Exercise 1 (Network Components)

For the given network components, mark the corresponding layers of the **hybrid reference model**.

In other words: Which layers (functionalities) do the single components implement?

	Hybrid reference model layer				
	1	2	3	4	5
Component 1					
Component 2					
Component 3					
Component 4					
Component 5					
Component 6					
Component 7					
Component 8					
Component 9					
Component 10					
Component 11					
Component 12					
Component 13					
Component 14					
Component 15					
Component 16					
Component 17					
Component 18					
Component 19					
Component 20					
Component 21					
Component 22					

Exercise 2 (Warm-up...)

For the network devices, protocols, transmission units, line codes and addressing schemes in the table, mark the corresponding layer of the **hybrid reference model**.

	Hybrid reference model layer				
	1	2	3	4	5
4B5B					
Address Resolution Protocol (ARP)					
Bridge					
Congestion control					
CSMA/CA and CSMA/CD					
Cyclic Redundancy Check (CRC)					
Distance vector routing protocols					
Dynamic Host Configuration Protocol (DHCP)					
Ethernet					
File Transfer Protocol (FTP)					
Flow control					
Gateway					
Hub					
Hypertext Transfer Protocol (HTTP)					
ICMP					
Internet Protocol (IP)					
Link state routing protocols					
Logical addresses					
Manchester-Code					
Media access control					
Modem					
Secure Shell (SSH)					
Multiport Bridge					
Non-Return to Zero					
Open Shortest Path First (OSPF)					
Physical addresses					
Port numbers					
Reliable end-to-end data connection					
Repeater					
Router					
Routing Information Protocol (RIP)					
Spanning Tree Protocol (STP)					
Switch					
Telnet					
Transmission Control Protocol (TCP)					
User Datagram Protocol (UDP)					
Wireless LAN					