



**CALIFORNIA STATE SCIENCE FAIR  
2012 PROJECT SUMMARY**

<b>Name(s)</b> <b>Joy E. Brown</b>	<b>Project Number</b> <b>J0202</b>
<b>Project Title</b> <b>Sol-Lunch</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My Objective was to built a solar oven in a form of a lunchbox that I can carry to school with my lunch inside of it and use it to cook my lunch without the use of electricity. <b>Methods/Materials</b> Materials: 1.Two shoe boxes 2.11/2 rigid insulation 3.Metal tape 4.Thin and Thick cardboard 5.Plexiglass 6.Duct tape 7.Black construction paper 8.Spray adhesive 9.Mylar 10.Oven thermometers 11.Metal handle 12.Timer 13.Camera 14.Pencils 15.Box cutter 16.Drill with 2" circle bit 17.Table saw 18.Record book Methods: I created two single panel solar oven lunchbox using a Shoebox. I kept one oven as a control oven and slowly added panels to the second oven for experimenting. Slowly adding panel by panel allowed my to create a portable solar oven lunchbox. <b>Results</b> I created a portable solar oven lunchbox that not only carries your food but also heats up and cooks food. <b>Conclusions/Discussion</b> My results supported my hypothesis in that I made a lunchbox that can cook food without the use of the electricity. Infact I surpassed my Hypothesis because Sol-Lunch lunchbox actually cooks meat and eggs and I did not think that was possible.	
<b>Summary Statement</b> My project is about creating a portable solar oven lunchbox.	
<b>Help Received</b> Mother helped separate variables, Father helped cut rigid insulation on table saw and hole drill.	