



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Ashly C. Kloiber	Project Number J0620
Project Title The Effect Age Has on Short Term Memory	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to determine the effects that age has on a person's short-term memory.</p> <p>Methods/Materials Six pre-selected age groups were chosen to include people from ages 4 and up. Sixty people, ten from each pre-selected age group were tested for their ability to recall items from their short-term memory. Fifteen household items were randomly selected and placed on a table in a certain configuration. Test subjects were allowed thirty seconds to examine the fifteen items. The items were covered up and the test subjects were given two minutes to recall which of the fifteen items they could remember. The average number of items recalled from the short-term memory testing was determined per age group. The percent of items recalled per age group was graphed and compared.</p> <p>Results The age group 22 to 40 years old had the most items recalled. The average number of items recalled was 11.7 out of the 15, which is 78%. The age group 4 to 6 years old had the least amount of items recalled. They recalled an average of 5.8 out of the 15 items, which is 39%. The 7 to 10 year old age group had an average of 9.0 out of 15 items recalled with 60%. The 11 to 21 year old age group had an average of 11.5 out of 15 items recalled with 77 %. The 41 to 60 year old age group had an average of 10.5 items recalled with 70%. The 61 and up age group had an average of 8.1 items recalled with 54%.</p> <p>Conclusions/Discussion My conclusion is that age does have an effect on memory. I believe the fact that the 4 to 6 year old age group having the lowest average amount of items recalled is insufficient to my results due to them having a very low attention span. Short-term memory peaks at ages 22 to 40 years old and then declines after the age of forty. The results from the age group 11 to 21 years old are fairly close to the 22 to 40 year old age group results. It could most defiantly be true when my grandmother uses the famous excuse, #I can't remember because I am too old.#</p>	
Summary Statement My project tests if a person's short-term memory is affected by the aging process.	
Help Received Test subjects were obtained through these various resources: Healy Senior Center, The Sing Trees Recovery Center, classes at Redway Elementary, and many friends of our family. My mom also helped me make the data charts.	