

Entrepreneurship First Year

Module 7 Computer Made Easy



What this module is about

Hello, dear student. It's nice to meet you again! Did you enjoy your lessons on "A touch of a finger"? I hope you did! It is to your advantage. Now, you have a new module, "Computer Made Easy". This will be a new experience for you. The lessons are simple. Hence, your learning depends on your interest and capabilities. Explore the world of computers easily. Let's now start working together again.



What you are expected to learn

This module is specifically designed for you. At the end of the module, it is expected that you shall have:

1. discussed the importance of computer education
2. traced the history of computers
3. enumerated the different types of computers according to:
 - a. purpose
 - b. capacity
 - c. use of data
4. explained the characteristics of a computer
5. discussed the capabilities of computers
6. described the parts of the microcomputer
7. discussed the computer system



How to learn from this module

You start by exploring a new world – the world of business. Who knows? Someday you may become one of the successful entrepreneurs our country can be proud of. Hence, you have to:

1. Study the readings very well.
2. Perform the activities and the self-check exercise.
3. Perform suggested tasks to reinforce learning or deepen insights into certain topics.

4. Answer the pretest and the posttest.

Are you ready now? Before proceeding, you are requested to take the pretest first. This test is specifically designed to determine your prior knowledge of the lessons you are about to study.



PRETEST

Directions: Read each item very well and choose the best answer. Write your answers in your assignment notebook.

- _____ 1. Which of the following may not be considered as a computer?
- a. abacus
 - b. analytical engine
 - c. tabular machine
 - d. keyboard
- _____ 2. Which of the following machines facilitate the flow of work in every endeavor?
- a. fax machine
 - b. digital machine
 - c. computer machine
 - d. scanning machine
- _____ 3. Which of the following is the first computing machine used by early merchants?
- a. abacus
 - b. analytical engine
 - c. punch card machine
 - d. integrated circuit
- _____ 4. Mario's task is to prepare the payroll and inventory control. What type of computer is the most appropriate for him to use?
- a. large scale
 - b. medium sized
 - c. supercomputer
 - d. any of these
- _____ 5. Computers may be categorized according to:
- a. speed
 - b. storage order of flexibility
 - c. function

d. all of the above

_____ 6. Anita failed to finish her report due to power failure. Her computer shut down while she was encoding a summary. This shows that her computer is

- a. automatically operated
- b. of lesser memory
- c. electrically dependent
- d. dependent on man's operation

_____ 7. Which of the following holds the instructions before the data processing starts?

- a. control unit
- b. automatic/logic unit
- c. primary storage
- d. central unit

_____ 8. It refers to the physical component of the computer.

- a. people ware
- b. hardware
- c. software
- d. engine ware

_____ 9. Which of the following refers to the product of electronic data processing?

- a. input
- b. result
- c. output
- d. a and c only

_____ 10. It is the stage when data are manipulated or the performance of the operations on the entered data according to the command.

- a. input stage
- b. processing stage
- c. output stage
- d. reversal stage

Lesson 1

Importance of Computer Education

We now live in the computer era. Everywhere, computers are part of the day-to-day existence of Filipinos. Almost all available jobs require computer literacy. Let's study the classified ads below. See what messages they are conveying:

Wanted: Sales Representative
The following qualifications are required:

1. Male/Female
2. Computer literate

Call: 632-75-76 at Block 5, Lot 10, Bocaue, Bulacan

Explore your new world... Let the computer help you... Visit our Internet Café. Only P30.00 per hour.

Shopping made easy ...
Just e-mail your orders.

By analyzing the foregoing advertisements, one can say that computer knowledge has become a vital qualification in finding a job. It is now a part of the day-to-day life of people. Job requirements advertised in leading newspapers show that employers seek applicants who know basic computer operations such as word processing, spreadsheets, and data management.

Look around, and you will agree that the personal computer is prevalent in our environment. This makes you eager to become computer literate, too.

Ask yourself whether you possess the capability required of a computer literate. Start the initial move now and study computer.

Activity 1

- With a friend or classmate, research on the benefits derived from computer use.

- Present your output to any member of the family or to someone knowledgeable in computer in order to validate information from your research work.
- Select at least two of the following topics:
 1. doing business;
 2. preparing reports; and
 3. conducting research.

I think your imagination has inspired you to go on with the next activity, for you to know the importance of Computer Education in research, in performing tasks in offices, in gathering information from a particular establishment, and in applying for a job.

