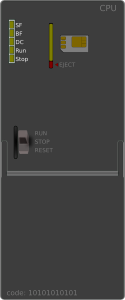
# CENTRAL PROCESSING UNIT



**INSTRUCTION CYCLE**

**FETCH**

instructions from memory

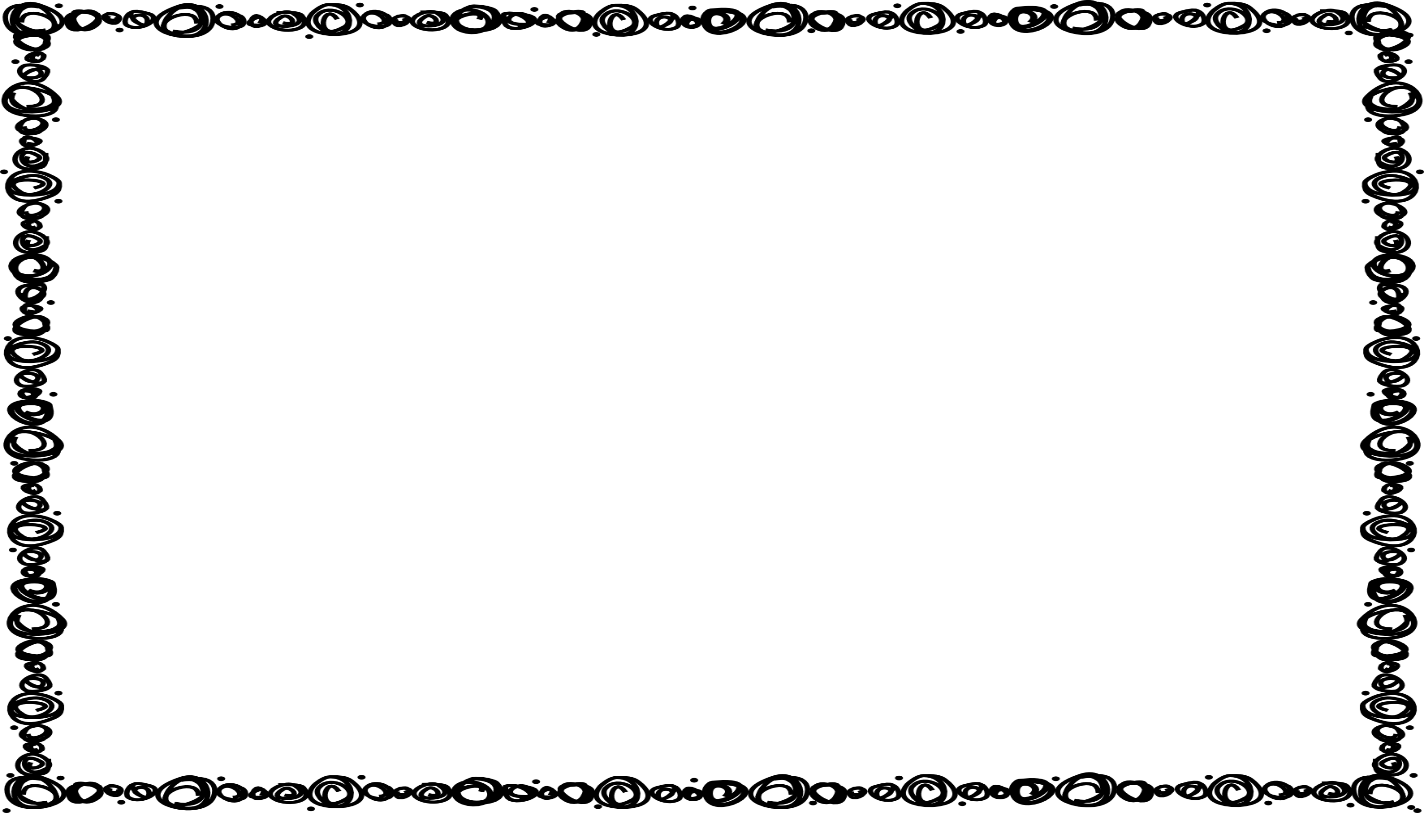
**DECODE**

instructions to be processed

**EXECUTE**

instructions

to perform the task



Arithmetic Logic Unit (ALU)

–

Performs

arithmetic and logical computations

Control Unit

–

Executes and stores ALU

results. Performs the Instruction Cycle.

