2 Hardware and Software

LESSON PLAN

After this lesson, students will be able to:

» Define computer hardware.
» Give examples of computer hardware.
» Define computer software.
» Give examples of computer software.
» Locate and describe input and output devices.
» Differentiate between software and hardware.
» Explain the need of software to make the hardware work.

WARM UP

Label the basic hardware parts of the standard computer system.

CHAPTER NOTES

- » A computer is a collection of various parts that work together.
- » The two basic parts of a computer are Hardware and Software.
- » Hardware are all parts of the computer that we and touch and feel. All parts of the computer are hardware.
- » All the programs and the instructions that we give to the computer are called Software. For example: Paint, Notepad, Tux Paint, calculator, etc.
- » Hardware works on instructions given to it through a software. A combination of both forms a usable computer system.
- » Some hardware devices are necessary for the working of a computer like keyboard, monitor, mouse and CPU whereas some other hardware devices are attached separately to the CPU box if they are required for a particular task. These devices are called Peripheral Devices.
- » All the computer parts that help in giving information or instructions to the computer are called Input Devices. For example: Keyboard, Mouse, Scanner, Webcam, Microphone, etc.
- » A joystick is an input device used for playing computer games.
- » Touchscreen helps in giving input to the computer just by touching the screen with a finger.
- » All hardware devices that help in giving the result or output are called Output Devices. For example: Monitor, Printer, Speakers, Headphones, etc.
- » Software is a set of programs or instructions given to the computer in order to solve a problem. Software can be of the following two types:
  - o System Software
  - o Application Software
- » System software helps in controlling the working of the computer.

» The Operating System (OS) is system software and the most important software for any computer. Some popular examples of operating systems are: Windows, Linux and Mac.

» Application software is designed and used for a specific purpose. For example, Paint software is used for drawing and colouring whereas Notepad software is used for typing and editing.

DEMONSTRATION

» Using different hardware and software in school.

LAB ACTIVITIES

Visit the computer lab in your school and perform the following tasks.

(a) Write the names of any four different hardware parts you find in the lab.

(b) Now, classify each of them into input and output devices.

(c) Name any five software you find in the computers of your lab.

(d) Is there any input device that can record your voice?

ASSESSMENT

Teacher can give on oral quiz on computer software and hardware, input and output devices, etc.

SUGGESTED CLASS ACTIVITIES

A. Tick (✓) the correct option.

1. Which of the following is hardware?

    (a) Keyboard   (b) CU   (c) MS Windows

2. Software is of:

    (a) two types   (b) three types   (c) four types

3. Which of the following is an input device?

   (a) Monitor   (b) Printer   (c) Keyboard

4. Which of the following is application software?

   (a) MS Windows   (b) MS Paint   (c) Linux

5. Which hardware will you use to listen to music?

   (a) Speakers   (b) Printer   (c) Microphone

B. Fill in the blanks with suitable words given in the box.

system   Hardware   scanner   printer   software

1. _____ refers to parts of a computer which we can see and touch.

2. A _____ copies a picture or text printed on paper into the computer.

3. A _____ is used to take printouts of our work on paper.

4. A computer cannot function without _____ software.

5. Paint is an example of _____.