Do the self-check to determine whether you learned something from the foregoing discussion/presentation.



Self-check:

Directions: Write **true** if the statement is true, and **false** if it is not true.

- _____ 1. Computers facilitate access to information.
- _____ 2. Computers contribute much to the improvement of operations in the world of business.
- _____ 3. Computer education does not give you any advantage in applying for a job.
- _____ 4. Computers complicate performing any task.
- _____ 5. Computer education helps you compete in a global society.

Lesson 2

How Computers Came to Be

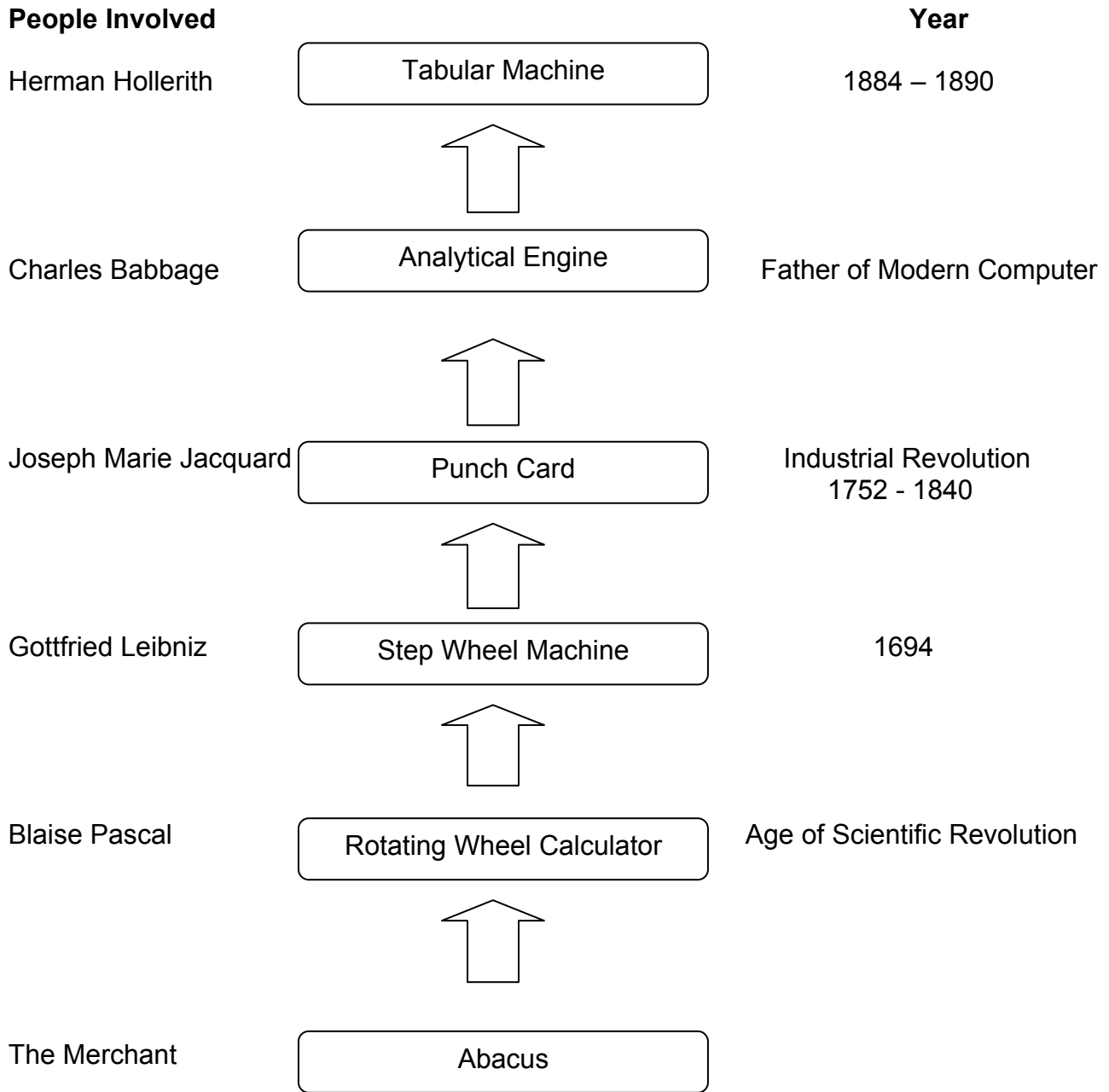
How well did you understand the importance of computer education? It develops essential timely knowledge. You will agree that most tasks today are computerized. But why do you think we have computers today? How did they start? Who are behind this wonderful invention? Well, this is your new lesson today!

