

TRACKGPT

iPro Ver. 5.0

3

TEACHER'S MANUAL

Extended Support for Teachers



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Teacher's Time Table		B R E A K						
Periods / Days								
		0	I	II	III	IV	V	VI
Days	Monday							
	Tuesday							
	Wednesday							
	Thursday							
	Friday							
	Saturday							
	Sunday							

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DEVELOPMENT MILESTONES IN A CHILD

Development milestones are a set of functional skills or age-specific tasks that most children can do at a certain age. These milestones help the teacher identify and understand how children differ in different age groups.



Age
5 - 8 Years

Physical

- First permanent tooth erupts
- Shows mature throwing and catching patterns
- Writing is now smaller and more readable
- Drawings are now more detailed, organised and have a sense of depth

Cognitive

- Attention continues to improve, becomes more selective and adaptable
- Recall, scripted memory, and auto-biographical memory improves
- Counts on and counts down, engaging in simple addition and subtraction
- Thoughts are now more logical

Language

- Vocabulary reaches about 10,000 words
- Vocabulary increases rapidly throughout middle childhood

Emotional/ Social

- Ability to predict and interpret emotional reactions of others enhances
- Relies more on language to express empathy
- Self-conscious emotions of pride and guilt are governed by personal responsibility
- Attends to facial and situational cues in interpreting another's feelings
- Peer interaction is now more prosocial, and physical aggression declines

“ If you cannot do great things, do small things in a great way. ”

Age
9 - 11 Years

Physical

- Motor skills develop resulting in enhanced reflexes

Cognitive

- Applies several memory strategies at once
- Cognitive self-regulation is now improved

Language

- Ability to use complex grammatical constructions enhances
- Conversational strategies are now more refined

Emotional/ Social

- Self-esteem tends to rise
- Peer groups emerge

Age
11 - 20 Years

Physical

- If a girl, reaches peak of growth spurt
- If a girl, motor performance gradually increases and then levels off
- If a boy, reaches peak and then completes growth spurt
- If a boy, motor performance increases dramatically

Cognitive

- Is now more self-conscious and self-focused
- Becomes a better everyday planner and decision maker

Emotional/ Social

- May show increased gender stereotyping of attitudes and behaviour
- May have a conventional moral orientation

Managing the children's learning needs according to their developmental milestones is the key to a successful teaching-learning transaction in the classroom.

“Family is the most important thing in the world.”

TEACHING PEDAGOGIES



Lesson Plans

A lesson plan is the instructor's road map which specifies what students need to learn and how it can be done effectively during the class time. A lesson plan helps teachers in the classroom by providing a detailed outline to follow in each class.

A lesson plan addresses and integrates three key components:

Learning objectives

Learning activities

Assessment to check the student's understanding

A lesson plan provides an outline of the teaching goals:

Before the class

1. Identify the learning objectives.
2. Plan the lesson in an engaging and meaningful manner.
3. Plan to assess student's understanding.
4. Plan for a lesson closure.

During the class

Present the lesson plan.

After the class

Reflect on what worked well and why. If needed, revise the lesson plan.

“Knowing yourself is the beginning of all wisdom.”

Teaching Strategies

Numerous strategies have evolved over the years to facilitate the teaching-learning process in the classrooms.



Bloom's Taxonomy

Bloom's Taxonomy was created by Dr Benjamin Bloom and several of his colleagues, to promote higher forms of thinking in education instead of rote learning. There are three domains of learning: cognitive (mental), affective (emotional), and psychomotor (physical). However, when we refer to Bloom's Taxonomy we speak of the cognitive domain. Bloom's Taxonomy is a list of cognitive skills that is used by teachers to determine the level of thinking their students have achieved. As a teacher, one should attempt to move students up the taxonomy as they progress in their knowledge.



Teachers should focus on helping students to remember information before expecting them to understand it, helping them understand it before expecting them to apply it to a new situation, and so on.

“ If you have no confidence in self,
you are twice defeated in the race of life. ”

CLASS 3

LESSON PLAN

1

A Computer System

Teaching Objectives

Students will learn about

- ✦ Hardware
- ✦ Software
- ✦ Working of a Computer
- ✦ Types of Computers

Number of Periods	
Theory	Practical
2	1

Teaching Plan

While teaching this chapter, tell the students computer is an electronic device made up of different components.

Discuss with students a computer system.

Explain the student that computer hardware.

Discuss different types of input devices:

- Keyboard
- Scanner
- Joystick
- Mouse
- Microphone
- Webcam

Explain processing device with students and explain CPU.

Discuss different units inside a CPU:

- ALU
- Control Unit
- Memory unit

Discuss different types of output devices:

- Monitor
- Projector
- Smartphones
- Printer
- Speakers

Discuss different types of Hybrid devices:

- Headphones
- Smart board
- Smartwatch
- Laptop

Explain Storage device and its examples.

