

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

Caitlin A. Killmer

Project Number

Project Title

Back to Basics: How Color Affects Short-Term Memory

Abstract

Objectives/Goals The purpose of my project was to see if and how color affected short-term memory of two syllable nouns. Methods/Materials

I obtained consent from 105 subjects and gave them one list with twelve words (4 of each blue, yellow and red) to memorize. For my first trial, they were given 2 minutes to memorize the words. For the second trial, they were given ten seconds. After the set amount of time, the list was taken away, they were given another, longer list, this time in black and white (that contained similar words), and they were instructed to pick out the words that were on the previous list. I repeated the procedure 35 times (out of 105) with a black and white list to serve as a control.

Results

There was a small difference between the percentage of words remembered per color, but with the small sample size I had, I considered it within the margin of error. The average number of words remembered per color all hovered around my control, which gives me a reason to think that color does not affect memory.

Conclusions/Discussion

My results did not support my hypothesis. I thought that red would be remembered the best because it is an advertising color and very bright. In my study, I found that color has no significant affect on memory.

Summary Statement

My project is about how the primary colors affect short-term memory.

Help Received

Math teacher helped make graphs, Science teacher helped edit written components