



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

<b>Name(s)</b> <b>Meagan T. Sitzer</b>	<b>Project Number</b> <b>J0330</b>
<b>Project Title</b> <b>Aromatherapy: Can It Boost Your Test Scores?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> Aromatherapy has grown in popularity and the users do not have any scientific evidence that it works. Previous research has provided the information needed to conduct this experiment. The purpose of this experiment is to see if aromatherapy affects test performance in adolescence. <b>Methods/Materials</b> The materials needed for this experiment were aromatherapy essential oils, lavender and rosemary, an oil diffuser, and the tests. The experiment consisted of two eight grade classes. They were separated into groups, lavender and rosemary. The experimenter distributed the first test and the students were given 15 minutes to complete it. Once the time was up the essential oil was diffused into the room. The students then took the second test and were given the same amount of time. Once the testing was completed, they were given a score and were recorded. <b>Results</b> The analysis from the data recorded showed that the essential oils affected the test scores of adolescents. By doing a statistical analysis, the experimenter was able to find that lavender increased the subjects test performance after the essential oil was diffused by 15% while the rosemary groups test scores were only increased by 13% after the diffusion. Comparing boys and girls, the girls preformed better after the essential oil was diffused. <b>Conclusions/Discussion</b> The researcher's hypothesis is that aromatherapy using lavender or rosemary essential oils will enhance cognitive performance by 15% in adolescents as measured by an IQ test. In conclusion, the lavender group preformed higher on the cognitive test than the rosemary after the aromatherapy was diffused. Another conclusion that can be made from this experiment is that the girls scored higher than the boys in both the lavender and the rosemary groups. The results prove the experimenter's hypothesis to be true.	
<b>Summary Statement</b> The purpose of this experiment was to see if aromatherapy essential oils lavender and rosemary affect test performance in adolescence.	
<b>Help Received</b> Parent helped gather materials and come up with the test to measure cognitive performance.	