Performance and scalability benchmarking

Devise and execute an experiment to measure each of the following:

- 1. How long does it take to send a round-trip request over the network...
 - To another computer on the local network?
 - To California?
 - To Europe?
 - To China?
- 2. How long does it take to negotiate a database connection?
- 3. How long does it take to access data...
 - In main memory?
 - In a file on disk?
 - In the database's memory (buffer cache)?
 - In the database on disk using the primary key?
 - In the CPU hardware cache?