



**CALIFORNIA STATE SCIENCE FAIR  
2007 PROJECT SUMMARY**

<b>Name(s)</b> Monika L. Gleim	<b>Project Number</b> <b>J1206</b>
<b>Project Title</b> <b>Effects of Different Solutions on Elasticity Percentage of Various Fabrics</b>	
<b>Abstract</b> <b>Objectives/Goals</b> What type of fabrics will retract back with which solution, with the amount of 10 trials for each fabric. <b>Methods/Materials</b> fabrics cotton, lycra, nylon, and polyester. Solutions bleach, ammonia, baking soda, salt, and control. Two 25 pounds weight, and 11 long poles, room temp water. <b>Results</b> Bleach caused the fabric to stretch, but the elasticity was so strong that the fabric retracted back further than its normal size. <b>Conclusions/Discussion</b> After completing my project I found that my hypothesis was incorrect and correct. I stated that the solution baking soda would cause less effect on the elasticity of the four fabrics: cotton, lycra, nylon and polyester. In the correct part of my hypothesis I stated that the bleach solution would have an effect on the elasticity of the fabrics and the solution will make the fabrics stretch more. From my results I discovered that bleach stretched the fabrics the most. I also discovered that all the solutions had more effect on the cotton fabric.	
<b>Summary Statement</b> What type of solution will cause the fabric to retract back to its normal size which it started from before it was stretched.	
<b>Help Received</b> Snowflake designs; Home Depot; Gleim Crown Pump	