



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Trevor C. Williams	Project Number 33025
Project Title Build vs. Buy a Computer	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to learn whether it was more cost efficient to build your own computer or to buy one. I believe computer companies are charging too much for their computers. Most people, when thinking about buying computers, do not think that they could build one by themselves. I chose to conduct this project to demonstrate the economics of how and why people should build their own computers.</p> <p>Methods/Materials I took the steps to build my own computer by ordering all the parts individually and then assembling the computer. My computer was built using a budget of \$250 because I wanted to show that you could actually build your own computer very cost efficiently. However, my build vs. buy analysis was based on a more expensive computer. First I went onto www.dell.com and found a \$1000 computer. Then, I went onto www.hp.com and did the same thing. I then looked at the parts of each brand computer and went online and found each individual part based on the parts from the brand computers. I added up the price of the individual parts of each computer and compared it to the brand computers.</p> <p>Results My research showed that when building your own computer you could save 20-30% off name brand computers.</p> <p>Conclusions/Discussion My data proves that my hypothesis was correct because when a computer company sells a computer they have to markup the price so the company can make a profit, therefore when you buy the parts on your own you do not have to pay the extra markup that the company charges.</p>	
Summary Statement Is it more economical to build your own computer versus buying one? I found, if you are looking for the most economical choice it is very smart and cost-efficient to build your own computer.	
Help Received My mom helped with some cutting and gluing on my display board.	