Registers

–

Temporary storage areas in

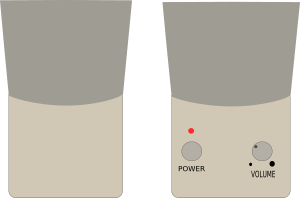
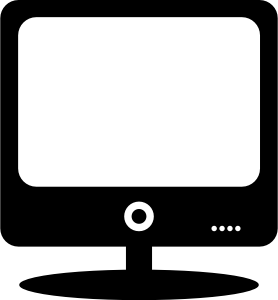
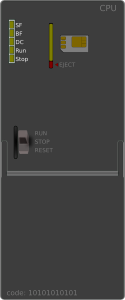
the processor that accept, store, and send

out data or instructions, as directed by

the control unit.

Name **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

# INFORMATION PROCESSING



**INPUT STORE OUTPUT**

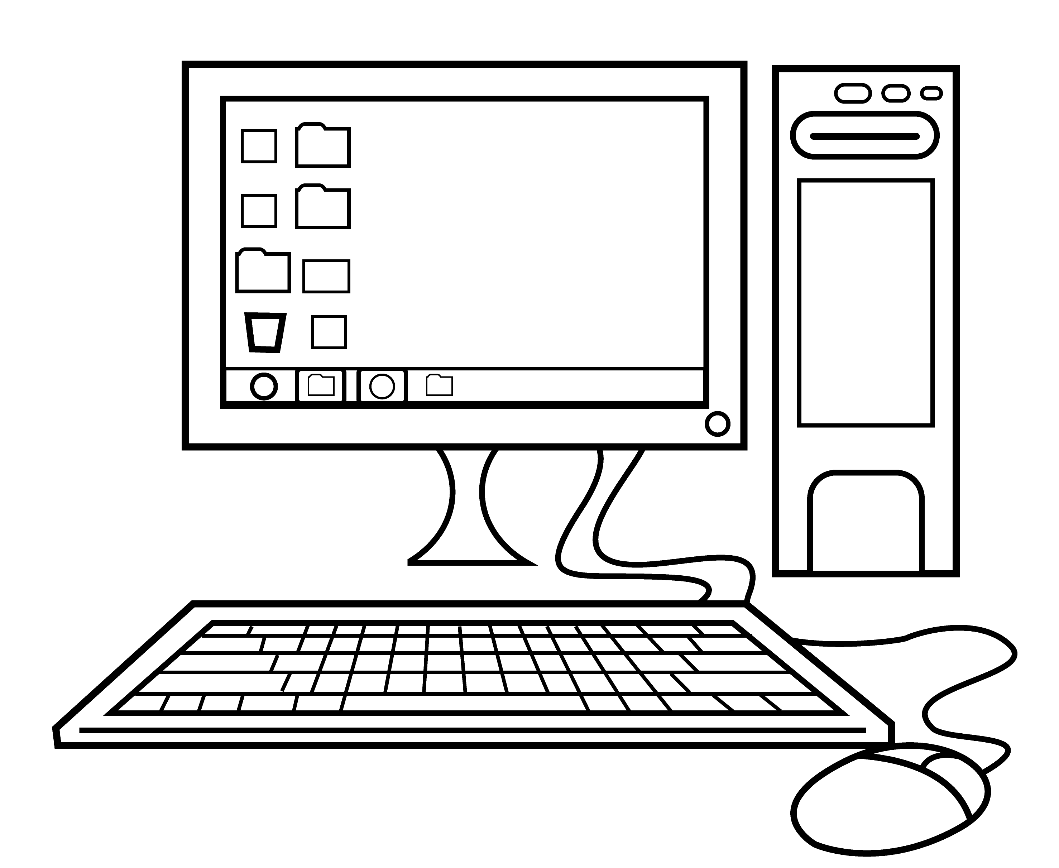


CPU

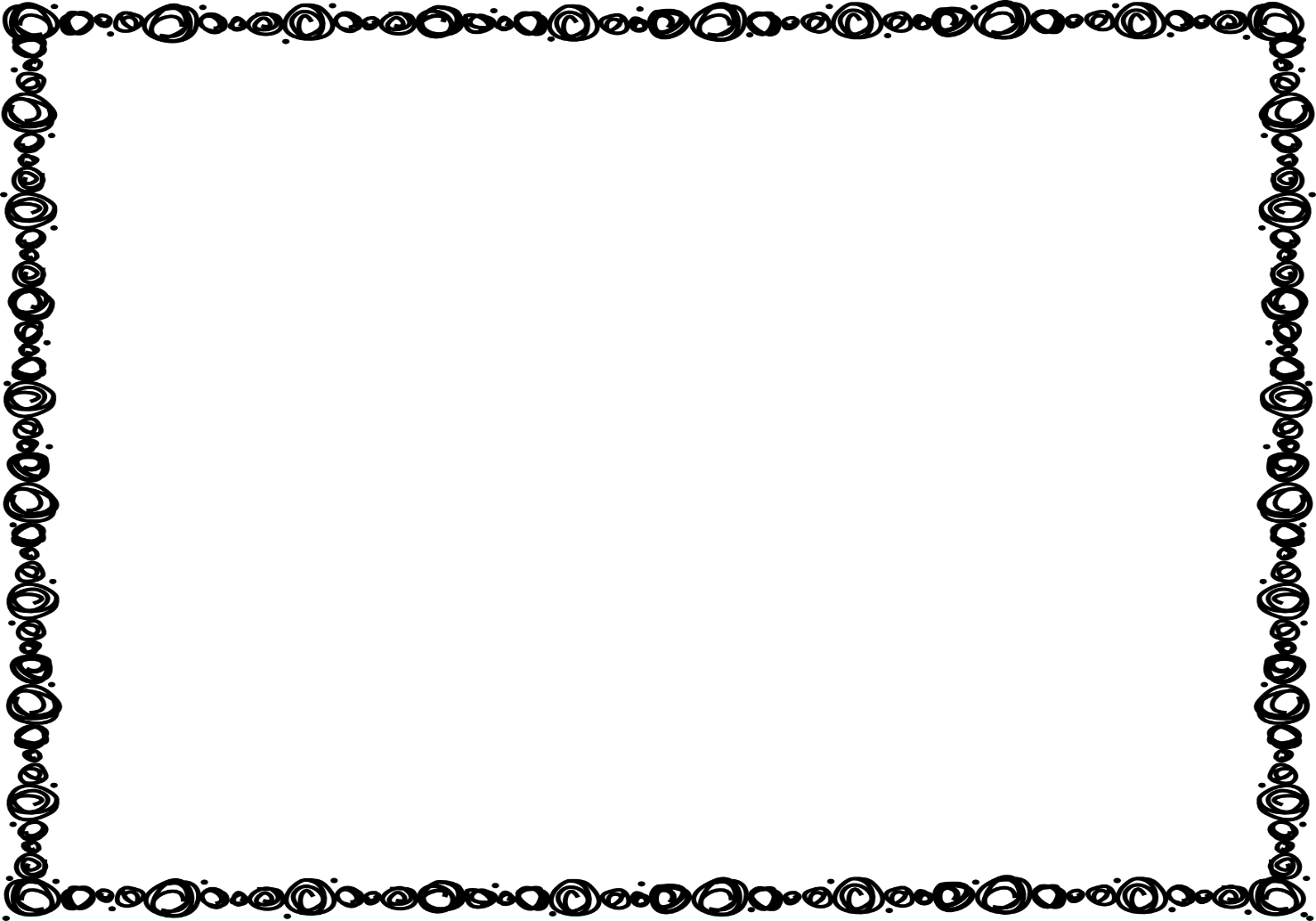


**&**

**PROCESS DATA**



**LABEL PARTS OF THIS COMPUTER**



**LABEL AS INPUT, OUTPUT, or BOTH**

1.

Speakers

\_\_\_\_\_\_\_\_\_\_\_\_\_

2.

Keyboard

\_\_\_\_\_\_\_\_\_\_\_\_\_

3.

Printer

\_\_\_\_\_\_\_\_\_\_\_\_\_

4.

Webcam

\_\_\_\_\_\_\_\_\_\_\_\_\_

5.

Mouse

\_\_\_\_\_\_\_\_\_\_\_\_\_

6.

CD Player

\_\_\_\_\_\_\_\_\_\_\_\_\_

7.

Monitor

\_\_\_\_\_\_\_\_\_\_\_\_\_

8.

Flash Drive

\_\_\_\_\_\_\_\_\_\_\_\_\_

9.

