



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Michelle S. Kwon	Project Number J1710
Project Title A, B, C As Easy As 1, 2, 3	
Objectives/Goals My objective is to find out which child, born into an immediate family, has the highest GPA.	
Methods/Materials There were three materials need in my experiment: a. A survey that collected information on the subject's birth order, gender, handedness, ethnicity, etc. b. A computer, so that I could record all the data and create graphs and charts to further interpret my results. c. Lastly, I needed a manila folder. This folder was needed so I could collect the testing subject's survey. That way it is almost impossible to match whose survey goes to whom.	
Results The eldest has the highest GPA (4.08). The second child has the second highest GPA (3.88), the third child had the second lowest GPA (3.75) and the fourth born had the lowest GPA (3.62). Only Childs had a GPA of 4.05. For sociability, the trend went the opposite way. The fourth child was at a 9.4, thirdborns were at a 9.09, secondborns were at a 8.3, firstborns were at 7.75, while only children were at a 6.9. Academic importance also had a strong correlation showing that as you move lower down the rank of birth order the lower the score would be (1st=9.47, 2nd=8.14, 3rd=7.9, 4th=7, and only child=9) This correlation was also shown in the hours spent studying. (1st=8.35, 2nd=6.04, 3rd=5.36, 4th=4.2, and only child=7.6) Right handed individuals were shown to have generally performed better at school verses left handed individuals. (average GPA R=4.0, L=3.88) There was no discrepancy between genders. The average GPA of males was 3.86 while the average GPA of females was 3.9	
Conclusions/Discussion My conclusion is that birth order does affect GPA, and that the lower one ranks on birth order, the lower one's GPA is likely to be. Also, individuals with no siblings display on average a higher GPA than others who are 2nd, 3rd, 4th born in families with multiple children. I also conclude that left handed individuals are shown to have slightly lower GPA than right handed individuals. Also sociability plays a more important role than actual birth order determining why subjects with lower birth rank had lower grades. Given that firstborns generally rated the importance of academics higher and studied more prevents me from saying any one factor actually caused higher grades. Also, there was no difference between the genders in GPA. Therefore, the only thing that can be concluded, is that there is a relationship between birth order and how well one does in school.	
Summary Statement My project is a study that helps parents, teachers, and students alike see which child has the highest GPA,, and if varied factors have an impact on this study's outcome.	
Help Received Father went out to purchase supplies; Richard Kim helped in supervision	