Tablet Computers

- The tablet is smaller and lighter than a laptop.
- It can be held with one hand.
- It can be easily carried from one place to another.

Smartphone

- The smartphone is smaller and lighter than a tablet.
- It can be held in the palm.
- It can easily fit into the pocket.
- It can also be used for making calls.

The first computer was as big as a room.

Uses of Computer

We can do many tasks using a computer, as mentioned below.

We can draw, paint, and make collage of pictures.

We can attend online classes.

We can listen to music.

We can play games.

We can chat with our friends or family members who live far away.

We can solve mathematical problems quickly.

We can buy things online.

We can record our voice and video.


We can listen to music.


We can play games.


We can chat with our friends or family members who live far away.


We can solve mathematical problems quickly.


We can buy things online.


We can record our voice and video.

The first computer was as big as a room.

The first computer game, Spacewar, was invented in 1962.

Isn't it great that computers can help us in so many ways? While we may think of the computer as a supermachine, there are certain things that it cannot do.


It cannot help the elderly cross the road.

It cannot go fishing with us.



It does not have feelings.

Ask students to come up with more examples of things that they can do but a computer cannot.

Key points

- Any device that makes our work easier is called a machine.
- A computer performs tasks quickly and runs on electricity.
- Desktops, laptops, tablets, and smartphones are the four commonly used computers that we see around us. They differ from each other in size and other features.
- A computer can perform many tasks at the same time.
- Computers are used in many places, such as banks, schools, airports, railway stations, etc.
- A computer cannot do all the things that humans can. It cannot climb stairs, help an elderly person cross the road, or blow a balloon.

In the Lab

Stand up if...

Listen to your teacher. She will say a few sentences relevant to machines or computers. Stand up if the sentence is true, and remain seated if the sentence is wrong. All the sentences the teacher says will have the opening words 'Stand up if ...'

For example, stand up if ...

1. computers are used in a forest.
2. a pair of scissors is a machine.
3. your best friend is a machine.

Prepare a list of sentences before carrying out this activity.

Project

1. Prepare a chart of places where a computer is used to do the work easier. Paste or draw relevant images. [Skill(s): Creativity, Critical Thinking]

2. Make a list of work you do, where you use a computer or mobile and where you do not use them. [Skill(s): Critical Thinking]

Self-Assessment

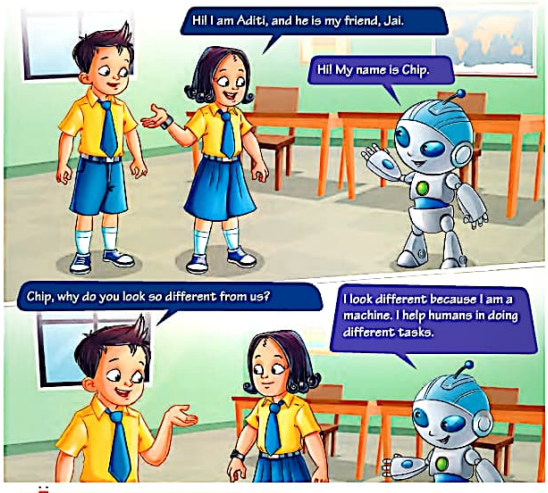
I can	On my own (✓)	With help (✓)
identify machines.		
differentiate among laptops, desktops, and smartphones.		
identify the tasks that the computer can perform.		
list the tasks where a computer cannot be used.		

Beyond the classroom

https://tinyurl.com/NextITGr1Ch1Computerfacts

https://tinyurl.com/NextITGr1Ch2usesofcomputer

1 Computer And Its Uses



Topics covered in this chapter:

- Machines
- Computer – A unique machine
- Different types of computers
- Tasks that computers can perform
- Tasks that a computer cannot perform
- Uses of computers

Machines

Imagine how we would go to meet our cousins and friends if there were no bicycles, cars, scooters, or buses!

We would have to walk to all the places. It would be difficult to walk to far-off places. Different means of transport, such as buses, cars, scooters, and trains, have made it easy for us to travel from one place to another. Similarly, a lift has made it easier to reach the higher floors of a building.

Any device that makes our work easier is called a machine.

Buses, cars, bicycles, trucks, lifts, and telephones are all examples of machines. Some commonly used machines that we see around us are shown in the figures.


Washing machine


Fridge


Scissors

Ask students to name some more machines that they have seen around them.

Computer – A Smart Machine

All machines are designed to do specific tasks. For example, the fridge keeps food and water cold. Similarly, a car is used to travel from one place to another.

A computer is a special machine that can do many tasks at the same time without making mistakes. It performs tasks quickly and works on electricity.

The first computer was invented by Charles Babbage.

Different types of computers

The four types of computers that we commonly see around us are shown below.

Ask students if they have used any of these computers. Ask them what they use it for.

These computers differ from each other on the basis of their size and other features.

Desktop Computers

- The desktop computer is heavy.
- It is kept in one place.
- It is difficult to carry due to its size.
- Different parts of this type of computer are connected to each other through wires.

Laptop Computers

- The laptop is smaller and lighter than a desktop computer.
- It can fit in a bag.
- It can be taken from one place to another with ease.

Tablet Computers

- The tablet is smaller and lighter than a laptop.
- It can be held with one hand.
- It can be easily carried from one place to another.

Smartphone

- The smartphone is smaller and lighter than a tablet.
- It can be held in the palm.
- It can easily fit into the pocket.
- It can also be used for making calls.

