CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY

Name(s)
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Project Number
J0711

Project Title
The Effect of CD Drive Speed on Data Access Speed

Abstract

Objectives/Goals
To see if the speed of a CD drive effects the data access speed off of that CD drive.

Methods/Materials
Methods:
1.Put fastest CD drive into computer.
2.Put in the music CD
3.Open up iTunes.
4.Time how long it takes the CD drive to write the iTunes track to the hard drive.
5.Time the loading screen on game #1.
6.Repeat step #5 with game #2.
7.Time the installation of game #3 (it shouldn't have already been installed).
8. Uninstall game #3.
9.Repeat steps 2-8 with the other two CD drives.

Materials:
Workiing computer
Three game CDs
One music CD
Three different CD drives

Results
In my results, I concluded that the 52x drive was the fastest with 18 seconds for the song, five seconds for the first loading screen, nine seconds for the second loading screen,and nine seconds to install the game. The 32x drive was second and had 26 seconds for the song, nine seconds for the first loading screen, 25 seconds for the second loading screen, and one minute, 26 seconds to install the game. The 12x drive took last at a surprising 14 minute and 37 second time for uploading the song. It then took 18 seconds for the first loading screen, and 43 seconds for the second one. For some reason, it took less time than the 36x drive to install the game, coming in at one minute, 21 seconds.

Conclusions/Discussion
Overall, I learned that the speed of a CD drive really does effect the speed of the data access off of that CD in that CD drive. So, if yo uspend money on a really cheap CD drive, you will not get the performance of a more expensive drive.

Summary Statement
My project was designed to see if the speed of a CD drive effects the speed of which data is pulled off of that CD in that CD drive.

Help Received