

GREATER SAN DIEGO SCIENCE & ENGINEERING FAIR (GSDSEF)
PROJECT PROPOSAL/SIGNATURE* FORM (GSDSEF-1, 2015)

This form must be completed and signed prior to starting project work. It must be placed in the student's notebook with an ABSTRACT OF THE PROJECT for the GSDSEF Screening Fair. (Use the "Tab" key to move from line to line)

1. Project Title Does Warmer Waters Make Hurricanes Stronger?

Is this a continuation of a previous project? Yes No

2. STUDENT'S NAME (Last, First, Middle) Leung, Lenette, Jayee

2a. Partner's Name (for Senior Division 2 person projects only) _____

EACH SENIOR DIVISION PARTNER MUST SUBMIT A SEPARATE PROJECT PROPOSAL FORM.

3. Address, City, Zip 11424 Eastwind Point, San Diego, 92131

4. Phone (858) 566- 0882 email lenette.leung@gmail.com

5. School Thurgood Marshall Middle School Grade 8th

6. Teacher Elaine Gillum

7. This project involves (check all that apply):

Live Vertebrate Animals (GSDSEF-2, 2015)

Humans as subjects, helpers, or interviewees (GSDSEF-3, 2015)

Hazardous Substances (anything that could cause injury) (GSDSEF-4, 2015)

Chemicals

Infectious Agents

Bacteria, Fungi and/or Molds

Mutagenic Agents

Carcinogenic Agents

Teratogenic Agents

Human or Other Vertebrate Tissue (GSDSEF-5, 2015)

8. WHERE REQUIRED (see #7 above), the following supplemental forms must be completed and included with the project proposal form (CHECK ALL THAT APPLY):

Certification of Humane Treatment of Live Vertebrate Animals (GSDSEF-2, 2015)

Certification of Compliance of Research Involving Humans (GSDSEF-3, 2015)

Certification of Hazards Control (GSDSEF-4, 2015)

Certification of Vertebrate Tissue Source & Safety (GSDSEF-5, 2015)

9. Location where experimental procedures will take place: At home.

10. People, companies, etc. providing equipment, materials, workspace: There is no one providing equipment, materials, or workspace for this research.

11. Describe, in 200 – 250 words, the planned project/experiment and the procedures to be used:

This science fair research project is to find out what makes hurricanes stronger. Since hurricanes have been becoming stronger, it makes scientists wonder what has been giving strength to the hurricanes. With all the hurricanes that have been appearing in Category 5, the curiosity in these hurricanes have gone up. Weather scientists can't help but wonder why hurricanes have been going up in strength and destruction. Since hurricanes have been becoming stronger and destructive, research was done to see what can help over the strength the hurricanes gets when it forms in the ocean. Finding out whether or not ocean temperatures was the leading factor to hurricanes would help find a way to lower the strength to these strong hurricanes.

The procedures that were used to carry out this science fair research project was to gather enough data enough data of the hurricanes. Searching with the right words in the search bar would allow the data to be gathered more efficiently. With the gathered data, comparing the hurricanes in the same category would allow the differences between the two hurricanes to be shown. Also, gathering data would show the difference between past hurricanes and the current hurricanes. Bu comparing the data from the past and the current, it might show the difference between the two hurricane ocean temperature.

Just before the screening fair, attach a 200-250 word ABSTRACT of your project to this form.


*Continue to next page for required Signatures

GREATER SAN DIEGO SCIENCE & ENGINEERING FAIR
(GSDSEF) **PROJECT PROPOSAL/SIGNATURE FORM (GSDSEF-1, 2015)**
REQUIRED SIGNATURES:

Student:

I have read the *Rules and Regulations* of the GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR and certify that my project complies with them. I understand that failure to meet the terms of these rules and regulations will result in the disqualification of my project.


SENIOR DIVISION: GSDSEF forms meet the requirements of California law; therefore, all Senior Division students agree that, should they be selected to compete at the 2015 *Intel International Science and Engineering Fair (Intel ISEF)*, when they sign all required *Intel ISEF* forms they will predate them to agree with the date on this form.

 9-1-14

Student Signature/Date

Parent/Guardian:

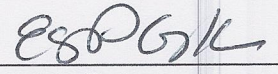
I am aware of all potential safety hazards connected with this project, approve the precautions being taken to ensure my student's safety and will, when appropriate, provide guidance and/or supervision. I understand that failure to comply with *Rules and Regulations* of the GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR will result in the disqualification of the project.

 9-1-14

Parent Signature/Date

Teacher:

I approved this project prior to the student beginning work on it and verified that it complies with the *Rules And Regulations* of the GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR. Any concerns about the project's design, appropriateness, safety, or legality were submitted to the GSDSEF Scientific Review Committee (SRC) for approval prior to allowing the student to proceed. I understand that failure to comply with the Fair's *Rules And Regulations* will result in the disqualification of the project. I will provide all needed supervision (other than that specified on other included forms) and will ensure that this proposal and all required supplemental forms are included in the student's notebook at the screening fair. I will have the student, if invited to apply for entrance to the GSDSEF, submit all SRC requested certification forms with their *2015 Application for Entrance*.

 9-1-14

Teacher Signature/Date

Additional Advisor (if required)

When certification forms (*GSDSEF 2, 3, 4 or 5, 2015*) are signed by someone in addition to the science teacher, a signature here ensures that the procedures described on these forms will be followed.

Additional Advisor Signature/Date