



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Nathan J. Choe	Project Number J0505
Project Title So Easy Clams Can Do It	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The goal of the experiment was to see how the amount of carbon dioxide captured was changed when using different amounts of calcium chloride with calcium oxide.</p> <p>Methods/Materials Materials: 75 grams of calcium chloride(0, 5, 10, 15, 20, 25 grams per container), 84 grams of calcium oxide (14 grams per container), Six 12x12x5 cm Glad container, and an OHAUS CS 2000 scale. Method: Fill the Glad containers with 14 grams of calcium oxide. Put 0 grams in one container, 5 grams in another, 10 grams in another, and so on for 15, 20, and 25 grams of calcium chloride. Do not cover the containers. Weigh the containers. Weigh once 8 days have passed. Subtract new weight from old weight to get new weight gain. Repeat nine more times</p> <p>Results I know most of the mass I achieved was carbon dioxide because with the little calcium chloride I had, it would stop absorbing after the seventh day. I then gave it one day for all water to evaporate. The average results for each independent variable are as follows. The container with 0 grams of calcium chloride gained an average of 2.1 grams of carbon dioxide. The container with 5 grams of calcium chloride gained an average of 10.7 grams of carbon dioxide. The container with 10 grams of calcium chloride gained an average of 19.8 grams of carbon dioxide. The container with 15 grams of calcium chloride gained an average of 23.3 of carbon dioxide. The container of 20 grams of calcium chloride gained an average of 23.6 grams of carbon dioxide. The container with 25 grams of calcium chloride gained an average of 25.8 grams of carbon dioxide.</p> <p>Conclusions/Discussion The hypothesis is if more calcium chloride is added, then more carbon dioxide will be caught. The results showed that more calcium chloride meant more carbon dioxide capture. Therefore, the hypothesis was supported by this experiment. The capture traveled in a sort of slump and had a great difference in the beginning between averages, but the difference lowered. Therefore, 15 grams was the best choice because it gave good carbon dioxide capture for the amount of calcium chloride I used.</p>	
Summary Statement How the amount of carbon dioxide capture changes with different amount of calcium chloride in calcium oxide.	
Help Received Science teacher lent me some calcium chloride and his scale. My Mom let me borrow the living room.	