

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

Karina Torres

Project Number

S1522

Project Title

Specific Heat in Materials

Abstract

Objectives/Goals

My project was done to see what material would stay with the most heat after being heated and cooled. By konwing this, one could see how the climate in different places is effected by the materials around them.

Methods/Materials

The materials that were tested were water, salt and tap, sand, soil, and oil, corn and car. I placed the material in a container and situated the two thermometers, one in 2 cm. deep and the other on the surface. The lamp was put a couple of centimeters over the material and turned on for 1 hour. Every 5 minutes the temperature was checked for each thermometer. After hour was over the light was turned off and again the temperature was recorded every 5 minutes. This was done 3 times to every material for the 3 trials.

Results

After testing the result was the that sand and soil did not absorb so much heat and when it did it was released easily. The oils absorbed a lot of heat and ended up losing a lot of it but not as fast as the Earth materials. The waters absorbed little heat but kept it in. The end result was that the oils ended up with the most heat since it accumulated so much but did not release it all. The water was the second with the most heat since it did not release it. Last was the Earth materials which released all their heat.

Conclusions/Discussion

My project shows how heat is absorbed and released by different materials. This project ties in with the climate by showing how you may be able to predict how the climate is in one place by knowing what is around. If a city is by the beach, like Oxnard, it will have nice weather because the ocean will keep in the heat. It will not be so hot or so cold. Other places that do not have a body of water around them get hotter since the soil does not contain the heat.

Summary Statement

My project shows how different materials relate with heat to effect the climate.

Help Received

My brother, Juan, helped by typing somethings for my board and Mr. Callaway gave me thermometers and other equipment to use.