CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY

Name(s)
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Project Number
J1131

Project Title
Biomimicry House

Abstract

Objectives/Goals
The objective of my project is to implement the systems that Cathedral Termites have created to keep their mounds at a consistent temperature into sustainable housing.

Methods/Materials
I used a thermometer, model house with a central chimney, and a fan. I built a model that circulated air, and recorded the model's temperature over several days.

Results
The temperatures I took, comparing the outside temperature against the inside temperature, showed that inside my house, the temperature range was smaller than the outside world.

Conclusions/Discussion
The temperatures of my model showed that, with minimal energy used, we can keep a house at a consistent temperature. I have concluded that these plans could be used by builders of all types.

Summary Statement
I designed a house that would stay at a consistent temperature using minimal energy inspired by the principles used in Cathedral Termite Mounds.

Help Received
My science teacher, Mrs. Morehouse, introduced me to bioimicry. My parents supported me when I hot frusturated, and were my sounding board for ideas.