



**CALIFORNIA STATE SCIENCE FAIR  
2011 PROJECT SUMMARY**

<b>Name(s)</b> <b>Hafsah A. Lakhany</b>	<b>Project Number</b> <b>J0712</b>
<b>Project Title</b> <b>Point, Set, Match: Can Visual Perceptual Therapy Help Master the Art of Observation?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The goal of my experiment is to determine if visual perceptual skills can be trained using the card game SET, and to compare taught skills to skills developed from one's own experiences (which would be assessed using the Symbol Digit Modalities Test) <b>Methods/Materials</b> In order to conduct my experiment, I recruited two fourth grade classes from my school. The students were already randomized into two classes; Section A (the experimental group) and B (the control group). I began by administering the SDMT (Symbol Digit Modalities Test) as a pretest to both groups in order to assess their initial level of visual perception. Next, both groups participated in an interactive tutorial for the visual perception game SET. After that, both classes were divided into three equal sub-groups. Each sub-group was provided with the card game SET. Members of the control group were simply asked to play the game. Members of the experimental group on the other hand, were provided with strategies as to how to master the game, while they were playing the game SET. This procedure was repeated for a total of 8 trials over a period of 5 weeks. After the completion of the training, both groups took the SDMT again (as a post-test) in order to determine if their level of visual perception was enhanced. <b>Results</b> By conducting this experiment, I realized that sharp observational skills are not attained by improving one's vision, but by training one's visual perceptual skills. I also found that visual perceptual skills did improve with therapy, and subjects who were taught strategies performed better on the SDMT, than those who learned on their own, thus confirming both my hypotheses. <b>Conclusions/Discussion</b> After conducting my experiment, I found that visual perception can be enhanced by manipulating the way one perceives something visually. I achieved this by providing my subjects with visual perceptual therapy in the form of the game SET. SET provided them the training needed to improve visual perceptual skills, which was proven with the scores on the SDMT before and after the training.	
<b>Summary Statement</b> The main aim of my experiment is to determine if visual perception can be enhanced with visual therapy, along with manipulating the way one perceives things visually.	
<b>Help Received</b> Dr. Lisa Edwards guided me throughout the process; Subjects' parents allowed the participation of their children; Fourth grade teachers allowed me to use their class time for my experiment.	