



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Sara A. Sholes	Project Number J1719
Project Title Who Has Hue Acuity?	
Abstract Objectives/Goals The objective of my project is to see if normal(not colorblind) people's color acuity(how well you can deferenciate between similar hues) varies from person to person, and if age, gender, and part of the spectrum affect it. I expected that age wouldn't affect it, females would do better than males, and that people would have the worst color acuity in the green part of the spectrum. Methods/Materials I designed a series of sixty tests that test hue acuity on the computer. The test taker has to decide out of nine very similar hues, which one matched a test patch. One of them does match exactly. I had about thirty people take the test. I then checked their errors(a correct answer is a 0, one to the right,1,one to the left,-1,so on). I compared the spread of their errors, according to age, gender, and part of the spectrum. Results Males overall did not do worse than females, they did about the same. Adults tended to do better than children. People did not do the worst in the green part of the spectrum; they did the worst in the blue. I tested color blind people, too. They had the same results, just did worse overall. Conclusions/Discussion I think that adults tended to do better than children because they spent more time and concentrated more on the test. Males and females probably did about the same because if you're not color deficient, then you should be able to descriminate between colors just as well as everyone else. Mabey everybody is the weakest in descriminating between the blues, which would explain why everybody did the worst on the blue tests.	
Summary Statement My project is about if age, gender, and part of the spectrum affect hue acuity.	
Help Received Dad helped with board; Mr. Steely let me test during class; testers took the test.	