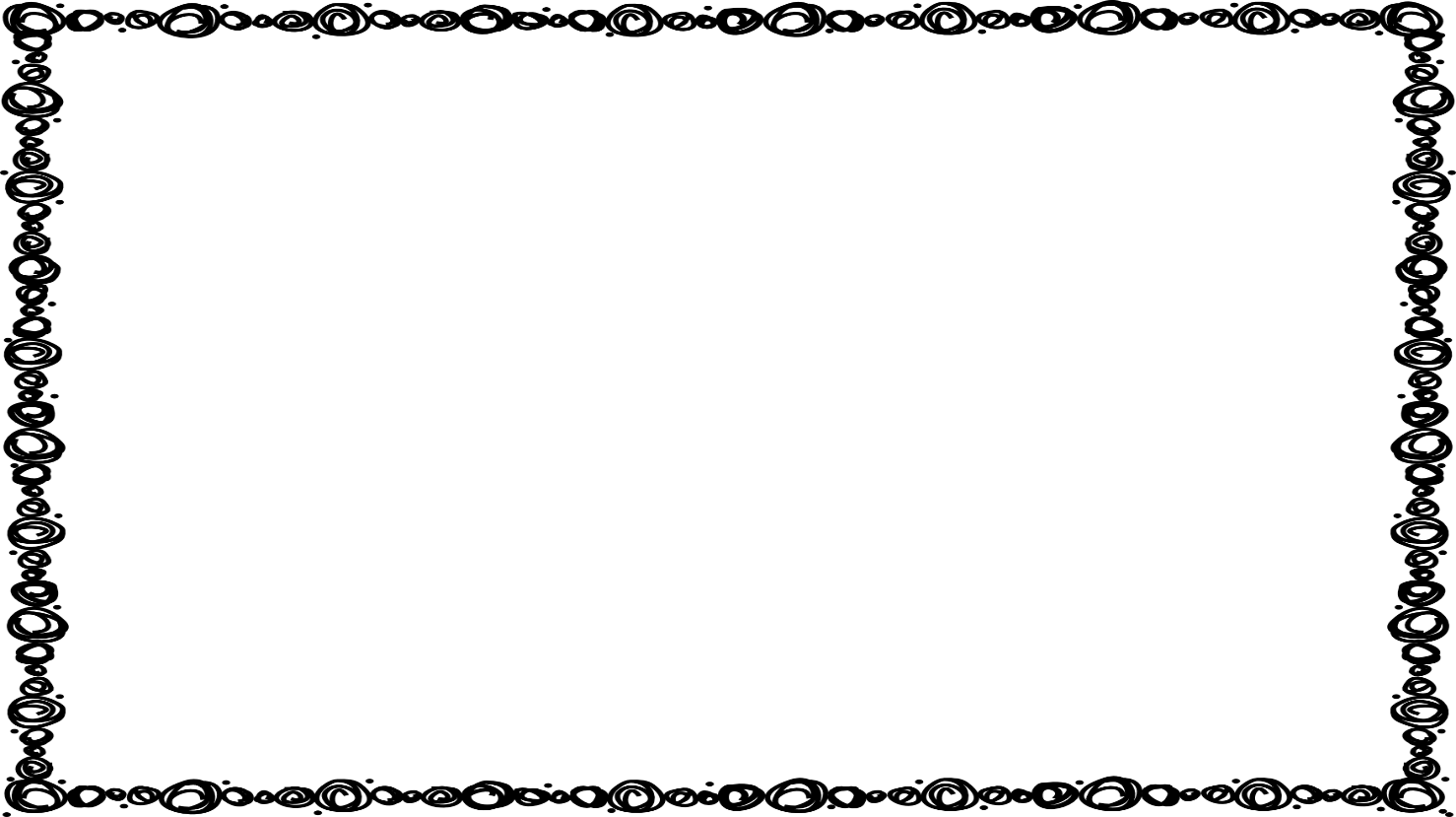
Scanner

\_\_\_\_\_\_\_\_\_\_\_\_\_

10.

Headset

\_\_\_\_\_\_\_\_\_\_\_\_\_



## SOFTWARE

Software is a set of machine-readable instructions that the computer can process. Programs and applications are software. The computer’s operating system (OS) is software.

List some of the software on your computer.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

