CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)
Mac P. Delaney

Project Number
22749

Project Title
Supreme Windmill Turbine Design

Abstract

Objectives/Goals
My goal with this project was to find the best windmill turbine blade by varying the width of the blade, and the inner and outer angles. I belive that the widest blade will be th fastest; the best angles will be both„ angles at sixty degrees.

Methods/Materials
To setup my project I had to construct a windmill with special blades, I used Knex for the base, and I made wooden blades with width attachments for one set, and angle adjustments for another set.

Results
I found that the medium width worked the best because it increased surface area without adding oo much weight; the fastest angles were both at sixty degrees.

Conclusions/Discussion
More surface area seemed best untiltoo much weight was added, the best anles were the ones facing the wind the most; next time I sould combine to test for the inner and outer angles with the width.

Summary Statement
My project tested for the best windmill blades varying the angles and widths of the blades.

Help Received
My father helped with the construction the windmill blades.