## 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**.

	Hybr	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					1
Transmission Control Protocol (TCP)					
User Datagram Protocol (UDP)					
Wireless LAN					