



**CALIFORNIA STATE SCIENCE FAIR  
2010 PROJECT SUMMARY**

<b>Name(s)</b> <b>Robert K. Olson</b>	<b>Project Number</b> <b>S0213</b>
<b>Project Title</b> <b>Synthetic Motor Oil: Is It Worth the Extra Money?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> Discovering if Synthetic motor oil has less variation in viscosity than regular oil over a range of temperature. <b>Methods/Materials</b> 3x Cylindrical Containers (Water Bottles) 1x Metal Sphere 1x Glass Marble 3x Different types of Oil -30W (Oil with no additives) -15W-40 (Oil with additives) -5W-30 (Synthetic Oil) 1x Scale for measuring mass 1x Electric Thermometer 1x Stopwatch 1x Pencil 1x Data Sheet for each type of oil 1x Spoon (for getting marble out of the marble) 1x Refrigerator and freezer 1x Stove and pot Lots of Paper Towels <b>Results</b> The Synthetic Oil stays at the same viscosity over a wide range of temperature, while the others change drastically. <b>Conclusions/Discussion</b> The Synthetic Motor Oil is the best out of all the oils tested.	
<b>Summary Statement</b> I measure how the Synthetic Oil is different than the other oils	
<b>Help Received</b> Dad helped glue paper onto the board	