



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> Mussa Mohamed	<b>Project Number</b>  34574
<b>Project Title</b> Influence of Environmental Light on Reaction Time	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Daytime driving is generally safer than driving at night due to an abundance of light. The purpose of this project is to test if there is a relationship between the intensity of light and the reaction time of drivers.</p> <p><b>Methods/Materials</b></p> <ol style="list-style-type: none"><li>1 meter stick</li><li>Lux meter</li><li>Night light</li><li>Volunteers</li><li>Notebook</li><li>Computer</li><li>Pencil</li></ol> <p><b>Results</b> Based on the graph, fifty-five percent had faster reaction time in sunlight and thirty-five percent had faster reaction time in dim light. Meanwhile, the intensity of light did not affect the reaction time for ten percent of the subjects.</p> <p><b>Conclusions/Discussion</b> My hypothesis was correct. I was not surprised that fifty-five percent of my test subjects had faster reaction time in sunlight. Due to the lack of visibility, the test subjects had a slower reaction in dim light than sunlight. Based on the results, it would be advisable for car manufacturers to consider the findings of this project to modify existing headlights.</p>	
<b>Summary Statement</b> The purpose of this project is to test if there is a relationship between the intensity of light and the reaction time of drivers.	
<b>Help Received</b> School allowed me to use their equipment and field	