



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Natasha N. Sosa	Project Number J0634
Project Title The Stroop Effect: Does Age Matter?	
Objectives/Goals The goal of my project was to investigate whether age had an impact on the Stroop Effect.	
Abstract	
Methods/Materials 30 subjects were tested in each of three groups: younger group (2nd and 3rd graders), middle school students (6-8th), and adults. They were asked to read from three different lists of color words for five tests. The three lists were as follows: words in all black ink, words matching the ink color and words and ink mismatched. Subjects were asked to read out loud the printed words (for three tests) or the color the word was printed in (for the other two) as fast and as accurately as possible. I recorded their time and number of mistakes.	
Results While each group clearly demonstrated the Stroop Effect, the youngest group had the largest difference in their times. They took 82.70 seconds longer to say the color when mismatched than to read the word when mismatched. In contrast, the middle school students had a difference of 51.28 seconds and the adults had a difference of 48.26 seconds.	
Conclusions/Discussion There appeared to be an affect of age on the performance of the Stroop Effect. The youngest group clearly had more difficulty naming the color when mismatched, even when taking their overall rate of reading into account. They also made more mistakes and demonstrated more frustration and uneasiness with the task. The middle school students and adults performed similarly. Both groups tended to use strategies (i.e. following with finger) to help them with naming the color of the word. They also tended to be wary of a trick when asked to name the color when it matched the word. The youngest group appeared to notice the matching and then proceed to just read the words quickly.	
Summary Statement My project determined that age had an impact of the Stroop Effect.	
Help Received My mother helped recruit subjects and drove me to their homes for testing. She also held the videocamera during testing.	