

# OSI Model Summary (Easy to Remember)

| Layer No. | Layer Name   | Primary Function                                | Data Unit | Devices/Examples                   | Key Protocols / Concepts               |
|-----------|--------------|---|-----------|------------------------------------|--|
| 7         | Application  | Interface between user and network applications | Data      | Computers, browsers, email clients | HTTP, HTTPS, FTP, DNS, SMTP, POP3      |
| 6         | Presentation | Translates, compresses, encrypts data           | Data      | -                                  | SSL/TLS, MIME, JPEG, MP3, ASCII        |
| 5         | Session      | Establishes, maintains, terminates sessions     | Session   | -                                  | RPC, NetBIOS, PPTP, Session management |
| 4         | Transport    | End-to-end delivery, reliability, segmentation  | Segment   | Gateways, firewalls                | TCP, UDP, Port numbers, Flow control   |
| 3         | Network      | Routing, addressing, path selection             | Packet    | Routers                            | IP (v4/v6), ICMP, ARP, RARP, OSPF      |
| 2         | Data Link    | Error detection, framing between nodes          | Frame     | Switches, bridges                  | Ethernet, PPP, HDLC, MAC, ARP          |
| 1         | Physical     | Transmits raw bits via physical medium          | Bits      | Hubs, cables, NICs                 | Wi-Fi, Fiber, DSL, Bluetooth, RS-232   |

**Mnemonics to Remember Layers:**  
Top → Bottom: *"All People Seem To Need Data Processing"*  
Bottom → Top: *"Please Do Not Throw Sausage Pizza Away"*