



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Rachel B. Dobrin	Project Number J2211
Project Title Can You Discern How Much Your Skin Burns?	
Objectives/Goals My goal is to see if SPF in sunscreen has the protection on your skin it says it does and to see which sunscreen out of three well known brands is the best; Banana Boat, Coppertone, or Neutrogena.	
Abstract Methods/Materials Materials: # 3 bottles of Neutrogena sunscreen, one SPF 15, one SPF 30, and one SPF 45 # 3 bottles of Coppertone sunscreen, one SPF 15, one SPF 30, and one SPF 45 # 3 bottles of Banana Boat sunscreen, one SPF 15, one SPF 30, and one SPF 45 # A UV monitor # Plastic wrap # A sunny day Methods: 1. Rip off a piece of plastic wrap and place it on the UV monitor. 2. Go outside with the monitor and hold it up to the sun for ten minutes. 3. Record the reading from the monitor. 4. Do the same thing with the plastic wrap and UV monitor, but put a thin coating of sunscreen on wrap. 5. Subtract the blank plastic wrap reading from the sunscreen reading, which shows how much the sunscreen reduced the UV radiation. 6. Do the same thing for all the sunscreens. 7. Do each individual sunscreen three times each on the monitor, and then find the average of the three numbers. 8. Record to see the UV light that reduced for each SPF.	
Results The SPF in the sunscreen did have the protection level it said and the sunscreen that blocked the most Ultra Violet rays was Neutrogena SPF 45.	
Conclusions/Discussion Overall, my hypothesis was correct. The sunscreens were true to their claims as i expected and the Neutrogena SPF 45 sunscreen was the best. Based on my information, I can conclude that if you wear sunscreen, you will have a longer and happier life and won't get diseases involving the sun and its rays.	
Summary Statement My project is about the various SPFs in sunscreens and whether the protection level of the sunscreens is accurate.	
Help Received Mother helped me with procedures; Dr. X helped me improve my project greatly; Mrs. Y helped me write my report.	