



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) David C. Andrecht	Project Number J0601
Project Title Improve Memory with Music	
Objectives/Goals My objective was to determine if music can actually improve short-term memory. My hypothesis is that music in the background of testing will help improve short-term memory. I chose Mozart's Piano Concert No. 20 in D minor.	
Abstract Methods/Materials I was able to test 35 subjects in a series of tests. The testing was made up of six groups of letters shown in 5 second intervals. The groups were increased by two letters each time, letters were selected randomly for each test. I started with 2 letters and increased to 12 letters by the end of the testing. The subject wrote down the letters they remembered after each group of letters was shown. The first series of tests was given with no music in the background. The second series was given with music in the background. Each subject had to complete 2 seperate tests for a total of 70 tests completed.	
Results I did observe that during the music portion of my testing my subjects were even more observant of the task at hand. My data shows a decrease in memorization of letters as the amount of letters tested increased. Although, with music 14.5% more letters were remembered in test number 5 (10 letters tested) than test number 4 (8 letters tested). Overall 25.5% more letters were remembered with music playing than without music playing. Indicating that music actually did in fact improve short-term memory.	
Conclusions/Discussion In conclusion, my test results indicate that short-term memory is improved with the aid of music, as stated in my hypothesis. This information could also be used in our personnel lives as well. I have learned by doing this project that this type of music seems to have a calming effect on a persons senses. I have even played it while studying for a test, and it seems to improve my concentration of the task at hand.	
Summary Statement The ability to improve your short-term memory with music by Mozart.	
Help Received My Mom helped proofread report; My Dad helped fix the printer; Testing of St. Mary's students.	