

CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s) Project Number

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J0120

Project Title

Riding on Air

Abstract

Objectives/Goals

Our purpose of making the project was to make a hovercraft and test different weights on different surfaces. We wanted to know how to build a hovercraft and how they work. We also wanted to learn more about how weights and surfaces like rough or smooth and how they affect the hovercraft.

Methods/Materials

To make the hovercraft, we took a wooden disk and cut a hole in the wood with the leaf blower. Next, we placed a plastic skirt on the bottom of the wood disk. Then we flipped the wood disk over so the skirt faces up. Afterward, we attached a plastic disk to the plastic skirt in the center. We then made six vent holes, to let out air. Next, we turned it over to the wood side, placed the leaf blower in the hole. We tested the hovercraft first mark a 10-12 foot mark between the launch and Distance X. Afterward, we launched the hovercraft with Weight one and Surface A with Force F, started to time the hovercraft once it passed Distance X. We repeated three times for Weight 1, Surface A, Weight 2, Surface A, Weight 3, Surface A, Weight 1, Surface B, Weight 2, Surface B and Weight 3, Surface B.

Results

We recorded our data differently because of the different weights and surfaces, concrete and asphalt. The concrete worked better than the asphalt because of the friction of the weight and the surface. The result answered both our questions. The weights did affect the results.

Conclusions/Discussion

Our project wasn't successful because our second hypothesis wasn't correct. Overall, we learned more about friction on the weights traveling on different surfaces.

Summary Statement

The project showed how weights and surfaces affect how the hovercraft moves.

Help Received

Parents helped on building the hovercraft.