



Colorado Science and Engineering Fair

2024 Team 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: Is It Really Clean?

Team Leader's Name: Bailey Cook

Team Member 1: Esmeralda Dominguez

Team Member 2:

School and City: West Grand Middle School, Kremmling

Sponsor's Name: Katie DeBell

Category: Micro & Molecular Biology (MCRO)

Division: Junior (6th - 8th grades)

Abstract (250 words or less):

Abstract

“Is it Really Clean?”

Bailey Cook, Esmeralda Dominguez

The purpose of this project was to find how many bacteria there are around the K-8 and the high school. We hypothesized that the middle school water bubblers will have the most bacteria. The experiment involved preparing twelve petri dishes to count the amount of bacteria grown. We put each swab into its own individual petri dish. We recorded their growth and compared their color, size, and amount of growth. After we swabbed all the petri dishes in all the different locations we put the dishes inside an incubator and waited to get our results back. By doing this, it shows how dirty things are around school even when you think that they are perfectly clean.

The data collected did not support our hypothesis. Our hypothesis was incorrect and the high school lunch trays had the most bacteria with an average of 63.36% bacteria and 6 different types of bacteria. The least amount of bacteria was the K-8 lunch tray with an average of 11.56% bacteria, 1.5 types of bacteria. These findings lead us to believe that our K-8 lunch tray cleaning products and equipment is better than what they have at the high school. The high school's water bubblers were cleaner than the K-8. Overall these findings led us to believe that the K-8 is cleaner than the high school.

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

Team Leader's Signature: _____

Date: _____

Team Member 1's Signature: _____

Date: _____

Team Member 2's Signature: _____

Date: _____

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 your Finalist Verification/Permission Form. A signed copy of this form must be included in your notebook.