



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Matthew I. Wunderlich	Project Number J0728
Project Title Which Is Faster: DSL or Cable?	
Objectives/Goals My objective was to find out which was a faster modem, DSL or Cable. My hypothesis was that DSL would be faster.	
Abstract	
Methods/Materials To perform my experiment, I tested the connection speed of several computers: eight (8) with DSL connections, two (2) with cable connections, and one (1) with a 56-K dial-up modem. I measured connection speed two ways: (1) Using an on-line modem speed tester (http://tech.msn.com/internet/speedtest.asp); and (2) Timing, using a stop watch, how long it takes to download a standard file (The Enron Special Investigation Report # 8.6 MB).	
Results Cable was the fastest, followed by DSL, and then, at a much slower speed, a 56-K modem. Cable was about twice as fast as DSL. DSL speed did not vary at different times of day, but cable speed varied by almost a factor of two. File downloads rates were about 8 times slower than connection speed. The type of Internet connection was much more important than computer speed or RAM.	
Conclusions/Discussion Cable was the fastest, although it varied by time of day. At its slowest, it was about the same speed as DSL. The effective speed of using the internet is slower than what providers say in their advertisements.	
Summary Statement I determined that cable modems are faster than DSL modems.	
Help Received Dad helped type report and discussed the tests with me; friends tested their computers and filled out the data form I gave them.	