1. Network**:** Is two or more devices connected through **links*.***
2. The term **telecommunication,**which includes telephony, telegraphy, and television, means communication at a distance.
3. **Data communications** are the exchange of data between two devices via some form of transmission medium such as a wire cable.
4. Network computer devices that originate, route and terminate the data are called network **nodes**.
5. **Delivery** Data must be received by the intended device or user and only by that device or user.
6. **Accuracy** The system must deliver the data accurately
7. **Timeliness** The system must deliver data in a timely manner.
8. **Jitter** It is the uneven delay in the delivery of audio or video packets.
9. The **sender** is the device that sends the data message.
10. The **receiver** is the device that receives the message.
11. The **transmission medium** is the physical path by which a message travels from sender to receiver.
12. A **protocol** is a set of rules that govern data communications.
13. In **simplex mode**, the communication is unidirectional, as on a one-way street. Only one of the two devices on a link can transmit; the other can only receive
14. In **half-duplex mode**, each station can both transmit and receive, but not at the same time.
15. In **full-duplex mode** both stations can transmit and receive simultaneously.
16. **A link** is a communications pathway that transfers data from one device to another.
17. In **point-to-point connection** the entire capacity of the link is reserved for transmission between those two devices.
18. In **a multipoint environment**, the capacity of the channel is shared.
19. **Security Issues** One of the major drawbacks of computer networks.
20. **NIC**: (**Network Interface Card**) Is used to enable a network device to connect to a network.
21. This **MAC** Media Access Control address is used to deliver Ethernet Frames (packets) to a computer.
22. **Repeater** Is used to **regenerate** the signals, when they travel over a longer distance.
23. A **repeater** connects two or more cable segments and retransmits any incoming signal to all other segments.
24. A repeater is used to regenerate the signals, when they travel over a longer distance it operates at Layer **1(physical layers).**
25. A **hub** is a central network device that connects **network nodes** Such as workstation and servers in a **star topology**.
26. A **bridge** is a network device that sends information between **two** local area network that uses the **same** protocol. A **bridge** operates at **Layer 2 (data link layer).**
27. **Routers** perform the traffic directing functions on the Internet. operates at **Layer 3(network layer).**
28. **Brouter** functions as a filter that lets some data into the local network, while redirecting unrecognized data to another network.

Is used on networks that operate with **several different protocols**.

1. Without **gateways**, you couldn't be able to access the internet, communicate and send data back and forth.
2. **Gateways** are [network protocol](https://www.lifewire.com/definition-of-protocol-network-817949) converters. Often the two networks that a **gateway** joins use **different base protocols.**
3. **gateways** can operate at **any level of the**[**OSI model**](https://www.lifewire.com/layers-of-the-osi-model-illustrated-818017).
4. **switch** is a [computer networking device](https://en.wikipedia.org/wiki/Computer_networking_device) that connects devices together on a [computer network](https://en.wikipedia.org/wiki/Computer_network), operates at **Layer 2 (data link layer).**
5. A network **switch** is a multiport [network bridge](https://en.wikipedia.org/wiki/Network_bridge) that uses [hardware addresses](https://en.wikipedia.org/wiki/Hardware_address) to process and forward data, operates at **Layer 2 (data link layer).**