



Colorado Science and Engineering Fair

2024 Individual Project Abstract Form

Please print 2 copies of the completed form. Sign both copies, keep 1 for your notebook and submit 1 copy to your Regional Fair Director with your other paperwork.

Title of Project: Shakin' and Quakin'

Finalist's Name: Ky Harkness

School and City: Plainview High School, Sheridan Lake

Sponsor's Name: Brenda Fickenscher

Category: Engineering (ENGR)

Division: Senior (9th - 12th grades)

Abstract (250 words or less):

Have you ever wondered what type of structure is the best for sustaining an earthquake? Well my project goes over a few different ways to build either an unsteady structure or a sturdy structure using basic rules of geometry. My hypothesis is that the structures that use the strong shapes in the design and construction are going to be the strongest against earthquakes. My approach to finding the answer was to construct an earthquake table, three different types of structures, and running the experiment and gathering the results. The results were that Structure #2 lasted the longest, structure #3 lasted for long enough to be average, and structure #1 failed in all but one attempt.

I hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. I also attest that the above properly reflects my own work.

Finalist's Signature: 

Date: 3/4/2023

In addition, all students must complete the ISEF Student Checklist (1A), Research Plan, Approval Form (1B), and Checklist for Adult Sponsor (1), and any other ISEF forms required for this type of project. See the International Rules and Guidelines for form requirements. Return COPIES of all of these forms to your Regional Fair Director with you Finalist Verification/Permission Form. A signed copy of this form must be included in your notebook.