



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Monica R. Luna	Project Number J0916
Project Title Comparing Different Filtration Materials in Cleaning Contaminated Water	
Abstract Objectives/Goals I was trying different filtration materials to determine which filter will clean up pond water the best. If there was a natural disaster, is there household materials you can use for a filtration system? Methods/Materials I first made filters by placing a strainer on top of cups. i then placed different materials into the strainer. The materials I used were cotton, carbon, and sand. I filled the strainer completely with the materials. The control group had no materials in the strainer. I then used a cooking baster to pour pond water through filters. I then collected the water that went through the filter and placed into petri dishes. 10 dishes for each material. Put dishes at room temperature and grew bacterial colonies. I then counted bacterial growth and compared results. Results Carbon reduced the bacterial growth the most with an average 232 colonies. Then sand with 235, Cotton had an average of 253, and the control group was at 274. Conclusions/Discussion I learned that if you are in a situation where you needed to get clean water. Boiling the water definitely works better. But if you needed to use a filter system. Carbon proved to be the best in keeping bacterial colonies lower than the control group.	
Summary Statement I filtered pond water with different materials to see if I you could have safe water to drink..	
Help Received Dad helped obtain materials. Petri dishes were obtained from Sanger High School. Teacher helped with scientific method.	