



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Kathryn S. Watts	Project Number J2299
Project Title Do Brine Shrimp Need Sunglasses to Hatch?	
Objectives/Goals This experiment intended to see how exposure to the different types of radiation (microwave, UV light, and light bulb radiation) would affect the number of brine shrimp eggs that hatch. The hypothesis in this experiment was that the light bulb radiation is less intense and would allow more eggs hatch than the microwave and UV light radiations. A creature would be more likely to survive if exposed to a less intense light wave.	
Abstract Methods/Materials Materials: The materials that were used in my experiment were brine shrimp eggs, a microwave, UV light, lamp, clear containers/cups, tap water, sea salt, a measuring cup, a Popsicle stick, a scale, paper towels, and a timer. Method: A set of cups, each containing 50 brine shrimp eggs, were individually exposed to radiation. A salt solution was added to each cup after exposure and allowed sit undisturbed for 48 hours. After 48 hours, the number of hatched brine shrimp eggs were counted and recorded. A percentage and average of hatched brine shrimp eggs was calculated for each type of radiation.	
Results The data collected for the hatched brine shrimp eggs was: Microwave Radiation had an average of 11.4% hatch. UV Radiation had an average of 10.6% hatch. Light Bulb Radiation had an average of 0.2% hatch.	
Conclusions/Discussion The data from my experiment rejects my hypothesis since I believed the light bulb radiation would have more eggs hatch but it ended up having the least number of eggs hatch. This radiation turned out to be the one that would not have many eggs hatch after exposure. This experiment connects to the real world by showing that exposure to various every day, natural radiation can be safe for organisms so they can live safe and healthy lives.	
Summary Statement How does different types of radiation affect the development of an organism	
Help Received Mom read and helped edit my research report, Ms. Christina Fisher provided the lab space for me to do my experiment, Dad help me with the display board and research	