

Note: The child has to do all the exercises in a four line interleaf notebook.

Lesson 1

The Thinking Machine: Computer



1 The Thinking Machine: Computer

Objectives

After reading this chapter, you will learn:

- What is thinking
- Uses of a machine
- Different types of computers
- Some hidden computers
- What is a machine
- What is a computer
- Uses of a computer

WHAT IS THINKING

All that work for which we apply our mind is considered as thinking.

Thinking involves:

- Finding an answer from memory.

Example: What is your birth date?
My birth date is _____.

- Finding an answer by calculation.

Example: What is the sum of 10 and 30?
Sum is _____.

- Finding an answer by comparison or checking conditions.

Example: You have a piece of chalk and a pencil. Which one will you use to write on your notebook?
I will use _____ to write on my notebook.



Teacher, Please
Give more examples of thinking to students.

ACTIVE PAGE

WHAT IS A MACHINE

Machine is a man-made thing which helps us to do different works. For example:

Automatic Washing Machine is that kind of a machine which does not need a man regularly to operate it.

REAL life Connection

Children! Ask your mom to make mango shake or juice. Find out how she gives input to the mixer grinder and takes output from it.

INPUT

The thing which we give to the machine for processing is called Input.



PROCESSING

The function of changing one form of a thing to another is called Processing.



OUTPUT

The thing which machine gives us after processing is called Output.



USES OF A MACHINE

- Machine helps us to work faster.
- Machine gives us an accurate result.
- Machine saves our energy and time.
- Machine makes our work easier.

EXTRA BYTE

The Thor was the first electric-powered washing machine.

Some examples of popular machines:



Sewing Machine



Calculator



Electric Iron



TV

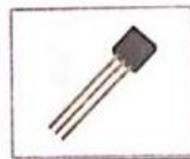


Washing Machine



Mixer Grinder

Transistor, Chip/IC, and Microprocessor are the main components of an Electronic Machine.



Transistor



Chip/IC



Microprocessor

FEATURE OF A COMPUTER

- Computer is a man-made machine.
- Computer runs on electric power.
- Computer saves our energy and time.
- Computer works very fast.



Computer

- Computer gives us an accurate result.
- Computer helps us to do calculations.

LIFE SKILLS

Always remember to take permission of your elder before using the computer.

DIFFERENT TYPES OF COMPUTERS

There are many types of computers. Let us know about them.

DESKTOP

Desktop is the most popular and multi purpose computer today. It is designed to fit on the top of a desk.

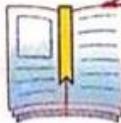


Desktops

LAPTOP

A Laptop is a small and light weight computer. It can be easily carried to a number of locations.

You must know



Desktop computer and Laptop are also called personal computer or simply PC.



Laptop

TABLET PC

Tablet PC is a very small computer just like a big smartphone. You can carry it anywhere and work on it.

EXTRA BYTE

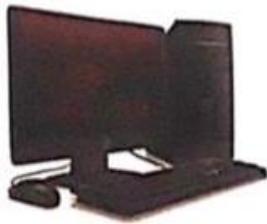
Most tablets can connect to independent physical keyboards by wireless Bluetooth or USB.



Tablet PC

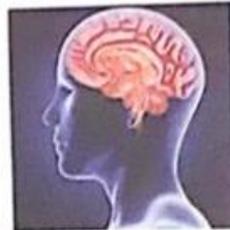
A computer works similarly like a human brain. Let us compare the human brain with a computer.

COMPUTER



1. Electricity is required to run a computer.
2. A computer works very fast.
3. A computer uses many parts as input and output devices.

HUMAN BRAIN



1. Human beings need to take food so as to make their brain function.
2. Human brain works slower than a computer.
3. Human brain also uses many organs of our body for receiving input and producing output.

In-text Assessment ★ ★ ★ ★

Match the following:

1. Laptop
2. PC
3. Machine
4. Electric Iron

- a. Machine
- b. Helps us to work faster
- c. Light weight computer
- d. Desktop and Mini Tower

USES OF A COMPUTER

Computer is used at various places.



Bank



School



Hospital



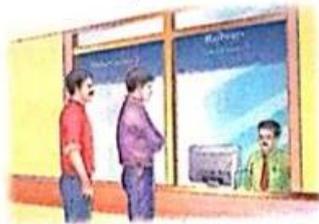
Shop



Office



Home



Railway Station



Hotel

SOME HIDDEN COMPUTERS

There are some hidden computers, built in with some machines:

1. ATM is a machine which automatically counts and gives money to the ATM card-holder. ATM stands for Automated Teller Machine.



