

Here’s the **OSI model with all 7 layers** and example protocols for each:

OSI Model Layers & Protocol Examples

Layer	Name	Description	Common Protocols / Standards
7	Application	Interfaces with user applications, defines how apps exchange data.	HTTP, HTTPS, FTP, SFTP, SMTP, IMAP, POP3, DNS, SSH, Telnet, SNMP, LDAP, NTP, MQTT, AMQP, CoAP, WebSocket, gRPC
6	Presentation	Data translation, encryption, compression.	SSL/TLS, JPEG, GIF, PNG, MPEG, ASCII, EBCDIC
5	Session	Manages sessions, dialog control, and synchronization.	NetBIOS, PPTP, RPC, SMB, SQL Session Layer
4	Transport	Reliable or unreliable delivery, error correction, segmentation.	TCP, UDP, SCTP, DCCP, QUIC, RDP
3	Network	Logical addressing and routing.	IP (IPv4/IPv6), ICMP, IGMP, IPsec, OSPF, BGP, RIP
2	Data Link	Physical addressing (MAC), error detection.	Ethernet (IEEE 802.3), PPP, Frame Relay, ARP, L2TP, VLAN (802.1Q)
1	Physical	Transmission of raw bits over a medium.	Cables (Ethernet, Fiber), Wi-Fi (802.11), Bluetooth, DSL, USB, SONET

 Memory Aid for OSI Layer Order

"All People Seem To Need Data Processing" (Application → Presentation → Session → Transport → Network → Data Link → Physical)

If you want, I can also make you a **Layer 4 vs Layer 7 protocols comparison diagram** so you can quickly tell which ones belong where — useful for networking interviews.