1. On the right are man's data of his activities.
2. The problem is how to classify, sort and count them.
3. How did the people during the early years solve their problems?



Let us trace the history.

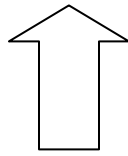
In the flowchart below, trace the history of computers. Start with man's activities.



Development of the Modern Computer

University of Pennsylvania

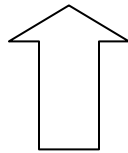
EDVAC



Cambridge University

EDSAC

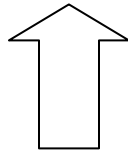
First computer to operate as internally structured instrument



J. Presper Eckert Jr.
John Mauchly

ENIAC

1945
Computer Digital



Mark 1 IBM

Computer Generation

Fourth Generation

32, 000 – 300, 000

Microprocessor
1970 - present



Third Generation

4,000 – 32,000
1 M instruction/sec

1960 – 1970
Integrated circuit

Second Generation



1959 – 1964
Transistors

First Generation

1,000 – 4,000 character
2,000 instruction/sec

1951 – 1958
Vacuum Tube

You have just traced the history of computers. The foregoing flowchart/illustration depicts the evolution of computer. It started from the invention of the abacus and advanced to the creation of the modern computer. Have you found out that computers are capable of greater speed, storage and order flexibility, and other functions depending on how it is programmed?

Activity 2

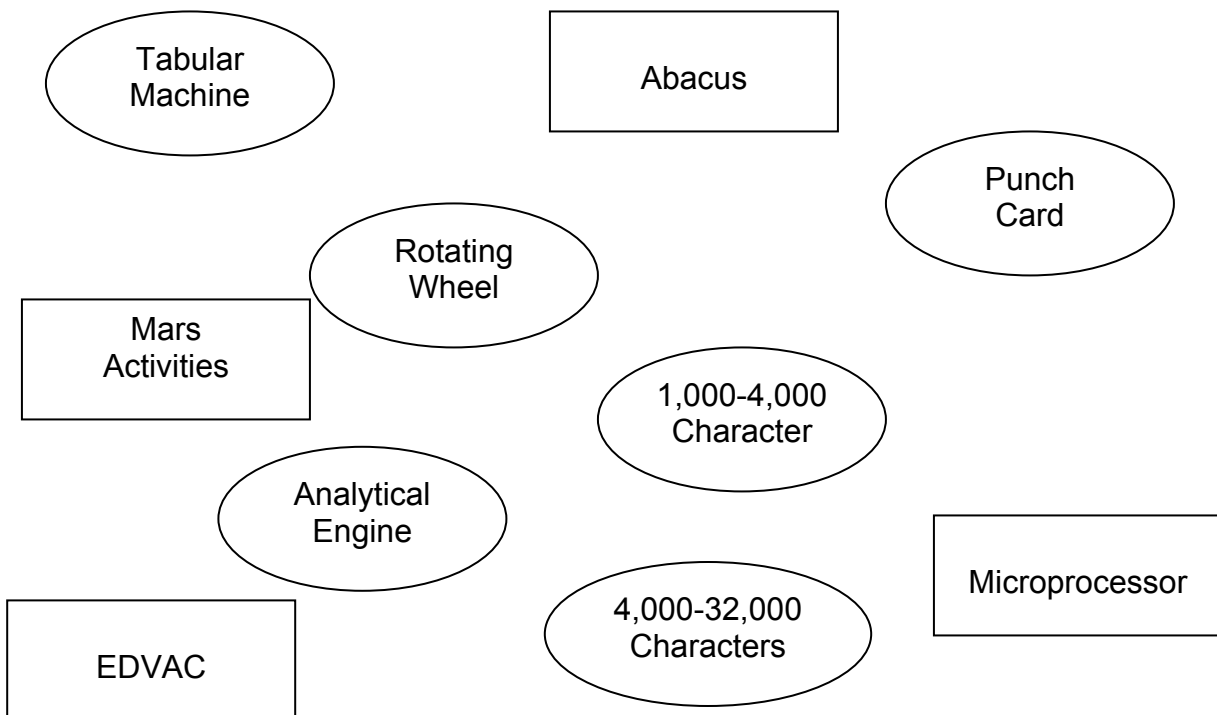
The History of Computers

1. Organize a group of two or three students.
2. Study the illustration that depicts the need for a computing machine.
3. Report on how people in the early ages solved their problems.



