



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Cody D. Lo	Project Number J2222
Project Title Will You Miss the World with Colored Contact Lenses?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Many teenagers today like to wear color contacts to change their eye color. Do color contacts make them see clearly especially on their peripheral field? Will it block their peripheral vision?</p> <p>Methods/Materials Test subjects will first have their peripheral vision tested without any contact lenses on the Humphrey peripheral field testing machine as controls. Then test subjects will wear a clear contact lens on their right eye and will be tested on the machine again. Test subjects will lastly test their peripheral vision with a color contact on the right eye with the same machine. All three peripheral vision tests will be compared to reach the conclusion. The materials used in this experiment were clear contacts, color contacts, Humphrey Peripheral Field Testing Machine, contact lens cleansing solution, contact lens cases, and eye patches.</p> <p>Results The average maximum peripheral vision on the Humphrey 68 point peripheral field test was 64.35 points. The clear contact lens test subjects scored an average of 60.24 points. The color contact lens test subjects scored an average of 55.05 points. When wearing no contact lenses, test subjects missed about 4% of their maximum peripheral vision. The clear contact lenses wearing subjects missed on average 10 % of their maximum peripheral vision. The color contact lenses wearing subjects missed on average 18 % of their maximum peripheral vision.</p> <p>Conclusions/Discussion Obviously, testing without wearing any type of contact lenses was the test subject#s maximum ability to see peripherally and that while wearing clear contact lenses, his or her peripheral vision decreased slightly. The test subjects peripheral vision decreased the most while wearing a color contact lens. Color contact lenses block peripheral vision. During the testing, many patients said that their vision became blurry when looking through the side of their eye.</p>	
Summary Statement The purpose of my experiment is to discover if color contact lenses block peripheral vision.	
Help Received My father helped me with the board. Dr. Garlan Lo provided the necessary instruments for conducting my experiment.	