



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Brian W. Pinner	Project Number J1232
Project Title Magnets: Hot or Cold?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective is to discover the effects (if any) of temperature on the strength of a magnet.</p> <p>Methods/Materials My method for testing this was to place a pure magnet at a variety of temperature zones for 1 hour and then sliding it towards a metal indicator to determine the magnetic strength by the distance the indicator jumped. My materials included a pure neodymium magnet, a magnetism meter created with a ruler, pvc pipe, and piece of framing on a wooden board together, a digital laser thermometer, and a metal indicator.</p> <p>Results My results showed that temperature can affect magnets in both positive and negative ways. If I heated up a magnet then it got weaker but if I cooled a magnet then the magnet's strength increased.</p> <p>Conclusions/Discussion I conclude that temperature does have an effect on magnets because it affects the tiny magnets found inside its electrons.</p>	
Summary Statement My project looks at the effects of temperature on the strength of a magnet.	
Help Received Mr. Miles Stoudenmire helped me by answering questions and my father helped me with my magnetism meter.	