

DEPARTMENT OF EDUCATION- NATIONAL CAPITAL REGION
SCHOOLS DIVISION OF PASAY CITY

MODULE IN TLE 9 (COMPUTER SYSTEM SERVICING)
First Grading / Week 1 / Day 4

Name of Student: _____
Name of Teacher: _____

Grade and Section: _____

Objectives:

Identify and obtain materials necessary to complete the work in accordance with established procedure and system requirements.

- Identify and familiarize with various computer components and devices in assembling computer hardware.**


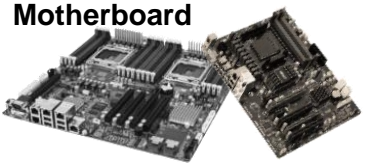
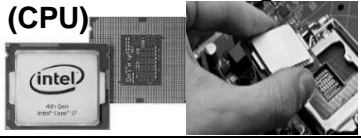
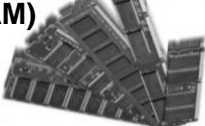

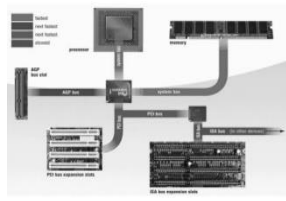
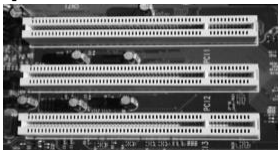


WHAT TO KNOW

Lesson: Computer Components and Devices



Taking this lesson is quite difficult if you are not familiar with the basic and simple things that computer has. It is very important to know the different devices attached to the computer system and each device plays an important role, without each other computer system will not work properly. The physical, touchable, electronic, and mechanical parts of a computer are called the hardware which is composed of different devices attached to the computer. Below are the basic sets of devices found in most Personal Computers.






System Unit 	The System Unit also known as a "tower" or "chassis" is a box-like case that houses the motherboard, processor, memory, and other internal components of the computer. All other computer system devices, such as monitor, keyboard, and mouse are also linked directly into the system unit.
Motherboard 	A Motherboard, sometimes called mainboard or system board, is one of the most essential parts of a computer system. It holds together many of the crucial components of a computer, including the processor, memory chips, expansion cards and connectors for input and output devices.
Central Processing Unit (CPU) 	The CPU is the processor and known as the brain of the computer. It controls and manipulates data to produce information. It is also responsible for interpreting and executing most of the commands from the computer.
Random Access Memory (RAM) 	RAM (known as read write memory/main memory/primary memory) is a computer memory that connects directly to the CPU. RAM is a volatile storage since it loses its contents when the computer power is turned off.
Read-Only Memory (ROM) 	ROM refers to memory chips storing permanent data and instructions. ROM is usually nonvolatile; The contents are not lost when the computer is turned off.
Buses 	Bus allows the various devices inside and attached to the system unit to communicate with each other. It enables data flow between the various system components and peripheral devices. <i>Two types of Bus:</i> System Bus - is part of the motherboard and connects the CPU to main memory. Expansion Bus - allows the CPU to communicate with peripheral devices.
Expansion Slot 	An Expansion Slot is a socket on the motherboard that can hold an adapter card.

REFERENCES FOR FURTHER ENHANCEMENT

- Book: PC Assembly and Troubleshooting, page 10
- Book: Understanding PC Hardware, page 51
- Book: TLE ICT Computer Hardware Servicing 9, page 43
- YouTube: <https://www.youtube.com/watch?v=xSj0C9MCNNk>

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Adapter Card 	An adapter card, also called expansion card, is a circuit board that enhances functions of a component of the system unit and/or provides connections to peripherals, and it can also add devices or capabilities to the computer. Examples: MODEM, Sound Card, Video Card/Graphics Card, Network Card
Power Supply Unit (PSU) 	The Power Supply is an electronic device that supplies electric energy to the computer; It converts the wall outlet AC power into low-voltage DC power. Built into the power supply is a fan that keeps the power supply cool.
Hard Disk Drive 	A Hard Disk Drive (sometimes abbreviated as hard drive, HD, or HDD) is a non-volatile memory that permanently stores and retrieves data on a computer. All computers have a hard drive installed in them, which is used to store files for the operating system and application software.
Optical Disk Drive 	An Optical Disc Drive (ODD) is a disc drive that uses laser technology or electromagnetic waves within the visible light spectrum as part of the process of reading and writing data to or from optical discs. Three types of Optical Drives: Compact Disc (CD), Digital Versatile Disc (DVD) and Blu-ray Disc (BD)
Digital Versatile Disk 	A DVD is a type of optical media used for storing digital data. It is the same size as a CD, but has a larger storage capacity.



EXERCISE 1: REVEAL THE PARTS

WHAT TO PROCESS


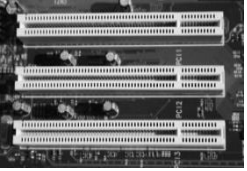



Directions: In the puzzle below, look for the fifteen (15) hidden computer devices in all direction including backward. Write your answers on the space provided.

