

TOUCHPAD

Prime Ver. 2.2

6

TEACHER'S MANUAL

Extended Support for Teachers



www.orangeeducation.in

[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

- 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



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.

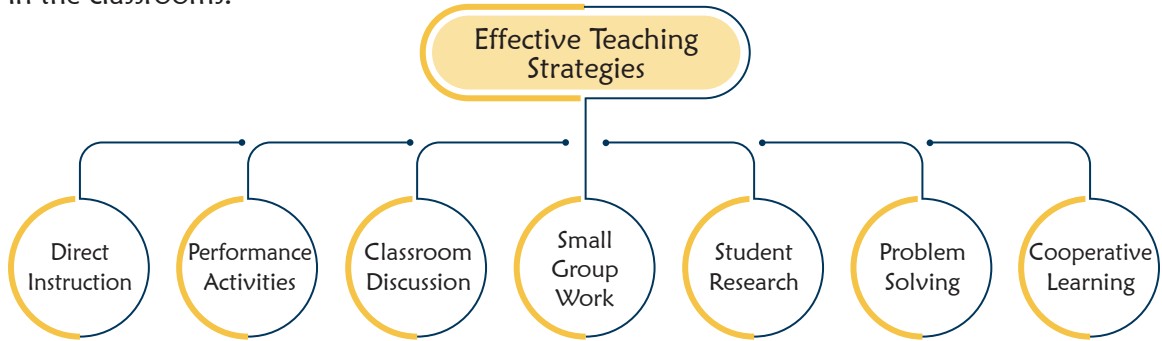
After the class

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

“Knowing yourself is the beginning of all wisdom.”

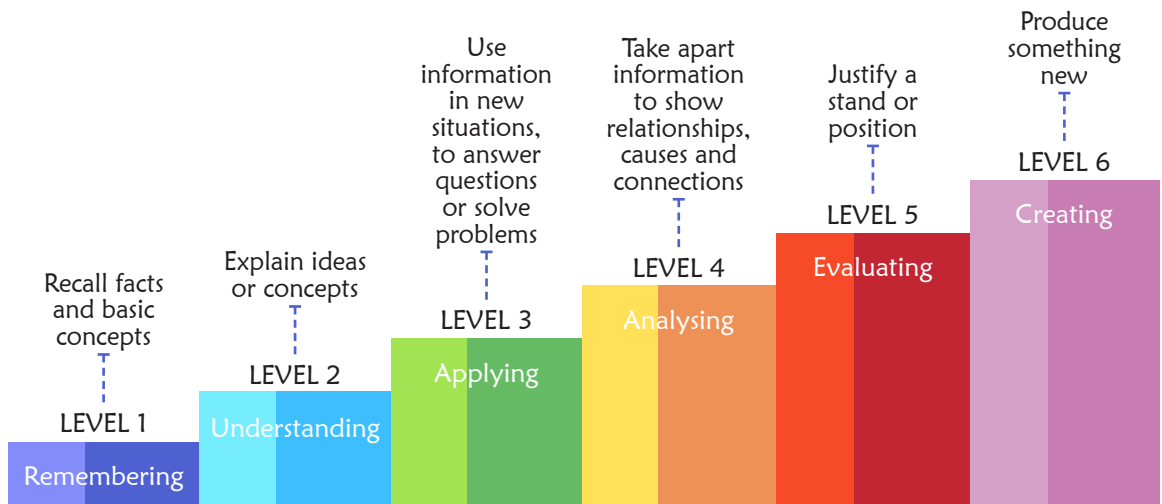
Teaching Strategies

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 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. ”

1 Advanced Windows

Teaching Objectives

Students will learn about

- + Control Panel
- + Mouse Settings
- + Disk Cleanup
- + Date and Time Settings
- + Sound Settings

Number of Periods	
Theory	Practical
2	4

Teaching Plan

While teaching this chapter, tell the students that the Control Panel is used to control and modify many features of Windows 10 on the computer.

Demonstrate to the students the steps involved in using the feature of Control Panel.

Familiarise the students with some of the computer settings covering System & Security, Hardware & Sound, Programs, Appearance & Personalization and Clock & Region.

Share with the students about steps involved in using the feature of Date and Time setting and how to modify it.

Explain to the students how to change Mouse setting and steps involved in using it.

Demonstrate the students about the Sound settings and steps involved in modifying.

