

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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Project Number

J0732

Project Title

Magnetic Electricity

Abstract

Objectives/Goals

My hypothesis is that a spark will arc from an electrical source to the north polarity of a magnet.

Methods/Materials

A Van de Graff generator was constructed so I would have a free source of electricity. A compass was also constructed in order to determine the polarity of the magnet. I then performed several experiments where I touched the magnet to the generator and tested how well electricity could travel through each of the magnet's polarities. I was looking for electricity to be drawn out of the generator in the form of a spark.

Results

My results were varied. Sometimes I saw a large spark arcing toward the north polarity from the generator. And sometimes no spark could be seen arcing at all. The exact same thing happened with the south polarity.

Conclusions/Discussion

My hypothesis was not correct. The electricity could not be seen arcing from the generator to the north polarity at a greater degree than to the south polarity. There is still a lot to learn about the similarities and differences between electricity and magnetism.

Summary Statement

My project is about finding out whether electricity is magnetic.

Help Received

Mom helped type this application and helped with board.