The first computer was as big as a room.

Uses of Computer

We can do many tasks using a computer, as mentioned below.

We can draw, paint, and make collage of pictures.

We can attend online classes.

Isn't it great that computers can help us in so many ways? While we may think of the computer as a supermachine, there are certain things that it cannot do.

It cannot help the elderly cross the road.

It cannot go fishing with us.

It does not have feelings.

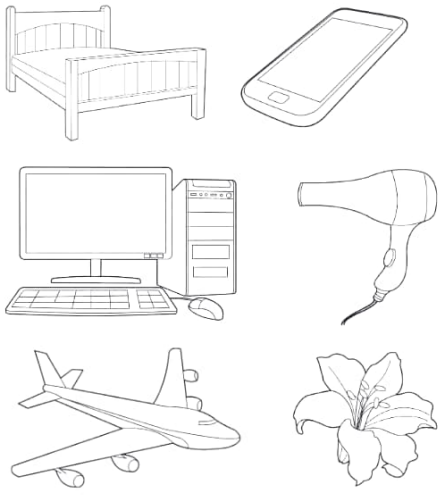
Ask students to come up with more examples of things that they can do but a computer cannot.

Key points

- Any device that makes our work easier is called a machine.
- A computer performs tasks quickly and runs on electricity.
- Desktops, laptops, tablets, and smartphones are the four commonly used computers that we see around us. They differ from each other in size and other features.
- A computer can perform many tasks at the same time.
- Computers are used in many places, such as banks, schools, airports, railway stations, etc.
- A computer cannot do all the things that humans can. It cannot climb stairs, help an elderly person cross the road, or blow a balloon.

Worksheet

1. Colour the machines.



2. Computer is a special machine because

3. Circle the type(s) of computers that can be carried easily from one place to another.

4. Write the correct word from the given jumbled words below.

(a) DSEKOTP _____

(b) SMRATPHNOE _____

(c) TBATEL _____

(d) MAHCIEN _____

(e) CMOUPTER _____

5. Circle the activities that a computer can help us with.

Listening to music

Making chapatis

Learning maths

Playing games

Taking medicines

Painting

Think Sheet

1. Below are some household tasks mentioned. Can you help your mother with the machines so that she can perform the tasks more efficiently? Draw the lines for each task to be replaced by its machine.

[Skill(s): Logical thinking, Problem solving]

2. List the activities you can do with your friend and the ones you can do with the computer. Write 'F' for a friend and 'C' for the computer in the boxes below.

[Skill(s): Logical Thinking, Initiative and Self-Direction]

☐ Do homework	☐ Write letters	☐ Play video games
☐ Chat online	☐ Go for walk	☐ Play football
☐ Paint pictures	☐ Watch movie	☐ Cook food

Based on their functionality, different parts of a computer can be categorised into input or output devices.

Input and output devices

Input devices help us to provide data and instructions to the computer.

Some commonly used input devices are a keyboard and a mouse.

Input devices

An **output device** tells us what task the computer has carried out. The most commonly used output devices are a monitor and a printer. It displays what we do using the computer.

Output devices

Key points

- Keyboard, mouse, CPU and monitor are the main parts of a computer.
- All the parts of a computer need to be connected for it to function properly.
- An input device tells the computer what to do.
- An output device tells us what the computer has done.
- Keyboard and mouse are input devices.
- Monitor and printer are output devices.

Worksheet

1. Ravi's mother is making a strawberry milkshake. She puts strawberries, sugar and milk in the blender and runs it for two minutes. She then pours the strawberry milkshake into a glass and gives it to Ravi. Look at the pictures given below and write input or output against them.




2. Match the name of the device with its picture.

Mouse

Keyboard

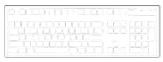
CPU Cabinet

Monitor




3. Colour the input device used to type your name on the computer.





4. Colour the input device used to point to a particular area on the monitor.



5. Colour the output device of a computer.



6. Fill in the blank spaces to get the names of the parts of a computer.

(a)  M O _ I _ _ R

(b)  M _ U _ _ _

(c)  K _ Y _ O _ R _

(d)  C _ _ C _ B _ _ E _

7. There are some computer parts hidden in this messy room. Count and write their number in the boxes.

☐ Monitors ☐ Keyboards ☐ Mouses ☐ CPUs

Think Sheet

1. Join the wires of the given computer so that it starts working.
[Skill(s): Logical Thinking, Information Literacy]

2. You are pressing the keys on the keyboard, but nothing happened on the computer. Tick (✓) and list out the possibilities for the problem.
[Skill(s): Problem Solving]

1. The connection of the keyboard is not properly done with the mouse. ☐
2. The computer may not be turned on. ☐
3. Keyboard is damaged. ☐
4. The mouse is not working properly. ☐
5. The monitor is not displaying the text. ☐

In the Lab

1. Play games that require the use of computer parts.
The steps to play a few are given below.

(a) Go to GCompris → Discovery Activities → Colour Activities → Colours. Click on the right duck.

(a) Go to GCompris → Reading Activity → Missing Letter.

