



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Andrew W. Brawders	Project Number 35491
Project Title TEC Peltier Tile Efficiency for Cooling and Heating	
Abstract Objectives/Goals My science fair project tests my hypothesis on whether the Peltier tile is more efficient in cooling or heating. Also to see if it can be used in daily life. Methods/Materials A platform made of some metal and wood, heatsinks, a Peltier tile, an adapter for the power source/peltier tile interface, and a power source . Results Opposite of what I expected in my hypothesis. The heating was more efficient than the cooling, bigger heatsinks were needed. I also calculated the efficiency of both sides of Peltier tiles. Conclusions/Discussion In conclusion, its efficiency is too low and is not energy efficient. Although it is small , you need a large heatsink to counteract the large amount of heat it produces to keep it from burning out.	
Summary Statement My project is to see if a Peltier tile is efficient and practical enough to be used in heating or cooling applications .	
Help Received Parents and teachers	