



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Mariah G. Cox	Project Number J1208
Project Title Ear Candling: Fire in the Hole	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My project is to see if ear candling actually sucks up ear wax. I believe that ear candling works because my ears get full of ear wax and my mom candles my ears and they feel normal again. I think ear candling works because it causes a heat vortex inside the cylinder of the candle, so it should work like a vacuum.</p> <p>Methods/Materials My mom, for safety reasons, candled the ears of two volunteers. I used a lighter to light the candles. I used a towel to cover their heads so they wouldn't get warm or hot. I used a bowl of water to put the candles out. I cut the candles open with scissors and found visible orange residue in them. I used a microscope to look at the slides I made with the orange residue and ear wax that I had pulled out of my ear with my finger. Then I compared them and recorded the results. To see if the candles would suck up anything I put powdered Kool-Aid in two vials. I put candles in each vial and lit them. I watched the vortex form. I also saw ash from the candles fall into the Kool-Aid powder. (That could have been my ear!) I put the candles out and cut them open. There was orange residue in them but no Kool-Aid powder.</p> <p>Results I found that the stuff in the candles was gray and bubbly under the microscope. The ear wax I pulled out of my ear was orange and jello-like under the microscope. I think the stuff that is orange in the candles is most likely candle wax, not ear wax. The candles from the Kool-Aid trial did not suck up any Kool-Aid powder but there was still orange residue in the candles. These candles had not been anywhere near an ear. The orange residue looked the same under the microscope as the others.</p> <p>Conclusions/Discussion The orange residue from the candles did not in any way resemble the actual ear wax. I found no ear wax in the candles. I have come to the conclusion that candling does not work. I will not have my ears candled again. It's not worth the risk even though it makes your ear feel better.</p>	
Summary Statement I wanted to prove that ear candling removes ear wax from the ear, but instead I proved that it does not work.	
Help Received My mom did the candling on the volunteers for safety reasons.	