



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> <b>Lorenzo A. Granados</b>	<b>Project Number</b> <b>J1215</b>
<b>Project Title</b> <b>Hand Sensitivity: Which Hand Is More Sensitive?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The goal of this project was to determine if a person's Dominant Hand was more sensitive to touch than their Non-Dominant Hand.</p> <p><b>Methods/Materials</b> Methods: 1. Gather 50 subjects between the ages of 11 and 14. 2. Ask them if they are left-handed or right-handed. Depending on their answer determines how I begin their tests. 3. Place the 5 different grades of sandpaper in front of them and ask them to arrange the sandpaper with their Dominant Hand from smoothest to roughest. 4. Check the back of sandpaper to determine if they placed all 5 in the correct places. 5. Move sandpaper and ask subject to close their eyes and look the other way. 6. I then touch their hand in 5 different areas using thin fishing line. 7. I then ask the subject to truthfully say how many times they felt the fishing line. 8. I record the data and determine how many correct answers my subject got out of 10. 9. Do the same tests with subject's Non-Dominant Hand. 10. Record data and thank subject. 11. Do methods 2-10 with rest of subjects. Materials: Five different grades of sand paper. (400, 220, 150, 100, and 60) Thin fishing line, Pen or Pencil, Comp. Book, and 50 subjects</p> <p><b>Results</b> The results of this project show that the Dominant Hand was indeed more sensitive with a mean of 7.34 correct answers and the Non-Dominant Hand with a mean of 6.88 correct answers. The means were obtained by adding all of the correct answers for the Dominant Hand and the Non-Dominant Hand and dividing each by 50. Possible errors for this project are that the sandpaper were each a different shade of purple possibly making it easier for the subject to answer correct. Another source of error may have been that the subject may have lied when asked how many time they felt the fishing line.</p> <p><b>Conclusions/Discussion</b> The results of this experiment show that my hypothesis was correct with the Dominant Hand having a mean of 7.34 correct answers and the Non-Dominant Hand with a mean of 6.88 correct answers. If I were able to redo this project all over again I would try to gather more left-handed subjects to see if there is a difference between sensitivity in the right-handers Dominant Hand and the left-handers Dominant Hand.</p>	
<b>Summary Statement</b> My project is about determining if a person's Dominant Hand is more sensitive to touch than their Non-Dominant Hand.	
<b>Help Received</b> Mother helped with display board.	