



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Henry R. Solomon	Project Number J1319
Project Title Is Bingo Random?	
Abstract	
Objectives/Goals My experiment was designed to test whether winning at Bingo is random.	
Methods/Materials Materials used: <ol style="list-style-type: none">1. 4 different Bingo cards2. A Bingo Set: a Bingo calling cage, a bingo ball counter, and 75 bingo balls3. 50 Bingo recording sheets *Note: All of the Bingo balls were counted to make sure that there were 75 of them.	
Experimental Method: <ol style="list-style-type: none">1. Turn the lever on the calling cage one time to dispense ball.2. Record the following:<ol style="list-style-type: none">a. The number on the ballb. The column the ball came fromc. The order in which the balls were called.3. When the game finishes, record the following:<ol style="list-style-type: none">a. How long the game tookb. The amount of calls until a Bingo showed up on a cardc. The five number Bingo sequenced. Whether the sequence used the FREE spacee. The winning numberf. Whether the Bingo sequence was vertical horizontal, or diagonalg. The card that had the Bingo.4. Repeat this process 50 times	
Results In the winning card test, Card #2 won 40% of the time versus the 25% probability. Similarly, 36% of the winning numbers were in the O column, versus the 20% probability. These two tests indicated that winning at Bingo is not random. However, in the FREE space test, 62% of the winning sequences did	
Summary Statement My project tested whether winning at Bingo is random.	
Help Received My family and friends played Bingo with me but I recorded all the data. My dad helped me with the equations to identify the expected probabilities for winning using the free space and winning horizontally, vertically, and diagonally.	