

LESSON PLAN

Touchpad MODULAR Ver 2.0
Class-2

1. Applications of a Computer

Teaching Objectives

Students will learn about

☞ Features of a computer

☞ Types of computers

Teaching Plan

While teaching this chapter, tell the students that a computer is an electronic machine which helps us to solve many problems.

Share with the students the features of a computer covering:

- Accuracy & Speed – does not make mistake and works at a very high speed
- Storage – stores information and does not forget it
- Work Process – does not get tired and work for long hours

Make the students understand that there are certain things which man can do but not the computers, covering:

- Feelings – computer does not have feelings
- Instruction – computer cannot work without our instructions
- Decision – computer cannot take its own decisions

Explain to the students about the different types of computers covering:

- Desktop computer – kept on desk or table
- Laptop – can be kept on lap also and is portable
- Tablet – smaller than a laptop and has a touchscreen
- Smartphone – mobile phone which has computer facilities

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

Q. What is a computer?

Q. State any two features of a computer.

Q. Name two things which man can do better than computers.

Q. Name any two types of computers.

Q. Can we keep all computers in our pocket?

- Q. Name two computers which we can keep in our pocket.
Q. Name the computer which we keep on a desk or a table.

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 10 and 11 of the main course book as Exercise.

In Creative Assignment, activities like Hands-On given on Page 11 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Show the pictures of different types of computers to the students and ask the name of each type of computer.

2. Operating a Computer

Teaching Objectives

Students will learn about

- 🖱️ How to start a computer
- 🖱️ How to shut down a computer

Teaching Plan

While teaching this chapter, tell the students that we need to follow proper steps to switch on and shut down a computer.

Share with the students the steps to switch on a computer as:

- (i) Switch on main power supply button
- (ii) Switch on UPS (inverter of the computer) button
- (iii) Switch on power supply button of CPU
- (iv) Switch on monitor

Explain to the students that:

- The first screen that appears on the monitor is called desktop.
- Small pictures on the desktop are icons.
- Long bar at the bottom of the desktop is called Taskbar.
- Start button is on the left corner of the taskbar and used to open different programs.
- Start menu has Shut Down button which is used to shut down the computer.
- Rectangular box that opens when we start a program is called Window.
- Control buttons on every window include Maximize and Minimize buttons to resize the window and Close button to close the window.

Share with the students the steps to shut down a computer as:

- (i) Click on Start button.



- (ii) Click on Shut Down button and wait.
- (iii) Switch off monitor button.
- (iv) Switch off UPS button.
- (v) Switch off main power supply button.

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is the first step to switch on a computer?
- Q. What is the first step to shut down a computer?
- Q. What is the last step to shut down a computer?
- Q. What are icons?
- Q. Where is taskbar located?
- Q. Where is Start button / Clock located on the taskbar?
- Q. Do we need to switch off the CPU button while shutting down a computer?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 15 and 16 of the main course book as Exercise.

In Creative Assignment, activities like Hands-On and In The Lab given on Page 16 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to draw images showing the steps to switch on a computer and to shut down a computer in their computer notebook.

3. Working of a Computer

Teaching Objectives

Students will learn about

👉 Working of Machines

👉 IPO Devices

Teaching Plan

While teaching this chapter, tell the students that the action takes place with the inputs is known as processing and the results that we get after processing is known as output.

Tell the students that a computer works according to the commands or instructions given by us.

Share with the students that this cycle of working of machines is called Input-Process-Output cycle or IPO cycle.

Tell the students about the working of some machines like:

- **Juicer** – we put fruit pieces inside it, the juicer squashes the fruits and gives out fresh juice.

Share with the students that in both these cases, the first step is input, the second step is process and the third step is output.

Introduce the term Devices as the parts made for a computer.

Tell the students about Input devices, the devices that are used to enter data into a computer.

Tell the students that keyboard and mouse are used as input devices in a computer.

Introduce the term Processing Device as the device that works on the input.

Tell the students that Central Processing Unit (CPU) is processing device of a computer and is called Brain of the computer.

Introduce the term Output Devices as the devices which help us to get the results.

Tell the students that monitor and printer are used as output devices in a computer.

