CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY

Name(s)

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Project Number

J0303

Project Title

Memory Lane

Abstract

Objectives/Goals

To discover which type of short-term memory was the strongest.

Methods/Materials

Six students, three boys and three girls between the ages of 11 and 13, were randomly selected, and gave us informed permission to participate in our short-term memory experiment. We created four sets of items to test each of the following short-term memories: visual, olfactory, auditory, and reading.

Results

We tested three sixth grade girls and three sixth grade boys. The average number of smells that the subjects correctly identified was 7 out 10. The average number of words that they read, and remembered correctly out of ten was eight. When they studied a composition of 10 pictures for thirty seconds, the average number of pictures they remembered correctly was 9. Then, when we tested their auditory memory, the average number of words they remembered correctly was 9.

Conclusions/Discussion

Our hypothesis was correct. Visual memory was found to be strongest in our tests. Surprisingly, we also discovered that auditory memory was just as strong as visual memory. In each of the four categories tested, we averaged the scores of all six subjects to arrive at a composite score for each category. After doing this, we found that visual and auditory memory both averaged a score of nine out of ten. We think our hypothesis was proven correct because the subjects were able to retain more factual details by picturing the visual images in their minds. The reason we think that auditory memory also came in equally strong as visual is because once you hear something you can usually see it in your mind as well. We will show you what we mean: hot fudge sundae! See!

Summary Statement

We investigated different types of short-term memory, and found that visual and auditory short-term memory were the strongest through our tests.

Help Received

Teacher instructed us on the use of Microsoft Excell to make our graph.