



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Kaya L. Moore	Project Number J0417
Project Title What Is the Effect of White Noise on Memory?	
Abstract Objectives/Goals The objective of this study is to determine whether or not white noise has a negative impact on memory. Methods/Materials A noise emitting device, approximately 50 students, 20 images, a stopwatch. Results Fifty students were tested on how well they could recall 10 images in order with white noise in the background and then with no noise at all. After testing all of the students, I found out that my hypothesis was incorrect. From my experiment, white noise actually assisted students on remembering the images. Conclusions/Discussion The results of my experiment contradicted with my hypothesis. I was led to believe, from my research, that white noise would have a negative affect on memory because white noise can result in the release of cortisol, a stress hormone. To much cortisol release can result in slight memory loss and in rare cases, brain damage. There are various reasons as to why students resulted higher with white noise, but I believe the leading cause is because the student is exposed constantly to white noise and has become partially imune.	
Summary Statement I determined whether or not white noise had a negative or positive affect on memory by testing students on their memory recall.	
Help Received I conducted the experiments and drew the conclusion by myself, but my science teacher assisted me in my research.	