

TRACKPAD

iPro Ver. 4.0 

Teacher's Manual

Extended Support for Teachers



ORANGE

www.orangeeducation.in

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Teacher's Time Table

[illegible]



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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Vocabulary reaches about 10,000 words• Vocabulary increases rapidly throughout middle childhood
Emotional/Social	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none"> • Motor skills develop resulting enhanced reflexes
Cognitive	<ul style="list-style-type: none"> • Applies several memory strategies at once • Cognitive self-regulation is now improved
Language	<ul style="list-style-type: none"> • Ability to use complex grammatical constructions enhances • Conversational strategies are now more refined
Emotional/Social	<ul style="list-style-type: none"> • Self-esteem tends to rise • Peer groups emerge

Age 11 - 20 Years	
Physical	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Is now more self-conscious and self-focused • Becomes a better everyday planner and decision maker
Emotional/Social	<ul style="list-style-type: none"> • 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

Pedagogy is often described as the approach to teaching. It is the study of teaching methods including the aims of education and the ways in which such goals can be achieved.

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 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."

LESSON PLAN

Trackpad iPRO Ver 4.0

Class-3

1. A Computer System

Teaching Objectives

Students will learn about

- | | |
|-------------------------|----------------------|
| ☞ Hardware | ☞ Software |
| ☞ Working of a computer | ☞ Types of computers |

Number of Periods

2

Teaching Plan

While teaching this chapter, tell the students computer is made up of various devices that help you do a task.

Discuss with students a computer system.

Explain computer hardware.

Discuss different types of input devices:

- | | |
|--------------|----------------|
| • Keyboard | • Mouse |
| • Scanner | • Touch screen |
| • Microphone | • Web Camera |

Discuss different types of output devices:

- | | |
|-------------|--------------------|
| • Monitor | • Speakers |
| • Projector | • Headphones |
| • Printer | • Types of printer |

Explain processing device with students and explain CPU.

Discuss different units inside a CPU.

- ALU
- Control Unit
- Memory unit

Explain Storage device and its purpose.

Explain computer software and its types:

- System software
- Application software

Tell the students about IPO cycle and its process.



Explain different types of computers based on shape and size:

- Microcomputers
- Mainframe computers
- Minicomputers
- 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 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 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 15, 16 and 17 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code 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 Hands-On and Fun in Lab given on page 18 of the main course book will enhance the ability of the students and serve as a creativity & innovativeness, 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
- ☞ Windows 10
- ☞ Components of desktop
- ☞ Hiding desktop icons
- ☞ Setting the screen saver
- ☞ How to start a computer

Number of Periods

3

Teaching Plan

While teaching this chapter, let the students know about Windows Operating System.

Make the students aware of Windows 10.

Explain to the students about features of Windows 10 and its desktop.

Give explanations of icons, taskbar.

Share with them different parts of taskbar – Start menu, notification area, etc.

Tell them about desktop background and steps to change desktop background. Also show the steps involved in hiding desktop icons.

Let the students know about the steps of 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 Corner 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 10.
- 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 26, 27 and 28 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on page 28 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 Hands-On and Fun in Lab given on page 29 of the main course book will enhance the ability of the students and serve as a creativity & innovativeness, collaboration & team work, digital literacy and 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 2019
- ☞ Starting Word 2019
- ☞ Components of Word 2019 window
- ☞ Working with Word 2019

Number of Periods

3

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 2019.

Demonstrate to the students the steps involved in starting Word 2019.

Show the students the various components of Word 2019 window covering Title Bar, Quick Access Toolbar, Ribbon, Rulers, Horizontal and Vertical Scroll Bars, Text/Document Area and Status Bar.

Demonstrate to the students the steps involved in:

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

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 Word 2019?
- Q. What are the various uses of Word 2019?
- Q. Name some important components of Word 2019 window.
- Q. Which company developed Word 2019?
- Q. What are the shortcut keys to open, save and print a document?
- Q. What are the various ways in which the user can exit from Word 2019?



Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 37, 38 and 39 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on page 39 of the main course book to imbibe digital literacy skills in them. Help the students to solve these questions.

In Creative Assignment, activity like Fun in Lab given on page 40 of the main course book will enhance the ability of the students and serve as a digital literacy and interdisciplinary 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.

4. The Internet—An Introduction

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 |

Teaching Plan

Number of Periods

2

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.

Share with the students the various requirements for an internet connection covering computer, telephone/cable line, modem/network card, software and company providing the connection.

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) and Web Browser (software to open websites).

Familiarize the students with the most common web browser, Internet Explorer and its components covering Title Bar, Menu Bar, Toolbar and Address Bar.

Make the students understand the use of common tools on the toolbar covering Back, Forward, Refresh and Stop buttons.

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 network?
- Q. What is internet?

- Q. What are the uses of internet?
- Q. What are the requirements for an internet connection?
- 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. Define Title Bar / Menu Bar / Toolbar / Address Bar.
- Q. What is the use of Back / Forward / Stop / Refresh button in a web browser?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 50 and 51 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on page 52 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Fun in Lab given on page 52 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 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 | ☞ Color picker tool |
| ☞ Callout shape | ☞ Selecting an image |
| ☞ Resizing an image | ☞ Skewing an image |
| ☞ Flipping an image | ☞ Rotating an image |
| ☞ Zooming an image | ☞ Cropping an image |
| ☞ Copying and pasting | ☞ Cutting and pasting |
| ☞ Saving the drawing | ☞ Opening an old drawing |
| ☞ Setting a drawing as a desktop background | ☞ Saving a file in different formats |

Teaching Plan

Tell the students about MS Paint.

Encourage the students to explore 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

3



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.

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 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 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 68, 69 and 70 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on page 70 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Fun in Lab given on page 71 of the main course book will enhance the ability of the students and serve as a Subject Enrichment 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

5

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.

Introduce to the students the Windows Explorer as a file manager that manages files and folders.

Tell the students that Windows 10 has some default folders to organize similar files.

Demonstrate to the students the steps to:

- Open a file and a folder
- Select a file and a folder (including selecting a single file, selecting multiple files, selecting all files and deselecting a file).
- Creating a new file and a folder.
- Deleting a file and a folder.
- Saving a file and a folder.

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 file/folder/subfolder?

Q. Define a computer icon.

Q. What is Windows Explorer?

Q. Name the default folders of Windows 10 for organizing data.

Q. Which key is used to select multiple files?

Q. Which key is pressed to invert the selection?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 78 and 79 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on page 79 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Fun in Lab given on page 80 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 collect information about some more features of Windows 10 other than those discussed in the chapter.