

MEETING 3

TYPE OF COMPUTER NETWORK

A. THE GOAL OF THE LESSON

In this module you will know how to use verb phrases in sentences, able to write sentences by using verb phrase, able to understand reading and listening text about computer networking.

B. DESCRIPTION OF MATERIAL

1. verb phrase

It is called a verb phrase when it has a helping verb before the primary verb. It sometimes consist of a head of verb, compliment, object modifier as its dependent:

Example of helping verbs are:

Form of to be : am , is, are, was , were

Form of to have: have, has, had

Form of to do : do, does, did

Sentences	Helping verbs	Main verbs
The students are fixing the computers	Are	Fixing
I have installed new software	Have	installed
I dont have to back up the data	Dont	Have
Do you undestand the coding ?	Do	Undestand
The student has finished his coding homework	Has	Finished
Are you going to take another course	Are	Going
I can't upgrade my computer storage	Can't	upgrade
Linda is checking the network problem	Is	Checking
They have turned off the computer power	Have	Turned off
He might need to buy more computers	Might	Need
I will start my online busiess soon	Will	Start
I am planning to take more computer course	Am	Planning
He is scanning the virus	Is	scanning

C. EXERCISES**1. Structure****1.1 Underline the helping verb and main verbs in sentences below!.**

1. to choose course, you must submit this form at the academic
2. Computers can provide us fat information.
3. A network is built by two or more computers which connect each other
4. Separate network are set up a public network.
5. You must install software to be able to use the computer
6. I dont have much space in my external storage device.
7. They are going to connect many computer in networks system
8. Everybody is using search engine to get the latest news, job, trend etc.
9. You can install new program in this computer.
10. Can you make account on internet?
11. What do we need to build a wireless LAN in our office?
12. Are those computers connected together a WAN?
13. We dont need to make more information about how to build WAN.
14. Don't forget to plug the cord on the socket.
15. CPU can operate all basic operations on the data
16. you can use fiber optic for Computer networks.
17. You might have to buy several personal computer to set up personal area network (PAN)
18. The processor inside the motherboard can process all the instructions that users need.

2. Speaking

2.1 conversation; practice the dialog with your partner below:

2.3 after discussing the questions above, record your answer with sound recording in your mobile phone.



<http://idrona.in/what-is-checkpoint-firewall-training/>

1. Do you agree if Networking is very important in modern life? Why?
2. Do you agree if there is no networking technology there is not online technology?
why
3. How many type of networking do you know? what are?
4. What do you think the advantages of networking in education field?
5. Is education base on online learning effective? Why or why not?
6. Can you name term of education you can get online?
7. Think of the advantages of networking in term of business?
8. Can you name popular online networking business?
9. Are there any online entertainment? If yes what are?
10. Can you think of online public services?

3. Reading

3.1 Read the article below with loud voice and record your voice by using sound recording with your phone!

3.2 underline the verb phrase

Types of Computer Networks



<https://www.bing.com/images/search?view=detailV2&ccid=7Go%2bmy1T&id=E110187E00E00D5DD91031217D1681C85C906DF9&thid=OIP.7Go-my1Tto1FCzYB2q6y-QHaF5&mediaurl=http%3a%2f%2fwww.conceptdraw.com%2fHow-To-Guide%2fpicture%2fnetwork-icon%2fComputer-Network-Diagrams-Wireless-Router-Network-Diagram.png&expf=725&expw=910&q=computer+network&simid=608039059720832889&selectedIndex=7&ajaxhist=0>

A computer network is **established** when a series of computers is connected to each other for communication. The **purpose** of this connection or network is to share the **resources** within the connected units.

Computer Network Technologies

Computer networks are established using **different** software and hardware technologies. Computer networks can be established using different hardware structures such as Ethernet, optical fiber or merely using wireless connections. Ethernet network is the most common and widely used technology to establish any computer network. The network based on the use of Ethernet network is **formed** by physically connecting the individual

computer units to each other **through** wiring. **Various** types of devices used for the Ethernet network are switches, bridges, routers and hubs mostly. Ethernet network can be started with the help of **employing** different types of cables such as twisted pair wire, coaxial cable and fiber optics mostly.

