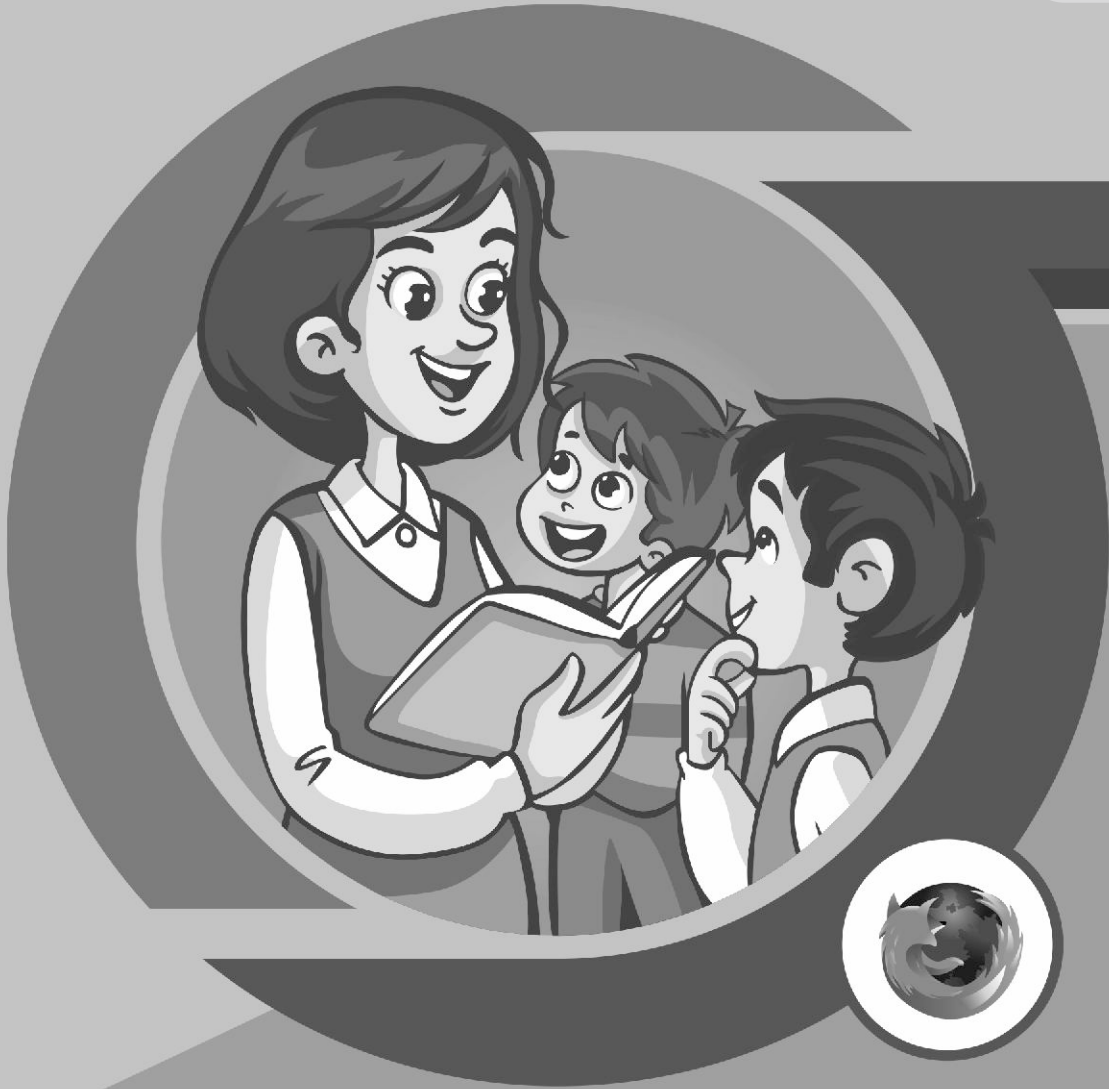# edufy
publications

TECHIE TOTS
TECHER'S HANDBOOK

1 STD

Dear Sir / Madam,

Welcome to the Teacher's Handbook for "Techie Tots" – an innovative IT textbook designed to equip students from Grades 1 to 8 with essential digital literacy skills. This handbook is designed to support teachers in delivering engaging and effective IT instruction by providing:

- Clear learning objectives for each grade level.
- Curriculum-aligned lesson plans and activities.
- Assessment strategies to measure student progress.
- Tips for integrating technology into classroom instruction.
- Access to our Learning Management System (LMS) platform.

