CALIFORNIA SCIENCE & ENGINEERING FAIR
2019 PROJECT SUMMARY

Name(s)

Gabriel Berger

Project Number

J1205

Project Title

Ears vs. Eyes

Abstract

Objectives

The purpose of this project was to find what humans react to faster, sound or light and how the pitch or color affects the reaction time.

Methods

To administer the tests, the coding language Scratch was used to make a program and said program was administered on many different people who were both male and female, ranging from 11-73. When the program was initiated by the subject, the test would invoke a random stimulus (sound or light) at a random frequency, begin a timer and wait for the subject to hit the spacebar. When the spacebar was hit, the timer would stop and the program would record the test type (sound or light), the frequency and the time results. After this, the lists of results would be exported into a folder for analysis later on.

Results

After administering the test on twenty different people, I found that the sound average reaction time was faster than light and that frequency didn t have a meaningful effect on the reaction time for both sound and light.

Conclusions

After thoroughly looking at the data, it can be concluded that the hypothesis was wrong due to a lack of trends and patterns in said data.

Summary Statement

My project is about human reaction time and what factors affect it.

Help Received

I consulted with my Dad about any problems I had while building my program on Scratch.