



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Maggie Chang	Project Number S1804
Project Title The Effect of Different Rosin Brands on the Intensity of Sound	
Abstract Objectives/Goals Objective: The goal of this problem was to test to see if different brands of rosin would affect the intensity of sound. Materials and Methods: Using five different brands of rosin as well as Audacity (online program), the intensity of sound was measured through the sound of a cello. Additionally, six separate bows were used during this experiment. Results: The brand of rosin, Larica had the highest sound intensity compared to the other four. The Andrea rosin had the lower intensity of sound. Conclusion/Discussion: It means that people who use the Larica rosin would have higher intensity and therefore would not need to exert as much force while playing than compared to musicians with the Andrea rosin. It proves that lighter rosin would generally have a higher intensity than compared to darker rosin. Methods/Materials Cello, 6 \$35 bows, 5 brands of rosin (W.E. Hill and Sons, Andrea, Larica, Kaplan, Pirastro), Audacity, cloth. Measured intensity of sound through Audacity for each of the five rosin brands. Results Lighter colored rosin, such as the Larica, had the highest intensity of sound. Dark colored rosin, like that Andrea had the least. Based on preference, knowing the intensity of sound can allow for more knowledge on each product. Conclusions/Discussion The different brands of rosin, each with different color and components had effects on the intensity of sound. Knowing that the lighter colored rosin would produce a higher intensity, it allows for the knowledge on which product to buy. Based on preference, one would not need to exert as much force while playing than compared to musicians with the dark colored rosin.	
Summary Statement Using different brands of rosin, I was able to test to see how a specific brand of rosin, with the specific characteristic would affect the intensity of sound.	
Help Received None. I designed, built, and conducted the experiment myself.	