

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

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Project Number

S0209

Project Title

Statistical View on Bowling

Objectives/Goals

Abstract

My objective was to determine whether or not the 16 pound bowling ball was better than the lighter bowling balls and to determine whether or not a hook is better than a ball without side rotation.

Methods/Materials

Metal ramp, tape, 8 bowling balls of different weights, bowling alley.

Results

Data showed that the 16 lbs ball was not the best, but the 15 lbs ball had the highest pinfall average. The ball with hook was much more accurate and effective.

Conclusions/Discussion

The heaviest ball being the 16 lbs, was not the best. The 15 lbs ball had a higher average pinfall. The extra pound of weight makes the ball harder to deflect off pins to cause more chaos and reactions. The four different shots constructed each had higher pinfall averages compared to the other experiment. Therefore, the ball with the hook is much more effective.

Summary Statement

I did this experiment to determine whether the heaviest ball is best over the other weights and to determine whether or not side rotation is better than no rotation.

Help Received

The bowling alley allowed me to use some of their lanes.