

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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Project Number

S1502

Project Title

Temperature's Effect on the Refraction of Light

Abstract

Objectives/Goals

The purpose of this project is to determine the effect of temperature on a liquid's refraction of light.

Methods/Materials

The experiment measures the change in the index of refraction of a liquid as its temperature changes.

Results

The results were inconclusive, and no trends could be demonstrated, since the changes in the indexes of refraction over temperature were very small, and hardly measurable.

Conclusions/Discussion

This suggests that the refraction of light in a liquid is only slightly affected by its temperature in the range used. The experiment could be improved if more precise measuring tools and a wider temperature range were used.

Summary Statement

The project is about finding the effect of temperature on a liquid's refraction of light.

Help Received

Mother helped create poster and provided some test liquids; Father provided a laser pointer and thermometer; Mr. Geluardi, my science teacher, helped improve my procedure.