Project

1. Draw and colour a computer: Draw a picture of the computer you are using. Be sure to draw all the computer related items on the desk in front of you. After the drawing is complete, colour it and write the names of different computer parts. [Skill(s): Creativity]

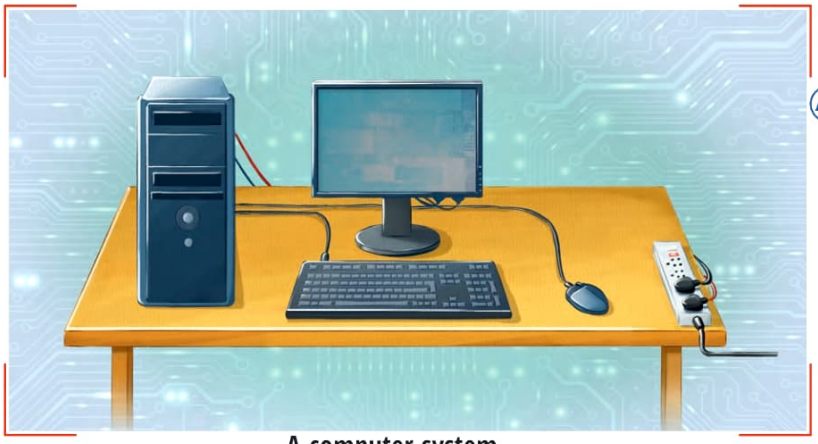
2. Act like a computer: Make a group of four. One person will be the leader and the other three should enact the roles of keyboard, CPU and monitor. The leader should go to the friend who is the keyboard to type a simple one-digit addition question. Then, pass the question to the friend who is the CPU. The CPU solves the problem and hands over the answer to the friend acting as the monitor. The friend acting as the monitor will show the answer to the class. [Skill(s): Communication, Collaboration and Creativity]

Self-Assessment

I can	On my own (✓)	With help (✓)
distinguish parts of the computer.		
identify input and output devices.		
list the names of the parts of a computer.		

Beyond the classroom

All these parts have to be connected to the CPU for a computer to function properly.



A computer system

Computers heat up when they perform tasks and so they have fans to keep them cool.

Take the students to the computer lab and show them how each part of a computer is connected. Type a message using the keyboard and let the students see it on the monitor. Disconnect the keyboard, type something and explain to the students why it does not work.

Input

As the computer cannot work on their own they need data and instructions called input from us to carry out various tasks.

Output

The final result that the computer produces is called the output.

Explain the concept of input and output to students by giving them some real-life examples. For example, ask them what the input and output would be when making a milkshake or when adding numbers.

In the Lab

1. Play games that require the use of computer parts.
The steps to play a few are given below.

(a) Go to GCompris → Discovery Activities → Colour Activities → Colours. Click on the right duck.

(a) Go to GCompris → Reading Activity → Missing Letter.

Project

1. Draw and colour a computer: Draw a picture of the computer you are using. Be sure to draw all the computer related items on the desk in front of you. After the drawing is complete, colour it and write the names of different computer parts. [Skill(s): Creativity]

2. Act like a computer: Make a group of four. One person will be the leader and the other three should enact the roles of keyboard, CPU and monitor. The leader should go to the friend who is the keyboard to type a simple one-digit addition question. Then, pass the question to the friend who is the CPU. The CPU solves the problem and hands over the answer to the friend acting as the monitor. The friend acting as the monitor will show the answer to the class. [Skill(s): Communication, Collaboration and Creativity]

Self-Assessment

I can	On my own (✓)	With help (✓)
distinguish parts of the computer.		
identify input and output devices.		
list the names of the parts of a computer.		

Beyond the classroom

Let's discuss about computer parts and their uses in detail.

Conduct a discussion in class to develop an analogy between different parts of the human body and parts of a computer.

Parts of a computer

CPU cabinet

The CPU (Central Processing Unit) is called the brain of the computer and is placed inside a box known as the CPU Cabinet. It controls all the workings of the computer system.

A **keyboard** has many buttons called **keys**. It has number, alphabet and symbol keys on it. Just like we use a pencil to write on paper, the keyboard is used to write on a computer.

Keyboard

Mouse

A **mouse** is also known as the pointing device. It is used to point at things on the monitor. A mouse usually has two buttons and a small wheel between the buttons.

The first computer mouse was made of wood? It was invented by Douglas Engelbart in 1964.

Monitor

A **monitor** looks like a television screen. All the work we do on the computer can be seen on the monitor.

2 Parts of a Computer

Topics covered in this chapter:

- Parts of a computer
- Input and output
- Input and output devices

Let's discuss about computer parts and their uses in detail.

Conduct a discussion in class to develop an analogy between different parts of the human body and parts of a computer.

Parts of a computer

CPU cabinet

The CPU (Central Processing Unit) is called the brain of the computer and is placed inside a box known as the CPU Cabinet. It controls all the workings of the computer system.

A **keyboard** has many buttons called **keys**. It has number, alphabet and symbol keys on it. Just like we use a pencil to write on paper, the keyboard is used to write on a computer.

Keyboard

Mouse

A **mouse** is also known as the pointing device. It is used to point at things on the monitor. A mouse usually has two buttons and a small wheel between the buttons.

The first computer mouse was made of wood? It was invented by Douglas Engelbart in 1964.

Monitor

A **monitor** looks like a television screen. All the work we do on the computer can be seen on the monitor.

Left-click

To left-click, press the left mouse button once and then release it immediately.

Double-click

To double-click, click the left mouse button twice quickly.

Right-click

To right-click, press the right mouse button once and release it immediately.

Scroll

Scroll is used to move the page up and down on the computer screen using the scroll wheel on the mouse.

