

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

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Project Number

S1011

Project Title

Hamster Findings

Abstract

Objectives/Goals

My project was designed to test the senses of hamsters, especially their senses of smell and sight. I believe that with the addition of color on the maze the hamster will move much quicker to find the food in the maze.

Methods/Materials

Two syrian female hamsters were used in this project. One of the syrian hamsters was a normal female while the other one was a syrian hamster with a missing paw. Two glass tanks were used to house the hamsters. The hamsters were fed the same foods and each were given an equal chance to run through the maze. Four days a week, for about three weeks the hamsters were set in the maze at the same starting point to find the food in the maze. The first week the hamsters ran through the maze without any markings on the maze. The last two weeks the hamsters ran through the maze with a green line that marked the floor of the maze.

Results

By the end of the first week the hamster with the missing paw (her name is Patches) averages about 9 minutes, the second week she averaged 8 minutes and the last week she averaged about 2 minutes. In contrast the nomral hamster (her name is Snowball) took about 10 minutes the first week, the second week she averaged about 9 minutes, and the last week about 3 minutes.

Conclusions/Discussion

My conclusions are the hamsters' sense of smell seemed to be more dominant than their sense of sight while running through the maze. The hamsters did not pay much attention to the bright green line drawn on the maze while they were running through it. In the end not only was the sense of smell more dominant over their sight but another revelation was made, the "abnormal" hamster worked much harder than the normal one. One reason could be that since she has a missing paw she works twice as hard to get what she wants and to go where she wants.

Summary Statement

This experiment was conducted to test the senses of hamsters, specifically their sense of smell and sight.

Help Received

Dad helped build maze, Teacher helped take care of hamsters, and mentor aided in project