



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Bryan A. Cuevas	Project Number J0303
Project Title Building Shock Absorbers for a Bicycle	
Abstract Objectives/Goals The goal of my project is to create a shock absorber that will be cheaper and as efficient as a store-brand shock absorber. Methods/Materials An acrylic sheet, two acrylic tubes, two springs, a solvent, and a power tool are needed to create the shock absorber. You must cut three circles for the ends of the tubes to help with stability. One of the circular coverings should be small enough to fit inside the interior tube. One of the other coverings should be small enough to fit tightly within the exterior tube. The last covering should cover a bit over the edge of the interior tubes outside end. Then you drill a hole into each of the three circles, so this may increase air pressure. Then you would attach the springs to the end of the interior tube that would fit inside of the exterior tube. Results My shock absorber handled a good amount of weight and was cheap to build. It is also as durable as a store-brand shock absorber. Conclusions/Discussion My conclusion is that I fulfilled my goal, and that acrylic could be used instead of metals, like aluminum, because it is light, cheap, and durable to use.	
Summary Statement I am creating a shock absorber that will be cheaper and as efficient as a store-brand shock absorber.	
Help Received My teacher, Mr. Robison, helped me obtain certain items, and Good Karma Bikes gave me the bike parts for my project.	