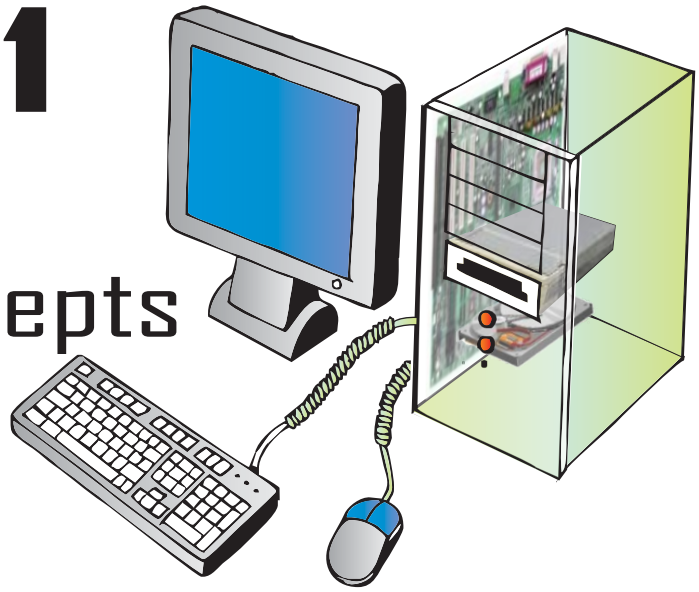
Part 1



Computer Concepts in Details

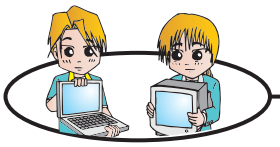
Learning Objectives

After completing this part, you should be able to:

- remember some computer facts;
- differentiate bits from bytes;
- state the different characteristics of memory, disk and drive;
- specify the types of applications software;
- cite the importance of operating system;
- show appreciation on how virtual reality works;
- mention some commonly used applications software;
- acquire some tips before purchasing a personal computer; and
- describe how computer works for man.

Word Power

Computer
Bits
Bytes
Memory
Disk
Drive
Software
Operating System
Word Processing
Database
Spreadsheet
Desktop Publishing
Virtual Reality
Robodoc
Virus
Local Area Network
Wide Area Network
Modem

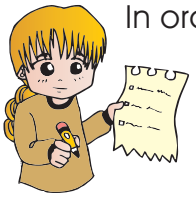


Computer Facts

Computer is a device that takes in facts, known as **data**. By following instructions, it processes facts to produce information. Computer can process vast amounts of data in a very short period of time just like our brain.

Data and information can be numbers, letters, sounds, pictures or symbols. The pictures and symbols which a computer produces are called **graphics**.

A computer cannot think for itself. It will do only what it is told to do - no more, no less. People often talk about "computer error" but usually this means human error. If you print an erroneous document, it will definitely produced an erroneous printout respectively.



In order to process data, computers need three things - hardware, software and peopleware.

Hardware is the computer's machinery - the parts that you can see and touch, like the monitor and all the electronic devices and circuits inside it.

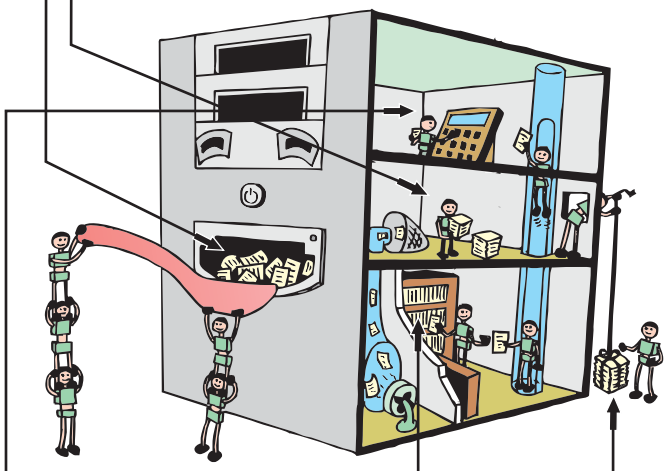
Software is all the facts and list of instructions that a computer receives in order to carry out its tasks. All the different lists of instructions are called **programs.**

What happens inside

The picture below shows what is going on inside the System Unit and in the Central Processing Unit (CPU) or the brain of the computer where the processing of data takes place.

Input (any of the data and instructions to be processed) is fed into the computer. The keyboard and mouse are the standard input devices used.

The **Control Unit**. Input comes here first and sends to the correct part of the computer to be processed. When work is completed, the control unit collects the information.



The **Arithmetic Unit.** The computer carries out all its work here. The control unit and the arithmetic unit are called together as the *Central Processing Unit* (CPU).

Memory. The data and instructions are stored here.