Introduce Disk Cleanup as a tool used to search and delete files on the hard disk, that can be deleted from the computer without affecting the computer's functions or personal files.

Demonstrate to the student the steps involved in Disk Cleanup process.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is a control panel?
- Q. How can you change date and time?
- Q. How can you change mouse settings?

Q. What are the steps to change the sound setting?

Q. What is a disk cleanup?

Evaluation

After explaining the chapter, let the students do the **Mind Drill** given on Pages 12 and 13 in the main course book as **Rapid Fire** and **Evaluation Time**. Tell the students to try sections under **Activity Time** given on Page 13 in the main course book to imbibe Critical Thinking skill in them.

Take the students to the computer lab and let them practice the activity given in the **Find Out** and **In the Lab** section on Page 14 in the main course book. This will enhance the ability of the students and serve as Initiative, Technology Literacy and Productivity & Accountability activity.

Suggested Activity

Ask the students to collect information from the Internet about earlier versions of Windows like Windows XP and Windows Vista. Tell them to make a comparative table about the various features available in these earlier versions and Windows 7.

2

Advanced Features of PowerPoint 2016

Teaching Objectives

Students will learn about

- + Inserting Audio and Video Files
- + Action Buttons
- + Printing the Presentation

Number of Periods	
Theory	Practical
2	3

Teaching Plan

While teaching this chapter, tell the students that PowerPoint 2016 is used to create electronic presentations.

Tell the students that what elements a movie has to make it interesting.

Explain the steps involved in inserting an audio file into a presentation.

Demonstrate the steps involved in inserting a video file into a presentation.

Explain the students about actions button in PowerPoint.

Demonstrate the steps involved in adding the action button.

Show the students how to print a presentation with labeled steps involved in it.

Extension

Ask the students some oral questions based on this chapter.

- Q. What type of audio files can be inserted into a presentation?
- Q. Can we add video files on a slide?
- Q. What are action buttons?
- Q. How can you add action button in a presentation?
- Q. How can you print a presentation?

Evaluation

After explaining the chapter, let the students do the **Mind Drill** given on Pages 23 and 24 in the main course book as **Rapid Fire** and **Evaluation Time**. Tell the students to try sections under **Activity Time** given on Pages 24 in the main course book to imbibe Technology Literacy skill in them.

Take the students to the computer lab and let them practice the activity given in the **Find Out** and **In the Lab** section on Page 25 in the main course book. This will enhance the ability of the students and serve as Initiative, Technology Literacy, Creativity and Leadership & Responsibility activity.

Suggested Activity

Divide the class into two teams. Ask one team to prepare charts on various types of pollution. Ask the other team to prepare a PowerPoint presentation on the same topic. Make the students share the benefits enjoyed and limitations faced by each team while working on their project.

3 More on Excel

Teaching Objectives

Students will learn about

- ✦ Selecting Cells in a Worksheet
- ✦ Column Width and Row Height
- ✦ Merging Cells
- ✦ Formatting Spreadsheets
- ✦ AutoFill
- ✦ Order of Operation
- ✦ Copying/Moving Data
- ✦ Inserting Rows/Columns
- ✦ Splitting Cells
- ✦ Customising Worksheet Tab
- ✦ Using Formulas to Perform Calculation

Teaching Plan

While teaching this chapter, tell the students that Excel is an application software that helps us to store and analyse data.

Number of Periods	
Theory	Practical
2	4

Demonstrate how to select cells in a worksheet in Excel. Show them the labeled steps to modify the cell content.

Tell the students the methods of modifying data by cut, copy and paste.

Explain to the students the steps involved in changing row height and column width – both manually and automatically.

Tell the students that Excel allows inserting blank rows and columns at the required place in the worksheet.

Demonstrate to the students how two or more cells can be merged into one and also how a cell can be split up into two or more cells.

Explain some worksheet formatting features of Excel like:

- **Wrap text** – displaying multiple lines of text in a cell
- **Format numbers** – applying various data types to the cells
- **Cell borders** – boundary around a cell or a series of cells
- **Cell styles** – Pre-defined cell border, colour and formatting
- **Cell fills** – adding colours or shades in the cells
- **Font color** – adding colours to the text

Show to the students the steps involved in applying all of these formatting features on a worksheet.

Explain to the students that worksheet tab can be customised by changing its default name and colour.

