4. READ & COMPLETE

Read this webpage.



What is a network?

A network is a group of linked computers or other devices. There are two kinds of networks that are in common use. In Local Area Networks (LANs) computers are close together - perhaps in the same building. They might be connected directly to each other by cable or through a wireless network such as wi-fi. In contrast, Wide Area Networks (WANs) cover a larger area and usually use telephone lines or a mobile phone to connect. A LAN can be a part of a WAN.

There are different types of wired networks. One is a star system. In this, each computer (or other device) is connected to a central server. Another type is a ring system. This is a network that has each computer linked to two others. In a bus system there is a central cable which is called a bus, and each computer is linked to it. Some large networks use a mesh. In this, each computer is linked to several others. This has one big advantage: if one connection breaks, the data can use other connections. Therefore, it is difficult to break a mesh network.

Many networks work on a client-server system. In this, servers are special computers that store data, serve websites and have other similar functions. Generally, a client program will ask the server for data and the server will then send the data back to the client. For example, when you type a web address into a browser, the browser (the client) will ask the server for a web page, which then sends the web page back.

Source: English for Information Technology 2 (Pearson)

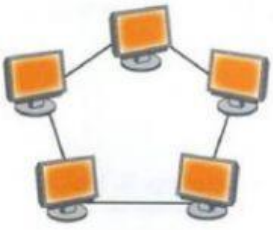
A. Match the paragraphs (1-3) to these points.

a) types of software and device on networks _____

b) the main types of networks _____

c) the arrangements of computers in networks _____

B. Label these types of network based on the reading.



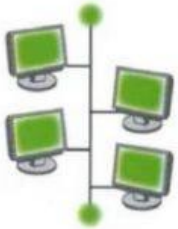
1. _____



2. _____



3. _____



4. _____

C. Here is a list of instructions for someone wanting to set up a small network. Put the instructions in the correct order from 1 to 10.

	a Make wiring and layout plans for your network.
	b Hook up the network cables by connecting everything to the hub.
	c Check that each computer has an IP address and give it a name.
	d If you're installing a small network, twisted pair will be adequate. However, in order to span greater distances and to minimize magnetic and electrical interference use fibre optic cable.
	e Decide on the type of network you want to install. To enable you to transfer large amounts of data, choose Fast Ethernet (100BaseT).
	f Install network adapters in the computers.
	g Add an internet gateway to your network to set up a shared internet connection.
	h Install driver software for the adapter driver and install client software to share printers and files.
	i Check which protocols are installed and add any other protocols you require.
	j Get the hardware you need: an Ethernet adapter card for each computer that doesn't have an Ethernet port, a hub if you've got more than two computers, cables and wall jacks.

D. GROUP WORK. Together with your partners choose one these topics and prepare a presentation (PPT, Prezi, Canva, other) to talk about it. Your teacher may also assign one topic for your group.

How does it work? What is it for? What do you need to make it work? Where/How is it applied in ordinary living?

1. Wireless Sensor Network(WSN)
2. TCP/IP Protocol
3. IPv4/IPv6
4. Network Simulator(NS)
5. Network Security
6. OSI Model