Wireless Networks

Wireless networks are established without physical **welding** or wiring techniques involved. Wireless technology is based on use of radio and infrared signals. However if you look at the wireless technologies, there are many wireless communication technologies **available**. Wireless communication can be established through communication satellites, **terrestrial** microwaves, cellular systems, wireless LANs and Bluetooth. The **recent** development and ease of using wireless technologies have almost **surpassed** the use of Ethernet. However still the advantages and economy associated with the physical networks can not be neglected fully. Networks can be made up using many types of physical **interconnections** usually referred to as the network topologies. Network topologies can be of many different types depending on the need of the network to be constituted.

Types of Computer Networks

Computer networks are of many different types such as Personal area network (PAN), Local area network (LAN), Metropolitan area network (MAN), Campus area network (CAN), Storage area network (SAN) and Wide Area Network (WAN). The computer networks which are designed for personal use are known as PAN or personal area networks. A PAN network is typically on an area of 20 to 30 feet. When we need the facility of network to be used on a really small commercial area or in small computer labs, we prefer LAN. LANs are capable of higher data transfer within small geographical area. LAN usually operates at a speed of Giga Bit. CAN is larger network than LAN. CAN is usually established in university campus to link over a connection among different computer labs, library, registration office and different academic units. MAN is usually a middle way to LAN and WAN. It is established by the various interconnections between WAN and LAN. Man is **spread** over an area of around 5 to almost 50 km. MAN has many applications , it is most commonly used in banks, online **reservation** systems and in many military based services. If we make a complex network of many LANs we will end up making a wide area network. Wide area network is commonly known as internet. The applications and availability of internet can be now seen in every building of commercial or other nature.

All of the above **mentioned** network connections can be made up using wireless or wired communication. Computer networks uses are: First and the foremost advantage are the file and data sharing. Other than that the other purposes that it serves are increased storage of data, more data sharing and cost **efficiency**. The ease of establishing networks allows you to download **complex** and expensive software in no time and with **convenience**. However initially when you make up a computer network it requires an extensive network of wires. Establishing a network earlier would involve a hefty budget in order to make a backup main file server. Thus networks have removed the troubles of communication thus narrowing the communication gap throughout the world. (Adopted from <http://freewimaxinfo.com/computer-networks-types.html>)

3.3 Read the article and find the answer below:

1. What is a computer network?
2. What is the purpose of computer network?
3. It needs hardware technology to set up computer network, what hardware technology is commonly used?
4. What is the function of Ethernet network?
5. What devices are used for the Ethernet network?
6. What types of cables are used in Ethernet network?
7. What are wireless networks?
8. How many wireless communication technologies are mentioned in the text? What are?
9. How can wireless communication set up?
10. What are the types of computer network?
11. What type of network is usually established in campus?
12. What kind of network that is good for small business area?
13. What kind of computer networks that is good for area of about 40 km?
14. What institutions usually use Metropolitan Area Network?
15. What are the uses of computer network?

3.4 Mark Incorrect and Correct the statement below, for false statement give true answer.

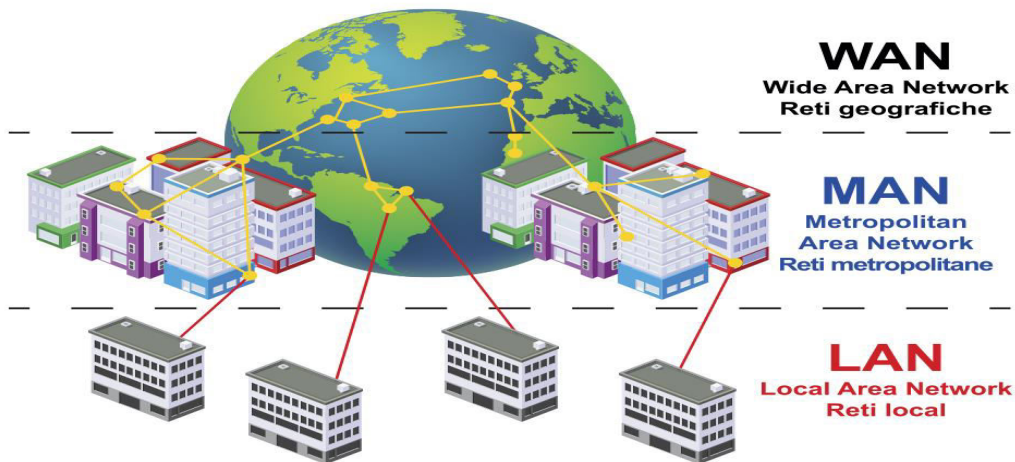
- 1) It is possible to use Same hardware to build up computer networks
☐ correct
☐ incorrect
- 2) Cable Twisted pair wire is the only cable that used in Ethernet network.
☐ correct
☐ incorrect
- 3) The physical networks is not used anymore.
☐ correct
☐ incorrect
- 4) Metropolitan Area network is usually on an area of 20 to 30 feet.
☐ correct
☐ incorrect
- 5) Local Area Networks has bigger data transfer compare to big region.
☐ correct
☐ incorrect
- 6) LAN is smaller network than CAN
☐ correct
☐ incorrect
- 7) Wire connection is not longer used in offices
☐ correct
☐ incorrect
- 8) Computer network design for area in big city call personal area network.
☐ correct
☐ incorrect
- 9) The technology of wireless is depended on the signal of radio and infrared.
☐ correct
☐ incorrect

