

# CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s) Project Number

Nishant Surapaneni

J1842

**Project Title** 

**Friction Frenzy** 

### **Abstract**

## Objectives/Goals

The objectives of my project were to test which type of synthetic oil best preformed the job of reducing temperature or friction on the pistons of a cars engine, which in my project is represented by gear pairs.

### Methods/Materials

My method was to build a set of 10 gears, 2 for each of the five oils and run the m for 10 minuites withg oil ande see which one reduced the temperature the most from the benchmark of 157 degrees.My materials were:10 gears, a steel box, 5 oils, a 1500 rpm engine, tools, plexiglass, and 2 5/16th's rods.

#### Results

My results stated that the american made Lucas oil best reduced oil to around 27 degrees lower and it preformed the best in all the tests of further testing and popular demand.

## **Conclusions/Discussion**

My conclusion is that Lucas Oil preformed the best, and it was rated number 1 in my science fair experiment

## **Summary Statement**

My project is about the best type of synthetic oil in regards to temperature reduction.

## Help Received

Father helped build rig, Mother and older sister helped in board and pitcures