



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Delayna C. Corts	Project Number 34669
Project Title Chemistry of Baking: Can You Make Your Own Baking Powder?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective is to see if you can make your own baking powder using baking soda and cream of tartar.</p> <p>Methods/Materials Materials used are muffin pans, measuring cups, timer, kitchen scale, ruler, and muffin ingredients. This includes cornmeal, water, baking powder for control, baking soda and cream of tartar. I made a "control" batch of muffins using baking powder and four batches using different amounts of baking soda and cream of tartar. I want to see which amount of each comes closest to the control batch.</p> <p>Results The third recipe with 1.5 tsp. baking soda and .75 tsp. cream of tartar was the test batch most similar to the control batch.</p> <p>Conclusions/Discussion Baking powder is a blend of baking soda and cream of tartar. When water is added to the mixture, a reaction causes CO₂ to be trapped in the muffin forming air-pockets which causes the muffin to be less dense. This is an example of acid/base chemistry.</p>	
Summary Statement Baking powder can be made with baking soda and cream of tartar.	
Help Received My mother and science teacher helped me proofread.	