ATM Machine



Robot

2. Robot is an artificial man. There is a hidden computer built inside its body.

3. A computer-controlled car has a hidden computer. It is guided by the computer and runs without a driver.



Computer-Controlled Car



Eye Testing Machine

4. There is a hidden computer built inside an Eye Testing Machine.



Ask your teacher to show all the machines present in your computer room.

Revision Time

- ❖ All that work for which we apply our mind is considered as thinking.
- ❖ Machine is a man-made thing which helps to do different works.
- ❖ Computer is an electronic machine.
- ❖ Desktop, Laptop, and Tablet PC are different types of computer.
- ❖ A computer works similarly like a human brain.

Exercise -1

Fill In The Blanks

- 1- Machine helps us to do different things.
- 2- Laptop is a small and light weight computer.
- 3- A computer works similarly like a human brain.
- 4- ATM stands for Automated Teller Machine.
- 5- A robot is an artificial man.
- 6- Desktop computer and Laptop are also called personal computer.

Exercise -2

Give One Word Answer

- 1- A very small computer just like a smartphone - **Tablet PC**
- 2- The most popular and multi-purpose computer designed to fit on the top of a desk - **Desktop**
- 3- It is a man-made thing which helps us to do different works - **Machine**
- 4- The first electric powered washing machine – **The Thor**
- 5- A machine which automatically counts and gives money - **ATM**

Exercise -3

Define The Following Terms

- 1- **Input** - The data which we give to the computer for processing is called Input.
- 2- **Processing** - The function of changing the data from one form to another is called processing.
- 3- **Output** - The data which the computer gives us after processing is called output.
- 4- **Desktop** - A desktop is the most popular computer which is designed to fit on the top of a desk.
- 5- **Laptop** - A laptop is a small and light weight computer which can be carried easily to any location.

Exercise -4

Answer the Following Questions

- Q1- Write three uses of a machine?
- A1- The three uses of a machine are-
- (a) It helps us to work faster
 - (b) It saves our energy and time
 - (c) It makes our work easier
- Q2- How many types of computers are there? Name them.
- A2- There are three types of a computer.
- (a) Desktop

(b) Laptop

(c) Tablet PC

Q3- Write three features of a computer?

A3- The three features of a computer are

(a) computer is a man-made machine

(b) computer works very fast

(d) computer saves our energy and time

Q4- Name six places where computers are used?

A4- Computers are used at various places-

(a) school

(b) bank

(c) hospital

(d) hotel

(e) office

(f) home

Q5- Name any three machines which makes our work easier?

A5- The three machines which makes our work easier are-

(a) a calculator

(b) a washing machine

(c) an electric iron

Exercise -5

Match The Following

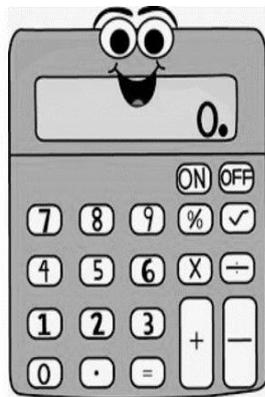
1- Super Computers	is the main component of an electronic machine...4
2- Robot	is an electronic machine...6
3- Electricity	is to apply our mind to do a work...5
4- Chip / IC	are the most powerful computers...1
5- Thinking	is an artificial man...2
6- Computer	is required to run a computer...3

Exercise -6

Draw two machines which help us to do different works.



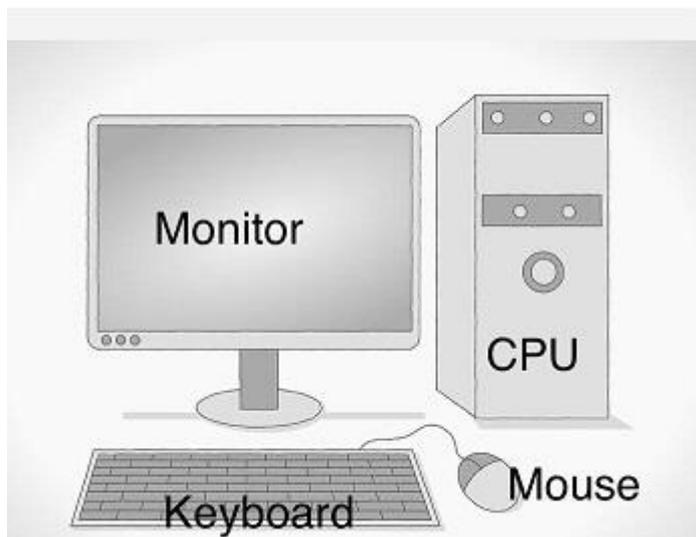
A Washing Machine



A Calculator

Exercise-7

Draw a computer and label its parts.



A Computer