Self-check:

Arrange and number the following items according to sequence or order of development.



Instruction:

Analyze the different figures. Try to arrange the same figures to form another sequence. Remember that your arrangement should be logical to justify chronological sequence.

Lesson 3

Types of Computers

You have traced the history of computers right? Your next lesson is on the types of computers. In this lesson, keep in mind that everything has its own purpose, capacity or capability and usage. Let's now start familiarizing yourself with the different types of computers.

Activity 3

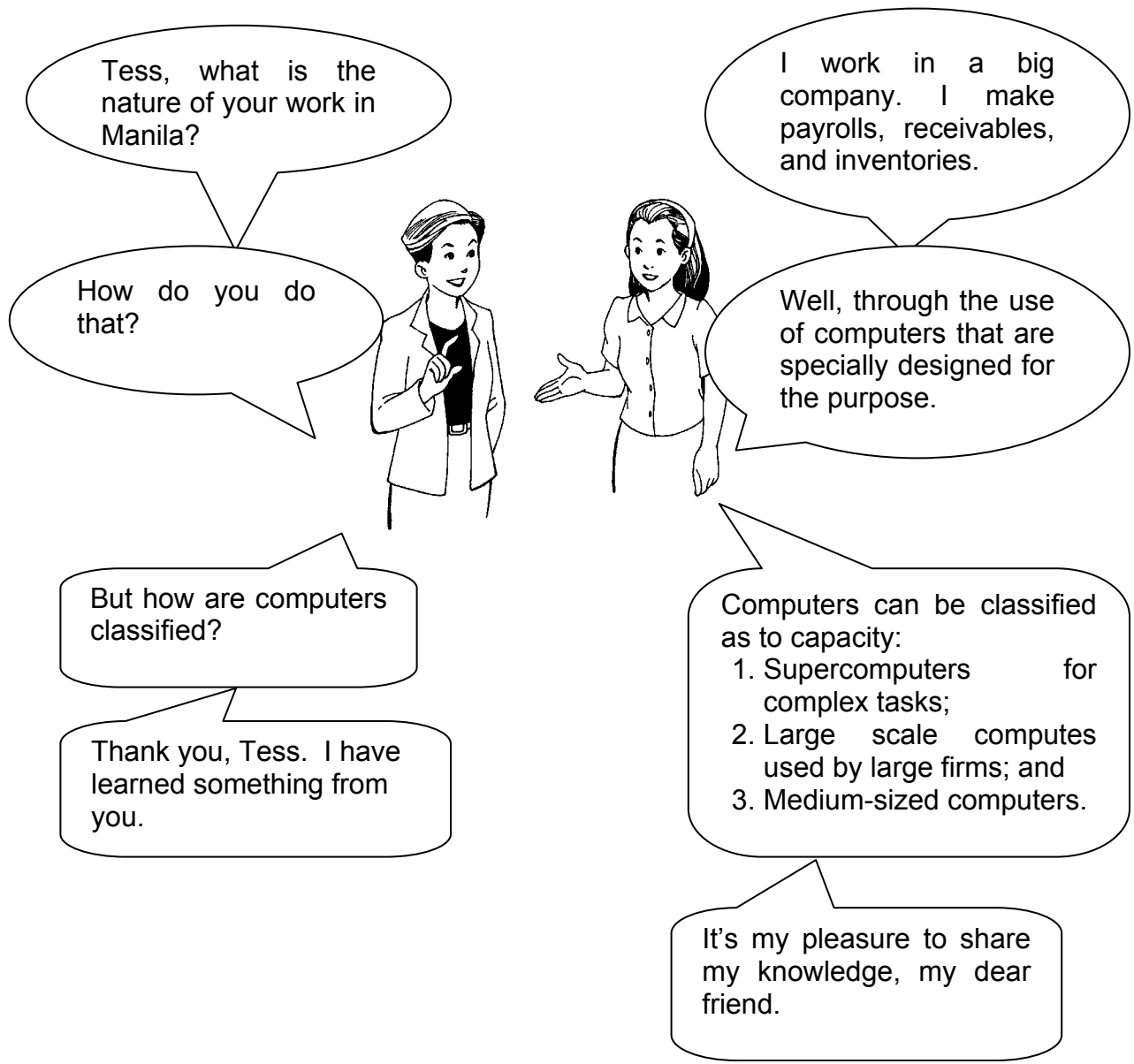


a. Describe or tell something about a washing machine.

