



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> Stephany R. Brundage	<b>Project Number</b>  34652
<b>Project Title</b> Purple Madness	
<b>Objectives/Goals</b> My objective was to see if chickens were blind to purple, or if it is an old family myth and they stay away from it due to natural instinct from purple things being poisonous in nature. <b>Abstract</b> <b>Methods/Materials</b> Seven chickens were used, 2 cocks and 5 hens. In the first experiment the chickens were fed a bowl of white rice and a bowl of dyed purple rice to see which color they prefer. In the second experiment the chickens were fed scratch grain that was set on two separate sheets of paper; one purple and one white. In the third experiment I put a purple hair tie, then a white hair tie in front of the birds' beaks to see which color they seemed more interested in. In the fourth experiment the chickens were fed a bowl of popcorn with one piece dyed purple and set on top, and a bowl of plain popcorn. The fifth experiment was actually a side experiment and the chickens were fed a bowl of purple spaghetti to see how much hesitation there was when eating it. <b>Results</b> The results of my project were partly inconclusive. The chickens may be blind to purple, but this may still be an old family tale. The results of my project pointed more toward the chickens being blind to purple, but since the chickens have an extra cone in their eyes (the UV cone) along with the RGB cones, they do see colors, but since they have the UV cone, they see UV reflection so colors appear different to them and more reflective things are "brighter". <b>Conclusions/Discussion</b> My conclusion is that my hypothesis is wrong, and the chickens may or may not be blind to purple, and according to my project chickens do not stay away from purple due to natural instinct from things being poisonous in nature.	
<b>Summary Statement</b> My project was about seeing if chickens are blind to purple or not.	
<b>Help Received</b> Mother was photographer	