



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Jennifer Guzman	Project Number J0809
Project Title Does Temperature Disperse with Depth in Different Types of Soils?	
Abstract Objectives/Goals My hypothesis is that the result numbers of the soil were going to go down. I made this hypothesis because the thermometer was being pushed in further down in all the soils. Methods/Materials Materials: 1. Black Gold soils- All purpose potting soil with controlled release fertilizer, Seedling Mix, Cactus Mix, and African Violet Mix 2. Four plastic medium potting pots 3. Digital Thermometer 4. Digital Timer 5. A heat lamp 6. A metric converter Results The results were that the Seedling Mix had the highest temperature. The second highest was the African Violet Mix. They might have gotten the highest temperatures because of the elements they were composed of. Some of the main ingredients for these two soils were: perlite, cinders, worm castings, and soft wood bark. The Cactus Mix, and the All Purpose Potting Soil were composed of very heavy elements which could have caused these two soils to get very low number results. Conclusions/Discussion In conclusion my hypothesis was correct because all the numbers (results) of the soils did decrease. The Seedling Mix did get a higher temperature and it could be possible that the heat could have gone further down into the soil because of the soft cartilage and perlite that it had. The second highest temperature was the African Violet Mix. Thanks to its soft elements, its temperature wasn't too low. The Cactus Mix and the All Purpose Potting Soil got very low results because of the hard softwood bark and because of the water "helper" that the Cactus Mix had.	
Summary Statement My project is about how the temperature changes with the depth in soil.	
Help Received	