



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

<b>Name(s)</b> <b>Kayla Goodwin</b>	<b>Project Number</b> <b>J2008</b>
<b>Project Title</b> <b>How Do Various Types of Table Tennis Balls Differ in Bounce Height?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives</b> The objective is to measure how various types and brands of professional table tennis balls differ in bounce height.</p> <p><b>Methods</b> Different types and brands of table tennis balls, camera, ball dropper, and measuring backboard. I dropped each type of five times using the ball dropper and recorded with slow motion video. By watching the video I determine the bounce height.</p> <p><b>Results</b> I recorded the bounce heights of each type of ball by watching the videos. I calculated the average and the median bounce height for each type of ball.</p> <p><b>Conclusions</b> The types of balls that are played more often in international competition bounce lower, than some of other 40+mm plastic balls. The new plastic balls were similar in bounce height as the 40mm celluloid balls.</p>	
<b>Summary Statement</b> My project is important because table tennis players can use this ball bounce height information to adjust their playing style in competitions.	
<b>Help Received</b> I designed and built the ball dropper myself. My dad helped with the slow motion camera, and my teacher helped review my research report.	