Let us learn the correct way to hold the mouse.

We should always hold the mouse with a loose grip.

While holding the mouse with the right hand the index finger is placed on the left button and the middle finger on the right button. While holding the mouse with the left hand, the index finger is placed on the right button and the middle finger is placed on the left button of the mouse.

The rest of the fingers are placed on the sides to help us move the mouse.

If we are using a touchpad, we can use our index finger to move the mouse pointer.

Demonstrate the correct way to hold the mouse. Emphasize the importance of gently pressing the mouse buttons.

Key points

- The keys with the letters A–Z are called alphabet keys.
- The keys with the numbers 0–9 are called number keys.
- A mouse has two buttons: the left button and the right button.
- Left-click, right-click and double-click are the three types of mouse clicks.
- The mouse is kept on a flat surface called the mouse pad.
- The mouse pad helps the mouse cursor move smoothly across the computer screen.

While holding the mouse with the right hand the index finger is placed on the left button and the middle finger on the right button. While holding the mouse with the left hand, the index finger is placed on the right button and the middle finger is placed on the left button of the mouse.

The rest of the fingers are placed on the sides to help us move the mouse.

If we are using a touchpad, we can use our index finger to move the mouse pointer.

Demonstrate the correct way to hold the mouse. Emphasize the importance of gently pressing the mouse buttons.

Key points

- The keys with the letters A–Z are called alphabet keys.
- The keys with the numbers 0–9 are called number keys.
- A mouse has two buttons: the left button and the right button.
- Left-click, right-click and double-click are the three types of mouse clicks.
- The mouse is kept on a flat surface called the mouse pad.
- The mouse pad helps the mouse cursor move smoothly across the computer screen.

Worksheet

1. On the keyboard below, colour the Enter key red, the alphabet keys green and the number keys yellow.

2. In the picture of the mouse shown here, colour the left button red and mark it as 'L', right button green and mark it as 'R', scroll button blue and the remaining part of the mouse yellow.

3. Circle the words related to a computer mouse.

right-click	left-click	mouse pad	scroll button
rat tail	double-click	arrow	photo-click
touchpad	Enter key		

While holding the mouse with the right hand the index finger is placed on the left button and the middle finger on the right button. While holding the mouse with the left hand, the index finger is placed on the right button and the middle finger is placed on the left button of the mouse.

The rest of the fingers are placed on the sides to help us move the mouse.

If we are using a touchpad, we can use our index finger to move the mouse pointer.

Demonstrate the correct way to hold the mouse. Emphasize the importance of gently pressing the mouse buttons.

Key points

- The keys with the letters A–Z are called alphabet keys.
- The keys with the numbers 0–9 are called number keys.
- A mouse has two buttons: the left button and the right button.
- Left-click, right-click and double-click are the three types of mouse clicks.
- The mouse is kept on a flat surface called the mouse pad.
- The mouse pad helps the mouse cursor move smoothly across the computer screen.

Worksheet

1. On the keyboard below, colour the Enter key red, the alphabet keys green and the number keys yellow.

2. In the picture of the mouse shown here, colour the left button red and mark it as 'L', right button green and mark it as 'R', scroll button blue and the remaining part of the mouse yellow.

3. Circle the words related to a computer mouse.

right-click	left-click	mouse pad	scroll button
rat tail	double-click	arrow	photo-click
touchpad	Enter key		

While there are a variety of keyboards available, most of us use the QWERTY keyboard. It is named after the first 6 alphabet keys on the upper left of the keyboard.

The keys other than the number and alphabet keys on a computer keyboard are called **special keys**. They are used to perform special tasks such as moving to the next line while typing, typing uppercase letters etc.

Computer Mouse

The computer mouse is used to point at items on the monitor. The mouse pointer is also called the cursor. It is shown on the screen as an arrow.

When we move the mouse, the arrow on the screen also moves in the same direction.

The computer mouse was invented in 1964 by Douglas Engelbart. It was called 'mouse' because it had a basic mouse-like shape and the cable that attached it to the computer resembled the tail of a mouse.

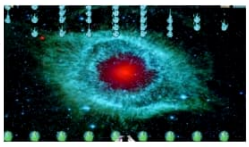
In the Lab

1. Play computer games that require the keyboard.

Start a game by selecting GCompris on the desktop and press the Enter key. Explain the uses of the Enter key while starting an application.

(a) Open Tux Typing and use the alphabet keys on your keyboard to play the game.

Tux Typing → Comet Zap → Space Cadet → Colours



2. Play games that require the use of a mouse.

Ask your teacher to open the following games.

(a) Left-click the mouse

Go to GCompris → Discover the Computer → Mouse Manipulation Activities → Click on Me

Left-click all the fish before they leave the fish tank.

(b) Double-click the mouse

Double-click the mouse to erase the area and discover the background.

Go to GCompris → Discover the Computer → Mouse Manipulation Activities Double-click the mouse

(c) Right-click the mouse

Go to GCompris → Discover the Computer → Mouse Manipulation Activities → Click the mouse

Let us practise the right-click. Right-click on the bricks to clear the area. Identify the animal shown in the picture. (Note: This activity can be done with a left-click as well).

Project

Different keys

The keyboard has many keys on it and is used for typing. List out some other machines that has keys on it in the space given. Collect pictures of the machines listed and paste them in a scrapbook. Compare these machines with a keyboard.

