



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Carina Aguirre	Project Number S1102
Project Title The Art and Science of Composting	
Objectives/Goals Abstract My research experiment examined which soil medium would decompose different food waste particles the best to produce a better soil for producing the fastest, healthiest, and tallest plants. I used five soil mediums for this experiment: sand, manure, home made compost, dry soil, and potting soil. After mixing the foods with the different soils, I measured the temperature, pH, and conductivity of the mixtures. These measurements allowed me to monitor the rate of decomposition. After three weeks of composting, I planted five seeds in each of the soils to see which container allowed the seed to sprout the fastest. I hypothesized that manure might just be the best alternative by having the highest rate of decomposition and seed sprouting. My prediction turned out to be false and to my surprise, the best medium was the dry soil; the plants seemed to grow fastest, tallest, and healthiest in this medium. My second, repeated experiment yielded similar results. I also did a statistical analysis to see how much landfill space can be spared, if all the same food wastes that I used in my experiment could be turned into compost around US and in the world.	
Summary Statement Trying to see which soil produces the tallest, healthiest plants.	
Help Received My teacher helped me with the layout of my board.	