



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: Lights, plants, action

Team Leader's Name: Ariadna de Tena Subirana

Team Member 1: Lea Feckova

Team Member 2:

School and City: Stratton Schools, Stratton

Sponsor's Name: Dannette McConnell

Category: Plant Sciences

Division: Senior (grades 9 - 12)

Abstract (250 words or less):

In our experiment, we were trying to find out if plants grow faster under sunlight or artificial light. Our initial assumption was that artificial light isn't as beneficial for plant growth as sunlight, and that's what our hypothesis stated.

This experiment is important because it shows an easy and simple way to grow basic plants in areas with limited sunlight, or during seasons with poor weather. Additionally, with the rising cost of healthy food options, this provides an easy alternative.

We conducted this experiment over 3 weeks. We planted two radish plants, one growing with sunlight, other growing with artificial light in our basement. Every few days we measured their height.

At the beginning the plant under sunlight was growing faster, but as the experiment progressed, the plant under artificial light began to grow more. This may be due to weather and temperature conditions and inconsistent sunlight exposure. The artificial light provided a more consistent light source, so the plant grew faster later in the experiment. However, at the end of our experiment, the plant under artificial light was higher and grew faster, but the plant under sunlight appeared healthier with a wider, sturdier stem, and a more vibrant green color.

To conclude, our hypothesis wasn't correct as the artificial light grew faster overall. Our experiment can help us understand that artificial light is a tool to be used if individuals want to grow their own plants when they lack the space to grow them naturally.

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.**