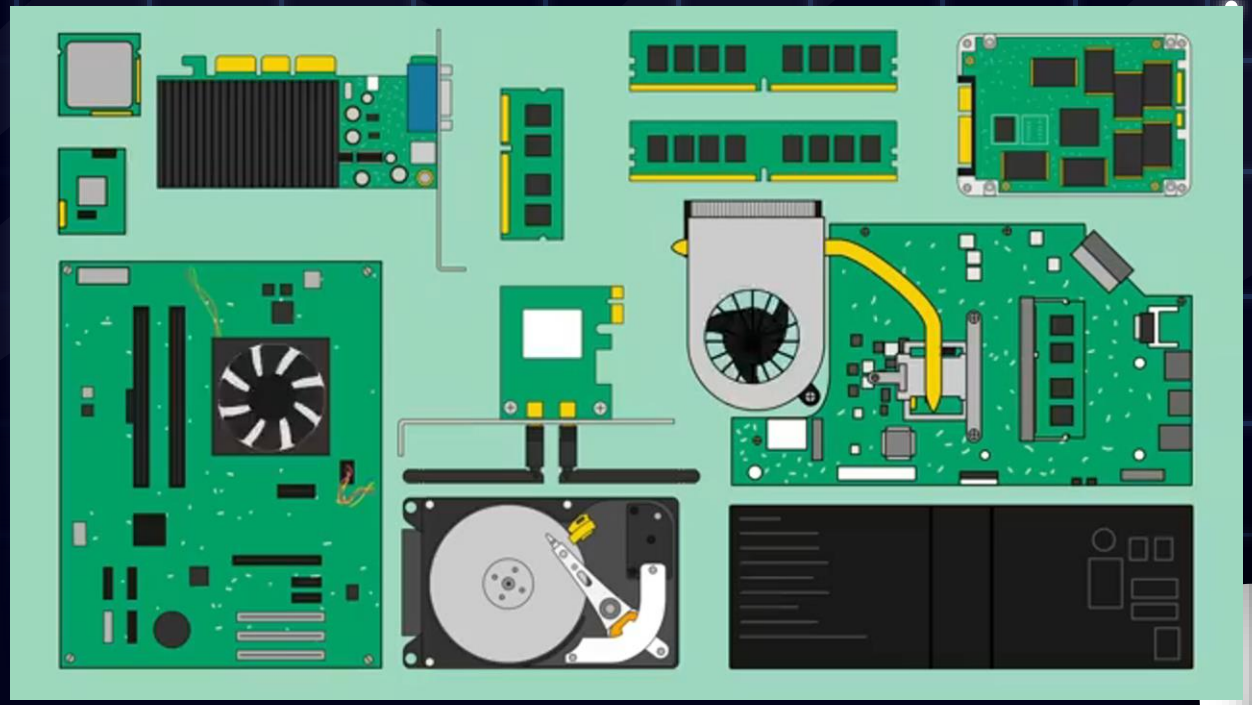
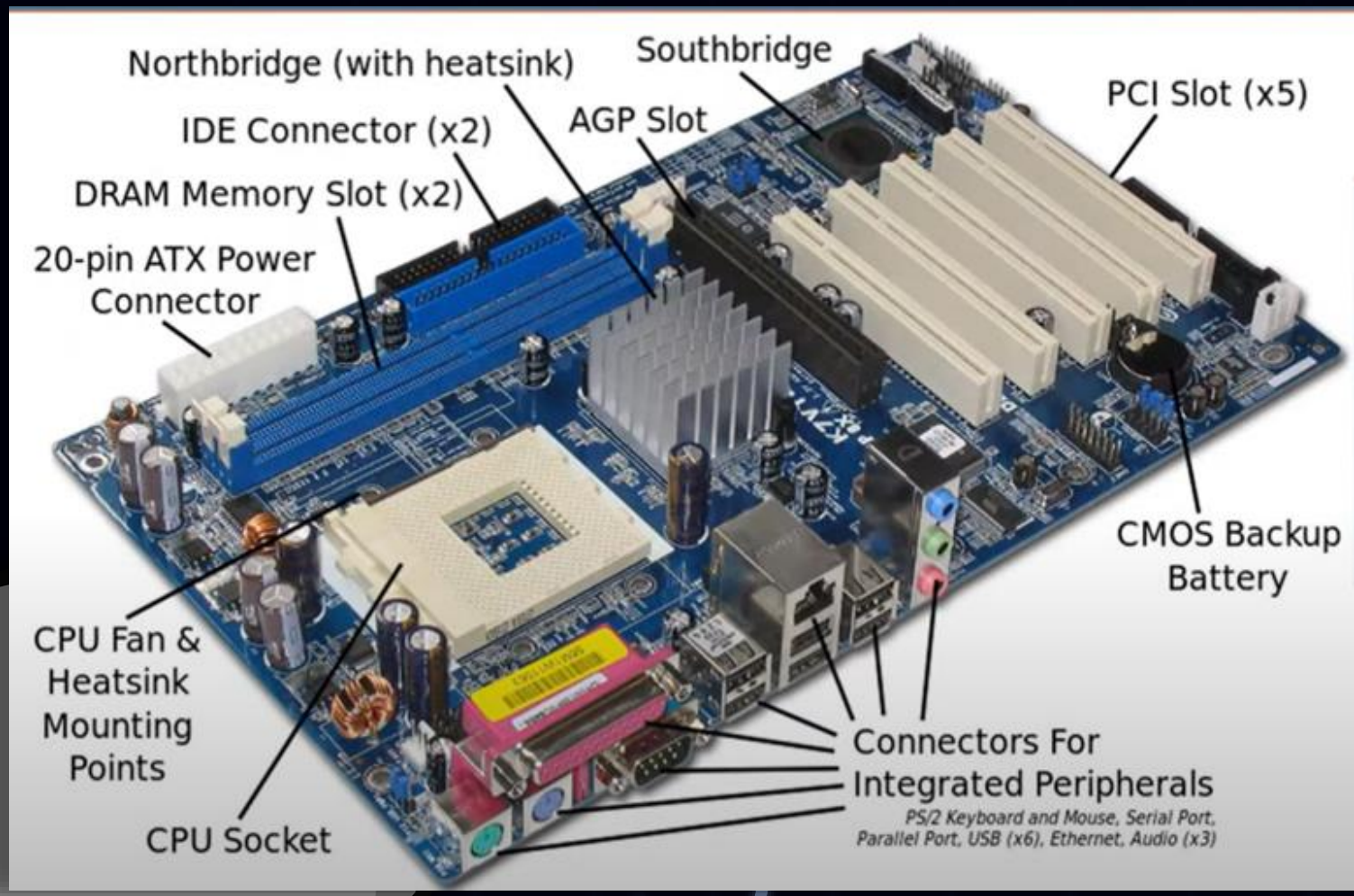
