3

TRACKPAD

iPLUS Ver. 2.0

Teacher's Manual

Extended Support for Teachers

ORANGE
www.orangeeducation.in
www.thetouchpad.com

Teacher's Time Table

Periods / Days	0	I	II	III	IV	BREAK	V	VI	VII	VIII
Monday										
Tuesday										
Wednesday										
Thursday										
Friday										
Saturday										

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 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

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.

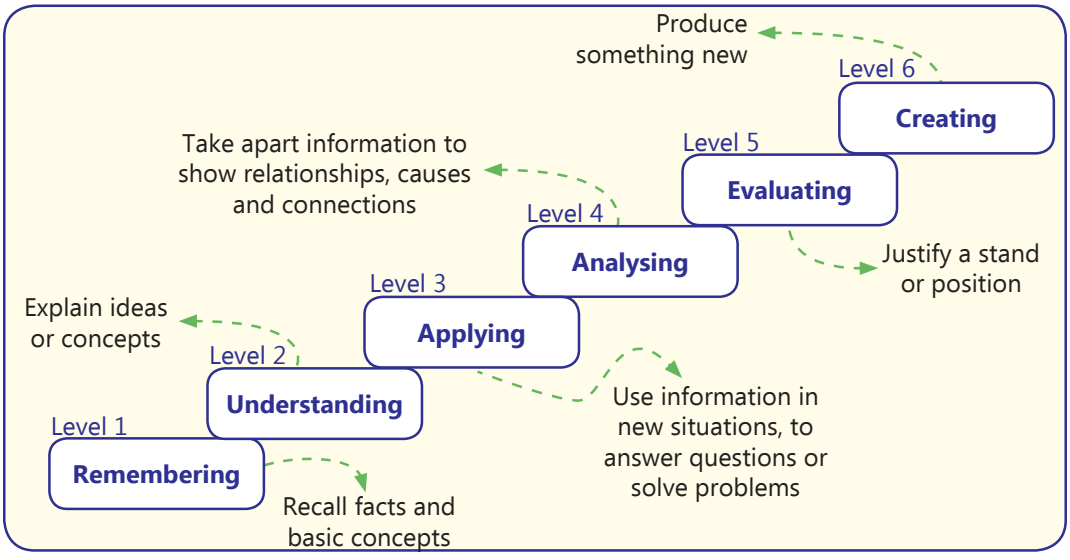
"Knowing yourself is the beginning of all wisdom."

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."

Class 3

Lesson Plan

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1. Computer System

Teaching Objectives

Students will learn about

- ☞ Computer System
- ☞ IPO Cycle
- ☞ Types of Computer
- ☞ Computer Hardware
- ☞ Computer Software

Number of Periods	
Theory	Practical
1	1

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

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Tell the students about 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 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 and 16 of the main course book as Exercise. After solving the course book exercises, tell the students to solve Crack the Code activity given on pages 17 of the main course book to imbibe interdisciplinary and problem & logical reasoning skills. Help the students to solve these questions.

In Creative Assignment, activities like Practical Time given on page 17 of the main course book will enhance the ability of the students and serve as a creativity & innovativeness, communication 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	
Theory	Practical
1	2

Teaching Plan

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

Define an operating system and explain its significance in managing computer resources.

Highlight that operating systems offer different interfaces, leading to GUI and CUI.

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 is an operating system? Can you give an example?
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.
Q. Can you explain what GUI stands for and what it means?

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Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 25, 26, 27, and 28 of the main course book as Exercise. After solving the course book exercises, tell the students to solve Crack the Code activity given on pages 27 of the main course book to imbibe interdisciplinary and problem & logical reasoning skills. Help the students to solve these questions.

In Creative Assignment, activities like Be Creative and Practical Time given on page 28 of the main course book will enhance the ability of the students and serve as a creativity & innovativeness, communication and digital literacy activity.

Suggested Activity

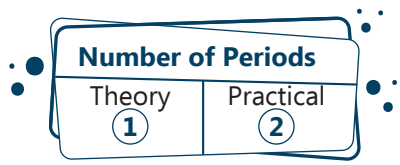
Show pictures of desktops and icons, etc. of some older versions of Windows and help students note noticeable changes in the interface of these versions of Windows over time.

3. Word Processor—An Introduction

Teaching Objectives

Students will learn about:

- ☞ Uses of Word 2016
- ☞ Starting Word 2016
- ☞ Components of Word 2016 window
- ☞ Working with Word 2016



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 2016.

Demonstrate to the students the steps involved in starting Word 2016.

Show the students the various components of Word 2016 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 2016?

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Q. What are the various uses of Word 2016?
Q. Name some important components of Word 2016 window.
Q. Which company developed Word 2016?
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 2016?

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. After solving the course book exercises, tell the students to solve Crack the Code activity given on pages 37 of the main course book to imbibe interdisciplinary and problem & logical reasoning skills. Help the students to solve these questions.

In Creative Assignment, activities like Practical Time given on page 38 of the main course book will enhance the ability of the students and serve as a creativity & innovativeness, communication and digital literacy 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.

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