Yes, you got it right, a washing machine is used to wash clothes. The above washing machine has a capacity of 2.5 kg. Its purpose is to make washing easier. It saves time, effort and money, too!

In studying the types of computers, read the conversation of Tess and Jenny.

Tess and Jenny are friends. Tess works in Manila, and Jenny works in the province. They met after 10 years.



From the conversation, answer the following:

1. How are computers classified?
 - a. _____
 - b. _____
 - c. _____

Have you answered the foregoing question correctly? If you did, you may proceed to the self-check.



Self-check:

Enumerate the following:

1. What are the purposes of computers?

- a. _____
- b. _____
- c. _____

2. What are the types of computers according to capacity?

- a. _____
- b. _____
- c. _____

Lesson 4

Computer Characteristics and Capabilities

Computers have invaded man's life and activities. Hence, the computer influences much the flow of work in business, factories, government and private institutions, schools, and even homes. You, yourself should know this! How you will do it! Well, by knowing its characteristics and capabilities.

In this lesson, place yourself in an environment of inanimate or lifeless objects and electricity.

Activity 4



Tell something about the following:

- The output of a computer

- How it operates

Very good! A computer:

1. is inanimate/no life
2. depends on electricity
3. is automatically operated
4. has a memory
5. presents with correct data
6. has logical function
7. depends on man's operation
8. performs arithmetic operations
9. presents lessons to ease the burden of book reading

By the way, how does the computer perform all of these?



You are also right!

Amazing!

- a. faster with a speed of 50 million operations/sec
- b. produces exactly the same results
- c. accurate
- d. makes decisions
- e. stores and recalls data
- f. checks accuracy
- g. executes instructions

Have you found out the characteristics and capabilities of computers from the lesson? If you have, answer the self-check.



Self-check:

Following are terms that describe a computer. Identify whether the following are capabilities or characteristics of computers. Draw a star if it is a capability; circle if it is a characteristic.

Drawing

1. inanimate object
2. a speed of 50 million operations/second
3. executes commands
4. automatic operator
5. with reasoning decision
6. correct results
7. relents data
8. exactly the same result

Lesson 5

Parts of the Microcomputer

Do you wonder how a machine runs? Well, you will now study the different parts of a computer, how it functions and what each function produces. Let's analyze the definition of computer and answer the questions on the right side.

Computer – an electronic machine which accepts data from an input device, performs arithmetical and logical operations in accordance with a program or series of instructions, and finally transfers processed data to an output device for further processing.

How does a computer receive data?

How does it work?

What kind of machine is this?

What does it perform?

Now, what do you think are the components of a computer?

Let's discuss the Central Processing Unit of this machine, the CPU:



The Control Unit

Heart and brain of the computer. Supervises or monitors activities performed by the entire system.

The Arithmetic Logic

Performs arithmetical and logical operations.

The Primary Storage

Holds instructions before data processing starts.

What the components of the CPU?

- 1. _____
- 2. _____
- 3. _____

What about the input devices?



Keyboard

They are used to type instructions to the computer and allow the user to communicate with the computer.

Contains:

1. letter keys
2. punctuation keys
3. space bar
4. a numerical key pad
5. Alt, Ctrl, Delete
6. Short cut keys: F1, F2, F3

Output Devices



Monitor

Prints processed data in a television which looks like a video screen and supplies what is known as soft copy. It is a temporary record.

Secondary Storage

Punch card – This is fragile and has the tendency to bend or get lost. Not reusable.

Magnetic Tape Drive – the device that can read from or write on a tape.

Magnetic Disk – resembles a record. It works like a record and a phonograph.

What about the software?

<p>Software – consists of sets of programs, routine and symbolic language vital to the operation and maintenance of the computer.</p>	<p>C L A S S I F I C A T I O N</p>	<p>Operating system – sets of instructions that control behavior and movement, making sure that it functions as programmed.</p> <p>Application system – performs specific tasks such as:</p> <ol style="list-style-type: none"> 1. Word processing 2. Electronic spreadsheet 3. Database
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Did you understand the discussion of computer parts and functions? You may now answer the self-check to determine the extent of knowledge gained from the lesson.