We understand that each classroom is unique, and the resources provided in this handbook can be adapted to meet the specific needs of your students and school environment. By fostering curiosity, creativity, and critical thinking skills, we aim to empower students to become confident users and creators of technology.

INDEX

SCHEME OF EXAMINATION

TWO TERM SCHEME

BOOKS	TERM I	TERM II
	LESSONS	LESSONS
BOOK 1	1, 2, 3	4,5, 6

THREE TERM SCHEME

BOOKS	TERM I	TERM II	TERM III
	LESSONS	LESSONS	LESSONS
BOOK 1	1, 2	3,4	5,6,

Note: Questions for each terminal examination cover only the portions prescribed for it.

General Objectives
- To introduce the concept of natural and man-made things.
- To understand the purpose and function of machines.
- To enable them to understand Computer as a machine.

Learning Outcomes
- Students can differentiate between natural things and man-made things.
- Students can recognize various types of machines and their functions.
- Students can tell about a different kind of machines.
- Students can tell the functionalities of a computer.

Methodology

Aim: To introduce students to the concept of natural and man-made things, To get the knowledge that a computer is a machine.

Strategy: Begin the lesson by asking students to define natural and man-made things. Provide examples and discuss the differences between them. Introduce the concept of machines and explain their purpose in making work easier. The teacher will explain different types of machines on the basis of their use or the way they helpful to us.

Expected Skills achieved by the learners: Critical Thinking Skills and Technological Literacy.

Lesson Activities:

A   Fill in the blanks

   1. C   2. A   3. D   4. B

B   Write T for true and F for false

   1. False   2. True   3. True   4. False   5. False

C   Tick the correct option

   1. Electricity   2. Easy   3. Draw   4. Calculator   5. Television

D   Find out the odd one

E   What comes next?

   1.   2.

F   Answer the following

1   1. Tree   2. Cat

2   Computer

3   Machine is a device, which is made by humans for their help.

General Objectives:
- To introduce them to the various areas where computers are used in daily life.
- To familiarize them with the diverse uses of computers in different fields.
- To enable them to identify different types of computers.

Learning Outcomes:
- Students can identify and describe different areas where computers are used, including homes, schools, offices, libraries, hospitals, banks, shops, and studios.
- Students can understand the specific uses of computers in each area, such as communication, entertainment, education, administration, accounting, design, healthcare, transportation, and banking.

Methodology

Aim: To engage students in interactive learning experiences to enhance their understanding of the uses of computers.

Strategy: Begin the lesson with a discussion on the importance of computers in daily life and introduce the areas where computers are commonly used. Use multimedia presentations, videos, and real-life examples to illustrate the diverse uses of computers in different fields.

Expected Skills achieved by the learners: Analytical Thinking, Communication Skills and Digital Literacy.

Lesson Activities:

A **Fill in the blanks**

    1. Office   2. Hospital   3. Bills   4. Railway Station

B **Multiple choice questions**

    1. Smart classroom   2. Scanning   3. Emigration   4. ATM

C **Match the following**

    1. Hospital   2. Airport   3. Office   4. Home   5. Railway station

D **Write T for true and F for false**

    1. T   2. F   3. T

E **Answer in one or two words**

    1. Shop   2. Hospital   3. Bank   4. School

F **Answer the following**

    1. Automated Teller Machine   2. Railway Station   3. Railway Station

    4 Emigration clearance , Air traffic control   5. Diagnosing diseases , Medical lab

G **Fill the Crossword**

    1. Airport   2. Doctor   3. ATM   4. Hospital   5. Computer

    6. Printouts

- **Assessment - 1**
- **(Based on chapters 1 and 2)**
- **A   Fill in the blanks with suitable words**
-      1. Computer   2. Bill   3. Calculator   4. Railway Station
- **B   Multiple choice questions**
-      1. Electricity   2. Smart classroom   3. Emigration
- **C   Write T for true and F for false**
-      1. F   2. F   3. T   4. T
- **D   Answer the following**
-   1. Computer   2. Diagnosing diseases, Medical Lab   3. Automated Teller Machine

