CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY

Name(s)
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Project Number
34298

Project Title
Soil Moisture Content

Abstract

Objectives/Goals
My goal was to find out whether soil, gravel, or sand took the most moisture to compact.

Methods/Materials
Soil
Sand
Gravel
Rammer
Cylinders/Molds
Straight Edge
Balances
Sieves
Sieve Shaker
Oven

Results
My results showed that the soil (silt sand) required the most moisture to compact. The silt sand and data indicated a maximum dry density of 121 pounds per cubic feet and moisture content of 10%.

Conclusions/Discussion
I concluded after compacting each type of sample that the soil took more moisture to compact than gravel or sand.

-Soil has a moisture content of 10% and a maximum dry density of 121 pounds per cubic feet.
-Sand has a moisture content of 9% and a maximum dry density of 118 pounds per cubic feet.
-Gravel has a moisture content of 7% and a maximum dry density of 140 pounds per cubic feet.

Summary Statement
My project is about which type of soil can hold the most moisture content.

Help Received
My father, Solin Jimenez, helped conduct experiment. My mother, Raquel Jimenez, helped me finalize reports and summaries.