LEARNING ACTIVITY SHEET
SPECIAL PROGRAM IN ICT 7
OFFICE PRODUCTIVITY 7
First Quarter, Week 2

Name of Learner: _____Date:_____

Grade Level /Section: _____

Computer Memory

BACKGROUND INFORMATION FOR LEARNERS

How large is a human brain? Do computers have brains? Can we make the computer like a human brain? These are the questions that trigger our mind as we heard about computer memory. Let us find out!
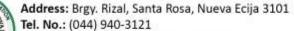
COMPUTER MEMORY

A memory is just like a human brain. It is the storage space in the computer where data is to be processed, and instructions needed for processing are stored. Memory is primarily of three types –

1. PRIMARY MEMORY/MAIN MEMORY

It is a computer memory that is directly accessed by the CPU. It holds data or information that is currently being used by the processing unit.

Types of Memory

a. **ROM** or *Read Only Memory* is a non-volatile memory meaning it can hold data even when the power is ON or OFF.
b. **RAM** or *Random Access Memory* is a volatile memory which can hold data and instructions while processing is happening. When the power is off, contents of RAM are lost. The CPU is the brain of the computer while RAM is the working memory or thinking memory used to store data.

Source: www.oempcworld.com
Figure 6. Example of RAM

2. CACHE MEMORY

It is a high-speed memory that speeds up the CPU and makes data retrieval from the computer's memory more efficient by holding parts of the most frequent used data and program of the CPU. The advantage of cache memory is that it is faster compared to main memory resulting to less consuming of access time but being very expensive and its limited capacity are some cons of using it.

3. SECONDARY MEMORY

It is also known as external memory use for storing data and information permanently. Secondary memory is not directly accessed by the CPU. The contents of secondary memories are first read by the main memory before it can be accessed by the CPU. Examples are CD-ROM, DVD, and disk.

LEARNING COMPETENCY

To compare and contrast the different types of memory.

ACTIVITIES

ACTIVITY 1

Directions: For deeper knowledge on computer memory, utilize the internet and watch the video presentation using the URL below.

https://youtu.be/c3m9r62jMS8

Guide Questions

1. Give the similarities and differences between primary and secondary memory.

_____
_____
_____
_____
_____

2. List down all the primary and secondary memory cited in the video.

_____
_____
_____
_____
_____

ACTIVITY 2

Directions: Read the items carefully. On the space provided before each number, write only the letter of the best answer.

_____1. ROM is a type of memory storage that is permanent and non-volatile, meaning that it is not deleted or lost when the computer shuts off. What does ROM stand for?
    a. Read Optical Memory
    b. Random Optical Memory
    c. Random Only Memory
    d. Read Only Memory

_____2. RAM is temporary storage, but it can be accessed directly by the CPU and is faster than ROM. RAM stands for _____.
    a. Read Access Memory
    b. Random Access Memory
    c. Random Application Memory
    d. Read Application Memory

_____3. Where is data stored when it is Virtual Memory?
    a. It is stored in the RAM.
    b. It is stored on an area of a secondary storage device.
    c. It is stored in an optical drive.
    d. It is stored in the ROM.

_____4. The moment you turn on your computer, it begins to access its memory. BIOS, the software that boots up your computer is in which type of memory?
    a. RAM
    b. Virtual memory
    c. Cache
    d. ROM

_____5. When looking at your computer's memory, you will come across the storage hierarchy, which separates storage into primary, secondary, and tertiary. Primary storage refers to

memory that is directly accessible to the CPU. What is another name for primary storage?

a. Main memory

b. External memory

c. Off-line storage

d. Flash Memory

_____6. A computer's cache will hold data that is used most often to make it faster to access. There are various levels of cache and the small amount of memory can be found in

_____.

a. BIOS

b. Central Processing Unit

c. Hard drive

d. Flash drive

_____7. Flash memory is a type of permanent storage that is very convenient if you need to backup files or as a type of portable storage. Flash memory is used in which of the following devices?

a. Floppy disks

b. Memory cards

c. CPU

d. Virtual memory

_____8. Virtual memory acts like RAM, but it is a process or program that creates a paging file to move items from RAM into that file. Where does it create the paging file?

a. Hard disk

b. Floppy disk

c. USB drive

d. Memory stick

_____9. Secondary storage, like the hard drive, isn't directly accessible to the CPU like primary storage. What is another name for secondary storage?

a. Auxiliary storage

b. Main memory

c. Internal storage

d. Virtual memory

_____10. Data can come from information stored in the computer's permanent storage, or it can come from peripheral devices, such as keyboards. Regardless of whether it is input through a peripheral device or taken from storage, which type of memory does most data go through first?

a. Flash memory

b. Virtual memory

c. RAM

d. ROM

REFLECTION

Memory is basically categorized into primary memory, cache memory, and secondary memory and each has its own specific function as a component of computer. What do you think will happen if memory is detached from the system?

_____
_____
_____
_____
_____
_____.

REFERENCES

Websites

https://www.tutorialspoint.com/computer_fundamentals/computer_memory.htm
https://computer.howstuffworks.com/virtual-memory.htm

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