



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <b>A. Gabriella Gutierrez</b>	<b>Project Number</b> <b>J0711</b>
<b>Project Title</b> <b>Snooze It or Lose It!</b>	
<b>Objectives/Goals</b> My goal was to determine if the amount of sleep you receive will affect your cognitive abilities.	
<b>Abstract</b>	
<b>Methods/Materials</b> 1. Record age, education level, stimulants; sleep/awake times Mon-Sun 2. Identify participant as non-sleep deprived (7.5 or more hrs of sleep) or sleep deprived (less than 7.5 hrs of sleep) so I can tell them apart 3. Measure the timed test by using a 1/100 second resolution accuracy stopwatch 4. When testing the participants repeat the same lighting, materials, noise level, and administer the test around the same time of the day 5. Repeat steps 1-5 doing three trials 6. Perform memory test 7. Perform judgment test 8. Perform coordination test	
<b>Results</b> Non-Sleep Deprived: Memory Test: Score/min/sec 32, 35, 44, 53, 1:15, 1:18 Judgment Test: Levels 7, 3, 3,3,2,2 Coordination Test: Laps 24, 20, 19,19,14,13 Sleep Deprived: Memory Test: Score/Min/Sec 32, 55, 58, 2:00, 2:00, 2:00 Judgment Test: Levels 5, 5, 3,3,2,1 Coordination Test: Laps 19, 16, 15,15,13,12	
<b>Conclusions/Discussion</b> My hypothesis stated that non-sleep deprived people would achieve higher results on memory, judgment, and motor skills cognitive abilities tests. The results of my experiment proved that my hypothesis was correct. When I began deciding how I was going to test my hypothesis, I wanted to test subjects who professed to be dealing with sleep deprivation on a regular basis, who said they slept less than 7.5 hours per night and often waking up between 1-3 times a night, against non-sleep deprived subjects, which I based on sleeping 7.5 hours or more per night on a regular basis. An interesting future study would be to test non-sleep deprived and sleep deprived teenagers, elderly and in general more test subjects.	
<b>Summary Statement</b> My project was about sleep and the effect it has on your cognitive abilities of memory, judgment and coordination skills.	
<b>Help Received</b> I used my school's science lab and benches to perform my experiment on my subjects, and my mom drove me to the store to purchase my science fair board and supplies.	