Tell the students that Auto Fill feature automatically fills a series of data in the worksheet.

Tell the students how to use formulas to perform calculations and also how to copy them.

Explain to the students the order of operation with the help of examples.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is the difference between Cut and Copy options?
- Q. What does it mean when data in a cell is displayed as #####?
- Q. Define merging of cells.
- Q. Define splitting of cells.
- Q. What is wrap text feature of Excel?
- Q. Name any three number formats available in Excel.
- Q. What is meant by border of a cell?
- Q. What is the use of AutoFill feature?
- Q. How can you use formulas to perform calculations?

Evaluation

After explaining the chapter, let the students do the **Mind Drill** given on Pages 41 and 43 in the main course book as **Rapid Fire** and **Evaluation Time**. Tell the students to try sections under **Activity Time** given on Page 43 in the main course book to imbibe Critical Thinking skill in them.

Take the students to the computer lab and let them practice the activity given in the **In the Lab** section on Page 44 in the main course book. This will enhance the ability of the students and serve as Initiative and Productivity & Accountability activity.

Suggested Activity

Ask the students to design their class time-table in Excel 2016.

4 Formulas and Functions in Excel

Teaching Objectives

Students will learn about

- + Types of Data in Excel
- + Understanding Cell Range
- + Customise Worksheet Tab
- + Different Ways to Enter a Formula
- + Cell Referencing in Formulas and its Types
- + Functions

Number of Periods	
Theory	Practical
2	3

Teaching Plan

While teaching this chapter, tell the students that Excel has some built-in formulas called functions. Familiarise the students with the types of data in Excel covering Labels, Values or Numbers and Formula.

Share with the students the basic elements and rules of writing a formula in Excel.

Introduce cell range as a group of selected cells.

Demonstrate to the students the steps to:

- Select a cell range
- Name a cell range

Introduce cell reference as a cell address that can be used in a formula to denote a specific cell.

Make them understand the different types of cell referencing and the difference between the three – Absolute, Relative and Mixed.

Demonstrate to the students the steps to refer cells in other worksheet.

Explain the students how to customise a worksheet tab.

Tell the students about rules for using Functions and different categories of Functions in Excel.

Demonstrate the use of mathematical functions – SUM, PRODUCT, MOD, SQRT, INT, POWER, ROUND and ABS.

Demonstrate the use of text functions – CONCATENATE, LEFT, RIGHT, LEN, UPPER and LOWER.

Demonstrate the use of logical functions – MAX, MIN, AVERAGE and COUNT.

Demonstrate the use of date functions – TODAY, MONTH, YEAR, DAY, NOW, HOUR and MINUTE.

Demonstrate the steps to use these functions.

Extension

Ask the students some oral questions based on this chapter.

Q. What are Functions in Excel?

Q. Name the different elements of a formula in Excel.

Q. What are the types of data in Excel?

Q. Define cell referencing.

Q. Name some important categories of Functions.

Q. State the purpose of SUM / SQRT / MOD / COUNT / LEN / RIGHT / TODAY / MAX Function.

Q. What is the syntax of PRODUCT / INT / POWER / CONCATENATE / LEFT / UPPER / LOWER / MIN / AVERAGE function?

Evaluation

After explaining the chapter, let the students do the **Mind Drill** given on Pages 58 to 60 in the main course book as **Rapid Fire** and **Evaluation Time**. Tell the students to try sections under **Activity Time** given on Page 60 in the main course book to imbibe Critical skill in them.

Take the students to the computer lab and let them practice the activity given in the **Find Out** and **In the Lab** section on Page 60 in the main course book. This will enhance the ability of the students and serve as Communication, Initiative and Productivity & Accountability activity.

Suggested Activity

Ask the students to enter their last mark sheet in Excel and calculate total marks scored, average marks scored, maximum and minimum marks amongst all the marks and the number of subjects using various Functions used in Excel.

5

Introduction to Animate CC

Teaching Objectives

Students will learn about

- ✦ Starting Adobe Animate CC
- ✦ Components of the Animate CC Window
- ✦ Creating a Document in Animate CC
- ✦ Saving a Document in Animate CC

- ✦ Creating Shapes in Animate CC
- ✦ Gradient Fill
- ✦ Creating a Symbol in Animate CC

Number of Periods	
Theory	Practical
2	4

Teaching Plan

Tell the students that Animate CC is a software developed by Adobe Systems that helps to create interactive animations and vector graphics using drawing tools.

