



# Colorado Science and Engineering Fair

## 2025 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: The Scent of Memory: Investigating The Relationship Between Oil Smells and Memory Retention

Team Leader's Name: Alexis Schneider

Team Member 1: Hailey Cornelius

Team Member 2:

School and City: Plainview School, Sheridan Lake

Sponsor's Name: Brenda Fickenscher

Category: Behavioral & Social Science

Division: Senior (grades 9 - 12)

Abstract (250 words or less):

The abstract for this science fair project is that as a team, we are researching and testing the correlation between different oil scents and memory retention.

We selected essential oils because they are a household product and easy to access. We tested this through essential oils (Lavender, Lemon, Peppermint, Lemongrass, Rosemary, Eucalyptus), diffusers, and an online memory test called Cognifit.com. Every night our subjects would use their diffusers that had 5-10 oz of water and two to three drops of essential oil for a minimum of two hours every night for twelve weeks. And then every two weeks on a Monday they would go on Cognifit.com (Cognifit.com is an online memory test that shows different pictures and if you have seen that picture before all you have to do is press the spacebar located near the bottom of one's computer/ Laptop) and take a memory test. We had the participants chart their results every two weeks and we graphed the data at the end of the 12 weeks.

The control in our experiment is that they used a diffuser with essential oil every night and they took a memory test every monday and wrote down their results.

This experiment aims to show whether there is a significant connection between specific scents and memory performance. The data will be analyzed to determine which scents, if any, had the most positive impression on memory retention. The findings could potentially help people improve their learning techniques through the strategic use of aromatherapy.

*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.**