



**CALIFORNIA SCIENCE & ENGINEERING FAIR  
2018 PROJECT SUMMARY**

<b>Name(s)</b> <b>Sophia G. Ruff</b>	<b>Project Number</b> <b>J0330</b>
<b>Project Title</b> <b>Which Bridge Can Hold More Weight?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My goal was to see which bridge design could hold more weight. <b>Methods/Materials</b> Cedar strips, wood glue, basic red wire. These items were used in the construction of both bridges. <b>Results</b> After I tested both bridges with weights, I concluded that my hypothesis was correct. <b>Conclusions/Discussion</b> The suspension bridge held more weight, suffering only a hair line crack at the main support. The arch bridge received major damage at less weight. I concluded that a suspension bridge would be a better design for safety.	
<b>Summary Statement</b> I designed and built two bridges to be tested for maximum weight.	
<b>Help Received</b> I designed, built and tested my bridges with minimal help from my father.	