Explain to the students how to start Adobe Animate CC.

Show the students how to create a document in Animate CC with labeled steps.

Explain the components of Animate CC window: stage, timeline, tools panel, properties panel, library panel, menu bar and pasteboard along with the functions.

Show the students the steps involved to save a document in Animate CC.

Demonstrate to the students the steps involved to create shapes in Animate CC.

Explain the use of gradient fill in Animate CC.

Show the students the steps involved to create a symbol in Animate CC.

Extension

Ask the students some oral questions based on this chapter.

Q. What is Animate CC?

Q. How to create a document in Animate CC?

Q. Define:

- | | | |
|---------------------|------------------|----------------|
| a. Stage | b. Timeline | c. Tools Panel |
| d. Properties Panel | e. Library Panel | f. Menu Bar |

Q. What is gradient fill?

Evaluation

After explaining the chapter, let the students do the **Mind Drill** given on Pages 69 to 71 in the main course book as **Rapid Fire** and **Evaluation Time**. Tell the students to try sections under **Activity Time** given on Page 71 in the main course book to imbibe Initiative and Productivity & Accountability skills in them.

Take the students to the computer lab and let them practice the activity given in the **Find Out** and **In the Lab** section on Page 71 in the main course book. This will enhance the ability of the students and serve as Initiative, Technology Literacy and Information Literacy activity.

Suggested Activity

Ask the students to create any shape in Animate CC using the tools taught in this chapter.



Teaching Objectives

Students will learn about

- ✦ HTML
- ✦ Rules for Writing HTML5 Codes
- ✦ Creating and Saving an HTML document
- ✦ Editing an Existing HTML Document
- ✦ Text Properties
- ✦ Font Properties
- ✦ Tags and Attributes
- ✦ HTML5 Document structure
- ✦ Basic HTML Tags
- ✦ Introducing CSS3
- ✦ Background Properties
- ✦ Margin Properties

Number of Periods

Theory	Practical
2	2

Teaching Plan

While teaching this chapter, tell the students that website is a collection of web pages which contain text, graphics, audios, videos and links to other pages.

Introduce Hypertext Markup Language (HTML) as language that describes the structure of a web page.

Make the students understand the meaning of the terms like hypertext and markup language. Tell the students about the key features of HTML5.

Make the students aware about the different types of HTML editors – WYSIWYG editor and Text editor.

Familiarise the students with basic HTML terms like tags, container tags, empty tags, block level tags, text level tags and attributes.

Tell the students about the concept of nesting of tags.

Share with the students the general rules followed for writing HTML5 codes.

Show to the students a HTML5 document and make them understand and identify the various sections and structure of the HTML5 document.

Demonstrate to the students the steps involved in:

- Creating a HTML document
- Saving a HTML document
- Viewing a web page

Tell the students about the meaning and use of basic HTML tags covering `<!DOCTYPE html>`, `<HTML>`, `<HEAD>`, `<TITLE>`, `<BODY>`, `<Hn>`, `<P>`, `
`, `<HR>`, ``, `<I>`, `<SUP>` and `<SUB>` tags along with their attributes.

Demonstrate to the students the steps involved in editing an existing HTML document.

Introduce CSS3 to the students.

Let the students know that there are three ways to use the CSS styles in HTML document. They are:

Inline style sheet

Internal Style Sheet

External Style Sheet

Familiarise the students with the CSS text properties covering color, text-align, text-indent, text-decoration and text transform.

Explain to the students about background properties, font properties and margin properties.

Extension

Ask the students some oral questions based on this chapter.

Q. What is HTML?

Q. Define hypertext and Markup language.

Q. Name the different types of HTML editors.

Q. What are tags and attributes?

Q. State the rules followed while writing HTML5 codes.

Q. Name the text editor most commonly used to write HTML5 codes.

Q. State the use of <HTML> / <HEAD> / <BODY> / <TITLE> tags.

Q. What is the difference between container tags and empty tags?

Q. What is CSS3?

Q. Name different CSS styles.

Q. Tell the steps to edit an existing HTML document.

Evaluation

After explaining the chapter, let the students do the Mind Drill given on Pages 95 to 97 in the main course book as Rapid Fire and Evaluation Time. Tell the students to try sections under Activity Time given on Pages 97 in the main course book to imbibe Critical Thinking skill in them.

