



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Zachary B. Follett	Project Number J1709
Project Title See the Light: A Study of Measuring Electromagnetic Wavelengths	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of my project was to determine if common household supplies could be used in building an effective way to measure wavelengths of a spectrum.</p> <p>Methods/Materials For the first experiment a CD was attached to a wooden platform. The glasses were then filled with water, and 4 drops of food dye were dropped into each glass. The glasses were then aligned with an LED light and the CD, which showed a spectrum of colors and pictures were taken. For the second experiment a linear diffraction grating was used to separate the light shown through colored water contained in glass cuvettes. A software application analyzed all pictures.</p> <p>Results The results of my experiment supported my hypotheses that a spectrum could be accurately captured and measured using common household supplies.</p> <p>Conclusions/Discussion The information gained from this project can be used to show that science experiments can be done with common household objects and without spending a lot of money.</p>	
Summary Statement To demonstrate that household materials can be used to perform effective scientific experiments.	
Help Received My dad helped buy supplies and set up software application.	