HARDWARE

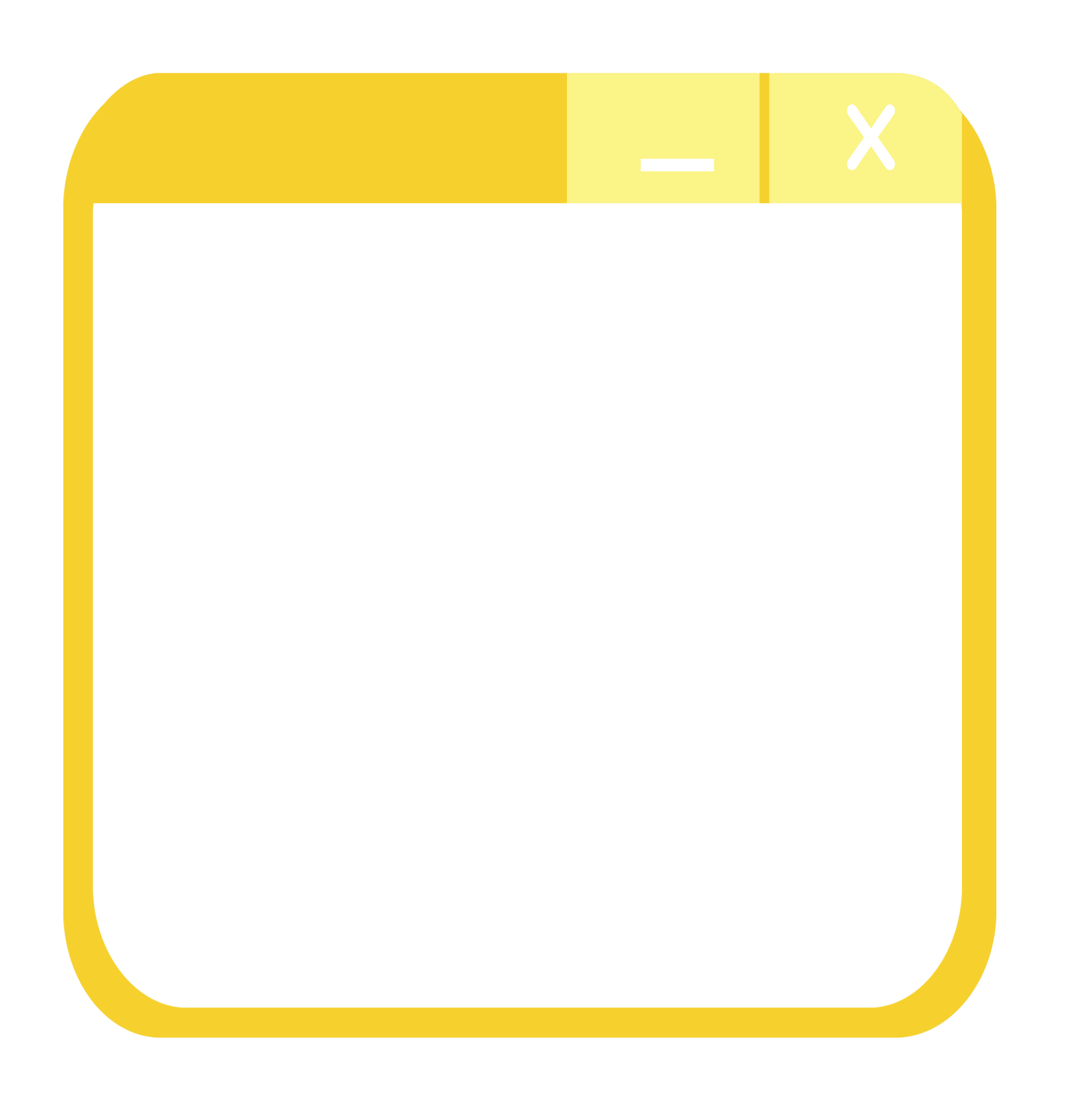
**Hardware is the physical pieces of a computer.**

**List all the hardware of your computer. (Hint: they could include more than keyboard, monitor, mouse and CPU).**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**DESCRIBE THE FUNCTION PERFORMED BY THESE**



1.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.

? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4.

\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6

. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



**SYMBOLS IN A SOFTWARE APPLICATION**

Machine language is a set of instructions used by the computer.

The language is binary code consisting of 0’s and 1’s. High

-

level

languages have to be interpreted by another language, called an

assembler or compiler, before being used by the CPU.

A bit is the smallest unit of data in a computer. It is represented

by either a 0 or a 1.

A byte is represented by eight characters. Most computers

represent data in bytes. For example, the computer processes

01100001

as an “a”, and 01000001 as an “A”.