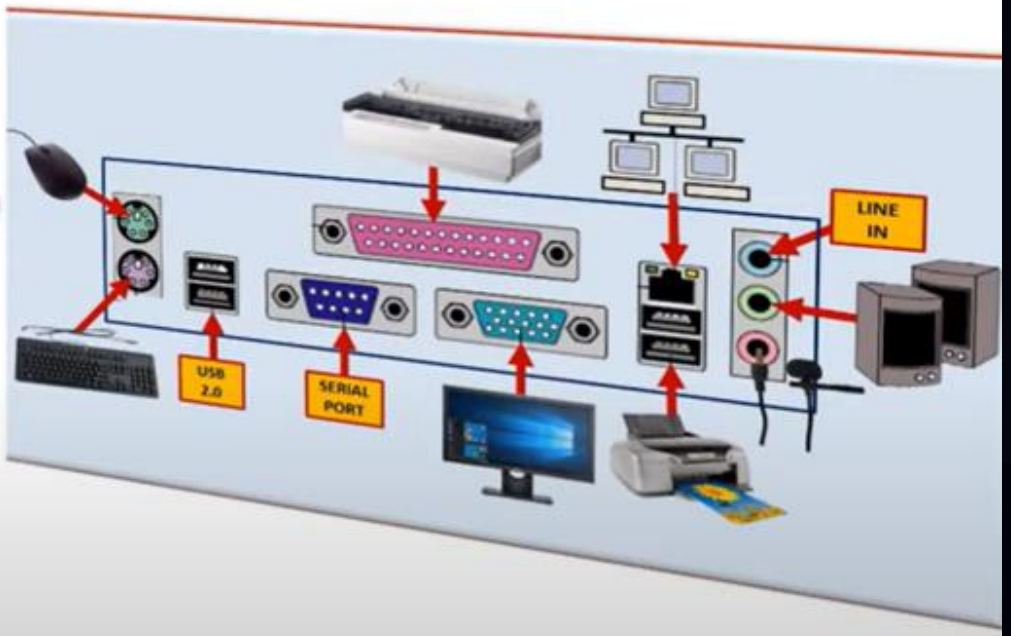
Parts and Functions of Computer System Unit

