

CALIFORNIA STATE SCIENCE FAIR 2009 PROJECT SUMMARY

Name(s)

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Project Number

J1319

Project Title

Reflexes through the Ages: Which Age Group Has the Quickest Reflexes?

Abstract

Objectives/Goals

We wanted to determine if 2nd Graders, 7th Graders or adults had the quickest reflexes.

Methods/Materials

We built a reflex testing device by creating a sturdy frame, then attached a clothes pin to the top bar from which we dropped a ruler. We released the ruler from the same height every time and the subject had to catch it. We took a measurement at the point where it was caught. We had three groups with 16 subjects each: 2nd Graders (ages 7-8), 7th Graders (ages 12-13) and adults (ages 25-70). We repeated the experiment 7 times with each subject, discarded the highest and lowest reading and calculated the average for each subject and then for each age group. We noticed a difference between males and females and calculated the averages in the same way.

Results

The adults were the fastest, but only a little bit faster than the 7th Graders. The 2nd Graders were a lot slower than the two older groups. We found that males were faster in every age group.

Conclusions/Discussion

Our hypothesis was not supported by our results, because we expected 7th Graders to be faster than adults. Reflexes seem to develop quickly through childhood (there was a big improvement from 2nd Grade to 7th Grade) and seem to keep on developing into adulthood, before it starts to decline.

Summary Statement

We tested people in three different age groups to determine how fast their reflexes were.

Help Received

Father helped with design and construction of reflex tester and creation of graphs. Mother helped to correct typing and helped with printing and layout.