[Skill(s): Logical Thinking and Creativity]

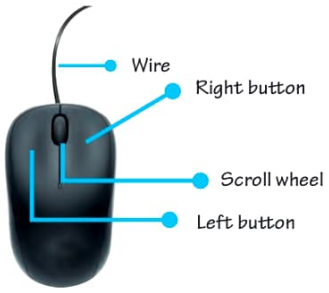
Self-Assessment

I can	On my own (✓)	With help (✓)
recognise alphabet keys.		
draw and identify number keys.		
identify different buttons of a mouse.		
right-click, left-click and double click using a mouse.		
use the touchpad of a laptop.		
identify the differences between the mouse and a touchpad.		

Beyond the classroom

Mouse is an input device.

- The computer also has a mouse which is different from the house mouse.
- It is used to give inputs to the computer.
- It has two buttons with a scroll wheel on it.
- The mouse also has a tail (wire) which is attached to the CPU box.
- The mouse is kept on a flat surface called the mouse pad.



The laptop has an area called **touchpad** that can be used to move the cursor around the screen. It has buttons to perform the functions of a mouse.

You can also connect a mouse to a laptop if you don't like to use the built-in touchpad.

There are three types of mouse clicks.

3 Input Devices- Keyboard and Mouse

Topics covered in this chapter:

- Alphabet keys
- Special keys
- Left and right mouse buttons
- Number keys
- Left-click, right-click and double-click

The keyboard is an important part of the computer system. It is an input device that lets you type letters and numbers onto the computer. Let's look at the keyboard in detail.

We can use the keyboard to enter text and give instructions to a computer. The buttons on the keyboard are called keys.

You can show a keyboard to students and ask them to observe it. Let them share what they see written on the keys. Write down their responses on the blackboard. Introduce alphabet keys, number keys and special keys separately.

Alphabet keys

The keys with A to Z on them are called alphabet keys. These are used to type words and sentences.

Number keys

The keys with 0–9 on them are called number keys. These are used to type numbers.

In the Lab

1. Observe the desktop of your computer. Name any five icons that you see on it and share it with your classmates. Are there any common icons on your desktop and that of others? Find out the names of the common icons on the desktop of the computers in your lab.
2. Locate the icon on your computer desktop.
3. Locate the GCompris icon on the desktop and do the following.
   (a) Start the GCompris activity.
   (b) Click the – button and observe what happens to the activity window.
   (c) Click the GCompris icon at the bottom of the desktop to make the activity window bigger again.
   (d) Play any game of your choice.
   (e) Close the GCompris activity.

Project

Mary's computer desktop looks plain. Draw an attractive wallpaper for her in your notebook. Choose the design and colours for the desktop such that the icons can be easily seen. [Skill(s): Creativity and Innovation]

Self-Assessment

I can	On my own (✓)	With help (✓)
identify computer desktop, icons and wallpaper.		
launch an activity using desktop icons.		
open, minimise and maximise buttons on the activity window.		
start and shut down a computer.		

Beyond the classroom

https://tinyurl.com/mr24zj34

4 Using the Computer

Topics covered in this chapter:

- Computer desktop, icons and wallpaper
- Launching an activity using desktop icons
- Open, minimise and maximise buttons on the activity window
- Starting and shutting down a computer

Starting a computer

Starting a computer is the process of preparing it for use.

Follow these steps to start a computer.

1. First, check whether the power supply switch is turned on.

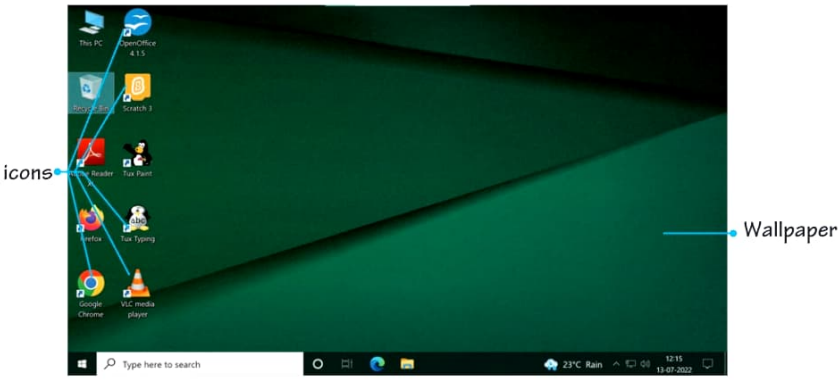
2. Locate the power button on the CPU and press it.

   You will hear a noise and the power button will glow.

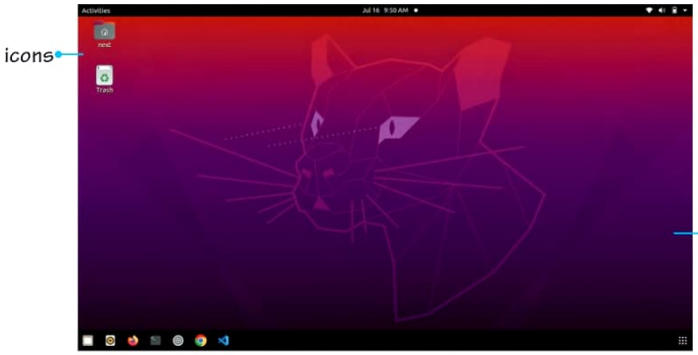
3. Press the power button on the monitor to switch it on.

The screen we see immediately after switching on the computer is called the **desktop**.

Different computers may have different types of desktops.