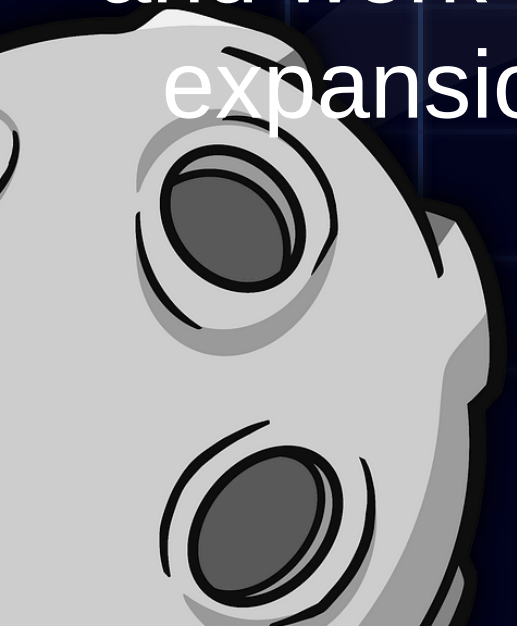


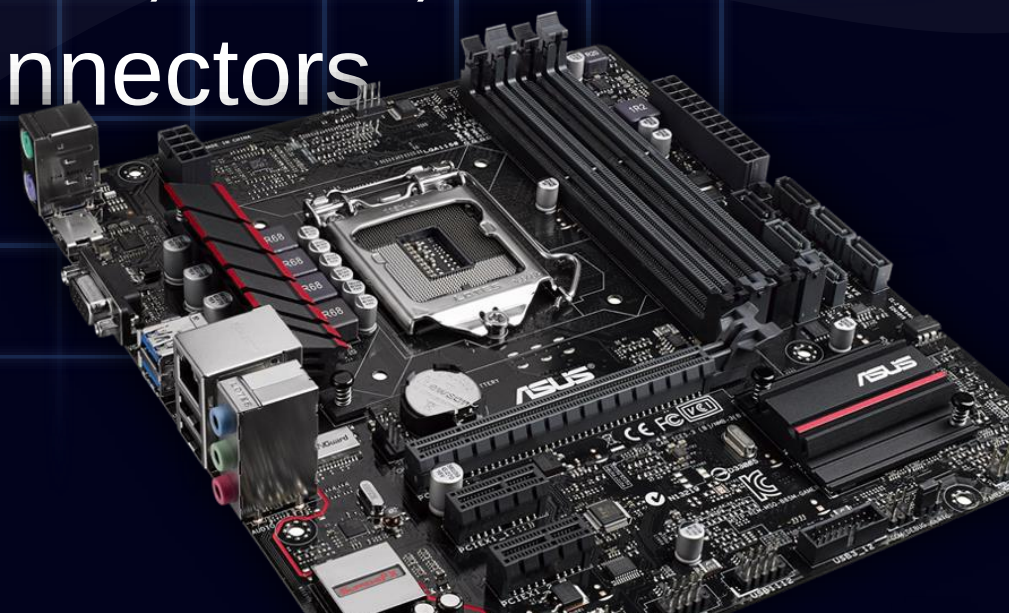

Northbridge (with heatsink)
Southbridge
IDE Connector (x2)
AGP Slot
PCI Slot (x5)
DRAM Memory Slot (x2)
20-pin ATX Power Connector
CMOS Backup Battery
CPU Fan & Heatsink Mounting Points
CPU Socket
Connectors For Integrated Peripherals
PS/2 Keyboard and Mouse, Serial Port, Parallel Port, USB (x6), Ethernet, Audio (x3)


