



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Christopher Ruh; Brandon Taylor	Project Number J1815
Project Title Investigating Glass Behavior Under Various Environmental Stress Conditions	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals To Determine how different temperatures will affect glass.</p> <p>Methods/Materials We are using 12 X 12 double strength (DS) glass sheets, inserted into a wooden frame to simulate a framed window. We will be dropping a 4, 5 and 6 oz. lead weight from a 40 degree angle into the framed glass. We are investigating if temperature will effect the way the glass breaks.</p> <p>Results We found that the hot glass cracked, and shattered easier than the cold glass, it even cracked while being put in the wooden frame. We also found that the heated glass cracked in a less uniformed manner.</p> <p>Conclusions/Discussion After completing our investigation, we discovered our hypothesis was incorrect. the hot glass cracked, and shattered easier and did not have much of a uniformed pattern, while the cooled glass had more uniform cracks, and the cracks were much straighter and clean looking. The cold glass did not have a lot of little pieces like the hot glass.</p>	
Summary Statement How glass reacts to different temperatures	
Help Received Parent at school who works for a glass company, Mr. Matt Imfeld from Anlin Industries	