Desktop - Windows



Desktop - Ubuntu

The background picture on the desktop is called the **wallpaper**

Each of the small pictures you see on the desktop is called an **icon**.

For example :

This is the icon for media player.

This is the icon for Tux Paint.

This is the icon for Trash.

This is the icon for Google Chrome.

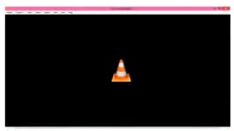
Prepare for the lesson by having a clean desktop with only a few icons relevant to the lesson. Select an interesting wallpaper which does not clutter the desktop or reduce the readability of the icons.

Start an activity using the icons on the desktop.

Place the mouse pointer on the activity icon and double-click the mouse.

Look at the examples given below.

Double-clicking the media player icon opens the following window.



Double-clicking the Tux Paint icon opens the following window.

OR

1. Move the mouse pointer on the activity icon and left-click.
2. Then, press the Enter key.

The activity window will open.

There are three buttons at the top-right corner of the activity window.

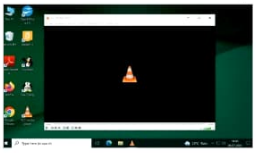
Minimize button

On clicking this button, the window hides itself into an icon which appears at the bottom of the desktop.

For example, clicking on the media player window will turn it into an icon at the bottom of the desktop.

- Windows

Clicking on the icon again will bring it back to its original size.



Windows

Maximize button

On clicking this button, the window enlarges and fits itself on the desktop.

For example, clicking on the button will make it cover the entire screen.

Close button

On clicking this button, the activity window closes and the activity icon disappears from the bottom of the desktop

Open a music file or draw something on Tux Paint. Demonstrate the use of maximise, minimise and close buttons.

Shutting down the computer

Shutting down is the action of closing all the activities on a computer and turning it off. We should shut down the computer when it is not in use.

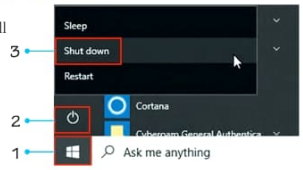
Follow these steps to shut down the computer.

For Windows system

1. Click Start button at the bottom left corner of the screen.
2. Click Power option from the menu.
3. Click Shut down.
4. A popup menu will appear. Click power off option.

The light on the CPU cabinet will go off.

It takes some time for the computer to shut down. This is because the computer closes all the activities that it started.



5. Switch off the monitor by pressing the power button.

6. Switch off the power supply after the light on the CPU box and the monitor goes off.

Key points

- The screen that appears on the monitor when the computer is switched on is called the desktop.
- The background picture on the desktop is called the wallpaper.
- Each of the small pictures we see on the desktop is called an icon.
- The Minimize button squeezes the activity window into its icon at the bottom of the desktop.
- The Maximize button reopens the activity window to fill the computer screen.
- The Close button closes the activity window.
- It is important to shut down the computer after use.

Worksheet

1. Emma wants to start her computer. The different steps to start, use and shut down a computer are given below, but they are all jumbled. Help her by numbering the steps in the correct order.

Switch on the CPU power. ☐
The desktop is visible. ☐
Switch off the monitor and the power. ☐
Switch on the monitor. ☐
Shut down the computer. ☐

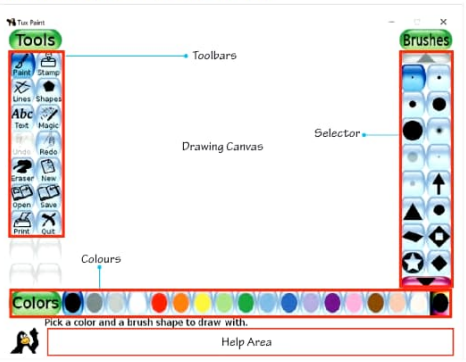
2. Match the following.

Maximise button	
Minimise button	
Close button	

3. Name the icons you see on the desktop screen.

4. Rahim opens the Tux Paint to draw scenery. But the window is not covering the whole desktop window. Help Rahim with the name of the button to increase the size of the Tux Paint window.

Components of the Tux Paint window



The Tux Paint window has the following components.

Drawing Canvas: It is the blank white space similar to a blank page in a drawing book. We draw pictures here.

Toolbar: The toolbar has a variety of drawing tools such as pencil, brushes, colours and eraser. These can be found under **Tools**.

Selector: This section shows various options for the tool we have selected. For example, if we are working with the Paint tool, the selector will show us different kinds of brushes we can use.

Colors: We can select the colours we want for our drawing from here.

Help Area: It is the section at the bottom of the window from where the Tux Paint penguin guides us with tips to use different tools.

Open Tux Paint and explain the different components of the Tux Paint window.

Steps to open a new drawing in Tux Paint

1. Click New under Tools to start a new drawing. Click the arrows to move up and down and choose a picture to work on.

2. Double-click a picture to open.

Demonstrate how to use the arrows to scroll through the different drawings available in the Tux Paint library.

Think Sheet

1. Fill the Sudoku with the following words

Magic Tool Paint Tool Eraser Quit

Rules to fill the sudoku

a. All the rows and columns should have all four words without repetition.

b. All the sections (2x2) should have the four words.

