



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Kim Nguyen	Project Number S0911
Project Title Which Is the Best Compost?	
Abstract Objectives/Goals Which is the best ratio of leaves and greens to make the best compost, in term of high mass percent of nitrogen, carbon and low mass percent of water, in normal condition? My goal in this project is to make compost in different ways and to compare the texture and the ratio of carbon and nitrogen Methods/Materials The compost tumbler; Fresh green grass and leaves; Dry leaves, branches and soil; A small chipper or shredder; Steer manure; A tumbler thermometer; Water; Shovel; 5 gallons bucket; Pitchfork; Soil test kit #Green Garde#; Bunsen burner; Crucible; Test tubes; Balance. Compost was prepared using fresh green grass and leaves, dry leaves and branches, and soil, and sometimes manure or other things. The materials were put into a CompostTumbler, turned nearly daily, and the temperature was measured many times a week for up to 2 months. After the temperature decreased to ambient temperature, the texture looked and smelled good, and samples were analyzed in the lab for carbon, nitrate, and water content Results Based on the texture, the second compost is the better one. According to the data from these experiments, water and carbon in the 1st compost is respectively 60.1% and 44.6%. In the 2nd compost, the percent of water is 59.8% and the percent of carbon is 39.1%. Based on the Nitrate test, the color of the solution of the 1st compost is darker than the 2nd compost, which means that the 1st compost has higher Nitrate level. Conclusions/Discussion My hypothesis was that the 2nd compost is the best compost. The results do not support my hypothesis. Based on the data, the 1st compost is better compost in terms of the level of Nitrogen and the mass percent of Carbon, even though we add steer manure, which is a rich source of Nitrogen, in the 2nd compost. However, while comparing the texture of the compost, the 2nd compost has the better texture than the 1st compost. The reason for this difference may be the longer period for making the 2nd compost and the better shredding to start.	
Summary Statement The project is about making compost in different ways and comparing the quality of the product by its ratio of carbon, nitrogen, water and its texture	
Help Received Mrs Carlberg provides me the Compost Tumbler to do this project	