



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Shawn P. Cogan	Project Number 35823
Project Title The Effect of Rocket Fuel Ratios on Burn Rate	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this experiment is to analyze the combustion rates of several ratios of potassium nitrate and sugar, to see which had the highest burn rate.</p> <p>Methods/Materials PVC pipe, a lighter, Potassium Nitrate, and Sugar were used.</p> <p>Results Results showed that a ratio of 35% sugar to 65% Potassium Nitrate was the most efficient fuel and had the highest burn rate.</p> <p>Conclusions/Discussion In conclusion, that ratio could be used to design better nozzels for these model rockets, because with that ratio, the temperature and pressure could be calculated, making the shape of the nozzle very specific.</p>	
Summary Statement This project in its present form analyzes the combustion of five different rocket fuels to determine the most rapid burn rate.	
Help Received N/A	