

CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s)

Samantha P. Sze

Project Number

S1725

Project Title

Would Elevation Affect the Performance of Objects with Different Masses on a Straight Slope and an Angled Curved Slope?

Abstract

Objectives/Goals

The objective was whether the change in elevation would affect the performance of different masses (5g, 6g, 10g, and 12g) on a Straight Slope and an Angled Curved Slope.

Methods/Materials

Construction paper, foam boards, a 5g marble, a 6g marble, a 10g toy car, a 12g toy car

Results

The lighter marbles performed better at the higher elevation than at the lower elevation. The toy cars did better at the lower elevation than the higher elevation.

Conclusions/Discussion

My hypothesis was partially correct. The change in elevation had little effect on the two marbles. The small toy car was less stable at the higher elevation than the lower elevation. The heavier toy car performed similarly in both elevations, but showed slight improvement in the higher elevation.

Summary Statement

This project is about how the change in elevation affects the performance of objects on a straight slope and an angled curved slope.

Help Received

My mother supervised the construction of the paper and foam road prototypes, while my father supported me financially.