



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Timothy M. Kiefer	Project Number J0614
Project Title The Engineering Properties of Soil	
Abstract Objectives/Goals The main reason I'm doing my science project on the engineering properties of soil is to show what soils are good for building on and why it is an important step in construction. Methods/Materials I had different types of soils (gravel, humus, and sand) and put washers (weights) on top of small cylinder shaped samples of soil and saw which types was sturdier. Results The results were just as I predicted. Gravel won because of its interlocking capabilities and held nineteen of twenty washers where as sand only held the base to hold the washers. The humus, which had some organic material inside it, held eight of twenty washers. Conclusions/Discussion I found out that testing the quality of soils is very important, if engineers didn't do this step, probably most buildings will sink into the ground or fall apart.	
Summary Statement My project is about the engineering properties of soil or the amount of weight different soils can hold.	
Help Received Dad supplied books for research and corrected errors in report.	