



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Anisa R. Joseph	Project Number J1915
Project Title When Do I Change My Fish Tank?	
Abstract Objectives/Goals My objective was to see how long it takes before the water in a fish tank needs to be changed. I think that it will take one week before the water in a 2.5 gallon tank needs to be changed, and 10-11 days before the water in a 10 gallon tank needs to be changed. Methods/Materials Two fish tanks, one 2.5 and one 10 gallon tank, with three fedder goldfish in each. I tested them once a day for nitrate and nitrite, and when the nitrite level got from 3-5 ppm I changed it so there would be no ammonia in the tank because ammonia kills the fish. Every day I wrote down how much nitrite and nitrate was in each tank and changed them when the nitrite level got from 3-5 ppm. Results My results were that a 2.5 gallon tank with three fish in it should be changed from every 5-6 days, and that the water in a 10 gallon tank should be changed every 10-11 days. Conclusions/Discussion My results supported my hypothesis almost exactly. The only difference was that I thought a 2.5 gallon tank should be changed once a week instead of every 5-6 days. My information shows that nitrate and nitrite build up quickly, and that fish have a greater chance of dying in water with ammonia in it.	
Summary Statement My project is about when to change a fish tank and the difference in a 2.5 and 10 gallon tank.	
Help Received My mother helped correct my report and cut out paper for my board, my father bought the fish and tanks for me, and my science teacher corrected my papers and supervised my report.	