



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Jenna M. Berry	Project Number J1103
Project Title Wool Strength	
Abstract Objectives/Goals Objective: My project was to determine if different chemicals will affect the strength of rabbit wool. I raise rabbits in 4-H, and I have seen these chemicals used for all different reasons. Strength is important when you spin wool. Methods/Materials Material/Method: Five 2# samples of wool were hung between two binder clips, with a one ounce river sinker attached to the bottom. Five sets of samples were hung in a separate wooden compartment. Then each sample was sprayed 10 times with one of each: bleach, vinegar, cat flea spray, soap/water, and water. I ran each test for 24 hrs. I checked for both damage and stretch. I determined each result by both observation and measurement. I retested 5 times for each different chemical. Results Results: The bleach and cat flea spray, when sprayed on the wool, caused breakage to the fibers of the wool. The soap/water sample caused the wool to stretch and to stay stretched even after it dried. Both the cat flea spray and soap/water caused a residue on the wool. The water and vinegar did not cause any noticeable damage or extreme stretch. Conclusions/Discussion Conclusion: I was right in my hypothesis that bleach should not be used on the wool of a rabbit. I was incorrect when I thought that cat flea spray, or soap/water would be safe. I found that using bleach, cat flea spray, and soap/water can greatly damage or alter the strength of the wool. Water and vinegar can be used on the wool. Further research would include more tests run, and to try washing samples that left a residue to see if wool would return to normal texture.	
Summary Statement My project tested the effect of different chemicals on the strength of rabbit wool.	
Help Received My mother helped me cut the foam board for my backboard. My dad helped me cut off remaining wood on my box. Mr. O'Neill corrected my spelling and grammar.	