

CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s)

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Project Number

J1212

Project Title

Red, Yellow, Blue, and Green, Which Color Is Most Easily Seen?

Abstract

Objectives/Goals

The objective was to determine which color (out of red, yellow, green, and blue) a child could see most readily 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

Twenty 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 twenty children, the results showed that green was seen first with the right eye and blue was seen first with the left eye. Results on the left eye shows that blue and red were the top two most easily seen and green was the least easily seen. On the right eye green and blue were the top two most easily seen and red was the least easily seen.

Conclusions/Discussion

The results partially supported the hypothesis. Blue was seen more readily on the left eye. These results can be used to help improve pedestrian safety by having people wear bright blue or green clothing to be more visible to drivers.

Summary Statement

The project shows which color a child can see most readily using their peripheral vision.

Help Received

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