# MINISTRY OF EDUCATION AJMAN EDUCATIONAL ZONE ALHIKMAH PRIVATE SCHOOL



Oesign and Technology

Grade (8)

Term 2 Unit 3







# Q/ What is the computer?

The computer is an electronic device that processes data.

## Q/ What is the memory?

- -Memory is an essential hardware component in a computer where data is sorted to be retrieved when needed.
- -There are two kinds of memory in a computer:
- 1- Secondary memory: is known as storage and is used to store files when they are not needed by the processors. Like (SD cards and USB).
- 2- Primary memory: is a short-term memory that is needed to execute any program.

### Q/ What is a Microprocessor?

A microprocessor is an integrated circuit that is used to run the tasks involved in computer processing, its also known as CPU.

#### Q/ What is a microcontroller?

A microcontroller is a minicomputer or a computer on a single chip designed to perform specific task.

#### Note:

The input will determine the output in devices such as ( keyboards, mice, washing machines, pen drives, remotes, microwaves, cars, bikes, telephones, mobiles and watches ).

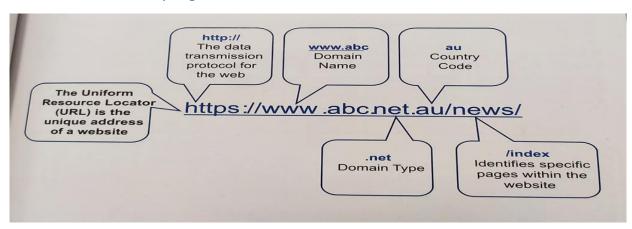
## **Networks and the internet**

- -A **network** is a connection of two or more computers connected to share data.
- -The **internet** is a system of interconnected networks.

#### Note:

Networks are important in today's lifestyle on a personal, work and government level.

-A web browser is a program used to view the information on the internet.



# Q/ what is the computer protocols?

The computer protocols are rules about how information is sent between computers.

## **Notes:**

- -Always ensure you have strong passwords.
- -Do not use the same password for every device.
- -Keep passwords secret.
- -The malware types are:

virus	a piece of code which can copy itself and most times, have a bad effect on your computer, such as corrupting the system or destroying data
spyware	an unwanted software that gets into your computing device, stealing your internet usage data and sensitive information; you do not always know this is happening
worm	a standalone malware computer program that copies itself to spread to other computers; on most occasions, it uses a computer network to spread itself, relying on poor security on the target computer to gain access
ransomware	is installed covertly on a device and threatens to damage the computer unless a sum of money is paid
phishing	is when a bad individual or group of individuals scam users; they do this by sending e-mails or creating web pages that are designed to get a person's online bank, credit card, or other login information

#### **Notes:**

- -When data is stored and processed by a computing device is called **information**.
- -A variable is a small piece of computer memory used for storing data.
- -If condition is true then do something.
- -conditional statements perform different actions based on their Boolean conditions ( True/False ).



#### True or False

	Statement	True/False
1	A computer is an electronic device that processes data.	True
2	A supercomputer can be found in a watch or phone.	False
3	The central processing unit is made up of many microchips that are located on the motherboard.	True
4	Memory is not important in a computer.	False
5	Computing systems and devices have input, control and output units.	True