Self-check:

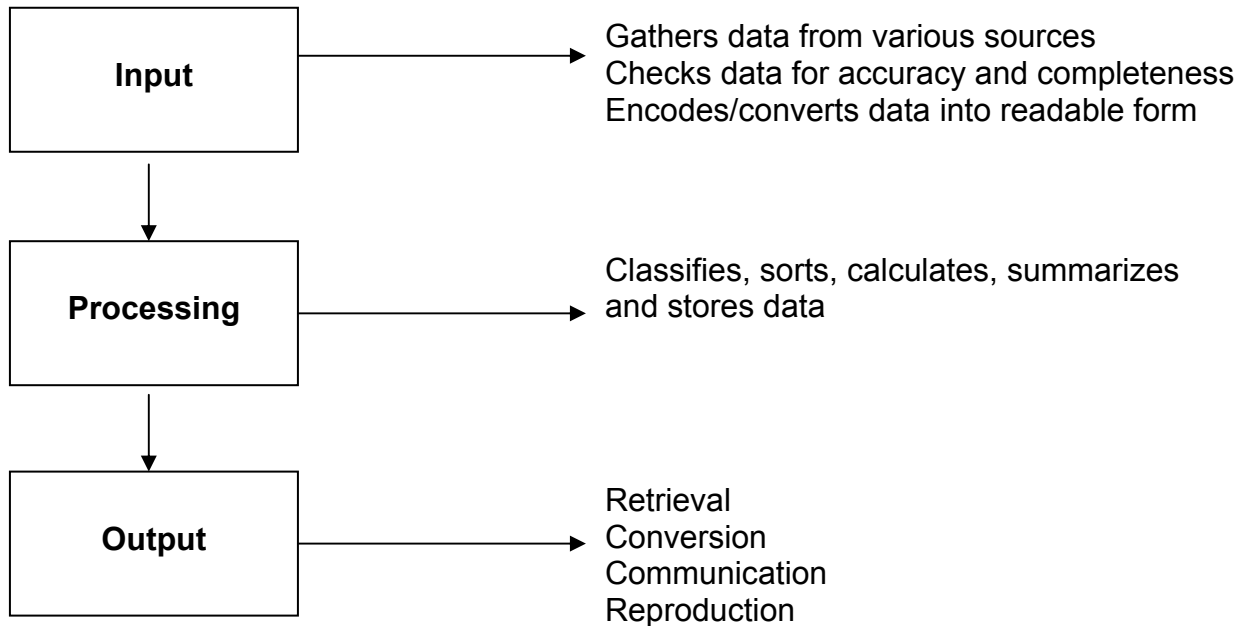
Directions: Fill in the blanks with the correct answer:

1. It is the heart and brain of the computer. _____
2. It holds instructions before data processing starts. _____
3. It is a machine composed of electrical and mechanical parts. _____
4. It is an input device used in typing data to be entered. _____
5. It provides output in video form. _____

