



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Laura A. Huppert	Project Number S0308
Project Title Shape vs. Color: Which Is the Primary Perception?	
Objectives/Goals The objective of this experiment is to determine whether individuals notice shape or color first. My hypothesis is that most subject's primary perception will be based on color as opposed to shape.	
Abstract Methods/Materials Informed consent was obtained from 100 randomly selected people, 50 men and 50 women in three selected locations. In order to test the hypothesis, a set of playing cards was used that contained a trick card: a heart playing card with the hearts colored black. A consistent testing environment was maintained throughout experimentation by controlling unwanted variables such as the lighting, card order, and the angle at which the cards were displayed to the subjects. As the set of cards was flipped through, the subjects were asked to identify the suit of each card as they were presented. When the subjects named the suit of the trick card, it revealed what their mind noticed first, shape or color, often without their conscious realization. The subjects that responded by saying "hearts" noticed the shape of the black heart first while those that responded by saying either "spades" or "clubs" noticed the color of the black heart first.	
Results When only one trick card was inserted into the set of playing cards, 70% of the women called the trick card a heart, indicating that they noticed the shape of the suit before the color. 54% of the men tested noticed the shape first, calling the trick card a heart. When three cards were inserted into the set of playing cards, most subjects called all three trick cards the same suit, indicating that their initial perceptions were consistent. Overall, the majority of the 100 subjects noticed shape before color in both the one- and three-trick card tests.	
Conclusions/Discussion My conclusion for this experiment is that most subjects notice shape before color, and more women than men noticed shape first. The data collected suggests that the designers of advertisements, web pages, and safety signs should concentrate on employing the use of shape effectively because most people have a primary response to shape perception.	
Summary Statement My project tested whether individuals notice shape or color first by using a set of playing cards that contained a trick card.	
Help Received None	