



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Rae'an S. Olivares	Project Number J0719
Project Title Determining if the Sea Floor Affects Wave Height	
Abstract Objectives/Goals The objective is to determine if common sea floor materials will decrease wave height. Methods/Materials Making a wave box with plastic cardboards and filling it up with water then sand, rocks, and shells. I used a ball to make waves, by applying pressure with a constant up and down motion. I did this about 10 to 30 times. I used a measuring stick to determine the height of each wave. Results After completing my science project I found out that with just water the height of the wave was about an average of 2.5 inches. Adding sand into the water it was an average of 3.5 inches. Then adding rocks onto the sand and into the water it was about an average of 4.5 inches. Finally after adding shells onto the rocks and sand it was an average of 5.5 inches. Each material was an inch difference from the previous test. Conclusions/Discussion When I finished my project I learned that after adding three materials it increased wave height. I then learned that my hypothesis about how these materials decreased wave height was wrong. I learned that the materials in the ocean have a huge impact on the size of a tsunami wave.	
Summary Statement Investigating the Affect of the Topography of the Ocean Floor on Wave Heighth	
Help Received Mom helped me type my report; my science teacher (Mr. Berry) helped with extra research and preparing my display board.	