

# CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

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**Project Number** 

S1012

**Project Title** 

What Do You Prefer?

#### **Abstract**

## **Objectives/Goals**

To see if mice have a femiliarity preference and/or a sense preference (between the sense of sight and the sense of smell).

#### Methods/Materials

In this experiment, I wanted to find out it mice prefer familiar surroundings, or if, between smell and sight, they prefer to rely on one sense more than the other. To test the familiarity preference, I first trained 8 mice to learn a route ina maze for 2 weeks, after which I allowed them the freedom to use whatever route they want to reach the bait(seeds and cheese) for a duration of another 2 weeks. Tot est their preference of senses, I placed the mice between a piece of foam board, rubbed with cheese and seeds to leave their scent, and a clear, plastic ziplock bag containing seeds and cheese so they can be seen but not smelled, and observed which one the mice went to first.

#### **Results**

Mice showed no preference for a familiar surrounding, but did show a preference for the sense of smell.

#### **Conclusions/Discussion**

If it were possible, I wish I could have been able to feed the mice regularly instead of leaving the inside the tank with them. By doing this, I could have had a greater control of how much the bait might be desired by the mice by having a better grasp of when they might be hungry. The biggest flaw thta I perceive in my experiment is the fact that I could not tell how much does the bait attract the mice, thus not knowing that when they wander whether it is because they can't find their way or if it was because they simply are not interested in the bait.

## **Summary Statement**

To see if mice have a femiliarity preference and/or a sense preference (between the sense of sight and the sense of smell).

### Help Received

N/A