



**CALIFORNIA SCIENCE & ENGINEERING FAIR  
2019 PROJECT SUMMARY**

<b>Name(s)</b> <b>Parker Harris</b>	<b>Project Number</b> <b>J0315</b>
<b>Project Title</b> <b>Protective Barrier for Classrooms</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives</b> The objective was to create a bulletproof collapsible wall that could be fully extended if there was an incident of an active shooter in a classroom setting at a school.</p> <p><b>Methods</b> I made a panel out of various materials to see if it could stop a bullet. I did a test with four guns and five trials per gun on the material I engineered. I have also designed a collapsible wall to protect students and faculty.</p> <p><b>Results</b> The concept of the foldable wall was applicable. The materials that I engineered needed to be able to stop bullets was a success because the material was able to take the impact of the various bullets.</p> <p><b>Conclusions</b> The protective barrier for classrooms was able to be applied to its task. The unique bulletproof panel I engineered was a success due to it stopped the impact of the bullets.</p>	
<b>Summary Statement</b> I engineered a collapsible wall that could pull across a classroom to protect students from rouge bullets in a case of an active shooter.	
<b>Help Received</b> A 10 year shooter veteran and a USPSA hand gun competitive shooter carried out the part of my experiment that involved shooting, my teacher educated me in the scientific method, and my Dad provided additional help in my project.	