Output. It is the processed data delivered to the user through the monitor/printer.

How It Goes

Lesson 1

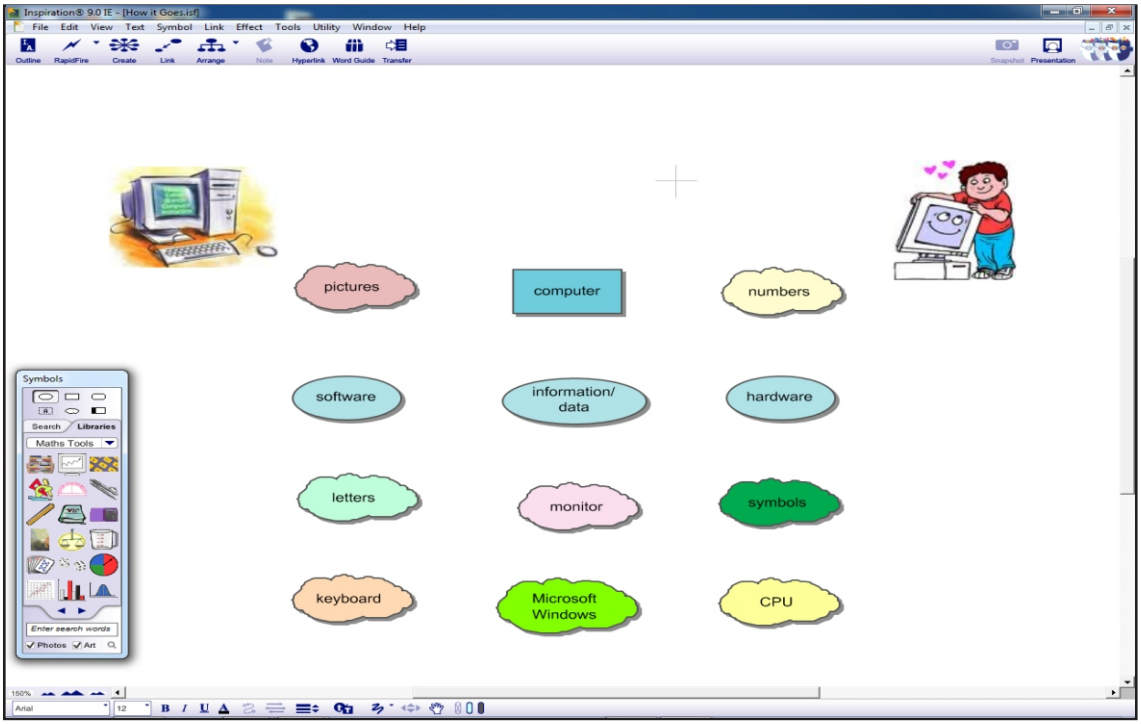
Score

Activity 1

Directions:

1. Launch Inspiration.
2. Open and perform Lesson 1 Activity 1 **How It Goes**.
3. Identify the main topic among the concepts. Use the Link tool to connect it on its subtopics. Clue: The main topic basically comes from the word "compute".
4. Arrange the subtopics using the tree type of arrangement.

Preview:



5. Save the activity as **How It Goes**.

The Process

Lesson 1

Score

Activity 2

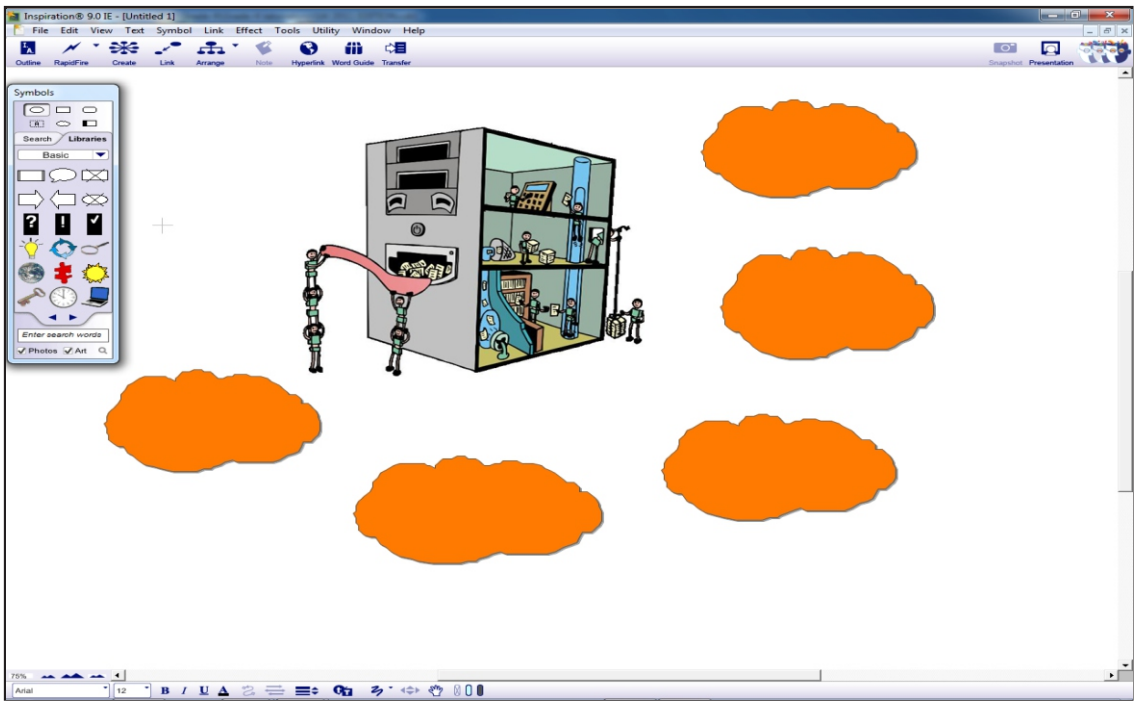
Directions:

1. Launch Inspiration.
2. Open and answer Lesson 1 Activity 2 **The Process**.
3. Describe what happens inside the CPU. Write your answer in the symbols and label them from 1 to 5. Link your answers using the Link tool.

Ways to Type:

a. clicking the outline view
b. clicking the symbol twice

Preview:



4. Save the activity as **The Process**.

Input For Output

Lesson 1

Score

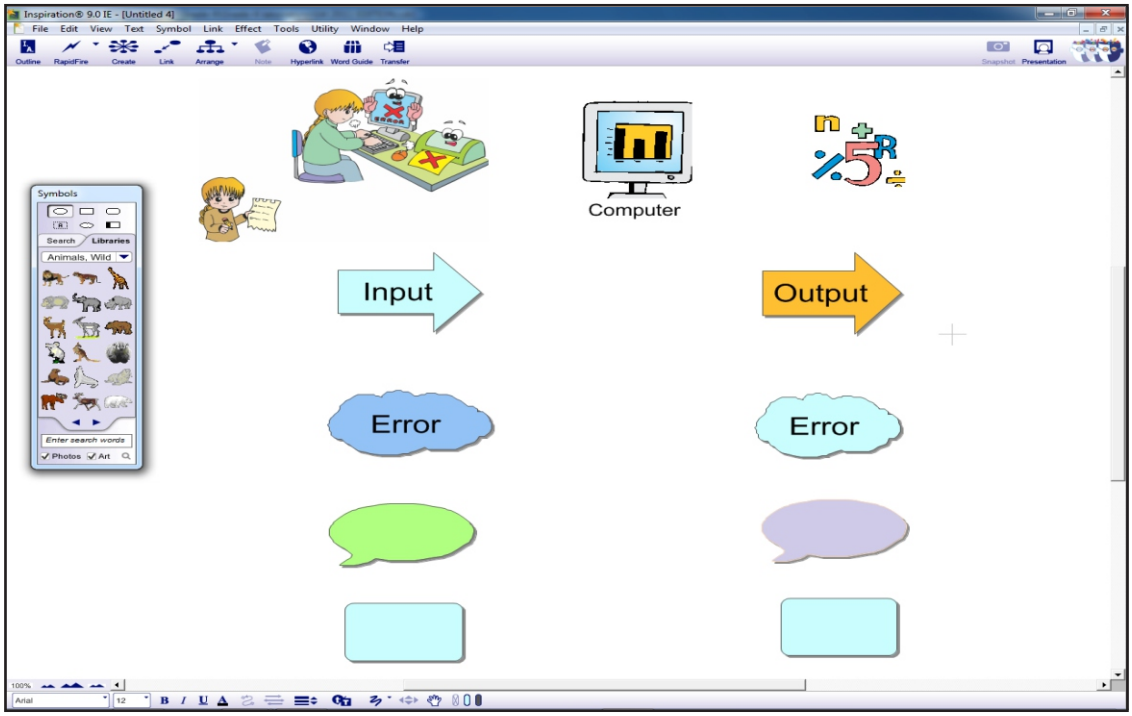
Activity 3

Directions:

1. Launch Inspiration.
2. Open and perform Lesson 1 Activity 3 **Input For Output**.
3. Provide some computer inputs which become an output at the same time. Use any pictures from the library to replace the given symbols. Link the inputs toward the outputs using the Link tool.

   Computer error is human error because whatever the output of the computer is based upon the data that you input.

Preview:



4. Save the activity as **Input For Output**.