Explain computer software and its types:

- System software
- Application software

Tell the students about working of a computer and IPO cycle and its process.

Explain different types of computers based on shape and size:

- Microcomputers
- Minicomputers
- Mainframe computers
- Supercomputers

Explain mainframe computer and supercomputer to students with examples of areas where these types of computers are used.

Ensure that the scope of Teacher's Truff 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 hardware?
- Q. How many types of hardware are there?
- Q. Explain the following:
 - a. Input Devices
 - b. Processing Device
 - c. Output Devices
 - d. Storage Devices
- Q. What is a software?
- Q. How many types of software are there?
- Q. What is a system software?
- Q. What is an application software?
- Q. Explain microcomputers.
- Q. Explain minicomputers.
- Q. What is a mainframe computer?
- Q. Where are supercomputers used?
- Q. What is the name of a supercomputer designed by India?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 16 to 18 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 18 of the main course book to imbibe digital literacy skills in them. Help the students solve these questions.

In Creative Assignment, activities like Tangible Task and Digital Drills given on page 19 of the main course book will enhance the ability of the students and serve as a Art Integration and Digital Literacy activity.

Suggested Activity

Ask the students to collect pictures of different types of computers and paste them on a chart paper according to the categories explained in this chapter.

2 GUI Operating System—An Introduction

Teaching Objectives

Students will learn about

- ✦ Operating System
- ✦ Desktop
- ✦ Sorting Desktop Icons
- ✦ Changing Desktop Background
- ✦ Mouse Pointer Shapes
- ✦ How to Shut Down a Computer
- ✦ Window 11
- ✦ Components of Desktop
- ✦ Hiding Desktop Icons
- ✦ Setting the Screen Saver
- ✦ How to Start a Computer

Teaching Plan

Number of Periods	
Theory	Practical
2	1

While teaching this chapter we will explore Windows 11, the most popular GUI-based operating system, following our previous discussion on the importance of the operating system.

Tell the students about Windows Operating System, and its types.

Encourage the students to Windows 11, developed by Microsoft, ensures efficient and reliable computer operation, offering a smooth user experience.

Explain to the students about features of Windows 11.

Tell the student Starting Window 11 when you power on your computer, Windows 11 loads, and after selecting a user and entering a password, the Desktop appears.

Explain to the student Desktop and its components.

Give explanations of icons, desktop background (wallpaper), taskbar.

Share with them different parts of taskbar – Start button, Opened programs, Clock.

Show the steps involved in sorting desktop icons.

Tell them about desktop background and steps to change desktop background.

Tell the steps to the students for setting the screen saver.

Share the shapes of mouse pointers.

Demonstrate the steps involved to start and shut down the computer.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. Explain some features of Windows 11.
- Q. What are icons?
- Q. What is a taskbar?
- Q. What do you mean by start menu?
- Q. Explain desktop background.
- Q. What is screensaver?
- Q. Discuss different mouse pointers briefly.

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 27 to 30 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 31 of the main course book to imbibe coding and computational skills in them. Help the students to solve these questions.

In Creative Assignment, activities like Tangible Task and Digital Drills given on page 31 of the main course book will enhance the ability of the students and serve as a Creativity & Innovativeness and Digital Literacy, Experiential Learning activity.

Suggested Activity

Show pictures of desktops and icons, etc. of some older versions of Windows and help students note noticeable changes in the interface of these versions of Windows over time.

3

Word Processor—An Introduction

Teaching Objectives

Students will learn about:

- ✦ Uses of Word 2021
- ✦ Starting Word 2021
- ✦ Components of Word 2021 Window
- ✦ Working with Word 2021

Number of Periods	
Theory	Practical
2	2

Teaching Plan

While teaching this chapter, tell the students that Microsoft Word is word processing software in the category of application software.

Make the students aware of the various uses of Word 2021.

Demonstrate to the students the steps involved in starting Word 2021.

Show the students the various components of Word 2021 window covering Title Bar, Tabs, Quick Access Toolbar, Ribbon, Rulers, Scroll bars, Text/Document Area, Cursor, Status Bar, Window control buttons and Zoom slider.

Tell the student create documents by typing text, and commonly used keys like Spacebar, Enter, Delete, and Backspace help in editing and formatting.

Demonstrate to the students the steps involved in:

- Creating a new document
- Selecting text
- Inserting text
- Opening a saved document
- Exiting Word
- Typing the text
- Deleting text
- Saving a document
- Printing a document

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

Extension

Ask the students some oral questions based on this chapter.

- Q. What is Word 2021?
- Q. What are the various uses of Word 2021?
- Q. Name some important components of Word 2021 window.
- Q. Which company developed Word 2021?
- Q. What are the shortcut keys to open, save and print a document?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 39 to 42 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on pages 42 and 43 of the main course book to imbibe digital literacy skills in them. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 43 of the main course book will enhance the ability of the students and serve as a Experiential Learning & Environmental Awareness activity.

