



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

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Project Title Propane vs. Gasoline	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this project is to determine if propane is a cleaner and more efficient energy source than gasoline for an internal combustion motor.</p> <p>Methods/Materials I connected a lawnmower motor to an electric motor to produce electricity, which was used as a control. Then I converted the motor to propane and measured its efficiency and compared it to the motor's efficiency running on gasoline.</p> <p>Results After performing three different tests, I found that one mole of gasoline burns in 14.42 minutes and one mole of propane burns in 16.30 minutes. Then I compared their efficiencies using weight. One ounce of gasoline is consumed in 4.18 minutes and one ounce of propane is consumed in 10.30 minutes. Propane burns cleaner and colder than gasoline as shown by a visual test.</p> <p>Conclusions/Discussion Propane is a cleaner and more efficient fuel than gasoline for the internal combustion engine.</p>	
Summary Statement I set out to determine if propane is a cleaner and more efficient fuel for the internal combustion engine by converting a gasoline motor to run off of propane and performing comparative tests.	
Help Received None	