



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Nick T. Scheel	Project Number J1019
Project Title The Reverse of Respiration	
Abstract Objectives/Goals The purpose of the experiment was to observe the effects of fresh water aquatic plants on the acidity levels of bodies of water. Carbon dioxide levels in the atmosphere are on the rise mainly because of deforestation; carbon dioxide affects the pH in bodies of water and the tests will show how well different plants regulate pH through photosynthesis. Methods/Materials The purpose of the experiment was to observe the effects of fresh water aquatic plants on the acidity levels of bodies of water. Carbon dioxide levels in the atmosphere are on the rise mainly because of deforestation; carbon dioxide affects the pH in bodies of water and the tests will show how well different plants regulate pH through photosynthesis. Results After choosing three common fresh water aquarium plants, the scientists immediately began testing. It was concluded that Elodea not only continued to keep the 1.9 liter bowl of water at an average pH of 6.9, but also retained a average of 6.3 milligrams per liter, blowing away the competition! Conclusions/Discussion It was concluded that Elodea not only continued to keep the 1.9 liter bowl of water at an average pH of 6.9, but also retained a average of 6.3 milligrams per liter, blowing away the competition! The hypothesis was supported in both ways, as the pH increase and was regulated, and Elodea out performed any other plant. The scientist learned how plants affect our ecosystem and how important they really are. With carbon dioxide levels on the rise and deforestation happening so fast, the supply of oxygen formed from photosynthesis is shrinking; testing how different plants photosynthesize is important in order to see which plants can put off the most oxygen to reverse the effects.	
Summary Statement What is the Best Aquarium Plant?	
Help Received Checked out equipment from St. Margaret's ; Friend helped design logo on board	