Computer Terminology
8th Grade Computer Class

Parts of a Computer

Input Units- any device that can feed information into the computer.

Ex. Keyboard, Mouse, touch screen monitor, Microphone,
Scanner, Web Cam

Output Units

- Decode information

Examples. Monitor, Printer, Speakers, Projector

LCD:
LIQUID
CRYSTAL
DISPLAY

Central Processing Unit (CPU)-

The “brain” of a computer, which reads programs and changes each program’s
instructions into actions .

“THE BRAIN”

Memory or Storage Units-

RAM- (Random Access Memory)

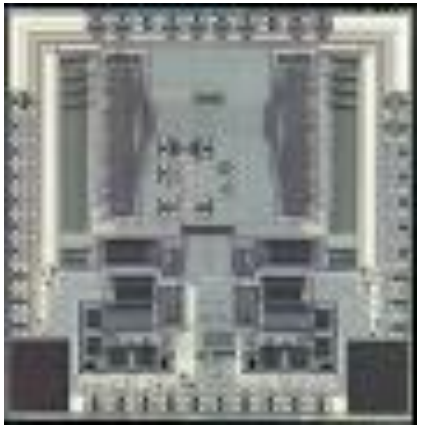
- Remembers what you tell the computer to do while the computer is on.

ROM- (Read Only Memory)

- Holds program instructions after power off
- Instruction set for startup

Integrated Circuit (IC)

- Is a tiny piece of silicon that contains thousands of electrical circuits. (A circuit is a path over which electric current or pulses flow.)



How the Microprocessor Works

1. **Fetch- Get the instruction from** the computer's memory or storage device
2. **Decode- Figures out what the** instruction is
3. **Execute- Carries out the instruction**

Binary Code

(1 = ON, 0= off)

- System of 1's and 0's used to represent information

Virus

- An illegally planted program that reproduces itself by secretly attaching to other programs and carrying out unwanted and often damaging operations.

Virtual Reality (VR)

- Is a multimedia application that uses 3-D graphics to create a realistic simulation

Hardware

- The physical part of a computer system
  Examples: Keyboard, disk drive.
Monitor and the internal electronics

Software

- System, utility, or application, programs used by a computer to perform desired tasks

Artificial Intelligence

- Is the process computers use to solve problems and make decisions that are commonly made by humans.

Wiki

- Allows the easy creation and editing of collaborative websites.

Social Networking

- Focuses on building online communities of people who share interests and/or activities

EX: facebook , twitter , LinkedIn

WEB 2.0

- The second generation of the internet. Instead of just a place to find information, it is also used for social networking (talking to friends)

Binary digit =bit

A group of 8 bits=byte

A group of 1024 bytes=kilobyte

A group of 1024 kilobytes=

megabyte

A group of 1024 megabytes=

GIGABYTE

A group of 1024 Gigabytes=

Terabyte

A group of 1024 Terabyte=

Petabyte

A group of 1024 Petabyte=

Exabyte

It would take approximately 1 trillion years to download an Exabyte file from the Internet using high-power broadband

A group of 1024 Exabyte=

Zettabyte

A Zettabyte is the equivalent of:

-The total storage capacity of 75 billion 16 GB iPads

-All the information in all the academic libraries in the US-times half a million

Internet Service providers

- Are companies that allow you to access the Internet for a FEE ($)

Search Engines

- Are programs that have been created to make it easier to search the Internet.

Examples:

Hypertext Markup Language (HTML)

- **(HTML)- is a special language used on the** World Wide Web that allows computers to talk to one another.

Network

- Uses a central computer that stores information from many smaller computers

Programming Language

- Translates information entering the computer into a form that it can understand. EX. C++, JAVA and PERL

The Internet

- **HTTP (Hypertext Transfer Protocol):** is a digital protocol for distributed, collaborative, information. It is the foundation of data communication for the World Wide Web.

- **HTTPS (Hypertext Transfer Protocol Secure):**is a more secure version HTTP to provide encrypted communication and secure identification of a network web server. HTTPS connections are often used for payment transactions on the World Wide Web and for sensitive transactions in corporate information systems.

The Internet

- **World Wide Web:** abbreviated as **WWW and** commonly known as **the Web, is a system of interlinked** hypertext documents accessed via the Internet. With a web browser, one can view web pages that may contain text, images, videos, and other multimedia and navigate between them via hyperlinks.

- **URL (Universal Resource Locator)** The best-known example of the use of URLs is for the *addresses of web* pages on the World Wide Web, such as http://www.example.com/.

The Trouble Shooting Process

- **Identify the problem**
- **Establish a hypothesis or theory of cause**
- Test the theory to determine cause
- **Establish plan to fix problem**
- **Verify full system functionality**
- **Document findings, actions outcomes**