



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Amy L. Gutierrez	Project Number J0316
Project Title The Stroop Effect with Numbers	
Abstract Objectives/Goals My objective was to see if people have difficulties saying a number for example 4, when that number has something around it. For example if there's a number 4 and it has little number 3's around it, it's to prove if people would say the regular number(4) rather than the number that it has around. Methods/Materials The experiment was tested on 50 13-14year old students from Nimitz Middle School with their consent. Out of those 50, 25 were females and 25 were males. They were presented with a sheet that had numbers on it. There were a total of 10 numbers, out of those 10 numbers, 5 were congruent numbers for example 1,2,3,4... and the other 5 were incongruent, for example the number 4 with little 3's around it, 5 with little 4's around it and so on. What was then done was that the seconds that each gender took were recorded to determine how long did each gender take to name first the incongruent numbers and then the congruent numbers. Afterwards the data was recorded consisting of the overall responses, of both males and females seconds of incongruent and congruent numbers. Results The results showed that consisting of gender on the congruent numbers the males were faster on naming the congruent numbers with 1.53 seconds average when the females were 1.67. Also consisting of gender on the incongruent numbers, the males were slower with 3.03 seconds average when the females ended up with 2.87 seconds. Overall of both genders, to say the incongruent numbers both genders took about 2.98 seconds and both genders took 1.66 seconds to say the congruent numbers. Conclusions/Discussion My conclusion ended up to be that the males were faster on saying the congruent numbers when the females were faster on naming the incongruent numbers faster than the males. Overall both genders took longer to say the incongruent numbers rather than the congruent. At the end people do have difficulties saying a number when that number has something around it.	
Summary Statement My project is about converting the stroop effect ,which deals with colors and word processing, to numbers that deals with incongruent and congruent numbers.	
Help Received The only help I got was my English teacher revised my research. Other than that I was on my own.	