Larger amounts of data is represented by kilobytes (1,024

bytes), megabytes (1,048,576 bytes), and gigabytes

(1

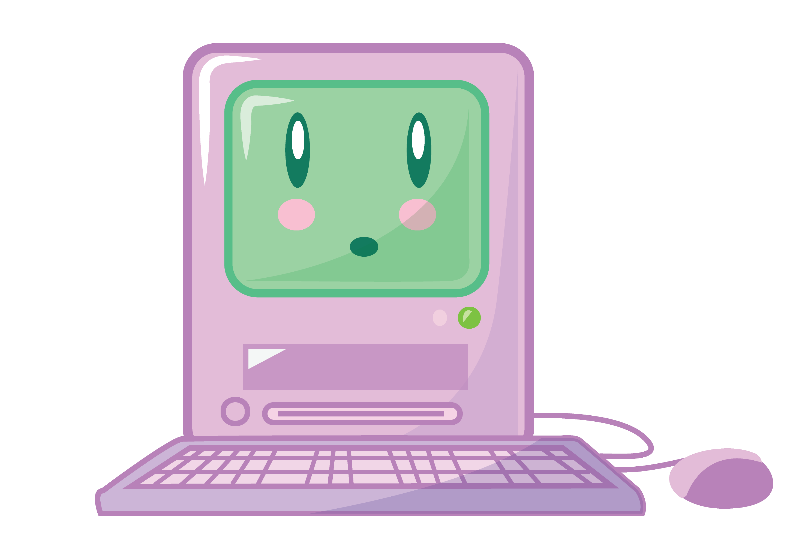
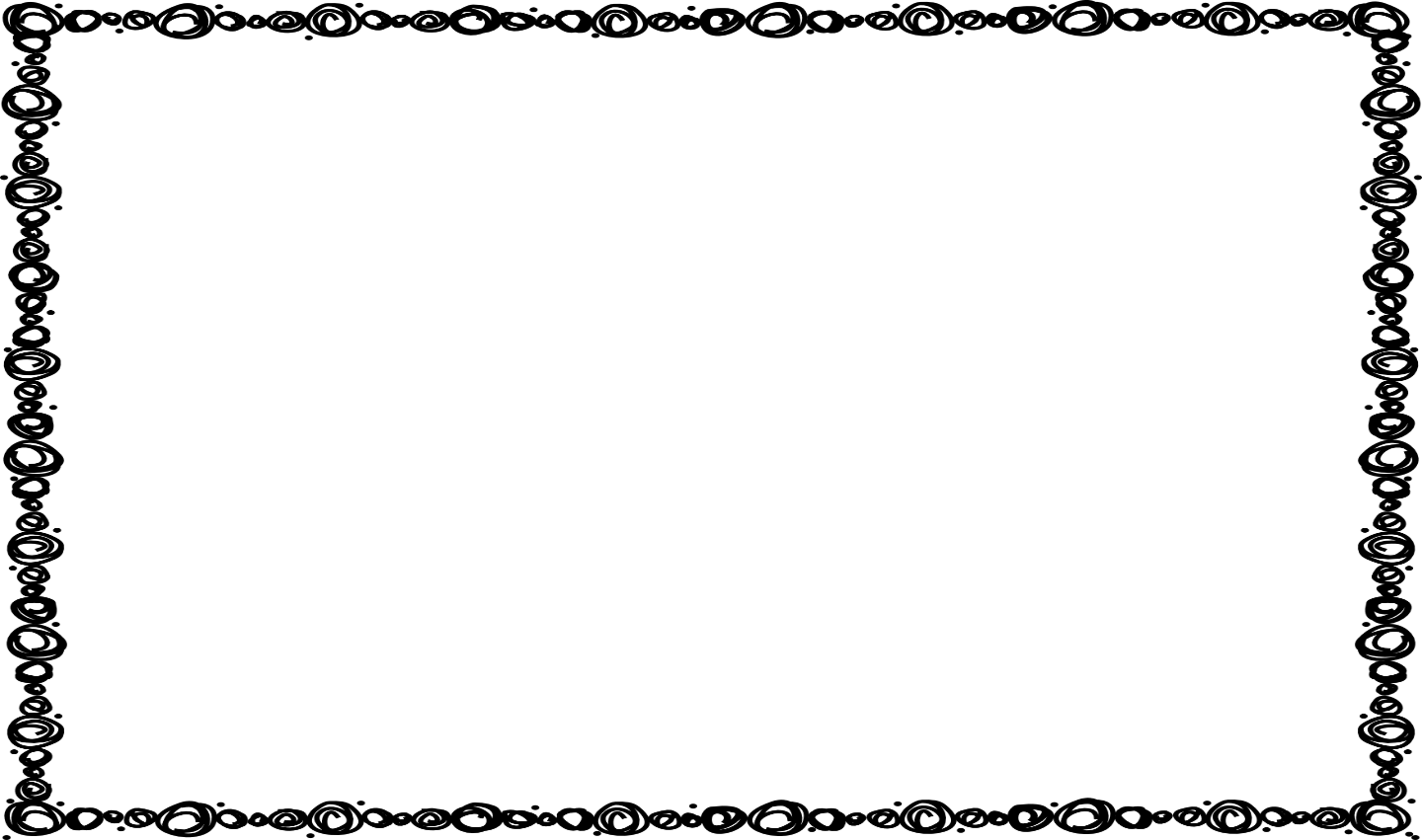
,073,741,824 bytes

).