LINE IN
USB 2.0
SERIAL PORT

Motherboard

The motherboard is the main printed circuit board (PCB) inside the system unit. It acts as the backbone that connects all the other components, allowing them to communicate and work together. It houses the CPU, RAM, expansion slots, and provides connectors for other peripherals





Parts of the Motherboard

Northbridge- RAM, Graphics Card

Southbridge-PCI, SATA

I/O Ports

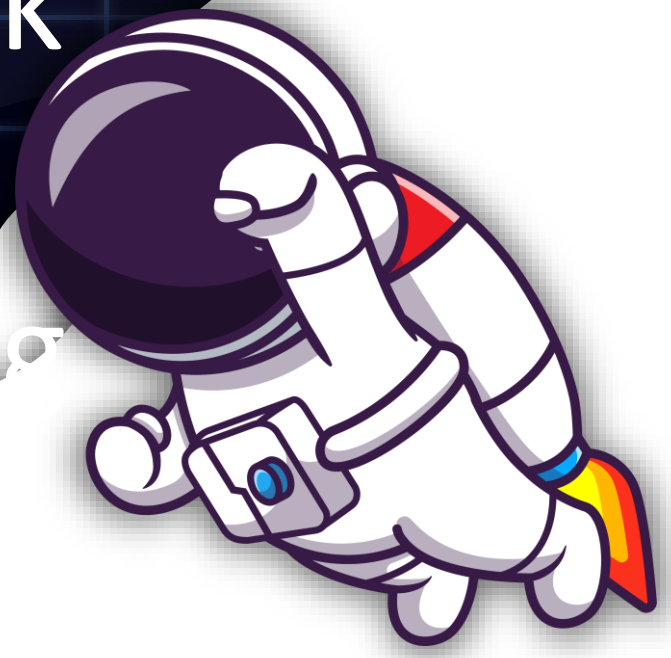
CPU Central Processing Unit

The CPU, often referred to as the "brain" of the computer, is responsible for carrying out instructions from programs and performing calculations. It processes data and controls the operation of all other parts of the computer, making it a critical component for overall performance

CoolerAge®

CPU FAN & Heat Sink

crucial components that work together to keep your computer's central processing unit (CPU) cool.



