



**CALIFORNIA STATE SCIENCE FAIR  
2008 PROJECT SUMMARY**

<b>Name(s)</b> <b>Brandon R. Sepulveda</b>	<b>Project Number</b>  28215
<b>Project Title</b> <b>Measuring the Burn Speed of Variable CPU and RAM</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My objective is to determine if the amount of Random Access Memory (RAM) and the Central Processing Unit (CPU) speed make a difference in the burn time of a Compact Disc (CD).</p> <p><b>Methods/Materials</b> My main materials are three computers; IBM ThinkPad (1GB, 1.6GHz) HP 9000 Laptop (2GB, 1.83GHz) and the HP ZV 5000 Laptop (1GB, 797MHz). I must also use 1 audio CD and 15 blank Compact Disc Recordables (CD-R's) and Roxio 7.5 which is the program I will use to burn the CD. First start roxio 7.5 and select burn speed of 8x. Insert Audio CD and copy to the hard drive, then insert blank CD-R and begin burning. Start stopwatch when burning begins and stop when the burning is finished. I will then repeat the same steps 4 times for each computer</p> <p><b>Results</b> My results show that the control of my project, the HP 9000 Laptop (2GB, 1.83GHz) burned the CD at an average time of 268.92 seconds. The IBM ThinkPad (1GB, 1.6GHz) burned the CD at an average time of 432.72 seconds. The last computer, the HP ZV 5000 Laptop (1GB, 797MHz) burned the CD at an average time of 213.92 seconds.</p> <p><b>Conclusions/Discussion</b> In conclusion my testing determined that a fast CPU speed and a large amount of RAM do not make a difference in the burn time of a CD. The reason for this conclusion is because the HP ZV 5000 Laptop (1GB, 797 MHz) burned 54.96 seconds faster than my control the HP 9000 Laptop (2GB, 1.83 GHz) and it burned 218.76 seconds faster than the IBM ThinkPad (1GB, 1.6GHz).</p>	
<b>Summary Statement</b> The focus of my project is to determine wheter a fast CPU speed and a large amount RAM make a difference in the burn time of CD.	
<b>Help Received</b> Mother helped put together board	