TT-I	3	MOUSE AND KEYBOARD

- **General Objectives:**
- To develop the interest of students in learning computers.
- To familiarize students with the fundamental components of a computer system, specifically   the mouse and keyboard.
- To make them understand the uses of Mouse and Keyboard.
- To enable them to identify parts of a Mouse and its actions.
- **Learning Outcomes:**
- 1. Students can identify and name the parts of a computer mouse.
- 2. Students can navigate and interact with a computer using a mouse, including moving the mouse pointer and clicking buttons.
- 3. Students can execute basic mouse actions such as single-click, double-click, dragging, right-click, and scrolling.
- 4. Students can tell about the features of a keyboard.
- 5. Students can identify different keys of keyboard and know its functions.
- **Methodology**
- **Aim:** To engage students in interactive learning activities to develop their understanding and proficiency in using the mouse and keyboard as essential computer input devices.
- **Strategy:** Begin the lesson with a brief explanation of the importance of the mouse and keyboard in computer usage. Demonstrate how to hold a mouse correctly and perform various mouse actions. Allow students to observe and ask questions. Provide hands-on practice opportunities for students to practice using the mouse and keyboard under supervision. Engage students in interactive activities such as typing exercises, mouse-based games, and simulated computer tasks to reinforce learning.
- **Expected Skills achieved by the learners:** Digital Literacy and Fine motor skills.
- **Lesson Activities:**

FUN TIME

Identify the following with suitable numbers
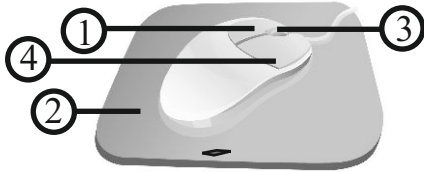
A   Fill in the blanks

1. Special Keys   2. Alphabetic Keys   4. Numeric Keys   5. Keyboard

B   Multiple choice questions

1. Scrolling   2. 26   3. ↖   4. Enter key   5. 1

C   Rearrange the letters

1. Mouse   2. Wheel   3. Click

Semester 1
(Based on chapters 1, 2 and 3)

A   Fill in the blanks with suitable letters

1. b   2. c   3. a   4. d

B   Rearrange the letters

1. MOUSE   2. WHEEL   3. CLICK

C   Write T for True and F for False

1. F   2. F   3. T   4. T   5. T

D   Multiple choice questions

1. ATM   2. Keyboard   3. 1

E   Match the following

1. Airport   2. Office   3. Hospital   4. Railway Station

F   Answer in one word

1. Computer   2. Mouse   3. Spacebar key   4. Delete key

TT-I	**4**	**STARTING WITH PAINT**

General Objectives:

·   To introduce students to the basics of using Microsoft Paint.

·   To enable them to draw different shapes using Shapes group.

·   To make them understand how they can close a paint window.

·   To make them understand how they can save their work for future use.

Learning Outcomes:

·   Students can tell how to start Paint program.

- Students can tell parts of Paint program.
- Students can tell colours group of Paint.
- Students can tell different tools available in the Tools group.
- Students can tell how to save and close drawings.

Methodology:

Aim: To familiarize students with the Paint application interface and basic painting tools.

Strategy: Begin by introducing students to the Paint application and its purpose in digital painting. Guide students through the different parts of the Paint window, highlighting key features such as the canvas, toolbar, color palette, and Home tab. Provide demonstrations of each paint tool, including the Pencil, Eraser, Rectangle, Line, Oval, and Fill with Color tools, explaining their functions and how to use them. Allow students to practice using the paint tools on their own, encouraging experimentation and creativity.

Expected Skills achieved by the learners: Digital Literacy and Fine motor skills.

Lesson Activities:

A **Fill in the blanks with suitable words**

1. Tools group 2. Colours group 3. Draw pictures 4. Oval
5. Start button 6. Tool box

B **Write T for true and F for false**

1. T 2. F 3. F 4. F 5. T 6.T

C **Multiple choice questions**

1. ⬭ 2. ▢ 3. ╲ 4. (eraser)

D **Tick (✔) the correct one**

2 Start ⟶ Windows Accessories ⟶ Paint

E **Find out tools name**

R	A	L	I	N	E
E	S	R	I	E	N
C	O	V	A	L	E
T	P	E	N	C	P
A	N	R	L	A	E
N	C	A	E	G	N
G	L	S	C	E	C
L	C	E	I	L	I
E	A	R	C	I	L

F **Connect the tools with related angry birds**

① ② ③ ④ ⑤

General Objectives:

To enhance students' cognitive abilities and critical thinking skills through activities aimed at improving numerical, visual, and analytical skills, developing problem-solving abilities, and fostering creativity and goal-setting.

