The Open Systems Interconnection (OSI) Reference Model
Developed by the International Organization for Standardization in 1984, updated in 1994
ISO/IEC 7498-1:1994(E)
ITU-T Rec. X.200 (1994 E)

Layer	Name	What Happens	Protocol Data Unit (PDU)	Sample Protocols	Associated Devices	TCP/IP Stack Comparison	Upper or Lower
7	Application	The user (host) connects to the Internet via an application, such as a browser or mail client.	Data	HTTP SMTP SSH DNS	Host devices	Application	Upper Layers
6	Presentation	Data is formatted, compressed, encrypted or otherwise manipulated to establish a common syntax.	Data	JPEG MP3 GIF SSL TLS	n/a		
5	Session	Connection between devices is negotiated and managed. Logical port numbers are assigned.	Data	SOCKS L2TP PPTP NETBIOS	n/a		
4	Transport	Delivery of data, either "connection-less" or "connection-oriented". Functions include flow control, error checking, and segmentation.	Segment	TCP UDP	n/a	Transport	Lower Layers
3	Network	Routing of data between networks. Functions include fragmentation, quality of service, and error notification.	Packet	IP ICMP OSPF RIP	Routers	Internet	
2	Data Link	Delivery of data to devices in the same network. Matches IP address to MAC addresses. Often split into two parts, media access control and logical link control. Functions include traffic synchronization and flow control.	Frame	ARP Ethernet 802.11 Bluetooth PPP	Switches	Network Access	
1	Physical	Transmission of raw data between devices. Often refererred to as "bits on the wire".	Bits		Cables NICs Modems		

References:

https://blogs.cisco.com/cloud/an-osi-model-for-cloud
https://www.iso.org/standard/20269.html
http://www.itu.int/rec/T-REC-X.200-199407-I
http://www.ieee802.org/
https://www.lifewire.com/layers-of-the-osi-model-illustrated-818017

Marcelle Lee, March 2018, marcellelee.github.io