



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> <b>Jennifer Davis; Rochelle Flores; Deynira Tellez</b>	<b>Project Number</b> <b>J0706</b>
<b>Project Title</b> <b>Static Electricity</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> We wished to discover what materials we could rub with plastic strips to produce easily observed static charges. Our intention was to identify those materials that would produce the strongest charges.</p> <p><b>Methods/Materials</b> We used scissors to cut 5 cm. by 20 cm. strips of plastic from a clear plastic report folder. These strips were rubbed with various materials and then checked for static charge. The charge indicator was a large paper clip standing upright in a walnut size piece of modeling clay. After rubbing, the plastic strips were brought near the paper clip. It was noted if the clip moved, or if there was an electric discharge. Each material tested was tested multiple times.</p> <p><b>Results</b> Our measurements indicate that not all materials produce the same amount of static charge when rubbed with plastic. Some materials do not produce any charge that is detectable using our method of detection.</p> <p><b>Conclusions/Discussion</b> Different materials produce different strengths of static charge when rubbed with plastic. We learned which materials of those tested we can rub with plastic to produce static charges measurable by our method and which ones of those tested produce the most static charge.</p>	
<b>Summary Statement</b> Our project measures static charges produced by rubbing test materials with plastic strips.	
<b>Help Received</b> Our families provided project materials and encouragement. Mr Singleton provided opportunity for us to work together and direction on how to construct our display.	