



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) McKenna G. Grant	Project Number J0407
Project Title Birth Order Effects on Leadership	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to learn if birth order effects leadership.</p> <p>Methods/Materials First, have students fill out a survey that asks their name, gender, birth date, birth order, height, and eye color. Then make groups of three eighth graders having an oldest, middle, and youngest sibling in each group. (Students in the groups are not related to each other.) Tell each group they have to complete a task of standing on a piece of 2' by 3' carpet and flip it over without any part of their body touching the ground. The objective is to do this as fast as possible within a three minute time limit. While they are doing their activity listen to them talking. Record the amount of commands each subject gives while doing the task. Then repeat this process with each of the groups and analyze the data by the amount of commands each sibling type gives. The sibling type with the most commands given is an indicator that they have the most leadership.</p> <p>Results My results showed that the middle siblings gave the most commands on average. My results also showed that the tallest people in every group on average gave more commands than the shorter people in each group. Another thing I realized while doing my experiment was that males were almost twice as commanding as females. However, there was a large standard deviation which suggests that this experiment is not statistically significant.</p> <p>Conclusions/Discussion The conclusion does not support the hypothesis that the oldest siblings show the most leadership. In the task I gave, a lot of cooperation was involved. The middle siblings might have given the most commands because studies show that middle siblings have peacekeeper personality traits and are good with cooperation. If more research was done, we might be able to see which sibling type shows the most leadership in tasks involved with cooperation.</p>	
Summary Statement This project was designed to test how birth order effects leadership.	
Help Received Science teacher provided mentorship.	