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

Q. What does IPO stand for?

Q. What is Input-Process-Output cycle?

Q. Define Input / Process/ Output.

Q. Name two input / output devices.

Q. Which part of the computer is called Brain of the computer?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 21 and 22 of the main course book as Exercise.

In Creative Assignment, activity like Hands-On and In The Lab given on Page 22 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Show some more machines with input and output to the students and ask the students to arrange these in correct order of the IPO cycle.

4. Keyboard and Mouse

Teaching Objectives

Students will learn about

☞ Special Keys

☞ Mouse Pointer Shapes

☞ Functions of Mouse



Teaching Plan

While teaching this chapter, tell the students that keyboard and mouse are the input devices that are used to give the instructions to the computer.

Show to the students a keyboard and demonstrate that a keyboard has 104 keys.

Explain the students that Special keys are used to perform special functions. Tell them about some special keys in details:

- **Caps Lock Key** – to type capital letters
- **Enter Key** – to move to the next line
- **Backspace Key** – to erase letters, numbers, symbols and words from its left side
- **Cursor Control Keys** – to move the cursor in four directions
- **Shift Key** – used with other keys for different purposes
- **Ctrl and Alt key** – used with another key to perform a particular task, used in combinational keys to perform a particular task
- **Symbol Keys** – have special signs and symbols

Show to the students a mouse and demonstrate the Functions of Mouse:

- **Click or Single-click** – used to select an item
- **Double-click** – used to open the selected item
- **Right-click** – used to display list of properties of the selected item
- **Scroll** – to move the page up and down
- **Drag** – used to move an item from one location to another

Explain the shapes of mouse pointers and their purpose.

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

Q. How many keys are there on a standard keyboard?

Q. State one use of Shift key.

Q. What is Caps Lock key used for?

Q. What is the use of Symbol keys?

Q. What is pointer?

Q. What is single-click / double-click / right-click / drag used for?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 28 and 29 of the main course book as Exercise.

In Creative Assignment, activities like Hands-On and In The Lab given on Page 29 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to draw a keyboard on an A4 sheet of paper and label these keys:

- Shift keys
- Enter key
- Symbol keys
- Keys to spell the name of the student

5. Tools of Tux Paint

Teaching Objectives

Students will learn about

- ☞ New Tool
- ☞ Text Tool
- ☞ Open Tool
- ☞ Stamp Tool
- ☞ Save Tool

Teaching Plan

While teaching this chapter, tell the students to recall that Tux Paint is an easy to use program which has lot of tools, animations and effects.

Tell the students that the Tux mascot, that is a penguin who guides you while working in Tux Paint.

Make the students recall the components of the Tux Paint window covering Toolbar, Colors Palette, Help Area, Selector, Up and Down Arrows and Drawing Area or Canvas. Explain the students about New tool which is used to open a new page for drawing from the toolbar.

Demonstrate to the students the steps involved in use of New tool.

Introduce Stamp tool as the tool used to insert different stamps or images from the Selector.

Explain the steps involved in the use of Stamp tool to the students.

Tell the students that just like in Paint, Text tool is used in tux Paint to type some text in the drawing area or canvas.

Demonstrate to the students the steps involved in using Text tool in Tux Paint.

Explain the term Save tool to the students which is used to save the drawing for further use.

Make the students understand that Open tool is used to open an existing drawing in Tux Paint.

Show to the students the steps to use Open tool.

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

Q. What is the use of Text / Stamp / New / Open tool?

Q. When is New tool used?

Q. Can Open tool be used to open a drawing which was not saved earlier?

Q. What is the use of Selector in Tux Paint?



Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 35 and 36 of the main course book as Exercise.

In Creative Assignment, activities like Hands-On and In The Lab given on Page 36 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

6. Introduction to Paint

Teaching Objectives

Students will learn about

- | | |
|-----------------------------|------------------------------|
| ☞ Steps to Start Paint | ☞ Components of Paint window |
| ☞ Drawing Lines | ☞ Drawing Rectangles |
| ☞ Drawing Rounded Rectangle | ☞ Drawing Curve |
| ☞ Saving a Drawing | ☞ Closing Paint |

Teaching Plan

While teaching this chapter, tell the students that Paint is a program used to draw and colour.

Familiarize the students with Paint window showing Tools group, Shapes group, Colors group and Drawing Area.

Demonstrate to the students the steps to start Paint.

