

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

Kylie L. Page

Project Number

J1124

Project Title

What Type of Sunglasses Are Best under UV Light?

Objectives/Goals

Abstract

Sunglasses are used by many people and there are many different types of sunglasses. By doing this experiment the researcher wants to determine which type of sunglasses is best at blocking UV light. UV light is one type of ray that the sun projects and can be harmful to your eyes and skin. The researcher#s hypothesis was that the Polycarbonate Polarized lens would block the UV light the best. The researcher chose this lens because it was much thicker than most of the other lenses.

Methods/Materials

To do this project the researcher exposed bacteria to UV light with or without a lens, for a certain amount of time. The researcher then counted the number of surviving bacteria. The researcher did this experiment with multiple lenses.

Results

The researcher discovered that there was no difference between the different types of plastic lenses that were used. The researcher also discovered that the lenses with UV coating and UV tint blocked the same amount of UV light. From the Polycarbonate lenses, the Polycarbonate Polarized lens was better than the Polycarbonate lens.

Conclusions/Discussion

The researcher also discovered from this experiment that either the material Polycarbonate is better at blocking UV light or that the thicker the lens the more it protects. The researcher predicts that it was the thickness that made a difference.

Summary Statement

I was trying to find out what type of sunglasses are best at blocking UV light.

Help Received

Lenscrafters donated lenses. Point Loma Nazarene University donated facilites & equipment under supervision of Dr. Dawne Page (mom).