



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: Shells to Cells

Finalist's Name: Kendyl Osborn

School and City: La Junta Intermediate School, La Junta, CO

Sponsor's Name: James Osborn

Category: Earth & Environmental Sciences (EAEV)

Division: Junior (6th - 8th grades)

Abstract (250 words or less):

I observed that when my mother cooks eggs for me in the morning that she throws the shells away. In school we are learning about recycling and the environment, so I had an idea. Can I use these eggshells for something? I know they are packed with vitamins and minerals. After some research I decided to use the eggshells as fertilizer for the blue grams grass on my Ranch. I am the heir to the ranch and want to be a good steward of the land and help wildlife. The eggshells can be used to make calcium acetate which the grass can absorb quickly. The shells in the ground can take years to be absorbed so I made calcium acetate and fertilized blue grama grass and then had the grass tested by the CSU extension office. I also did a control sample with pure water. The testing showed that the grass with the calcium acetate had higher calcium than the control sample.

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:

Kendyl Osborn

Date:

2-26-2024

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.