



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

| | |
|---|---------------------------------------|
| Name(s) Emilee H. Bass | Project Number J2001 |
| Project Title To Rust, or Not to Rust? | |
| Abstract Objectives/Goals The goal of this experiment was to see which acid mixture or chemical would prevent the most rust. Methods/Materials For this experiment I used 24 finishing nails, 261 grams of Prep and Primer, Krylon Rust Preventative Spray Paint, 54 grams of Baking Soda, 54 grams of water, 195 grams of Boiled Linseed oil, 48 grams of melted Coconut oil, 40 grams of Fish oil, Wd-40 Aerosol, eight small bowls, one spoon, 24 test tubes, a weight scale, saran wrap, tape, a sharpie, scissors, a ruler, a box, 450 milliliters of hot water, and 24 plastic knives. I put a nail in each test tube. 21 test tubes had nails with a product on it and the other three were the control nails. I let the nails rust for 21 days. Results In the end Prep and Primer prevented the most rust with zero rust on any of the nails and Baking Soda with Water prevented the least amount of rust with an average of 7.3 millimeters of rust. Conclusions/Discussion In the end my hypothesis was correct. Prep and Primer did prevent the most rust. The information I have learned from this experiment is that you can't always trust what a company tells you. | |
| Summary Statement It is about what will prevent the most rust. | |
| Help Received Faith Bass helped me buy the materials for my project and Nathan Sargent proof read my notebook. | |