

## CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s)

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**Project Number** 

J0910

#### **Project Title**

# Is There a Relationship between Soil Density and Water Evaporation Rates?

### Objectives/Goals

**Abstract** 

The objective of this project is to determine if different soil densities affect evaporation rates.

#### Methods/Materials

In 4 tests, measured the weight of 4 types of soil (sand, loam, clay and potting) with added water 2 times each day over a period of 3 days. Materials: pots, soils, water, scale and measuring cup

#### Results

Water evaporation rates were independent of soil density. The most dense soil was sand and the least dense was potting. Clay soil had the greatest water evaporation rate at 18 grams and potting soil had the least at 11.75 grams.

#### **Conclusions/Discussion**

The density of soil did not have an impact on water evaporation rates during the test cycle of 3 days. Further testing would need to be conducted to understand the longer term implications of which soil is best to hold water for specific plants.

### **Summary Statement**

As measured by weight, I found that soil density does not affect water evaporation rate.

#### Help Received

I designed and conducted my tests by myself after researching my topic.