



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> <b>Briana Vincent; Brandon Wisely</b>	<b>Project Number</b> <b>S0525</b>
<b>Project Title</b> <b>Blazin' Wax</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Test the effect scent has on the rate of combustion. Hypothesis: The fragrance oils added to the wax will decrease the rate of combustion.</p> <p><b>Methods/Materials</b> The materials used include: 3 Scented Paraffin wax candles, 1 Unscented Paraffin wax candle, Matches, Candle Outer and a Stopwatch. The candles were placed on a flat surface spaced equally apart. The candle were then lit 15 seconds apart and allowed to burn for 1 hour. After an hour, measurements of the candles height were taken in mm. The candles were then lit for a second consecutive hour and a second set of measurements were taken.</p> <p><b>Results</b> The rate of combustion (in mm/hour) for the scented candles was less than that of the control group (unscented).</p> <p><b>Conclusions/Discussion</b> The content of the wax appears to have an effect upon the rate of combustion in candles, thus the hypothesis is accepted. The wax burned as predicted with the control-unscented combusting at an increased rate in relation to the scented candles. However, the experiment suggests lurking variables may be present. These include the slope of the surface on which the candles were burned, and other additives in the wax besides the scent such as dyes.</p>	
<b>Summary Statement</b> The scents impact upon the rate of combustion in candles.	
<b>Help Received</b> Father helped with data calculations; mother helped assemble board	