2 minute prepared overview speech)
2. Where did you get your idea?
3. How is your idea original or different?
4. What did you learn from background research?
5. What would you do next?
6. (not on scoring rubric but...) What are you planning to do after high school? College/Career goals?

Hot topics for this year

- AI
- Green energy
- Biomedical (always)
- Electrical transportation

Judging criteria

<b><i>POSTER FORM FOR NON-ENGINEERING</i></b>	
<b>CATEGORY</b>	<b>CATEGORY WEIGHT</b>
CREATIVE ABILITY	50
EXPERIMENTAL DESIGN	16.6666667
DATA ANALYSIS	16.6666667
CITATIONS/RELATED RESEARCH	16.6666667
SCOPE AND DEPTH	10
EFFORT	10
SKILL	20
CLARITY	10
	<b>TOTAL</b>
	150
<b><i>POSTER FORM FOR ENGINEERING</i></b>	
<b>CATEGORY</b>	<b>CATEGORY WEIGHT</b>
CREATIVE ABILITY	50
OBJECTIVE	25
PRACTICALITY AND UTILITY	25
SCOPE AND DEPTH	10
EFFORT	10
SKILL	20
CLARITY	10
	<b>TOTAL</b>
<b><i>INTERVIEW FORM</i></b>	150
<b>CATEGORY</b>	<b>CATEGORY WEIGHT</b>
CREATIVE ABILITY	30
THOROUGHNESS	20
SCIENTIFIC THOUGHT/ENGIN. GOALS	30
CLARITY	20
	<b>TOTAL</b>