



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Sean M. O'Brien	Project Number J0330
Project Title The Effect of Caffeine on Alertness	
Abstract Objectives/Goals My objective was to find out what effect caffeine would have on the results of a math speed test, relating to both speed and accuracy. Methods/Materials I administered three similar, but slightly different 64-problem math tests under three different conditions: 1. without caffeine, 2. after having ingested 54mg. of caffeine (from a can of Mountain Dew soda), and 3. after having ingested another 54mg. of caffeine, totaling 108mg. We timed ourselves on each test and waited 30 minutes after drinking the soda before taking tests #2 & #3. Later I corrected the tests. Results The results show that the intake of caffeine helped the participants improve their test performance. The time it took to complete the tests was faster, and the number of errors were lower. Conclusions/Discussion My conclusion is that caffeine improves alertness and in moderate amounts can actually help students perform better on tests.	
Summary Statement My project is about how caffeine might effect math test performance.	
Help Received Mother helped conduct experiments, Mrs. Biggers provided math tests for experiments.	