



**CALIFORNIA STATE SCIENCE FAIR  
2016 PROJECT SUMMARY**

<b>Name(s)</b> <b>Matthew J. Waldman</b>	<b>Project Number</b> <b>J2021</b>
<b>Project Title</b> <b>Testing Oxidation on Skateboard Bearings</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> In my project I am testing to see which bearing company can withstand the most oxidation while sitting in water for three days. I will be using salt water, fresh water, and chlorine. After seeing which has the most rust, I will then go on to see which spins for the longest. I will be putting each bearing on one wheel and timing it in seconds.</p> <p><b>Methods/Materials</b> I will start by getting each substance of water and placing the bearings in, for approximately seventy two hours. Next, I will take each bearing out and leave them at rest for twenty four hours. After this, I will continue to test which spins the best by placing them in a standard 52mm wheel. I will test to see which company lasts the longest, then I will compare to see if the rust effects the motion.</p> <p><b>Results</b> In my first project, I saw that the cheapest company did the best. These bearings by Active Brand did great and had minimal rust. This was great to see that people do not need to spend a lot of money on bearings that might not be as good as cheaper ones.</p> <p><b>Conclusions/Discussion</b> My project showed that if something is expensive, it doesn't always mean it is great. For example, one pair of Red skateboard bearings were not as good as the cheaper Active Bearings. So I suggest that customers should look at prices in between.</p>	
<b>Summary Statement</b> My project is testing the oxidation on skateboard bearings in three different substances of water and how well they spin.	
<b>Help Received</b> I tested all the bearings by myself, but was helped out by Active Ride Shop, who donated supplies, the TOHS mentours, my science teacher, Virginia Bartley, and my family and friends for support.	