Learning Outcomes:

·   Students can demonstrate improved numerical, visual, and analytical skills through participation in activities such as picture sudoku, puzzles, matching cards, identifying the odd one out, predicting what comes next, finding missing numbers, completing patterns, finding paths, and spotting differences between pictures.

·   Students can apply problem-solving strategies to effectively tackle various challenges presented in the activities.

·   Students can generate creative ideas and set achievable goals based on the outcomes of the activities.

Methodology:

Aim: To engage students in a variety of activities to enhance their logical reasoning skills and foster critical thinking abilities.

Strategy: Begin by introducing students the concept of logical reasoning and its importance in everyday life. Explain how logical reasoning skills can be developed through engaging activities. Choose a variety of activities from the provided list that align with the learning objectives. Demonstrate the first activity to the students, providing step-by-step instructions and modelling problem-solving strategies. Guide students in setting personal goals for improving their logical reasoning skills based on their performance in **the activities.**

Expected Skills achieved by the learners: Numerical, Visual & analytical skills and Problem-solving skills.
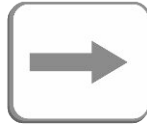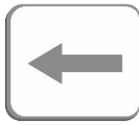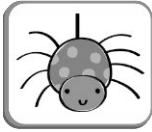
Lesson Activities:

Picture sudoku
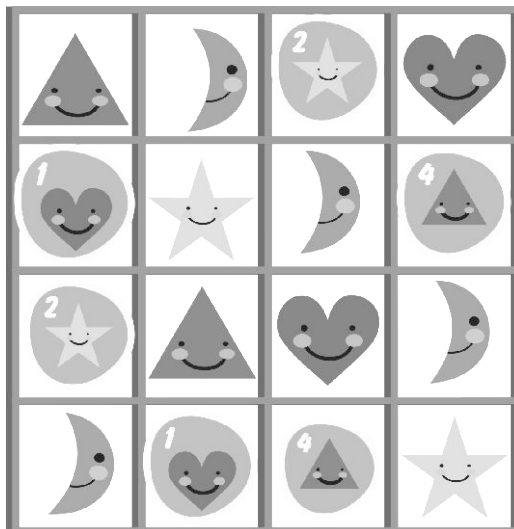
Puzzle

Ans)

4

Match the cards

Odd one out

1. 2. 3. 4. 5.

5 |||| seven

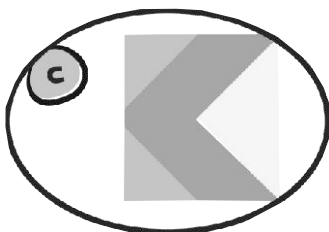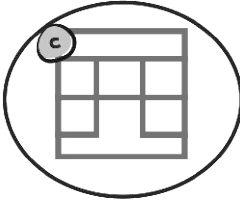**What comes next?**

1. 2. 3.

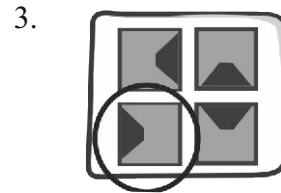**Can you spot the odd one out?**

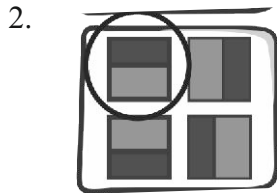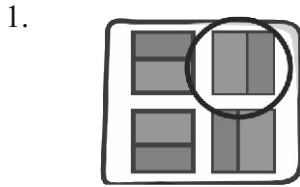2

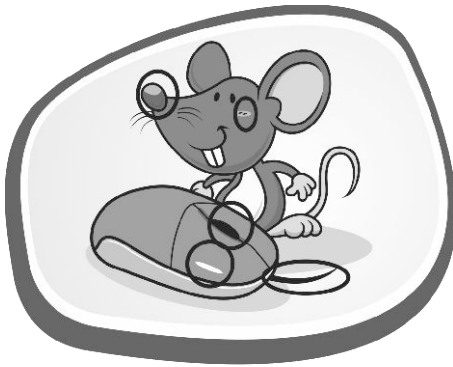**Find the missing part from the given image**

c

Find the image which is similar to given X

How many?

