CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY

Name(s)

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Project Number

J1214

Project Title

Perceiving with Your Periphery

Abstract

Objectives/Goals

The objective was to determine which color (out of red, yellow, green, and blue) an adult could see most easily using their peripheral vision. Research done on this says that blue and yellow are seen more easily with your peripheral vision, and yellow can be mistaken for white, so it was expected that blue would be seen more readily.

Methods/Materials

Thirty subjects were seated, one at a time, under a large protractor made to measure the degree at which a color card was first recognized. A color card was moved from behind the subject around to the front at the rate of 5 degrees per 2 seconds until the subject said they could distinguish the color on the card. This was repeated three times on each side for each color tested.

Results

After experimenting on thirty adults, the results showed that both yellow and blue were seen most easily with the right eye at 71.5 degrees. Yellow only, was seen easiest with the left eye at 74.5 degrees.

Conclusions/Discussion

The results partially supported the hypothesis. Blue was seen most easily, along with yellow, with the right eye. These results can be used to help improve pedestrian safety by having people wear yellow or blue while walking, running, or biking.

Summary Statement

The project shows which color an adult can see most easily using their peripheral vision.

Help Received

Interviewed optometrist Dr. Marcus Appy about the project subject and had my teacher proof-read my work.