

CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s)

Jade L'Heureux

Project Number

J1017

Project Title

Infinity Rover

Abstract

Objectives

My objective was to build a car that would run on itself using a generator attached to the axle. My goal was to have it run forever using its own power.

Methods

Materials:

1. A radio controlled (RC) car with a battery 2. A DC motor generator 3. 20 alligator clips 4. Module boost USB. 5. Wire extenders. 6. Rubber band. 7. Soldering iron. 8. Hot glue gun.

Method:

Buy all the materials listed in materials. Glue the generator to the car. Solder the wires to the module boost USB and then attach it to car. Charge the batteries. Test the car without the generator three times. Use a rubber band and put it around the wheel and the generator. Strip the wires on the battery and attach them to the charger. Put the charger in the module boost USB. Test the car with the generator three times.

Results

For my science summit project I rebuilt a radio controlled car by attaching a generator. The generator was powered by a belt attached to one of the car s axles. My hypothesis was that the generator would increase the length of time the car would run on a single charge. This did not turn out to be the case. Instead, the energy it took to run the generator (friction, etc) was more than the power generated. So, it ended up running for a shorter period of time.

Conclusions

For my science project I decided to build a car that partially runs on itself using a generator attached to the rechargeable battery. I tested the car without the generator to see how long it would last on a single charge. I also tested the car with the generator to see how long it lasted. I used a RC car I bought online. I put the car on a stand and let it run until it stopped. When it stopped I looked at the time and recorded it. Although it turned out that my hypothesis was incorrect and the generator did not increase the battery life, I still learned a lot.

Summary Statement

My car will help the environment by being powered by itself and not having to use gallons of gasoline.

Help Received

My STEM teacher Mr. Reeder let me use his soldering iron.