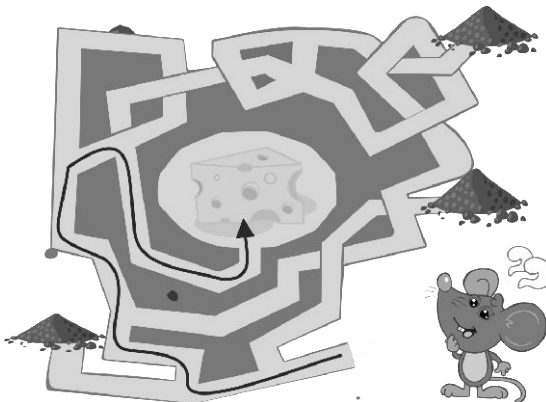 - Three   - Two   - Two

Which figure comes next?

1.   2.   3.

Spot the differences between pictures

Find the path

Fill in the missing patterns using stickers

1.

2.

3.

ASSESSMENT - 2
(Based on chapters 5 and 6)

A   **fill in the blanks with suitable letters**

    1. Colours group   2. Oval   3. Draw pictures   4. Tool box

B   **Write T for True and F for False**

    1. T   2. F   3. F   4. F   5.T

C   **How many Squares, triangles, and rounds are in the picture?**

     - Three   - Two   - Two

TT-I	6	ARTIFICIAL INTELLIGENCE

General Objectives:

•   To introduce students to the concept of intelligence and its manifestations in human and artificial forms.

•   To familiarize students with the concept of Artificial Intelligence (AI) and its applications in daily life.

Learning Outcomes:

•   Students will be able to explain the concept of intelligence and identify examples of human intelligence.

•   Students will understand the definition and significance of Artificial Intelligence.

•   Differentiate between human intelligence and artificial intelligence.

•   Recognize the role of AI-powered devices and virtual assistants in modern society.

•   Appreciate the contributions of pioneers like John McCarthy to the field of AI.

Methodology:

Aim: To introduce students to the concept of Artificial Intelligence (AI) and its applications in daily life.

Strategy: Begin the lesson by discussing the concept of intelligence and its various forms in

• human beings. Introduce the concept of Artificial Intelligence (AI) through interactive discussions and examples. Present examples of AI technology such as robots, virtual assistants, and drones to illustrate the applications of AI in different fields. Engage students in a discussion to compare and contrast human intelligence with artificial intelligence. Discuss the role of AI-powered devices and virtual assistants like Google Assistant, Siri, Alexa, etc., in daily life and how they utilize AI technology.

Expected Skills achieved by the learners: Cognitive skills and Problem-Solving Skills.

Lesson Activities:

A   Fill in the blanks with suitable words

      1. ALEXA   2. SIRI   3. John McCarthy   4. DRONE

B   Multiple choice question

      1. Machine Intelligence   2. Artificial Intelligence   3. Google Assistance

      4. Siri   5. Robot

C   Write T for True and F for False

      1. T   2. T   3. T   4. T   5. T   6. F   7. T

D   Answer the following

      1. Google Assistant is an artificial intelligence powered virtual assistant developed by Google.

      2. Robot is a machine that does a job for us.

      3. John McCarthy

SEMESTER - 2
(Based on chapters 4, 5, and 6)

A   Fill in the blanks with suitable words

      1. Tools group   2. Tool box   3. Drone   4. John McCarthy
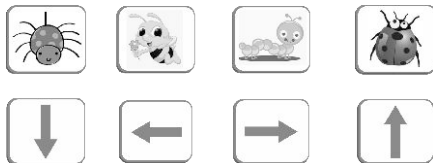
      5. Paint   5. Eraser

B   Write T for True and F for False

      1. F   2. F   3. T   4. F   5. F   6. T

C   Multiple choice questions

      1. ◯   2. Siri

D   Match the cards

E   Answer in one word

      1. Robot is a machine that does a job for us.

      2. Oval

      3. John McCarthy