



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Marco R. Harding	Project Number J0707
Project Title Shifting Sands: The Mystery of How Waves Move Sand Down the Beach: Does the Angle of the Wave Matter?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective for this project was to determine what the angle of the waves had to do with the sand going down the beach.</p> <p>Methods/Materials My first experiment was to make a model beach to see how the waves moved the sand. My hypothesis is "IF the angle of the wave is larger THEN the sand will move farther." For my second experiment I went to a real beach to test longshore drift. My hypothesis is "IF the angle of the wave is larger THEN the longshore drift will be faster."</p> <p>Results For my model beach my hypothesis was right. For my second hypothesis I couldn't control everything well enough to see if my hypothesis was right. I still think that waves with bigger angles create faster longshore drift on the beach, but I learned that when you control all of the variables it is different from when you are at the beach and you aren't controlling everything.</p> <p>Conclusions/Discussion I am interested in the beach because every winter the sand disappears. My project is about how wave angles and longshore drift move sand. I set up two experiments to test this.</p>	
Summary Statement My project is about how longshore drift moves sand down the beach.	
Help Received Godfather helped with model beach; Mom helped with display board; Garry Griggs helped with background info; Mr. Lay helped with scientific method.	