



**CALIFORNIA STATE SCIENCE FAIR  
2011 PROJECT SUMMARY**

<b>Name(s)</b> <b>Annika V. McBride</b>	<b>Project Number</b> <b>J2122</b>
<b>Project Title</b> <b>Back Busters</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of my project was to find out which backpack effected your posture the most. My hypothesis is that the 6 pocket backpack will negatively effect your posture the most because it has a lot of pockets and will pull on the subjects back and make them lean foward. <b>Methods/Materials</b> I used a ruler, a wood pole with a base, a timer, a pencil, a notebook, 3 backpacks, 3 subjects, backpack contents and a scale. First I measured the backpack and backpack contents to equal 5,10 or 15 pounds. I told one of my subjects to walk around and set my timer for five minutes. When the timer was up I lined my subject up against the wood pole and measured with my ruler how far they were leaning over and how far they were leaning to the side. I wrote what I measured in my notebook and repeated the steps for the other backpacks, subjects and pound increments. <b>Results</b> The 6 pocket backpack negatively effected the posture the most. I think that it effected the posture the most because it had a lot of pockets and so it pulled down on the subjects back and made them have to lean over. <b>Conclusions/Discussion</b> My hypothesis was correct. This project could help people have more knowledge about which backpack would be better to buy and would not hurt your back.	
<b>Summary Statement</b> My project explains which backpack is the worst for your back.	
<b>Help Received</b> My sisters and neighbor helped me by being my subjects.	