



## 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: Purifying Water with Activated Charcoal

Finalist's Name: Fallyn Gregersen

School and City: Wiggins Middle School, Wiggins

Sponsor's Name: Brenda Gregersen

Category: Chemistry (CHEM)

Division: Junior (6th - 8th grades)

Abstract (250 words or less):

### Abstract:

Purifying Water with Activated Charcoal  
Fallyn Gregersen

The purpose of this project was to see if activated charcoal will purify water. I hypothesized that the colored water would come out clear/purified after adding activated charcoal. I thought this because while doing research, there was plenty of evidence showing how and why using activated charcoal works.

This project involved adding plain water and blue food coloring in a cup. Once you've done that, add activated charcoal and stir for 2 minutes continuously. While stirring, fold a filter paper to fit into a funnel. Grab another cup and put the funnel with filter paper in it. Pour the colored water through the filter and observe the results.

The data collected did support my original hypothesis. My hypothesis was proven right because after all three trials, I found that all of them came out clear.

These findings lead me to believe that activated charcoal does clean/purify water. This is good for me to know because many companies use activated charcoal to clean their water and there is very cool science behind charcoal filters.

*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: *Fallyn Gregersen*

Date: *2/29/23*

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.