



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Isabella Castrodale; Sophia Castrodale	Project Number J1301
Project Title Speed Stacking vs. Physical Education	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Our objective was to find out if Speed Stacking was an effective way to raise a participant's heart rate, as it is now being used in many physical education classes for children.</p> <p>Methods/Materials Stop Watch Speed Stacking Cups</p> <p>Results We found, using the Karvonen Formula, that in multiple trials with multiple subjects that the activity of speed stacking did not significantly raise the participant's heart rates, and therefore would be an ineffective component in any physical education program.</p> <p>Conclusions/Discussion We concluded that speed stacking should only be considered for use in a P.E. setting, if it's goal was to develop eye-hand coordination, or a a transitional activity between cardio elevating activities such as relays. In a country where childhood obesity is on the rise, it is important that we are utilizing the most effective possible exercise programs for students.</p>	
Summary Statement Our project examines whether or not the speed stacking of cups is an effective way to raise a participant's heart rate, and thus be a suitable activity for physical education.	
Help Received My mom oversaw our project and gave suggestions regarding scheduling.	