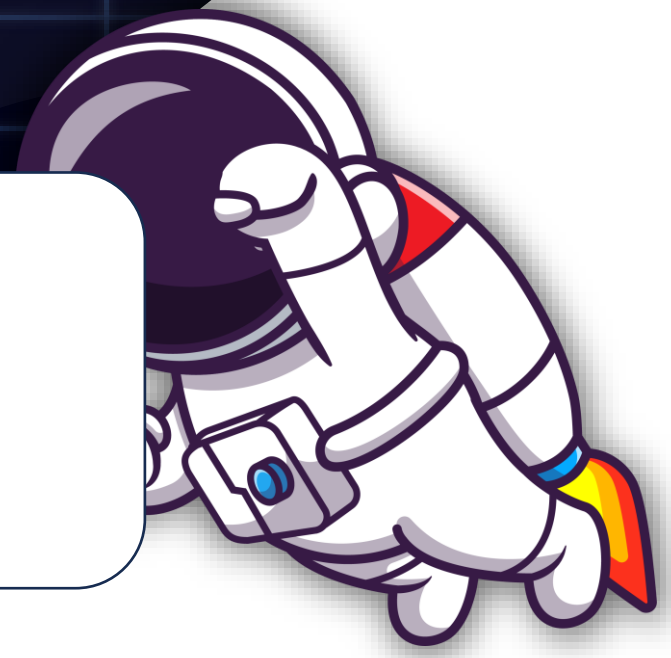
RAM

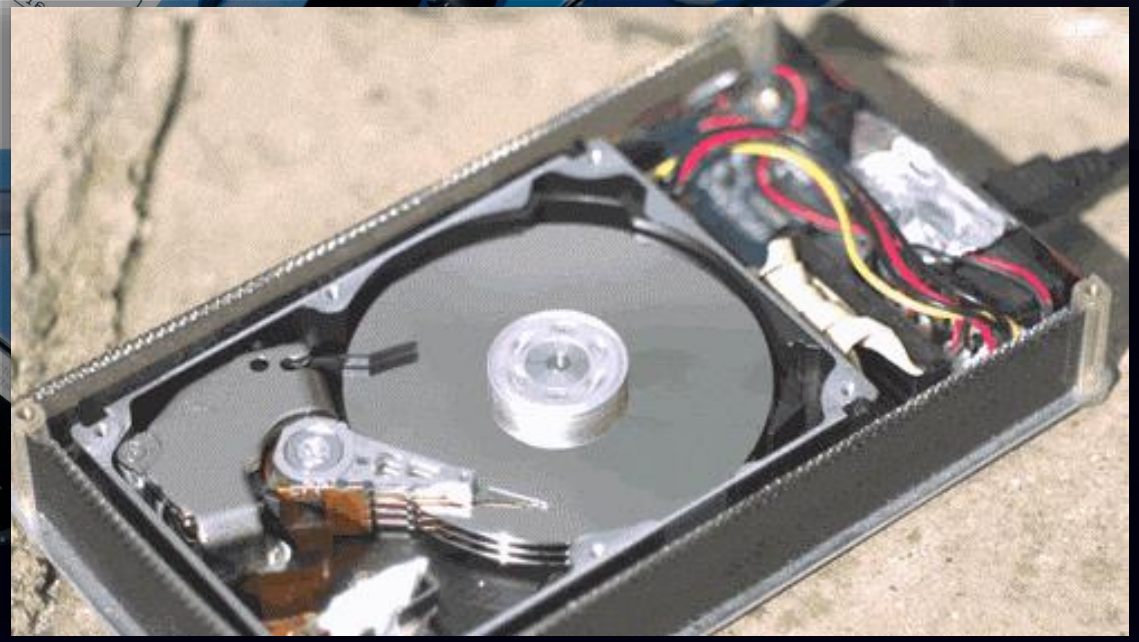
RAM Random Access Memory

- Function: Provides temporary storage for data and instructions that are actively being used or processed by the CPU. RAM enables quick access to this data, supporting efficient multitasking and faster performance.

A computer has 8 GB of RAM. If a running program uses 2 GB, how much RAM is available?

Answer: 6 GB



HITACHI
Deskstar
MADE IN CHINA FOR Hitachi Global Storage Technologies Inc.
WARRANTY VOID IF ANY LABEL BROKEN
RATED: 5V 620mA 12V 600mA
MODEL: E182115 ES
P/N: HDS728080PLA380
LBA: 160,836,480 SECTORS
P/N: 0A30356
0A30356BA1356B54
S/N: S450LPZM
SATA
RPM: 7200RPM
MLC: BA1356
CHS: 16383,16
RoHS
N13508


Storage Devices

Function: Permanent storage for data and programs. Common types include Hard Disk Drives (HDDs) and Solid State Drives (SSDs). They store the operating system, applications, and user files, providing long-term data retention

1. If a Hard drive has 32 GB of total storage and you've used 8 GB, how much storage space is left?

Possible Answer: 24 GB

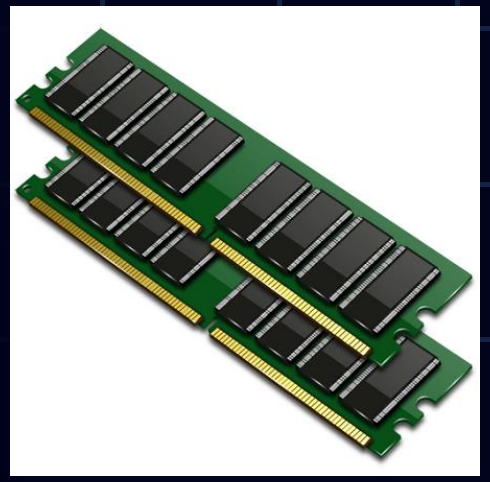
Presented by: JOEL P. RODRIGUEZ

Power Supply Unit

Function: Converts electrical power from an outlet into a usable form for the computer’s internal components. It supplies power to the motherboard, CPU, RAM, storage devices, and other peripherals.