[Skill(s): Critical Thinking and Problem Solving]

	Eraser		Magic Tool
Magic Tool		Eraser	
Paint Tool			Eraser
	Quit	Magic Tool	

2. You were asked to draw a scenery. What will you use, a chart paper or the Tux Paint application and why? [Skill(s): Critical Thinking]

In the Lab

1. Use the Tux Paint application to do the following exercises.

(Instruction for the teacher: Draw the images in Tux Paint and keep them open for the students to colour.)

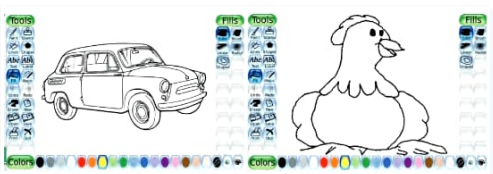
(a) Colour my house! (b) Make me colourful!

2. Open Tux Paint and colour the pictures.

(a) Start the application by clicking the Tux Paint icon and open the pictures for colouring.

(b) Explore the Paint tool and colour the pictures.

(c) Save the file after you complete the task.



Suppose we select the following picture to colour.

Did you notice the help tip at the bottom? The help tip is given to help you use the tool.

Now let us explore some basic tools from the toolbar.

Fill

1. This tool allows you to fill color in your drawing.
2. Click from tools.
3. Select any colour from the Colours palette.

4. Click anywhere in the picture to fill the colour.

Magic

This tool allows us to add special effects to the drawing.

1. Click from Tools.

The mouse cursor will change into a magic wand and the Selector will show the options available for the Magic tool.

2. Click on any effects from the options available.

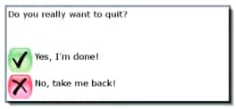
The picture will be stored on the computer.

Quit

It is used to close the Tux Paint window.

1. Click Quit under Tools to close Tux Paint.

The following options will appear.



Click ✓ to close Tux Paint.

Click ✗ to keep the Tux Paint window open.

Key points

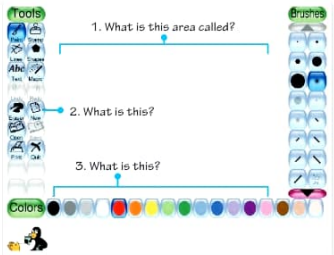
- Tux Paint is used to draw and paint pictures.
- The New tool is used to start a new drawing in Tux Paint.
- The Fill option is used to colour the picture by clicking the mouse.
- The Eraser tool is used to erase unwanted portions of a picture.
- The Save tool is used to store the current work in the computer.
- The Quit tool is used to close the Tux Paint window.

Worksheet

1. Match the following buttons to their functions.

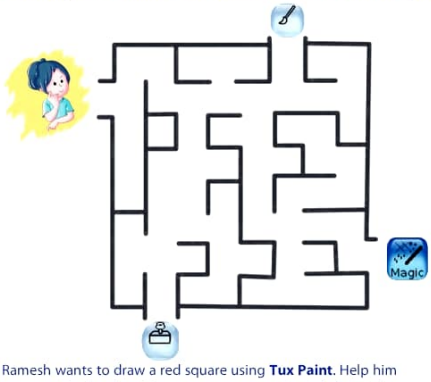
	To exit the application
	To fill colour
	To open a file
	To save a file
	To add special effects to the picture
	To draw something
	To erase words, pictures etc.

2. Answer the following questions.



1. _____ 2. _____ 3. _____

3. Sheetal wants to pick up the Magic tool, but she has lost her way. Help Sheetal by colouring the path that leads her to the Magic tool in green.



4. Ramesh wants to draw a red square using **Tux Paint**. Help him by arranging the steps in a proper sequence. Write 1 to 7 in the correct places.

(a) _____ Draw a square using the Shapes tool.
(b) _____ Select the Fill tool.
(c) _____ Select red colour from the Colour Palette.
(d) _____ Click inside the square.
(e) _____ Double - click the Tux Paint icon.
(f) _____ Click the Save option.

Think Sheet

1. Fill the Sudoku with the following words

Magic Tool Paint Tool Eraser Quit

Rules to fill the sudoku

a. All the rows and columns should have all four words without repetition.

b. All the sections (2x2) should have the four words.

[Skill(s): Critical Thinking and Problem Solving]

	Eraser		Magic Tool
Magic Tool		Eraser	
Paint Tool			Eraser
	Quit	Magic Tool	

2. You were asked to draw a scenery. What will you use, a chart paper or the Tux Paint application and why? [Skill(s): Critical Thinking]

5 Drawing with Tux Paint

Topics covered in this chapter:

- Components of the Tux Paint window
- New, Magic, Fill, Paint, Eraser, Save and Quit tools

Tux Paint can be used to make greeting cards or posters.

Tux Paint was created in 2002 by Bill Kendrick.

As we use chart paper to draw, in a similar way Tux Paint can also be used to paint on a computer.
Let's compare some Tux Paint tools with normal drawing tools.

Drawing on Chart Paper	Drawing in Tux Paint
	
	
	

Now, let us explore similar tools in Tux Paint to help us draw interesting pictures.

1. Double-click the Tux Paint icon on the desktop to start it.

The Tux Paint window will open on the screen.

Flash drive

- It looks like a Pen drive.
- Stores more data as compared to that of a Pen drive.

External Hard disk

- It is easy to carry and can store more information than a Flash drive.

Storage devices such as Flash drive, External Hard disk and Pen drive allow us to store and transfer movies, songs, pictures etc. from one computer to another easily.

