



CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s) Charlotte L. Hogan	Project Number 38670
Project Title Don't Take Your Kitchen for Granite	
Objectives/Goals During this experiment the goal was to find out what common countertop was most stain resistant and durable. My hypothesis was that granite would be the most stain resistant and durable because it is very durable and the least porous. To test this theory I conducted three tests with three different countertop materials, granite, marble, and travertine. By comparing test results the answer to the question, which countertop material is best was found. Abstract Methods/Materials 6 samples of marble # of an inch height 6 samples of travertine # of an inch in height 6 samples of granite # of an inch in height 1 stopwatch 1 black sharpie 1 black crayon 1 ruler 1 empty soup can 2 pairs of safety goggles 1 roll of paper towel Results Although travertine is extremely porous it is also dense. Although the hypothesis was that granite would be more durable, travertines dent lengths are on average, slightly longer than granites but granite usually has less dents. As predicted, the granite was the most stain resistant even erasing all signs of sharpie. This is shown by the lack of black (the color used to show granite in the bar graph) on the sharpie bar graph. The table shows calculated averages for dent lengths and number of dents for each material. The bar graphs show inches of sharpie or crayon left and dent lengths. The granite was the most stain resistant but was not the most durable, in that category travertine won. Conclusions/Discussion My hypothesis that granite would be both the most durable and stain resistant was false but there was more to this experiment than that. During this experiment the goal was to find the best countertop materials but in reality, there is no one star. Since every material is different and everyone has different needs, everyone's ideal countertop is different. However, these studies did help to determine what types of materials are suitable for your countertop.	
Summary Statement This experiment compares different counter-top material's density and porosity.	
Help Received I had help obtaining the material samples. The experiment was executed individually.	