- 10) Network topologies only use in wire computer networking.
☐ correct
☐ incorrect
- 11) MAN is generally used in stores library, schools and government service system .
☐ correct
☐ incorrect
- 12) A WAN can be set up three, four or more local area network.
☐ correct
☐ incorrect
- 13) Through network connection, users are possible to download complicated and high cost software at anytime.
☐ correct
☐ incorrect
- 14) Network topologies is made up using many type physical interconnection.
☐ correct
☐ incorrect
- 15) Internet is also commonly known as wide area network
☐ correct
☐ incorrect
- 16) Building up computer network is Used to be very expensive.
☐ correct
☐ incorrect
- 17) Computer Networks solve the communication problem throughout the world.
☐ correct
☐ incorrect

3.5 Match the Term and the statement

- A. Computer network
- B. Ethernet network cable
- C. Ethernet network
- D. CAN
- E. Network technology
- F. PAN
- G. MAN

1. The most popular and highly apply technology to make computer network.
2. It is set up when several computers are connected to one and another for communication
3. Fiber optics, coaxial cable and strained cable
4. Computer physical interconnections.
5. A type computer network that is built personally.
6. To connect different places such as library, computer labs office registration in campus area.
7. It is commonly used to connect area that is about 5 to approximate 50 km.



<http://straighttechnologygroup.com/index.php/solutions/>

4. Listening

4.1 Listen to Sultan Issa Hampton talking about Computer network.

Mark true for true of false statement for false statements give true statement!

- 1) To connect many devices in computer is called computer network
☐ True
☐ False
- 2) The function of the computer network is for sending and receiving data..
☐ True
☐ False
- 3) Computer networks doesn't need devices that is function to help the communication between devices.
☐ True
☐ False
- 4) Computer network devices such as router, switch hub and bridge are for helping communication between different devices.
☐ True
☐ False
- 5) Topologies are layout pattern that device connect each other
☐ True
☐ False
- 6) The speaker mentioned only four type of topological.
☐ True
☐ False
- 7) Open system interconnection is also called OSI
☐ True
☐ False

5. Writing

5.1 Translate the sentences below in English !

- 1) Jaringan komputer dapat di buat jika ada beberapa unit komputer, ada kabel penghubung serta semua alat pendukung yang dibutuhkan.

- 2) Jaringan komputer dapat di bentuk dengan menggunakan teknologi perangkat keras dan perangkat lunak.

- 3) Teknologi nirkabel merupakan teknologi yang memanfaatkan sinyal infrared.