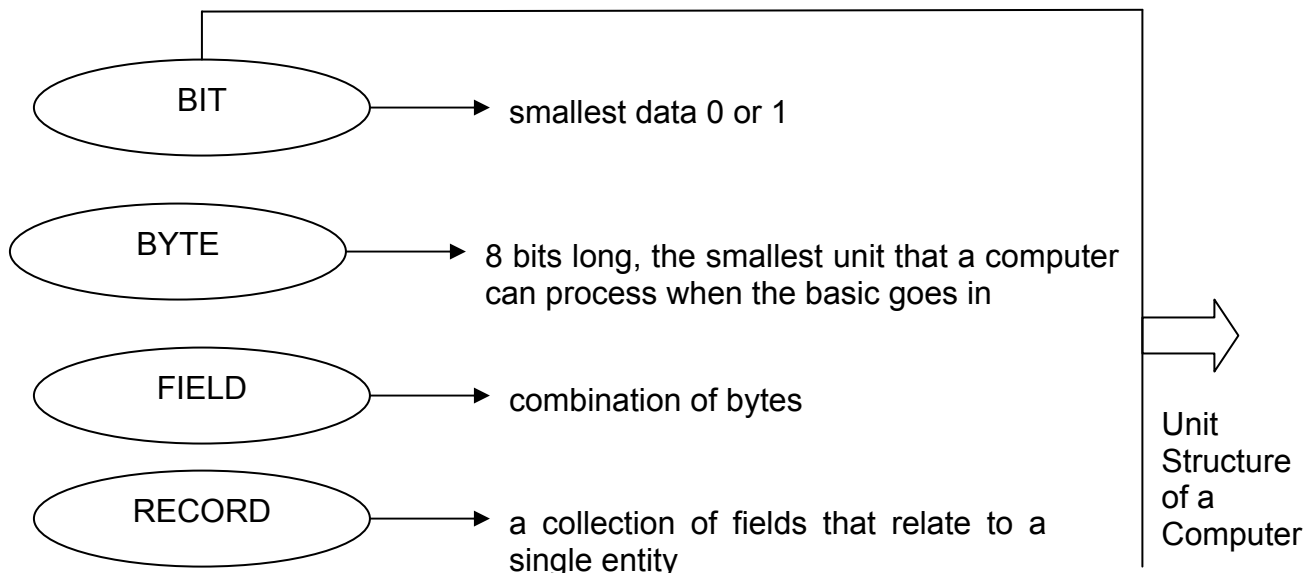
Lesson 6

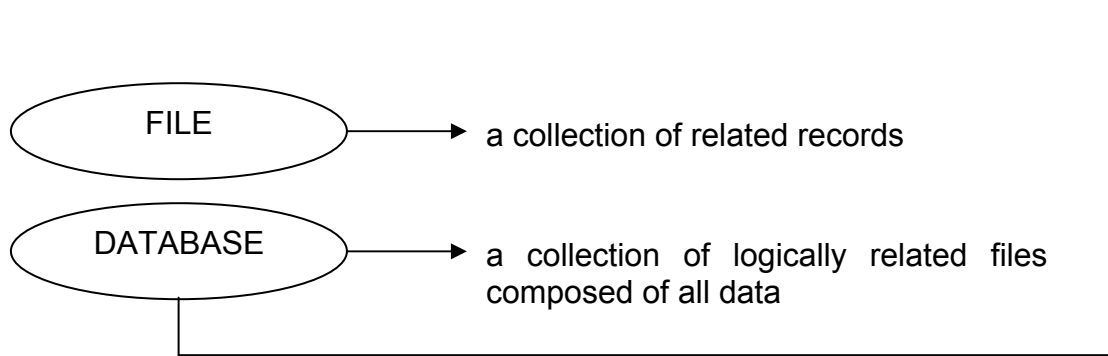
The Computer System

Knowing the different computer parts and their functions is indispensable knowledge in understanding the computer system. A system is established to facilitate work? Hence, the computer system is a program which is systematically installed to facilitate delivery of its services. Now, follow the basic flow below.



System of Sorting and Storing Data





Did you study the flowchart on how data enters through the different input devices? The process is called Electronic Data Processing (EDP). I hope you did the process! If you did it correctly, answer the activity and self-check.

Activity 5

Construct the flow pattern of data processing.



Self-check:

Directions: Match Column A with Column B.

Column A

1. database
2. Input
3. Program
4. File
5. Bit

Column B

- a. gathers data from various sources
- b. systematically installed
- c. collection of related records
- d. data processing done
- e. collection of logically related files
- f. smallest unit which represent data

LET'S SUMMARIZE

- Computer education is very important because most tasks in offices, factories, public and private institutions, schools and even in homes make use of computers.
- It is important to know the history and development of computers to appreciate the works of man. Through the years, man has contributed discoveries that have helped make life livable.
- Computers are classified according to purpose, capacity and usage. Today, many people have maximized their use in government and private offices, schools, homes and business enterprises.
- Computers facilitate the flow of work. They save time, energy and effort. Results of computations are accurate. Data fed to the computers cannot however, be accurate.



POSTTEST

Multiple Choice:

Directions: Read each item very well and choose the best answer.

- _____ 1. Which of the following may not be considered as a computer?
- a. abacus
 - b. analytical engine
 - c. tabular machine
 - d. keyboard
- _____ 2. Which of the following machines facilitate the flow of work in every endeavor?
- a. fax machine
 - b. digital machine
 - c. computer machine
 - d. scanning machine
- _____ 3. Which of the following is the first computing machine used by early merchants?
- a. abacus
 - b. analytical engine
 - c. punch card machine
 - d. integrated circuit
- _____ 4. Mario's task is to prepare the payroll and inventory control. What type of computer is the most appropriate for him to use?
- a. large scale
 - b. medium sized
 - c. supercomputer
 - d. all of these
- _____ 5. Computers are characterized according to:
- a. speed
 - b. storage order of flexibility
 - c. function
 - d. all of the above
- _____ 6. Anita was not able to finish her report due to power failure. Her computer shut down while she was encoding a summary. This shows that her computer
- a. is automatically operated

- b. has an instant memory
- c. is electrically dependent
- d. is dependent on man's operation

_____ 7. Which of the following holds the instructions before the data processing starts?

- a. control unit
- b. automatic/logic unit
- c. primary storage
- d. central unit

_____ 8. This refers to the physical component of the computer.

- a. people ware
- b. hardware
- c. software
- d. engine ware

_____ 9. Which of the following refers to the product of electronic data processing?

- a. input
- b. result
- c. output
- d. only a and c

_____ 10. It is the stage when data are manipulated or performance of the operations on the entered data according to the command.

