



## Colorado Science and Engineering Fair

## 2025 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: Skittles Chromatography

Finalist's Name: Jocelyn Shoenfeld

School and City: Genoa-Hugo School, Hugo

Sponsor's Name: Kacy Shoenfeld

Category: Chemistry

Division: Junior (grades 6 - 8)

Abstract (250 words or less):

Chromatography can be used to look at color compositions and mixtures. Large molecules move slower over the paper and small particles move faster. It has applications in many scientific fields. It is used a lot in Quality Control to make sure medicines and foods meet high standards.

For this experiment, Skittles and food dyes were observed on the Chromatography strip. The most surprising results came from the secondary colors. Green food coloring, green skittles and purple skittles all separated into primary colors, which was expected. The orange skittles were surprising because they did not separate into red and yellow. The orange skittles color may have the same size molecules or the solvent may not be the correct medium.

*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:

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