

## CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

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**Project Number** 

J1519

**Project Title** 

# **How Temperature Affects Magnets**

#### **Abstract**

### **Objectives/Goals**

My objective in the project was to find out if temperature would affect magnetism.

#### Methods/Materials

My method to test my hypothesis was to place the magnets into 4 different temperatures. After we got the magnet in that temperature we placed it into a bowl full of paper clips. The amount of paper clips that came out determined the strength of the magnet. Materials: 3 alnico magnets, 201 paper clips, low and high temperature thermometers, bowls, gripper, gloves, and Excel program.

#### Results

After testing the magnets in 4 different temperatures the resuts were when the temperatures were lower the magnets picked up more paper clips.

#### **Conclusions/Discussion**

I concluded that higher temperatures decreased magnetism, while lower temperatures increased magnetism. I also saw that there was little difference between temperatures from 100 degrees to 200 degrees because the amount of decreasing strength stops at some point.

## **Summary Statement**

My project is about how temperature will affect magnetism.

#### Help Received

My dad helped in controlling dangerous items like boiling water and dry ice.