- a. input stage
- b. processing stage
- c. output stage
- d. reversal stage

Assessment of Responses

Did you get a perfect score, dear student? If you did, congratulations! That was outstanding. That means you understood and remembered the lesson very well.

If you got 7 to 9, very good! That was very satisfactory! You probably remembered most of the facts you like most! I suggest that you read the text again and try to answer the questions you failed to answer correctly.

If you got a score between 4 – 6, your rating was good, but shows that you should have more time for your studies.

If you got 1- 3 dear student, I strongly suggest that you focus more on your studies. Good luck!

This ends your lessons in this module. I look forward to seeing you again next year!



ANSWER KEY

Pretest

1. d
2. c
3. a
4. b
5. d
6. c
7. c
8. b
9. c
10. b

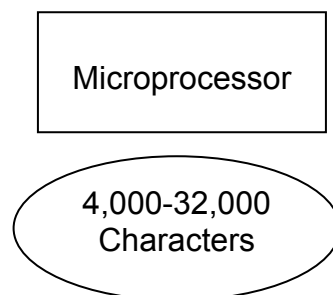
Lesson 1: Activity 1

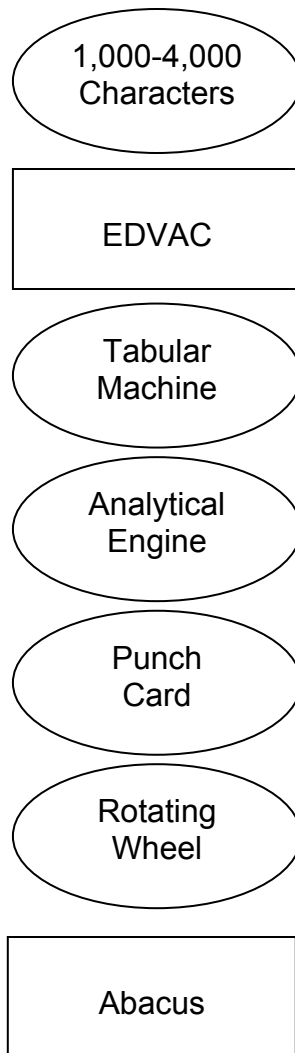
- a. Business transactions become easy. The use of Automated Teller Machine (ATM) saves time from queuing at the bank for a simple bank transaction.
- b. In preparing school reports, one saves time if he/she encodes the report himself/herself. If an individual already knows the use of computers, he/she can make better reports by integrating some clip arts or graphical presentations.
- c. Internet facilities which are common in urban settings, can help a lot. One can access much information, new discoveries and findings in doing research work. He/she, can easily identify information needed for a particular research activity.

Lesson 1: Self-check

1. True
2. True
3. False
4. False
5. True

Lesson 2: Self-check





Lesson 3: Activity

1.
 - a. purpose
 - b. capacity
 - c. usage

Lesson 3: Self-check

1.
 - a. To facilitate the flow of work
 - b. To produce an accurate output
 - c. To produce exactly the same output
2.
 - a. Supercomputer
 - b. Large scale computer
 - c. Medium sized computer

Lesson 4: Self-check

1. resources
2. demands
3. materials
4. skills
5. needs

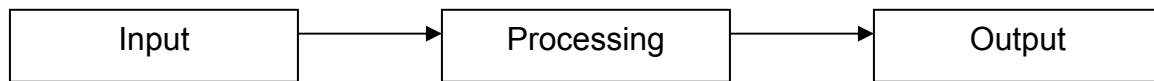
Lesson 5: Activity

1. the control unit
2. the arithmetic logic unit
3. the primary storage

Lesson 5: Self-check:

1. CPU
2. primary storage
3. computer
4. keyboard
5. monitor

Lesson 5: Activity



Lesson 6: Self-check

1. d
2. a
3. b
4. c
5. f

Posttest

1. d
2. c
3. a
4. b
5. d
6. c
7. c
8. b
9. c
10. b