

CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s)

Rachana Madhukara

Project Number

J1408

Project Title

Devising an Effective Way of Solving the Rubiks Cube

Abstract

Objectives/Goals

The purpose of my project is to devise a method of solving the Rubiks Cube that is not only simple to learn, but also solves the Rubiks Cube fairly quickly.

Methods/Materials

Paper, pencil, computer with an Internet connection and a 3x3 Rubiks cube were used. From my research online, I found out that the Fridrich Method was an effective method to solve the Rubiks cube. However, I realized that the second and third steps were way too hard to memorize and use. Hence, I developed new steps to replace them. By stitching all these steps together, I arrived at an optimal algorithmic sequence. This sequence is way easier to learn and memorize.

Results

The number of moves it takes to solve the Rubiks cube using my method is about 25 percent less compared to the Beginners Method.

Conclusions/Discussion

I conclude that if the number of operations to solve the Rubiks Cube are reduced, then the Rubiks Cube can be solved quickly and effectively.

Summary Statement

Devising an easy to learn and memorize algorithm to solve the Rubiks Cube.

Help Received

My parents helped me prepare the display board.