Take the students to the computer lab and let them practice the activity given in the In the Lab section on Page 98 in the main course book. This will enhance the ability of the students and serve as Initiative and Productivity & Accountability activity.

7

Internet

Teaching Objectives

Students will learn about

✦ The Internet

✦ World Wide Web

✦ Using Web Browser

✦ Using URLs

Number of Periods	
Theory	Practical
3	2

Teaching Plan

While teaching this chapter, tell the students that the Internet is a computer network that connects hosts and end systems throughout the world.

Tell the students about Internet and its history.

Tell the students and define what is World Wide Web.

Show the students how the web works and meaning of URL. Demonstrate them use of URL using address bar and hyperlink.

Make the students understand the meaning of services of Internet like E-mail, E-Greetings, Online Shopping, Online Reservation and Online Education with labeled steps to use them.

Extension

Ask the students some oral questions based on this chapter.

Q. What is Internet?

Q. Define the following:

- URL
- E-mail
- E-Greetings
- Online shopping
- Online Reservation
- Online Education

Evaluation

After explaining the chapter, let the students do the **Mind Drill** given on Pages 110 to 112 in the main course book as **Rapid Fire** and **Evaluation Time**. Tell the students to try sections under **Activity Time** given on Page 112 in the main course book to imbibe Critical Thinking skill in them.

Take the students to the computer lab and let them practice the activity given in the **Find Out** and **In the Lab** section on Page 112 in the main course book. This will enhance the ability of the students and serve as Communication and Information Literacy activity.

Suggested Activity

Ask the students to learn how to use the internet services.

8

Problem Solving and Programming Languages

Teaching Objectives

Students will learn about

✦ Algorithm

✦ Characteristics of a Good Algorithm

- ✦ Uses of an Algorithm
- ✦ Defining Flowcharts
- ✦ Solving Problems Using Algorithms and Flowcharts
- ✦ Computer Languages
- ✦ Working of Language Translators
- ✦ Writing an Algorithm
- ✦ Language Translator

Number of Periods	
Theory	Practical
2	3

Teaching Plan

While teaching this chapter, tell the students about how humans communicate and their language. Also give an introduction of problem solving techniques, algorithm, flowchart, etc.

Introduce algorithms as set of steps in a sequential and ordered manner to solve any problem or to complete a task.

Explain to the students the characteristics of a good algorithm.

Tell the students about the uses of an algorithm.

Encourage the students to write algorithms involving some basic tasks like getting ready for school or involving mathematical problems.

Introduce flowcharts as a graphical diagram that represents an algorithm.

Explain the shapes and usage of flowchart symbols covering Start / Stop box, Process box, Decision box, Input / Output box, Flow lines and Connectors.

Make the students learn the rules for drawing a flowchart.

Explain them the advantages of flowcharts.

Encourage the students to draw flowcharts for the algorithms written earlier.

Tell the students that computer languages are categorised as low-level languages (machine dependent) and high level languages (machine independent).

Share with the students that low level languages are further classified as machine language (first generation language made up of 0s and 1s) and assembly language (second generation language made up of alphanumeric symbols).

Make the students learn that the high level languages are further classified as third generation languages (examples: **BASIC, FORTRAN, PASCAL**, etc.), fourth generation languages (examples: **SQL, Perl, Python, etc.**) and natural language or fifth generation languages (involving artificial intelligence).

Tell the students the advantages and disadvantages of high level languages over low level languages.

Introduce the concept of language translators as software that convert a high level language into a machine language covering:

- **Assembler** – used to translate assembly language into machine language.
- **Compiler** – used to convert source program at once into machine language before executing it.

- **Interpreter** – used to convert source program one line at a time into machine language before executing it.

Ask the students to solve the question in Warm Up! on page number 94.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is an algorithm?
- Q. What is a flowchart?
- Q. What are computer languages?
- Q. What is Low-Level language?
- Q. What is High-Level language?
- Q. Give examples of each:
 - a. Machine Language
 - b. Assembly Language
 - c. Third Generation Language
 - d. Fourth Generation Language
 - e. Fifth Generation Language
- Q. What are advantages of HLL?
- Q. What are disadvantages of HLL?
- Q. What is a language translator?
- Q. What is an assembler?
- Q. What is the difference between a compiler and an interpreter?
- Q. Explain the working of language translators.

