

## CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s) **Project Number** Kelsey K. Morton S0314 **Project Title** This Is Your Brain. This Is Your Brain on Music Abstract **Objectives/Goals** My objective in doing this experiment is to determine whether music made from the frequencies of Beta brainwaves will help improve concentration. **Methods/Materials** The following materials were used in my experiment: a pen and paper, a "High Focus - Music & Beta Frequences" CD, stereo headphones, test subjects, a computer and the "superfocus" website. Essentially, my experiment was to compare the my ssubjects' results from the Mental Processing Speed and Attention Span tests on the superfocus website with and without the music. I sat one of my subjects down at the computer and had them take both tests in silence. I then had them listen to the music for five minutes and then had them take the tests again and recorded their scores both times. **Results** My results fairly consistently showed that concentration did improve with the music. The average improvement in the Mental processing Speed Test was about 5-6 second and the average improvement of the Attention Span Test was about 3-4 rows. Almost all of my subjects showed an overall improvement. **Conclusions/Discussion** to conclude, Beta brainwave music does in fact improve one's ability to concentrate. **Summary Statement** The Beta frequency is that which the brain enters during a concentrated state; I am testing whether music converted from these frequencies will aid in concentration.

**Help Received**