

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 The Durability Of Nail Polish

Is this a continuation of a previous project?  Yes  No

2. STUDENT'S NAME (Last, First, Middle) Hern, Emma Renee

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 11362 Village Ridge Rd, San Diego CA 92131

4. Phone 619-507-2921 email kloe@san.rr.com

5. School Thurgood Marshall Middle School Grade 7th

6. Teacher Mrs. 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: 11362 Village Ridge Rd, San Diego CA  
92131

10. People, companies, etc. providing equipment, materials, workspace: Paul Bryson, PhD.,

Director of Research & Development, OPI

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

The goal for this science fair project is to find the most durable nail polish by testing six polishes on two individuals with two different lifestyles and also completing a rub test using six ping pong balls on white paper. The results of this project will show which polish is the most durable under varying circumstances. The individuals will include one working adult female and one full-time student that has extracurricular activities aside from school. Each of their fingernails will be painted with two standard coats of the polish being tested. In addition, a test will be done rubbing six ping pong balls on white twenty-pound paper to see how many rubs it will take before there is a visual difference. Results for the painted fingernails will be gathered by taking pictures on days one, three, five and seven to compare wear and tear throughout the week as well as to compare results with other polishes. Finally, ingredients will be listed and compared for each polish. All polishes recipes are trade secret and cannot be obtained. However, there will be a comparison done for similar ingredients and the order in which they appear on the list of ingredients. The end result is to provide consumers with information on the best polish durability available between the six polishes being evaluated.

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.

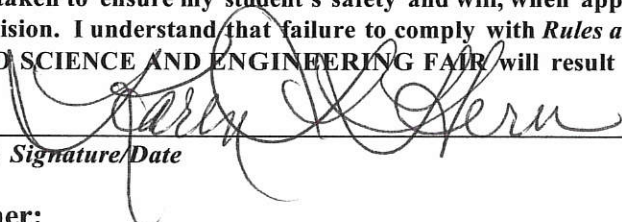
**SENIOR DIVISION:** GSDSEF forms meet the requirements of California law; therefore, all Senior Division students agree that, should they be selected to compete at the 2015 *Intel International Science and Engineering Fair (Intel ISEF)*, when they sign all required *Intel ISEF* forms they will predate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

Emma Kern 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*