CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY

Name(s)
Audrey L. Robinson

Project Number
J1920

Project Title
Examination of the Most Effective Sunscreen

Abstract

Objectives/Goals
The objective of this study is to determine which sunscreen is the most effective.

Methods/Materials
I tested four brands of sunscreen using three testing methods: ultra violet beads, a UV meter and Sun-sensitive paper.

Results
The Ultraviolet beads and UV Meter were not satisfactory testing methods. I then focused my efforts on the sun-sensitive paper and repeated my trials three times for each sunscreen. The sunscreen with the most zinc oxide was the most effective.

Conclusions/Discussion
Repeated trials of sunscreen on sun-sensitive paper proved the sunscreen with the most zinc oxide had the best protection against UV rays. It is concluded that sunscreen with at least 10% of zinc oxide is the most effective.

Summary Statement
I showed that zinc oxide based sunscreens provide the most protection from the sun.

Help Received
None. I researched methods and tested the sunscreens on my own.