Suggested Activity

Ask the students to create a Word document on Myself. The students should take a printout of the document and paste it in their computer notebook/practical file.



Teaching Objectives

Students will learn about:

- ✦ Uses of Internet
- ✦ Advantages and disadvantages of the Internet
- ✦ Internet Terms
- ✦ Using URLs
- ✦ Best Practices Related to Online Safety
- ✦ Responsibilities of a Good Digital Citizen

Number of Periods	
Theory	Practical
3	1

Teaching Plan

While teaching this chapter, tell the students that a computer network is a connection between two or more computers.

Introduce Internet as a network in which millions of computers are connected to each other to share information and in an abbreviation of International Network.

Explain to the students the various uses of internet.

Tell the student advantages and disadvantages of the internet.

Introduce the students to common internet terms like Website (collection of related web pages), Web Page (electronic page on a website), Home Page (main or first page of website), World Wide Web (largest collection of websites), Web Browser (software to open websites) and Search Engine.

Familiarise the students using URLs and Demonstrate to the students the steps to Opening a web page.

Make the students understand the best practice related to online safety.

Tell the student responsibility of a good digital citizen. digital citizen respects privacy, avoids plagiarism, maintains a real identity, and reports harmful or illegal online behaviour to trusted adults.

Ensure that the scope of Teacher's Truff 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 network?
- Q. What is internet?
- Q. What are the uses of internet?
- Q. What are some important best practices for staying safe online?
- Q. Define Website / Web Page / Home Page / World Wide Web / Web Browser.

- Q. What does WWW stand for?
- Q. Which is the most common Web Browser?
- Q. What are the advantages and disadvantages of internet?
- Q. What are some key responsibilities of a good digital citizen?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 53 to 55 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on pages 55 and 56 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 56 of the main course book will enhance the ability of the students and serve as a Digital Literacy and Experiential Learning activity.

Suggested Activity

Ask the students to paste a picture of Internet Explorer in their computer notebook / practical file and label its components and tools discussed in the chapter.

5

Fun With Paint

Teaching Objectives

Students will learn about

- ★ Starting Paint
- ★ Callout Shape
- ★ Resizing an Image
- ★ Flipping an Image
- ★ Zooming an Image
- ★ Copying and Pasting
- ★ Saving the Drawing
- ★ Setting a Drawing as a Desktop Background
- ★ Color Picker Tool
- ★ Selecting an Image
- ★ Skewing an Image
- ★ Rotating an Image
- ★ Cropping an Image
- ★ Cutting and Pasting
- ★ Opening Old Drawing
- ★ Saving a File in Different Formats

Teaching Plan

While teaching this chapter, tell the student that uses of paint.

Tell the students about MS Paint.

Encourage the students to Starting the paint window.

Explain to the students about features and tools of the MS Paint window.

Explain color picker tool and callout shape.

Number of Periods	
Theory	Practical
3	2

Share with them procedure to select an image using rectangular selection and free form selection. Tell them about resizing, skewing an image, flipping an image and rotating an image, zooming an image.

Explain about cropping an image, copying, cutting & pasting an image.

Explain how to save a drawing and open an already saved drawing.

Explain the students about the procedure of setting a drawing as desktop background and saving a file in different formats.

Ensure that the scope of Teacher's Truff 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 paint program?
- Q. What are the main components of the paint window?
- Q. What is the use of color picker tool, skew command?
- Q. Explain differences between copy paste and cut paste.
- Q. What are the steps to resize an image?
- Q. Explain rectangular and free form selection.

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 72 to 74 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 75 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 76 of the main course book will enhance the ability of the students and serve as a Creativity & Innovativeness, Art Integration activity.

Suggested Activity

Show some drawings made on MS Paint to the students and ask them to come up with similar drawings.

6

File Management—Organisation of Folders

Teaching Objectives

Students will learn about

- ★ File/Folder
- ★ Creating a New file
- ★ Saving a File
- ★ Creating a New folder
- ★ Deleting a File/Folder
- ★ Opening a File/Folder

Teaching Plan

While teaching this chapter, tell the students that all the data saved on a hard disk consists of files and folders.

Number of Periods	
Theory	Practical
2	1

Introduce file as an item that contains a collection of related information, a folder as a collection of files and a sub folder as a folder within a folder.

Tell the student creating a new folder on the desktop and computer drive.

Explore the student creating a new file, deleting a file, saving a file and opening a file and its steps.

Ensure that the scope of Teacher's Truff 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 file/folder/subfolder?
- Q. What is the purpose of saving file?
- Q. Name the default folders of Windows 11 for organizing data.
- Q. How to create a folder on the desktop?
- Q. How to create a folder on the computer drive?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 82 to 84 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 85 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 86 of the main course book will enhance the ability of the students and serve as a Digital Literacy & Experiential Learning activity.

Suggested Activity

Ask the students to collect information about some more features of Windows 10 other than those discussed in the chapter.