SUMMARY

What are the basic components of Computer System Unit?



ID. 192.168.254.254

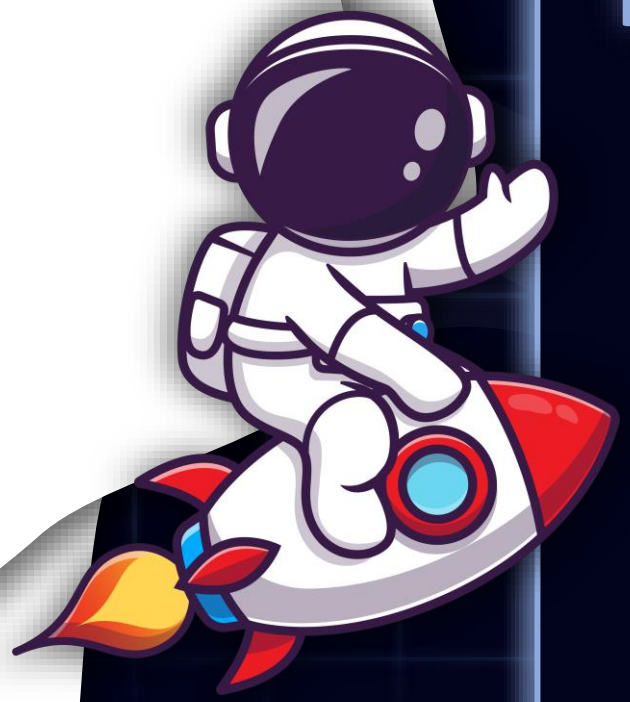
Presented by: JOEL P. RODRIGUEZ

Literacy Skills

Instructions: Rearrange the words in each sentence to form a correct sentence about computer components.

1. CPU/ The / brain / computer / is / the / the / of / .

Possible Answer: The CPU is the brain of the computer.



Identify the Components

Attach the corresponding names to the following computer components. Use the labels provided to match each component with its correct name.

Locate and identify the main components of the computer system unit on the board or in your hands-on lab setup. These components include:

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MOTHERBOARD

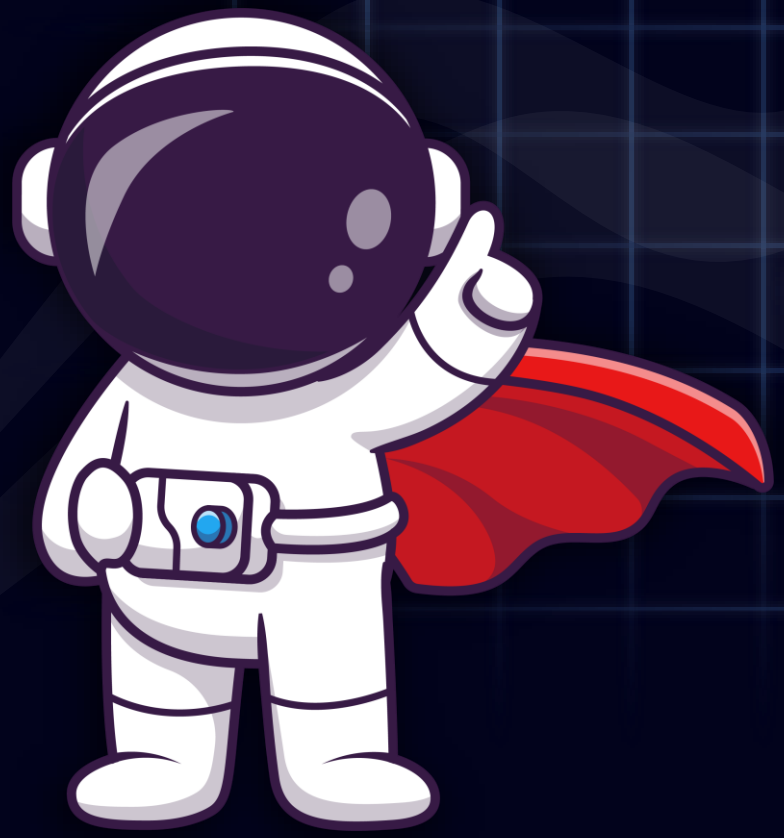
2. main / connects / The / all / the / components / together / motherboard / .