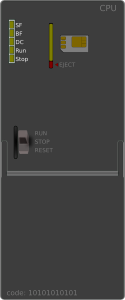
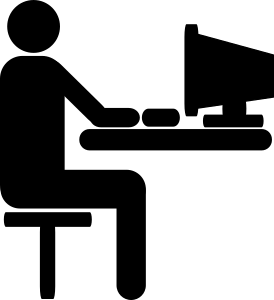
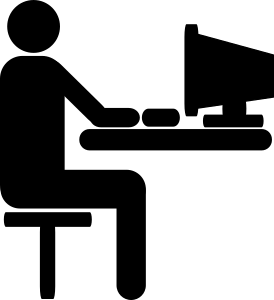
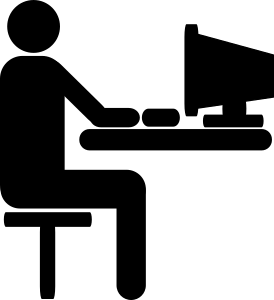
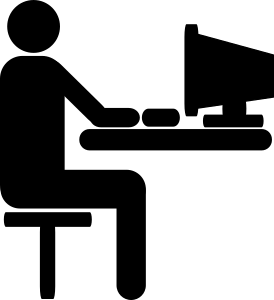
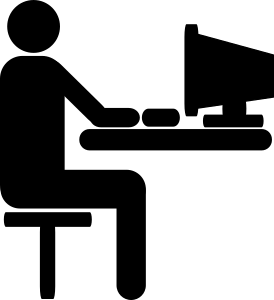
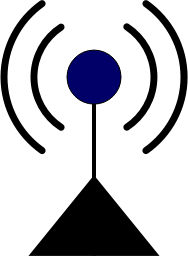
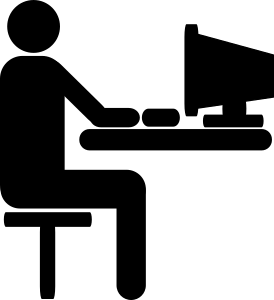
Metaphorically, your computer is a busy bee processing 0’s and

1

’s to execute tasks and give you results.



# LOCAL AREA NETWORKS

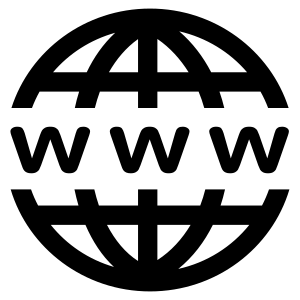


A local area network (LAN) is a small group of computers sharing a common communication link. This may be a school or a company LAN. You may have a LAN in your home if you have multiple computers that can share data. Local area networks are usually connected to a main computer known as a server. The server provides data to be shared between the computers connected to the LAN. A print server allows multiple users to access the same printer and a file server is used to store and access files

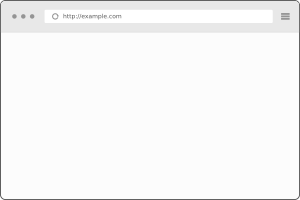
among multiple computers.

# THE INTERNET

The Internet spans the globe, connecting millions of computers. It carries electronic mail, file sharing, telephony services, and the World Wide Web. The World Wide Web is a subset of the Internet.



In order to connect to the Internet, you need access through an Internet Service Provider.

Depending on the URL requested at the top, webpage information will be displayed back to you from the Internet.

# USING THE INTERNET

1. **URL** – The reference address to a resource on the world wide web. For example:

[http://myexample.com](http://myexample.com/)

The http is the protocol identifier and myexample.com is the resource name. Notice they are separated by a semi-colon and two forward slashes

1. **SEARCH ENGINE**– You select the keyword(s). A program identifies and selects items from a database. The web pages of the search are displayed, for you to select.
2. **WEB BROWSER** – A software application used to

retrieve, display, and transfer information from a resource on the World Wide Web.

1. **HOME PAGE** – The first page that comes up when you execute a web browser.
2. **HTML** – Hypertext Markup Language is a set of tags used to create web pages. HTML tags display

the font, color, hyperlinks, and graphics of text files.

# ACRONYMS

1. CD – Compact Disc
2. CD-R – Compact Disc Recordable
3. CD-ROM – Compact Disc Read-Only Memory
4. CD-RW – Compact Disc Re-writable
5. CPU – Central Processing Unit
6. DBMS – Database Management System
7. FTP – File Transfer Protocol
8. HTML – Hypertext Markup Language
9. HTTP – Hypertext Transfer Protocol
10. HTTPS – Hypertext Transfer Protocol Secure
11. I/O – Input/output
12. ISP – Internet Service Provider
13. JPEG – Joint Photographic Experts Group
14. Kbps – Kilobits Per Second
15. LAN – Local Area Network
16. MIPS – Million Instructions Per Second
17. MMS – Multimedia Messaging Service
18. MP3 – MPEG-1 Audio Layer-3
19. PC – Personal Computer
20. PDF – Portable Document Format
21. RAM – Random Access Memory
22. URL – Uniform Resource Locator
23. USB – Universal Serial Bus
24. VGA – Video Graphics Array
25. WWW – World Wide Web 

## Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ACRONYMS

Write the acronym that pertains to this description.

