



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Kellie K. Stutz	Project Number S0318
Project Title Pretty Patterns: The Study of Pattern Replication vs. Age	
Abstract Objectives/Goals The objective of this project is to test pattern replication vs. three different age groups. If pattern replication is tested on subjects of all ages, utilizing four shapes in eight different colors for fifteen seconds, then children will be more accurate with color, adults with shape, and teens with both shape and color. Methods/Materials Eight colors of four foam shapes were glued to a piece of cardboard. Subjects were given fifteen seconds to memorize the pattern. After memorizing the pattern, it was flipped over and the subjects were asked to replicate the pattern exactly using replicas of the glued foam shapes. The time was accounted for on a stopwatch, and the age and results of each subject was recorded. Results Teens showed that they replicated both shape and color the best with an average of 5.94 shapes/colors that were exactly correct. Adults averaged 4.46 shapes/colors that were exactly correct. Children averaged 3.54 shapes/colors that were exactly correct. The results showed more times than not, the subject would either get nothing correct, or both the shape and the color correct. Conclusions/Discussion The data supported the hypothesis in that teens were more correct in both categories of shape and color.	
Summary Statement This project tested the memorization skills and the difference in ages and how it affected the results of patter recognition and replication.	
Help Received Mrs. Grubb a teacher at Bailey School- allowed her class to be tested. Mr. Moss a teacher at Desert High- allowed his class to be tested. Steven Stutz my father- allowed employees to be tested.	