



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Gregory Bailey; Wayne Karim	Project Number S0203
Project Title Magnetic Attraction Can Cause Hot Situations	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Our experiment will hope to uncover which adjustment to the heat motor will make it work more efficiently. We will be experimenting with what factor, pendulum wire length or heat source strength, will make the motor run most efficiently.</p> <p>Methods/Materials We will be using a regular ceramic magnet to swing in the pendulum, and an electro-magnet to attract this ceramic magnet. The magnet will dangle on a pendulum and hover over a candle while being over a candle while being attracted to a large electro-magnet. Once the heat dissipates the magnetic properties of the element, the pendulum will swing. Ultimately it will regain its strength and continue this pendulum motion.</p> <p>Results We uncovered from our experiments that the heat source intensity was the factor that made the heat motor run most efficiently.</p> <p>Conclusions/Discussion As the heat source became more intense, the suspended magnet's period on the pendulum became significantly shorter. on the contrary, the increase of the wire length caused the magnetic attraction between the suspended and stationary magnets to become stronger, so that eventually the motor did not move at all.</p>	
Summary Statement Which factor, pendulum wire length or heat source strength, will make a heat motor run most efficiently.	
Help Received we recieved no help during the project	