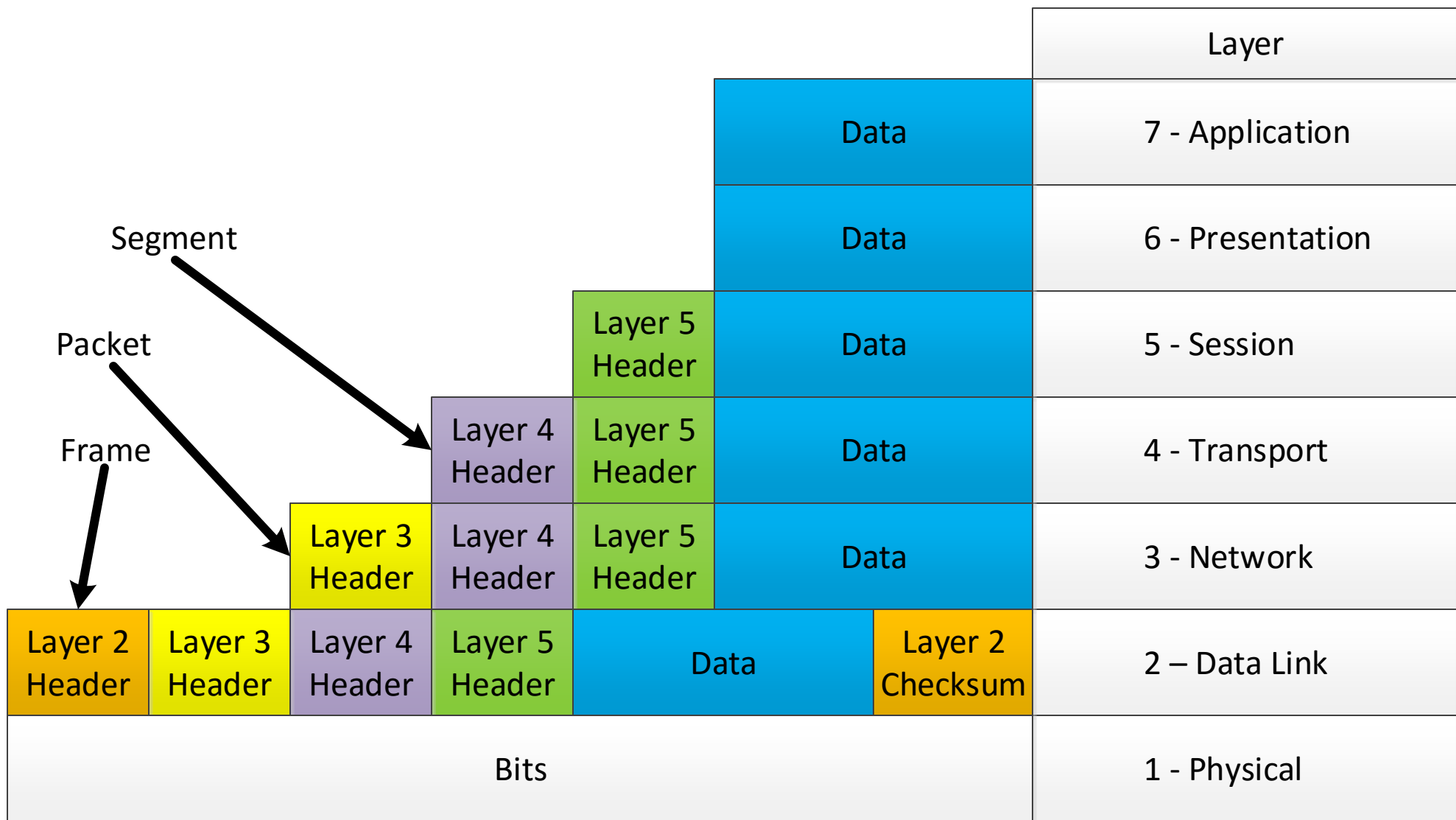| Layer	Description	Protocols / Function
7 - Application	Software that is requesting or receiving a network communication	Web browser, e-mail client, FTP client, etc.
6 - Presentation	Responsible for translating between software encoding and human readable format	DOC, JPG, GIF, XLS, WRI, etc.
5 - Session	Establishes a logical connection between software endpoints	FTP (21), SSH (22), HTTP (80), HTTPS (443), NTP (123)
4 - Transport	Segments traffic for reliable or best effort transmission between hosts.	TCP, UDP, SPX
3 - Network	Configures packets for intra-subnet and inter-subnet communications	IPv4, IPv6 , IPX
2 – Data Link / LLC / MAC	Applies physical addresses to the data creating a switchable frame.	MAC addresses
1 - Physical	Converts the data into the format appropriate for the associated media.	Hubs, fiber optics, copper, electricity, RF

						Layer
					Data		7 - Application
					Data		6 - Presentation
				Layer 5 Header	Data		5 - Session
			Layer 4 Header	Layer 5 Header	Data		4 - Transport
		Layer 3 Header	Layer 4 Header	Layer 5 Header	Data		3 - Network
	Layer 2 Header	Layer 3 Header	Layer 4 Header	Layer 5 Header	Data	Layer 2 Checksum	2 – Data Link
	Bits						1 - Physical

Segment

Packet

Frame

Layer	Description	Protocols / Function
Application	Software that is requesting or receiving a network communication	Web browser, e-mail client, FTP client, etc.
Application	Responsible for translating between software encoding and human readable format	DOC, JPG, GIF, XLS, WRI, etc.
Application	Establishes a logical connection between software endpoints	FTP (21), SSH (22), HTTP (80), HTTPS (443), NTP (123)
Transport	Segments traffic for reliable or best effort transmission between hosts.	TCP, UDP, SPX
Internet	Configures packets for intra-subnet and inter-subnet communications	IPv4, IPv6 , IPX
Physical	Applies physical addresses to the data creating a switchable frame.	MAC addresses
Physical	Converts the data into the format appropriate for the associated media.	Hubs, fiber optics, copper, electricity, RF