CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY

Name(s)
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Project Number
J0320

Project Title
Rubik's Cube: Does Age Affect Performance?

Abstract

Objectives/Goals
The goal of my project was to determine if age has an affect on people's performance on the Rubik's cube. I hypothesize that the oldest age group would perform at the highest level on one side of a Rubik's cube.

Methods/Materials
My method was simple. I set a Rubik's cube to a prescribed pattern and then tested members of three age groups as they attempted to complete one side of the cube in a one minute period. I tested three age groups. The youngest was ages 6-16. The middle group was 21-33. The oldest was 38-54. The oldest of these groups was alive during the time when Rubik's cube became a popular hit. Most people had cubes. The middle group came around during the time when Rubik's cube was not popular and the youngest is growing up during this time when Rubik has regained very much popularity. My project required only a Rubik's cube and a timer.

Results
I found that the youngest age group, 6-16, had the best performance on the cube. They had an average of 6.5 spaces out of 9 on a side. The other groups were tied at an average of 5.6 pieces out of 9 on a side.

Conclusions/Discussion
When testing different age groups on one side of a Rubik's cube, I learned that age does affect performance. Younger people are generally able to perform better on this test. I suspected that experience might have been a factor as the oldest group has been around the cube for the most time. This was incorrect. I would like to test other variables, such as testing different cubes or levels of experience.

Summary Statement
My project tests the ability to complete the Rubik's cube as a function of age.

Help Received
My teacher and parents helped edit writing. Teacher helped with board design.