CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY

Name(s)
Spencer E. McVeigh

Project Number
J1209

Project Title
From the Corner of the Eye...

Abstract

Objectives/Goals
To determine which colors a human's dominant and non-dominant eye distinguish the soonest through peripheral vision.

Methods/Materials
4 cm by 21.4 cm sheet of red paper
4 cm by 21.5 cm sheet of light red paper
4 cm by 21.5 cm sheet of blue paper
4 cm by 21.5 cm sheet of light blue paper
4 cm by 21.5 cm sheet of black paper
4 cm by 21.5 cm sheet of white paper
60 cm by 90 cm black foam board

Results
For red, 15 subjects chose it the soonest using their dominant eye, and 14 subjects chose it the soonest using their non-dominant eye. For pink, 7 subjects chose it the soonest on their dominant eye, and 11 subjects chose it the soonest on their non-dominant eye. For blue, 31 subjects chose it the soonest on their dominant eye, and 25 subjects chose it the soonest on their non-dominant eye. For light blue, 13 subjects chose it the soonest on their dominant eye, and 16 subjects chose it the soonest on their non-dominant eye. For black, 14 subjects chose it the soonest on their dominant eye, and 13 subjects chose it the soonest on their non-dominant eye. For white, 26 subjects chose it the soonest on their dominant eye, and 27 subjects chose it the soonest on their non-dominant eye.

Conclusions/Discussion
The hypothesis of this experiment was that a human's dominant eye will see a brighter color the soonest and a human's non-dominant eye will see a darker color the soonest while using peripheral vision. The purpose of this was to determine which colors the dominant and non-dominant eye distinguishes the best with peripheral vision.
The color that was overall seen the most with the dominant eye was blue, a total of 31 subjects. The color that was overall seen the least with the dominant eye was pink, a total of only 7 subjects. The color that was overall seen the most with the non-dominant eye was white, a total of 27 subjects. The color that was overall seen the least with the non-dominant eye was also pink, a total of only 11 subjects.
The hypothesis was proven to be incorrect. A human's dominant eye did not distinguish a brighter color the soonest; it saw blue the soonest, which is a darker color. A human's non-dominant eye did not

Summary Statement
This project is about which colors a human's dominant and non-dominant eye distinguish the soonest through peripheral vision.

Help Received
Teacher informed of GSDSEF guidelines.