



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

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Project Title Optical Illusions	
Abstract Objectives/Goals The objective was to determine if age and gender would make a difference in decoding hidden images in optical illusions. This is important because if perception is affected by these factors, they probably should be considered in cases such as the admission of eyewitness testimony. Methods/Materials Thirty persons of both sexes, in three age ranges (5-15, 16-40, older than 40) were presented with four printed optical illusions and asked to find the hidden image. The time in seconds they took to find it was measured, and means and standard deviations were obtained. Results The results showed that people in the range 16-40 decode the images faster, while no significant difference was found between men and women. However, it was found that the subject matter of the image is important: younger kids were better at decoding the image of a dog, and older people the image of a kiss. Women decoded the image of a baby faster than men did. Conclusions/Discussion I conclude that the sample was too small to reach adequate conclusions. My hypothesis that persons in the intermediate age range would decode the images faster seems to be supported by the results, but a larger sample would be required, and the subject matter of the images should be taken into account, too.	
Summary Statement Determining if age and gender make a difference in decoding hidden images in optical illusions	
Help Received Father helped in printing images of optical illusions	