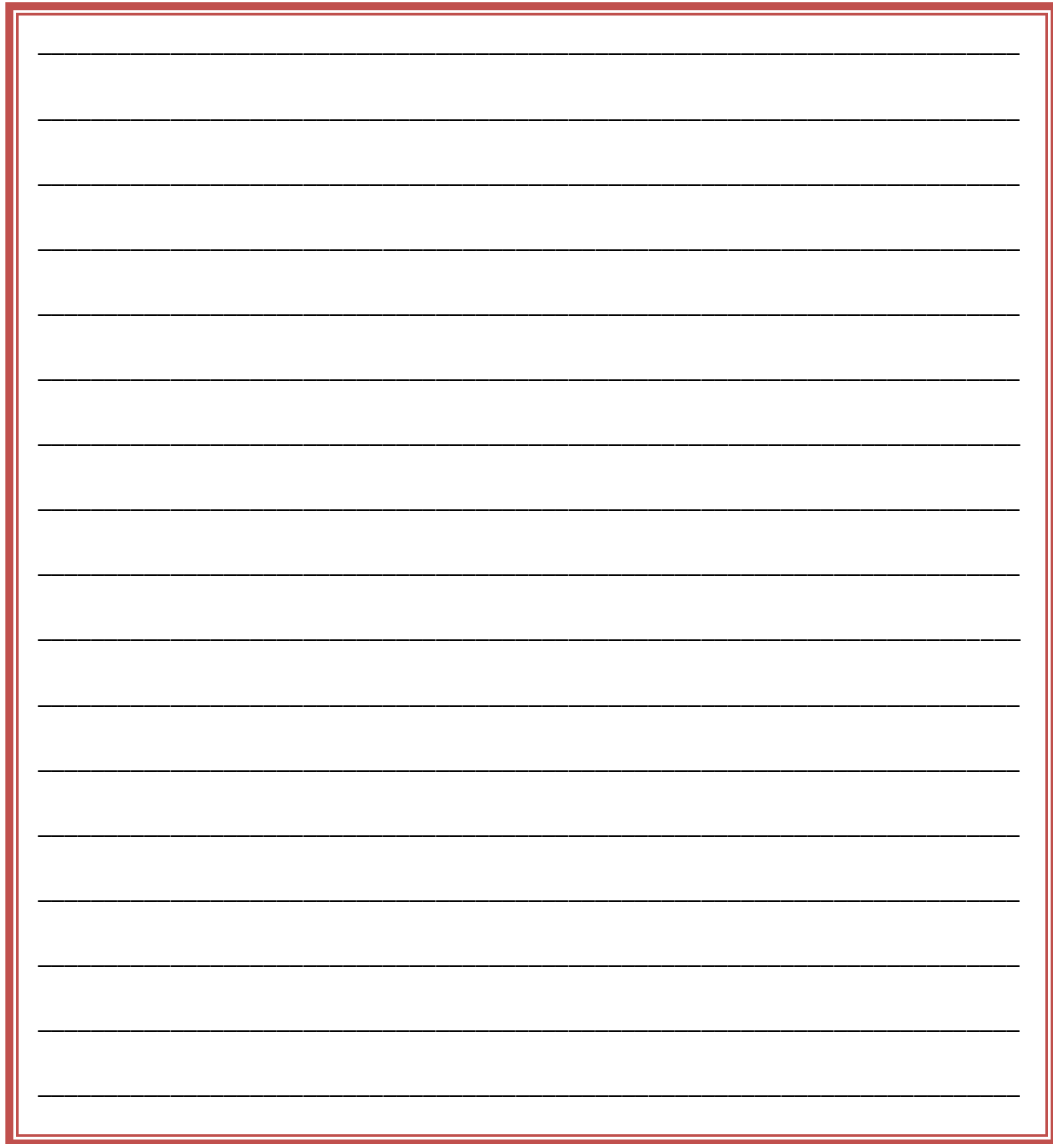
- 4) Komunikasi nirkabel dapat dibangun dengan menggunakan sambungan satellite, gelombang mikro terrestrial, system seluler, nirkabel LAN dan Bluetooth

- 5) Penggunaan teknologi nirkabel saat ini sudah hampir menggantikan teknologi jaringan kabel.

- 6) Jaringan komputer dapat dibangun dengan menghubungkan beberapa jenis perangkat keras yang saling berhubungan dengan berbagai macam model yang sering di sebut topologi.

- 7) Membangun jaringan yang kompleks yang terdiri dari beberapa lokal arean network pada akhirnya terbentuk wide area network.

5.2 Write sentences by using verb phrase such as made of, Fill in , look for, think of, consist of, plug into, turn off, sign up, log on etc

A large rectangular box with a red border, containing 20 horizontal lines for writing sentences. The lines are evenly spaced and extend across the width of the box.

6. key words**7.1 find the synonym and translate them**

English	Synonym	Indonesian
established, purpose, resources, different, formed, through, Various, employing, welding, available, terrestrial, recent, surpassed, interconnections, spread, reservation, mentioned, efficiency, complex, convenience		

D. BIBLIOGRAPHY

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