

CALIFORNIA STATE SCIENCE FAIR 2013 PROJECT SUMMARY

Name(s)

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Project Number

J0717

Project Title

Is It Real or Just an Illusion? The Effect of Age on Optical Ilusion Perception

Abstract

Objectives/Goals The objective of this investigation was to learn if age affected optical illusion perception. The hypothesis was that the increase of age would make the optical illusion perception more acute, allowing the subjects to see and perceive more in the illusion than younger girls.

Methods/Materials

Ten different black-and-white optical illusions were placed in a shadow box. Thirty girls were tested: ten each from the third, fifth, and eighth grades. One by one, each student was brought into a separate room, shown the ten illusions, and asked what the subject saw in each. The answers were recorded on a data sheet.

Results

The results of the data collected showed that the eighth grade girls saw the whole illusion correctly more often that the third and fifth graders. However, the third grade girls had more complete answers than the fifth grade girls did.

Conclusions/Discussion

The results neither supported nor disproved the hypothesis. No patter was found to explain this, but the ages might provide a theory. The third graders still have very active imaginations helping them and the eighth graders have a cultural and academic advantage. the fifth graders are right in between these two stations in life.

Summary Statement

This project focused on how the perception of an illusion differs with age differences.

Help Received

Mother helped type board; Father helped edit board; Olivia Kohler helped rotate illusions and held box