



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

Name(s) Annika V. McBride	Project Number 31131
Project Title Back Busters	
Abstract Objectives/Goals 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 forward. Methods/Materials 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. Results 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. Conclusions/Discussion 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.	
Summary Statement My project explains which backpack is the worst for your back.	
Help Received My sisters and neighbor helped me by being my subjects.	