



**CALIFORNIA STATE SCIENCE FAIR  
2012 PROJECT SUMMARY**

|   |                                       |
|---|---------------------------------------|
| <b>Name(s)</b><br><b>Julieana L. Tarantino</b>  | <b>Project Number</b><br><b>J0322</b> |
| <b>Project Title</b><br><b>Blasting Blades</b>  |                                       |
| <b>Abstract</b><br><b>Objectives/Goals</b><br>Experiments were performed to determine which hockey stick blade length would produce the most speed. The focus was on the speed that was being produced by the different length blades. The adult length blade was thought to have been to produce the most speed.<br><b>Methods/Materials</b><br>To test the different blade lengths, a blade swinging machine had to be built. Then the junior length blade had to be swung forty times. Next, the intermediate length blade had to be swung forty times. Finally the adult length blade had to be swung forty times. After all the data was recorded, it was converted from miles per hour to kilometers per hour.<br><b>Results</b><br>The results showed that the junior length blade produced the most speed with an average of 24.74375. The junior length blade is the shortest out of all three. The adult length blade, which is the longest length blade, did the worst with an average of 15.2045. The intermediate length blade was thought to be right in the middle for length and speed and it was.<br><b>Conclusions/Discussion</b><br>In conclusion, the junior length blade did the best. The hypothesis, which was that the adult length blade was thought to produce the most speed, was proven wrong. The adult length blade did not produce the most speed. |                                       |
| <b>Summary Statement</b><br>This project is testing the speeds produced by the different length hockey stick blades.  |                                       |
| <b>Help Received</b><br>Teacher helped in process. Dad helped build machine and test.   |                                       |