



**CALIFORNIA STATE SCIENCE FAIR  
2008 PROJECT SUMMARY**

<b>Name(s)</b> <b>Crysta L. Williams</b>	<b>Project Number</b> <b>J1829</b>
<b>Project Title</b> <b>Shampoo's Effect on Tensile Strength</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The purpose of this experiment was to see if shampoos affect the strength of human hair. I have always wondered if shampoo has an affect on the hair. It has been stated that you should switch shampoos once a month because your hair gets used to the same shampoo, and when you're switching it is thought that hair will be more manageable. <b>Methods/Materials</b> The procedures ussed were: wet the hair, soak the strand in the shampoo for two minutes, then rinse thoroughly and let dry. Once the hair is dry, test the strength of the hair that was tested by using a spring scale. The force before breakage was recorded. Repeat nine times for each hair color for a total of ten trials. <b>Results</b> The procedurawas consisted of 15 cards with each card stating what color hair, what type of shampoo, and the ten recordings for each spring test. The average for each hair color per shampoo used was calculated and entered on the cards. The data also includes pictures of the spring scale and the shampoos used. <b>Conclusions/Discussion</b> The conclusion was inconclusive. The reason why was due to the different affect each hair color had with the various shampoos. It was found that brown hair with Pert Plus, red hair with Herbal Essence, and blonde hair with Kids Suave. The findings were that not one single shampoo works best for all hair types.	
<b>Summary Statement</b> Red, blonde and brown hair were all treated in five different brands of shampoo to determine if the strength of each hair color could be improved.	
<b>Help Received</b> Mother helped with recording the data as I was testing and taking pictures.	