



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Maya V. Hanck	Project Number 34380
Project Title Kaffeinated Kids	
Objectives/Goals The purpose of my experiment was to see whether children ten and under or children over ten would have a higher increase in heart rate after drinking 60mL of Mountain Dew. Abstract Methods/Materials There were many materials that were used to complete this experiment that included: 3 chairs, 40 Dixie cups, deck of cards, heart rate monitor, 20 cans of Mountain Dew, 40 participants, pencil, timer, table, 1/4 measuring cup. The procedure for this experiment was: take the subject's resting heart rate with a heart rate monitor, have subject sit down and drink 60mL of Mountain Dew, wait ten minutes, and take the subject's heart rate again with the heart rate monitor, and record the results to see whether the ten and under age group or the over ten age group had a higher increase in heart rate. This will be done with 40 participants. Results The results of this experiment were that the over ten age group had a higher increase in heart rate than the ten and under group, which contradicted my hypothesis. The average resting heart rate for the ten and under age group was 81.85, and for the over ten's it was 77.5. As for the heart rates taken after drinking Mountain Dew, the ten and under's was 86.65, and for the over ten age group it was 93. Conclusions/Discussion My hypothesis was proved incorrect, because I thought that children ten and under would have a higher increase in heart rate, but the children over ten actually had a higher increase in heart rate by 20%. There are some factors that might have affected the outcome of this experiment including the weight of the children, gender of the children, and the sugar levels in Mountain Dew.	
Summary Statement The purpose of my project was to see whether kids ten and under or kids over ten would have a higher heart rate after drinking 60mL of Mountain Dew.	
Help Received Science and Language Arts teacher helped edit report; Mom and Dad helped with buying supplies and writing papers.	