### Making Mjolnir: An experiment with electromagnetivity

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Physics 211

# Origin Story

An interest in Comics and Science led us to building a prototype Mjolnir for an Engineering Design 100 Class.

#### Specs:

1 purchased electromagnet

1 Lithium Polymer Battery

11.1v

1200 mA

A mechanical switch

Maximum holding force

75 lbs

Build Time 6 hours

## **Updated Specs**

With these new parts we were able to achieve power rivaling the God of Thunder himself!

Maximum holding force 450 lbs

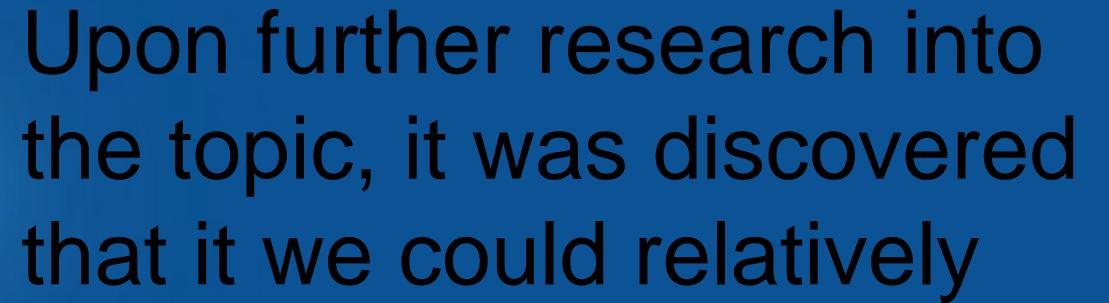
Build Time
11 hours



Wilkes-Barre

#### Resources

(2015, October 11). Retrieved October 07, 2016, from https://www.youtube.com/watch?v=0\_8Xhzt5YQI&t=114



Idea for Improvement

easily improve our design at a relatively low cost.

#### Improvements Made

4 Lithium Polymer Batteries
11.1 v
1200 mA

3 2-way Deans Male to Charger connectors

One microwave transformer Modified into usable E configuration

One Mega2560 Arduino Board

Prototype Breadboard

NFC Receiver

NFC Transmitter

Miscellaneous wires