Possible Answer: The motherboard connects all the main components together.

3. supplies / electrical / The / power / to / computer / the / .

Possible Answer: The power supply supplies electrical power to the computer.

4. is / data / for / temporary / RAM / used / storage / .



Possible Answer:
RAM is used for temporary data storage.

5. storage / device / permanently / A / stores / files / .

Possible Answer: A storage device permanently stores files.

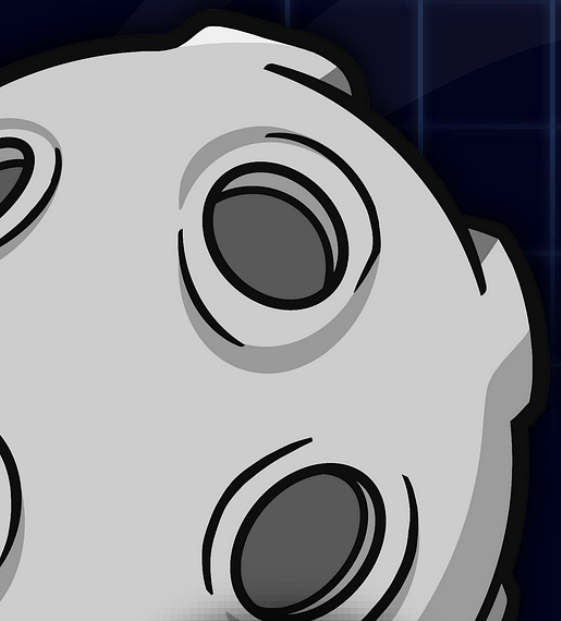
Answer

Calculate

6. A computer has 8 GB of RAM. If a running program uses 2 GB, how much RAM is available?

Answer: 6 GB

7. If you are transferring a 2 GB file at a speed of 1 GB per minute, how long will it take to transfer the file?



Answer: 2 minutes

Answer

Assessment:

Match the Components to Their Functions

- During the board activity, match each computer system unit component to its corresponding function. Use the provided labels to correctly align each component with its specific role within the computer system.

(Numeracy Skills) Questions: Computer Components and Functions

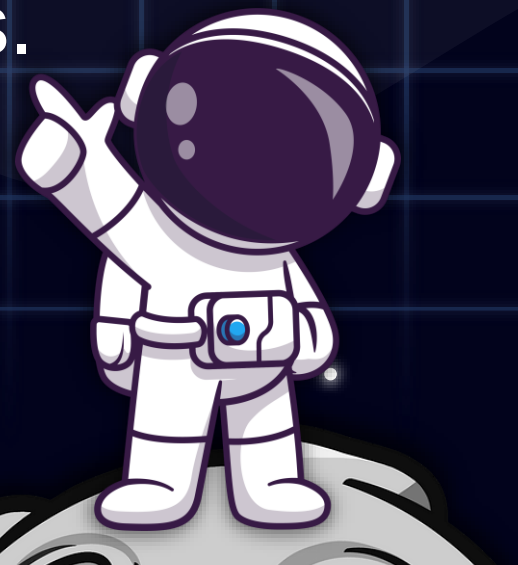
1. If a USB flash drive has 32 GB of total storage and you've used 8 GB, how much storage space is left? Possible Answer: 24 GB

Assignment

Research and Write a Report:

Component Focus: Choose one component from the computer system unit (e.g., CPU, motherboard, RAM, storage device, etc.).

Research: Investigate the advanced features and functions of your chosen component. Consider aspects such as performance improvements, technological advancements, and real-world applications.



Report: Write a 1-2 page report covering the following:

- An overview of the component's primary functions.
- Detailed information about advanced features or recent technological developments.
- Examples of how these advancements benefit users and impact overall system performance.

Any potential future trends or innovations related to the component

Concluding Activity

"Just like every tiny part in a computer works together to make it run smoothly, our individual strengths and efforts come together to create something truly amazing. Understanding how each component fits into the bigger picture reminds us that every contribution matters and leads to great things."