

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

Jonika M. Weerasekara

Project Number

Project Title

The Effect of Net on Free Throw Accuracy

Objectives/Goals

The objective of this investigation was to learn if the presence or absence of the net affected free throw accuracy. The hypothesis was: if the net is removed from the hoop then the subject#s free throw accuracy will decrease

Methods/Materials

Adjustable hoop, 7 people, paper, clipboard, pencil, net, stepstool, free throw line, official NBA sized basketball court, camera, and computer.

Abstract

Seven basketball players were asked to perform this experiment. The subjects shot five sets of five free throws with the net on. Then they shot 5 sets of 5 free throws with the net off. The data was recorded.

Results

The subjects shot with 57.71% accuracy with the net off and 54.86% accuracy with the net on. The subjects overall, made more shots (were successful) with the net off. With the net on, the standard deviation was lower at 1.01 and higher with the net off at 1.37.

Conclusions/Discussion

The data gathered in this experiment did not support the hypothesis that having the net off the hoop would decrease free throw accuracy. The subjects made more shots with the net off, yet the standard deviation was higher meaning that they shot less consistently. From the data gathered, it seems helpful for the shooter to remove the net from the hoop to increase shot percentage.

Summary Statement

This project analyzes the effect of net on free throw accuracy.

Help Received

Mother proofread and helped me understand graphs. Steve Yount helped me understand standard deviation.