Tell the students about the uses of Tools group (contains tools), Colors group (contains colour options), Shapes group (contains shapes), Drawing Area (Blank area to draw and color) and Ribbon (Long horizontal bar).

Demonstrate the steps to:

- Draw straight lines using Line shape.
- Draw rectangles using Rectangle shape.

Tell the students that Rounded Rectangle shape is used to draw rectangles and squares with rounded corners.

Demonstrate to the students the steps involved in use of Rounded Rectangle shape.

Share with the students that Curve shape is used to draw curved lines.

Show to the students the steps involved in use of Curve shape.

Explain the students the steps involved in saving a drawing.

Tell the students that close button from Title bar is used to close Paint.

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

Q. What is Paint?

- Q. What is the use of Line / Rectangle shape?
- Q. How can the width of the Brush be changed?
- Q. Under which category is the Paint program listed?
- Q. Name the groups present on Paint window.
- Q. What does the Colors / Shapes / Tools group contain?

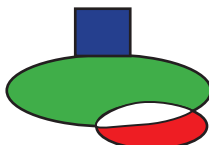
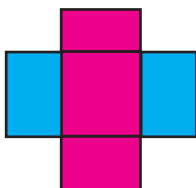
Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 41 and 42 of the main course book as Exercise.

In Creative Assignment, activity like In The Lab given on Page 42 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to draw the following shapes in Paint.



Ask the students to draw a picture of a school with its name written on a board at the top of the school building.

7. Fun with Paint

Teaching Objectives

Students will learn about

☞ Filling Colours

☞ Drawing Freehand

Teaching Plan

While teaching this chapter, tell the students that Paint is a program used to draw and colour.

Tell the students that Paint allows to draw freehand using Brushes Tool and Pencil Tool.

Explain to the students the use of Brushes tool and steps involved in using the tool.

Show the students the use of Pencil tool and steps involved in using the tool.

Demonstrate the steps to Fill colours in closed shapes using Fill with Color tool.

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.



Extension

Ask the students some oral questions based on this chapter.

Q. What is the use of Brushes / Fill with Color tool?

Q. What is the use of Pencil tool?

Q. What is the use of Brushes tool?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 46 and 47 of the main course book as Exercise.

In Creative Assignment, activity like In The Lab given on Page 47 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

8. Blocks in ScratchJr

Teaching Objectives

Students will learn about

☞ Components of ScratchJr Window

☞ Blocks in ScratchJr

Teaching Plan

While teaching this chapter, tell the students that in this chapter they will learn about blocks of ScratchJr.

Tell the students to recall the Components of ScratchJr Window.

Explain the students that Blocks in ScratchJr are divided into different categories based on their functions.

Introduce the students with Motion Blocks which are used to control the movement of a character and are blue in colour.

Tell them that some of the commonly used Motion blocks are:

- Move Right (moves the character to the right)
- Move Left (moves the character to the left)
- Move Up (moves the character up)
- Move Down (moves the character down)
- Turn Right (rotates the character clockwise)
- Turn Left (rotates the character anti-clockwise)

Introduce the students with Looks Blocks which are used to modify the character's costumes and colours.

Tell them that some of the commonly used Looks blocks are:

- Say (show a specific message)
- Grow (increase the character's size)
- Shrink (decrease the character's size)
- Hide (fade out the character)
- Show (fade in the character)

Introduce the students with Control Blocks which are used to repeat and pause the character.

Tell them that some of the commonly used Control blocks are:

- Wait (pauses the script)
- Stop (stops all of a character's script)

Introduce the students with Sound Blocks which are used to control the sound functions and they are green in colour.

Tell them that some of the commonly used Sound blocks are:

- Pop (plays a "pop" sound)
- Play Recorded Sound (plays a sound recorded by the user)

Explain the students about Events Blocks which control how the blocks in a script will start to run.

Tell them that some of the commonly used Events blocks are:

- Start on Green Flag (starts by clicking Green Flag)
- Start on tap (start by tapping)

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

Q. Tell about some commonly used motion blocks.

Q. What is Say Block?

Q. What is the use of Start on tap?

Q. Tell the uses of Say / Grow / Shrink / Hide / Show.

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 53 and 54 of the main course book as Exercise.

In Creative Assignment, activities like Hands-On and In The Lab given on Page 54 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

