



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> <b>Drew J. Worthing</b>	<b>Project Number</b>  22378
<b>Project Title</b> <b>Virtual Eyesight</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The purpose of my study was to determine whether or not playing video games for a certain period of time would affect your eyesight temporarily or permanently. I think playing video games will affect your eyesight temporarily and the longer you play the more your eyesight will be affected. <b>Methods/Materials</b> Informed consent was obtained from my family. Using a Standard Graham Eye chart I tested each individuals eyesight before the testing began and recorded their starting values. I then tested each person before playing the video game and than had each person play the 64 Lego Racer game starting with a 10 minute time period. I than tested their eyesight immediately after completing the game. I repeated this process at 20,30,45 & 60 minute time periods. Each time study was completed on separate days. I then repeated the whole time studies to check the validity of the results. <b>Results</b> There was a definite change in eyesight results after each time period played for each individual. However each individual was affected at different time periods and their eyesight was only affected temporarily. All subjects returned to their pre-test values before each time period. All subjects reported of their eyes itching, burning and irritation during each period of testing. <b>Conclusions/Discussion</b> My hypothesis was wrong. Different peoples eyes were affected more at different times during both tests. I believe that it takes different time periods for different peoples eyes to adjust to playing the video games. The reports of eye irritation are symptoms of Eye-strain. I learned that playing video games does affect eye sight temporarily. Further studies with a larger group of subjects divided by age and over longer time periods would be needed to accurately determine long term affects.	
<b>Summary Statement</b> The purpose of my project was to determine if playing video games for a certain period of time would affect your eyesight temporarily or permanently.	
<b>Help Received</b> My mom, dad, and sister were my test subjects. My mom and dad helped with the computer and assembly of the display board. Dr. Stephen Ratty provided the eye chart. Dr. Donald Tohm provided information on administering the eye tests accurately and explained how to analyze the results.	