



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Claude R. Vargas	Project Number J2134
Project Title Clarinet Reeds and the Pitch of That One Tricky High D Note	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of my project is to determine if the brand of reed will affect reaching the pitch of the high D note on a clarinet. I will be testing three different reed brands: the Rico brand, the Vandoren brand, and the Mitchell Lurie brand. The Rico brand will be the control because it is the brand that is most commonly used. The Vandoren brand of reed for a clarinet will reach the pitch of a high D note because it was recommended by a music professional to be the best reed to use.</p> <p>Methods/Materials I will test three different reed brands (Rico, Vandoren and Mitchell Lurie) for a clarinet. I will test 5 reeds for each brand. Each reed will be tested 20 different times. I have created a measuring device using my tuner. The ideal reading on the tuner for a clarinet is at the top center of the gauge. I have used this gauge as a measuring device by adding numbers that range from 1 - 30. As the tuner measures the pitch of the notes and the gauge moves to the left it identifies it as flat. I will identify a flat note by using the numbers 1-14. The perfect note will be measured at number 15. As the tuner measures the pitch of the notes to the right it identifies it as sharp. I will identify a sharp note with the numbers 16 - 30.</p> <p>Results My results show that the Mitchell Lurie brand of reed averaged a tuner measurement of 15 on the scale that I created. This measurement is the ideal pitch of note for a clarinet. Both the Vandoren and the Rico were sharp.</p> <p>Conclusions/Discussion My hypothesis was incorrect. The Mitchell Lurie brand of reed for a clarinet is the better brand to reach the pitch of the high D note. This could be because this brand is thinner and allows for a fast response.</p>	
Summary Statement My project is about testing different clarinet reeds to see which brand can produce the most accurate high D note.	
Help Received My mom purchased the reeds for me to test.	