

CALIFORNIA STATE SCIENCE FAIR 2011 PROJECT SUMMARY

Name(s)

Jenna N. Dern

Project Number

J0407

Project Title

When Blue Means "Green"

Abstract

Objectives/Goals

The objective of the experiment is to determine which color (blue, green, red, orange) will attract the most recycling content due to color association and its behavioral effects on humans.

Methods/Materials

Four recycling bins (blue, green, red, orange) were placed side by side in a populated area for trials 1A-7A in order to test the recyclable content attracted for each bin when humans were faced with a direct choice. Trials 1-7 tested the four bins and their recyclable content when they were set in four separate corners, rotating to a different area every trial.

Results

Blue collected a total of 64 recyclable items and 6 waste items. Green collected 59 recyclable items and 14 waste items. Red collected 46 recyclable items and 9 waste items. Lastly, orange collected 44 recyclable items and 9 waste items. As an average, blue collected 4.57 recyclables and 0.43 waste items. Green collected 4.21 recyclable items and 1.00 waste item. Red collected 3.29 recyclable items and 0.64 waste items. Finally, orange collected 3.14 recyclable items and 0.64 waste items.

Conclusions/Discussion

As an average, blue collected the most recyclable items, followed by green, red, and orange, respectively. This confirmed the hypothesis to be correct. When observing the trash content, blue collected the least amount of trash. Red and orange both collected the second least. However, green collected the most waste content in all. Blue is clearly the most effective color for recycling.

Summary Statement

On average, the blue recycling bin collected the most recyclable content (4.57 pieces) and the least trash content (0.43 pieces.)

Help Received

Guidance from my teacher, Mrs. Erin Schumacher and my parents