



# How Computers Work

## LESSON PLAN

**After this lesson, students will be able to:**

- » Give examples of home machines
- » Define Input
- » Define Process
- » Define Output
- » Discuss the IPO cycle of different everyday machines
- » Explain the computer's IPO cycle
- » Understand the term GIGO – Garbage In Garbage Out

## WARM UP

**Write each word three times.**

Data	Instructions	Input	Process	Output
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

**Ans.** Do it yourself.

## CHAPTER NOTES

- » Every machine follows the IPO concept.
- » Computer is also a machine.

- » The Input-Process-Output cycle is followed by computers.
- » What we give to a machine is called input.
- » What the machine does to the input is called process.
- » What we finally get from the machine is called output.
- » We give data and instructions to a computer as input.
- » The processed data is called output.
- » Devices through which we give data to a computer are called input devices.
- » Devices through which we get output from a computer are called output devices.

## DEMONSTRATION

- » Doing calculations on a computer to explain the IPO cycle.

## LAB ACTIVITIES

### 1. Solve the questions below and type the answers in Notepad.

Follow the IPO cycle. Write down the output for the following.

	INPUT (DATA & INSTRUCTIONS)	OUTPUT
1	Add 7 and 2.	
2	Write the word 'computer'.	
3	What comes after 9?	
4	Write the number '5' three times.	
5	Fill in the blanks – a, b, c, d, __, __.	

2. Open the Calculator application on the computer and solve the following problems.

»  $12 + 17 =$  \_\_\_\_\_

»  $23 * 8 =$  \_\_\_\_\_

»  $123/7 =$  \_\_\_\_\_

»  $40 * 3 =$  \_\_\_\_\_

»  $50 + 73 =$  \_\_\_\_\_

»  $98/65 =$  \_\_\_\_\_

## ASSESSMENT

Give an oral quiz to test the students on the IPO cycle. Take examples of machines they use in their daily life, as well as computer devices.

## SUGGESTED CLASS ACTIVITIES

A. Identify the Input and Output for the following machines. One has been done for you.

Input	Process	Output
1. Fruits	Crushing of fruits	Fruit Juice
2. _____	Water gets heated	_____
3. _____	Corn gets heated in popcorn machine	_____
4. _____	Clothes get ironed by steam iron	_____
5. _____	Clothes get washed by washing machine	_____