1. A monitor, system unit, a mouse, and keyboard. \_\_\_\_\_\_\_\_\_
2. Can be accessed by a web browser. \_\_\_\_\_\_\_\_\_
3. A file requiring Adobe Reader. \_\_\_\_\_\_\_\_\_\_
4. An address on the Internet. \_\_\_\_\_\_\_\_\_
5. A network of computers linked together. \_\_\_\_\_\_\_\_
6. A disc that can record data. \_\_\_\_\_\_\_\_\_
7. Connects devices, such as printers to a computer. \_\_\_\_\_\_\_
8. Company you pay to get internet access. \_\_\_\_\_\_\_\_
9. Runs the operating system and all applications. \_\_\_\_\_\_\_\_\_
10. Measurement for data transfer rates. \_\_\_\_\_\_\_\_\_
11. A compressed audio format. \_\_\_\_\_\_
12. A program that manages data. \_\_\_\_\_\_
13. Memory chips to read data. \_\_\_\_\_
14. Round discs that hold data. \_\_\_\_
15. Language used to create webpages. \_\_\_\_\_
16. A disc that can be written on multiple times. \_\_\_\_\_\_
17. Describes sending data in and out of computer. \_\_\_\_
18. Sends messages, videos, images on a mobile phone. \_\_\_\_
19. A disc that data on it cannot be changed. \_\_\_\_\_
20. Standard interface for a monitor. \_\_\_\_\_\_
21. Measurement of the processor in the computer. \_\_\_\_
22. Defines rules for transferring data over web pages. \_\_\_\_\_
23. Format for compressing pictures. \_\_\_\_\_
24. Set of rules for transferring files on the internet. \_\_\_\_
25. Rules to encrypt data for security purposes. \_\_\_\_\_\_

## FILL IN THE BLANKS

1. Upon exiting an application, you should always \_\_\_\_\_\_\_\_ your work.
2. The part of the CPU that performs arithmetic computations is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The three phases of the Information Processing Cycle are

\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_.

1. The part of the CPU that performs the Instruction Cycle is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. A small group of computers that are connected by a common communication link is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. An example of input hardware is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. An example of output hardware is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. The program used to access the Internet is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Web pages are written in text files using \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. In order to perform certain functions within an application, you can use the \_\_\_\_\_\_\_\_ key instead of using a mouse.
8. An application you can use to find web pages using key words is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. The address of a web page is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

## TRUE OR FALSE

1. \_\_\_ The CPU receives, processes, stores, and transfers data.
2. \_\_\_ Speakers are an example of output hardware.
3. \_\_\_ Arithmetic calculations are performed in the control unit.
4. \_\_\_ VGA is an interface to the keyboard.
5. \_\_\_ A scanner is an example of an output device.
6. \_\_\_ Data can be seen as output on a monitor.
7. \_\_\_ This is an example of a URL: https//mypage.com.
8. \_\_\_ A LAN is a group of computers that can share data.
9. \_\_\_ The Ctrl key can be used with other keys to do tasks.
10. \_\_\_ PDF is an example of a file type.
11. \_\_\_ An ISP is not needed in order to access the internet.
12. \_\_\_ HTML is used to create web pages.
13. \_\_\_ Using Ctrl + X keys will print your work.
14. \_\_\_ The CPU uses binary code to execute instructions.
15. \_\_\_ A byte is a unit of measure consisting of eight bits.
16. \_\_\_ A kilobyte is 1,000 bytes.
17. \_\_\_ Clicking on the “?” in an application will provide you with help for the application you are in.
18. \_\_\_ The internet can only be accessed by a search engine.
19. \_\_\_ DBMS stands for database maintenance service.
20. \_\_\_ A print server allows multiple users access to use a LAN printer.
21. \_\_\_ Electronic mail is transmitted over the internet.
22. \_\_\_ The internet is part of the world wide web.
23. \_\_\_ A CD-ROM is a disc that can be written over multiple times.
24. \_\_\_ A USB is a port used to connect hardware to the CPU.
25. \_\_\_ RAM is hardware that the CPU can access randomly rather than sequentially.