Evaluation

After explaining the chapter, let the students do the **Mind Drill** given on Pages 123 to 125 in the main course book as **Rapid Fire** and **Evaluation Time**. Tell the students to try sections under **Activity Time** given on Page 126 in the main course book to imbibe Critical Thinking skill in them.

Take the students to the computer lab and let them practice the activity given in the **Find Out, Hands-On** and **In the Lab** section on Page 126 in the main course book. This will enhance the ability of the students and serve as Information Technology and Creativity activity.

Suggested Activity

Ask the students to find some questions which can be solved using algorithm and flowchart. Also, ask the students to collect more information about the computer languages and translators.

Teaching Objectives

Students will learn about

- ✦ Python
- ✦ Installing Python
- ✦ The input() and print() Functions
- ✦ Variables in Python
- ✦ Using Separators with print() Function
- ✦ Features of Python
- ✦ Modes of Python IDLE
- ✦ The type() Function
- ✦ Data Types of Python
- ✦ Comments in Python

Number of Periods	
Theory	Practical
2	3

Teaching Plan

While teaching this chapter, tell the students that Python is a general-purpose high-level programming language and it is a powerful language used for general-purpose programming.

Share with the students the features of Python briefly that it is:

- Easy to code
- Open-source language
- Object-oriented
- Integrated and Extensible language
- Interpreted language
- Dynamically Typed language

Demonstrate the students the steps to install Python.

Tell the students that Programming in Python has two basic modes:

- Interactive Mode
- Script Mode

Explain input(), type() and print() function to the students.

Tell the students that variables are like containers used to store data.

Demonstrate the steps to declare and initialise a variable.

Explain to the students the naming conventions for variables.

Explain Data types and its categories covering Number, Sets, Sequence and Boolean.

Tell the students that separators are used to define how multiple items are separated when printed or displayed.

Also tell them examples of few separators covering comma(,), tab space(\t) and new line(\n).

Show the students the proper use of Single Line and Multiple-line comment in Python.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is Python?
- Q. What are features of Python?
- Q. What are the steps to install Python?
- Q. What are the two modes of programming in Python?
- Q. What is the purpose of input() function?
- Q. What is the purpose of print() function?
- Q. What are variables in Python?
- Q. What are comments in Python?

Evaluation

After explaining the chapter, let the students do the **Mind Drill** given on Pages 138 to 140 in the main course book as **Rapid Fire** and **Evaluation Time**. Tell the students to try sections under **Activity Time** given on Page 124 in the main course book to imbibe Critical Thinking skill in them.

Take the students to the computer lab and let them practice the activity given in the **In the Lab** section on Page 141 in the main course book. This will enhance the ability of the students and serve as Critical Thinking and Technology Literacy activity.

Suggested Activity

Ask the students to learn how to use the internet services.

10

Intelligence and AI Approaches

Teaching Objectives

Students will learn about

- + Intelligence
- + AI Approach
- + Types of Intelligence

Teaching Plan

Define the meaning of Intelligence to the students.

Explain the types of Intelligence along with the qualities of the same to the students:

- Naturalistic Intelligence

Number of Periods	
Theory	Practical
2	1

- Musical Intelligence
- Logical-Mathematical Intelligence
- Existential Intelligence
- Interpersonal Intelligence
- Bodily-Kinesthetic Intelligence
- Linguistic Intelligence
- Intrapersonal Intelligence
- Spatial Intelligence

Define the AI Approach which simulate human attribute:

- Rule Based Approach
- Learning Based Approach

Extension

Ask the students some oral questions based on this chapter.

Q. Define Intelligence.

Q. Define the qualities of these:

- Verbal-Linguistic Intelligence
- Logical-Mathematical Intelligence
- Bodily-Kinesthetic Intelligence
- Musical Intelligence
- Interpersonal Intelligence
- Existential Intelligence
- Intrapersonal Intelligence
- Naturalistic Intelligence

Q. Define the two AI approaches:

- Rule Based Approach
- Learning Based Approach

Evaluation

After explaining the chapter, let the students do the **Mind Drill** given on Pages 146 to 148 in the main course book as **Rapid Fire** and Evaluation Time. Tell the students to try sections under **Activity Time** given on Page 148 in the main course book to imbibe Critical Thinking skill in them.

Suggested Activity

Make a presentation showing different types of intelligence and their qualities.

