



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Duncan A. Welch	Project Number J2126
Project Title Which Air Filter Removes the Most Particles from the Air?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The object is to determine if high efficiency air filters (HEPA filters) really catch more air particles than a standard air filter. I believed that the high efficiency would perform better than the standard air filter.</p> <p>Methods/Materials In my project I used two types of air filters, a High efficiency (HEPA) filter and a standard filter. I cut the two filters in half and measured their weight. I then taped the two different filters together with packing tape and place those newly constructed filters into to separate air vents in my home. After 30 days they were removed, taken apart, and weighed again for the results.</p> <p>Results The high efficiency filter from both vents did weigh more than the standard filter. However, the difference was not a lot. Since the difference was not that big, it makes me question if paying the price for the high efficiency is really worth the money.</p> <p>Conclusions/Discussion My conclusion is that while a high efficiency air filter does hold more air particles, I would have to advise people that unless you needed it for medical reasons, such as asthma and allergies, buying the standard filter is almost just as good and will save you some money.</p>	
Summary Statement High efficiency filters may work better but it may not be enough to pay the higher price for one.	
Help Received Mom helped with the look of the board. Dad helped put the filters in & take them out.	