Key points

- Data stored on storage devices can be accessed anytime.
- A hard disk is a storage device inside the CPU cabinet of the computer. It can store large amounts of data.
- Storage devices are used to store songs, movies, documents etc.
- A Flash drive looks like a Pen drive but can store more data as compared to that of a Pen drive.
- A pen drive is a small storage device that can easily fit into our pocket.
- Flash drive, External Hard disk and Pen drive can be used to transfer data from one computer to another.

Flash drive

- It looks like a Pen drive.
- Stores more data as compared to that of a Pen drive.

External Hard disk

- It is easy to carry and can store more information than a Flash drive.

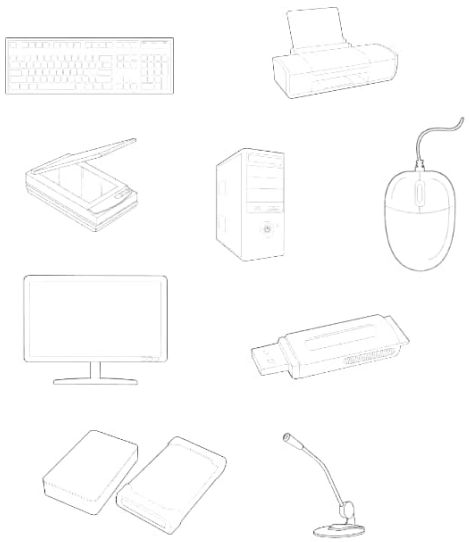
Storage devices such as Flash drive, External Hard disk and Pen drive allow us to store and transfer movies, songs, pictures etc. from one computer to another easily.

Key points

- Data stored on storage devices can be accessed anytime.
- A hard disk is a storage device inside the CPU cabinet of the computer. It can store large amounts of data.
- Storage devices are used to store songs, movies, documents etc.
- A Flash drive looks like a Pen drive but can store more data as compared to that of a Pen drive.
- A pen drive is a small storage device that can easily fit into our pocket.
- Flash drive, External Hard disk and Pen drive can be used to transfer data from one computer to another.

Worksheet

1. Shown below are some of the devices that can be used with a computer system. Circle the storage devices and colour them.



2. Write the name and a few lines about the use of each storage device you coloured.

3. Tick (✓) the correct statements and cross (✗) out the false statements.

(a) A Flash Drive can store more photographs than a Pen Drive. ☐

(b) Pen drives are used to write using a computer. ☐

(c) Songs stored in a computer are a type of data. ☐

(d) A pen drive is difficult to carry while travelling. ☐

4. Match the following column A with column B

Column A	Column B
Pendrive	To carry tools
School Bag	Placed inside the CPU box.
Hard Disk	Looks like a Pendrive
Toolbox	Fits in the pocket
Flash Drive	Can store books

Think Sheet

1. Choose the most appropriate storage device for each of the tasks listed in the table below. [Skill(s): Logical Thinking and Problem Solving]

Task	Suggested storage devices
Storing games that run on a computer	
Transferring a greeting card made on the home computer to the school computer	
Storing movies that can be watched on another computer	
Storing the work that is being done on a computer	

2. Can you use your school bag to store a movie in it? Justify your answer. [Skill(s): Critical Thinking]

6 Storage Devices

Topics covered in this chapter:

- Data and memory
- Storage devices - Hard disk, Flash Drive, External Hard disk and Pen Drive

We keep our clothes in Almirah. So it's a storage unit for clothes.

How do you carry your books to school? Yes, using a school bag. So it's a storage unit to carry school items.

Similarly in computers, we also store drawings, songs, videos etc. So, we can say that the devices used to store objects are called the storage devices.

Storage devices

Some of the commonly used computer storage devices are described below:

You can carry the storage devices discussed in the chapter to the class and show those to the students. Let them hold the devices and get an idea about their size.

Hard disk

- It is the main storage device of the computer.
- It is kept inside the CPU box.
- It can store large amount of data.

Pen drive

- It can fit in your pocket.
- It can easily transfer songs, documents, etc. from one computer to another.

Practice Test Paper 1

1. Select the correct option for each of the questions given below.

a. Circle the picture of CPU.

(i) 

(ii) 

(iii) 

(iv) 

b. Using which medium does the printer work ?

(i) Petrol (ii) Water (iii) Electricity (iv) Wind Energy

c. Karan is finding it difficult to turn on the computer. Which of the following steps should he follow to switch it on?

(i) Switch on the power plug, then press the CPU button.

(ii) Switch on the power plug, press the CPU button, and then press the monitor button.

(iii) Switch on the CPU, then press the power button.

(iv) All of the above options.

d. What kind of a device is the printer?

(i) Input device (ii) Output device

(iii) Both input and output device (iv) None of these

2. State 'Yes' or 'No' for the given statements.

a. A human being and a computer have the same capacity to store information. _____

b. A computer is a device that can perform many tasks. _____

c. The computer can function without a CPU. _____

d. A keyboard is an output device. _____

3. Fill in the blanks.

a. The mouse is an _____ device.

b. All the data entered in a computer gets stored in its _____.

c. Vinita wants to shut down her computer. Which button on the desktop should she click first? _____

4. Match the pictures of the parts of a computer with their names.

	Speaker
	Keyboard
	Mouse
	Printer
	Scanner

5. Write the correct word from the given jumbled words below.

(a) D S E K O T P _____

(b) A R I P T R O S _____

(c) M O I N T R O _____

(d) M A H C I E N _____

(e) C M O U P T E R _____