The OSI Layers

Physical: Describes the transmission of raw bits in terms of mechanical and electrical issues.

Data Link: Describes how a shared communication channel can be accessed, and how a *data frame* (= series of bits) can be reliably transmitted.

Network: Describes how routing is to be done. Mostly needed in subnets.

Transport: The hardest one: generally offers connection-oriented as well as connectionless services, and varying degrees of reliability. This layer provides the actual network interface to *applications.*

Session: The dumbest one (and ill-defined): tells how applications can set up "long-lasting" communications.

Presentation: Describes everything that is needed to exchange data in a platform-independent way. Example: think of big-endian vs little-endian.

Application: Contains the stuff that users see: e-mail, remote logins, the Web's exchange protocol, etc.