



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Trevor C. Williams	Project Number J2127
Project Title Build vs. Buy a Computer	
Abstract 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. 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. Results My research showed that when building your own computer you could save 20-30% off name brand computers. 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.	
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.	