



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Chloe J. Feller	Project Number J0609
Project Title Does Age Affect Short-Term Memory?	
Objectives/Goals I wanted to investigate the question if short-term memory was affected by one's age.	
Abstract Methods/Materials 1. An I Spy picture book; 2. A timer; 3. Test subjects (40 people divided equally into four different age groups); 4. Forty questionnaires; 5. A folding table and two chairs; 6. Several pens; 7. Digital camera to photograph and document the study. Major steps: 1. First set up and lay out all materials; 2. Randomly select a person who fits within the age groups; 3. Explain the procedure; 4. Set timer for one minute; 5. Have them study a picture for one minute and answer a questionnaire. No time limit. 6. Write down all observations about the subject's testing and affects on the test results. 10. Repeat this procedure 40 times. My independent variables were the ten people in age groups 4-12, 13-19, 20-35, 36-53. My dependent variable was the measurement of all the age group results. My constant variables were the picture I used to test all age groups, the amount of time to study the picture, the questionnaire I used, and the environment under which each person was tested.	
Results 1. All groups could accurately and correctly recall items from the picture, so it appears that there was no guessing in the unaided recall segment. 2. A surprise result was that females in all age groups had better short-term memory recall than the males. 3. The youngest group 4-12 performed the poorest remembering an average of 52% of the aided questions and could remember unaided 3.4 items on average. 4. The 13-19 year old age group placed third out of the four age groups. They could only remember an average of 58% of the aided questions and could recall unaided an averaging 5.7 items for the group. 5. The eldest group (ages 36-53) came in second. They could remember 68% of the aided questions and an average of 6.3 items on their own. Health conditions affected this group's results. 6. The 20-35 age group performed the best. They could remember an average of 76% of the aided items and an average of 7.9 items unaided.	
Conclusions/Discussion Was My Hypothesis Correct? No. I predicted that participants in the 13-19 year old age group would perform better because I thought their minds were still growing.	
Summary Statement I investigated how age affected short-term memory in forty people divided into four age groups.	
Help Received My teachers provided guidance in scientific method. My mother helped edit the writing and design of my project.	