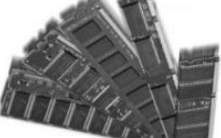




- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____
- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____

R	E	M	D	R	A	O	B	R	E	H	T	O	M	R
A	P	O	W	E	R	S	U	P	P	L	Y	U	Z	E
B	M	E	M	O	R	Y	A	A	C	A	R	D	E	A
U	S	X	A	A	A	E	L	I	T	A	L	O	V	D
E	X	P	A	N	S	I	O	N	S	L	O	T	I	O
X	N	A	N	R	O	S	S	E	C	O	R	P	R	N
N	O	N	V	O	L	A	T	I	L	E	E	O	D	L
P	N	S	Y	S	T	E	M	U	N	I	T	W	L	Y
E	V	I	R	D	D	R	A	H	A	R	P	E	A	M
R	O	O	A	B	S	A	T	A	S	D	A	R	C	E
O	L	N	O	N	V	E	H	R	P	I	D	C	I	M
C	S	B	L	U	E	R	E	D	I	S	A	A	T	O
B	L	U	R	A	Y	D	I	S	C	C	O	R	P	R
E	E	S	U	B	M	E	T	S	Y	S	A	D	O	Y

EXERCISE 2: NAME THE DEVICE

Directions: Name the devices of a computer system shown in the pictures below.





1. _____ 2. _____ 3. _____ 4. _____ 5. _____

6. _____ 7. _____ 8. _____ 9. _____ 10. _____

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EXERCISE 3: MATCHING TYPE

Directions: Match Column A with Column B and write your answers on the space provided.

- | A | B |
|--|----------------------------------|
| _____ 1. Brain of computer | a. Adapter Card |
| _____ 2. Expansion Card | b. Central Processing Unit (CPU) |
| _____ 3. Read/Write Memory | c. Expansion Bus |
| _____ 4. System Board | d. Expansion Slot |
| _____ 5. Uses laser technology | e. Motherboard |
| _____ 6. Supplies electric energy to computer | f. Optical Drive |
| _____ 7. Non-volatile memory | g. Power Supply Unit |
| _____ 8. Tower or Chassis of computer | h. Random Access Memory (RAM) |
| _____ 9. Allows CPU to communicate with peripheral devices | i. Read Only Memory |
| _____ 10. A socket that holds an adapter card. | j. System Unit |

EXERCISE 4: UTILIZE THE VIDEO

Directions: Utilize the internet and the website www.professormesser.com, view the video regarding parts of the computer. Use the URL below. After watching the videos, answer the following questions:

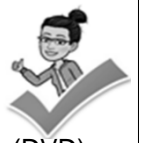
1. What are the different types of motherboard shown in the video?
2. What are the different types of CPU?

URL: <https://www.professormesser.com/free-a-plus-training/220-801/an-overview-of-motherboard-types/>
<https://www.professormesser.com/free-a-plus-training/220-801/an-overview-of-cpu-socket-types/>

THINGS TO REMEMBER!

Computer Devices

- System Unit, Motherboard, Central Processing Unit (CPU), Read Only Memory, Random Access Memory (RAM), Read Only Memory (ROM), Expansion Bus, Expansion Slot,
- Adapter Card, Power Supply Unit (PSU), Hard Disk Drive (HDD), Optical Drive, Digital Versatile Disc (DVD)



EVALUATION: MULTIPLE CHOICE

Directions: Read each question carefully and encircle the letter of the correct answer.

1. It is a socket on the motherboard that can hold an adapter card.
 - a. Expansion Bus
 - b. Expansion Card
 - c. Expansion Slot
 - d. System Bus
2. A box-like case that houses the motherboard, processor, memory and other internal components.
 - a. Adapter Card
 - b. Motherboard
 - c. Processor
 - d. System Unit
3. It is one of the most essential parts of a computer system. It holds together many of the crucial components of a computer, processor and memory chips
 - a. Central Processing Unit
 - b. Motherboard
 - c. Processor
 - d. System Unit
4. It is the computer component that's responsible for interpreting and executing most of the commands from the computer's other hardware and software.
 - a. Adapter Card
 - b. Central Processing Unit
 - c. Motherboard
 - d. System Unit
5. It is a computer memory that connects directly to the CPU.
 - a. Non-Volatile Memory
 - b. Random Access Memory
 - c. Read Only Memory
 - d. Volatile Memory
6. It is a non-volatile memory which contents are not lost when the computer is turned off.
 - a. Main Memory
 - b. Primary Storage
 - c. Random Access Memory
 - d. Read Only Memory
7. It converts mains AC to low-voltage regulated DC power for the internal components of a computer.
 - a. Adapter Card
 - b. Hard Disk Drive
 - c. Power Supply Unit
 - d. Processor
8. A storage device that uses laser technology to read data on the optical media.
 - a. Compact Disc
 - b. Digital Versatile Disc
 - c. Hard Disk Drive
 - d. Optical Disk Drive
9. It is a non-volatile storage device where operating system and application software are being saved.
 - a. Digital Versatile Disc
 - b. Hard Disk Drive
 - c. Optical Disk Drive
 - d. Processor
10. It is a computer bus which connects the CPU to main memory.
 - a. Expansion Bus
 - b. Expansion Card
 - c. Expansion Slot
 - d. System Bus

Prepared by:

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