TOUCHPAD

Ver. 2.2

6

Teacher's Manual

Extended Support for Teachers

ORANGE
www.orangeeducation.in

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 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

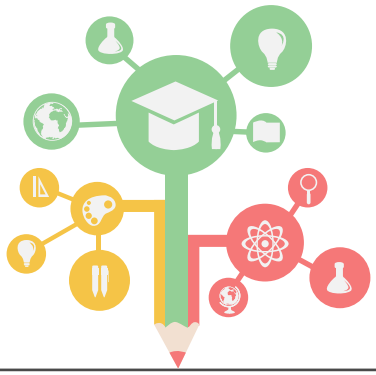
Age 11 - 20 Years

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.

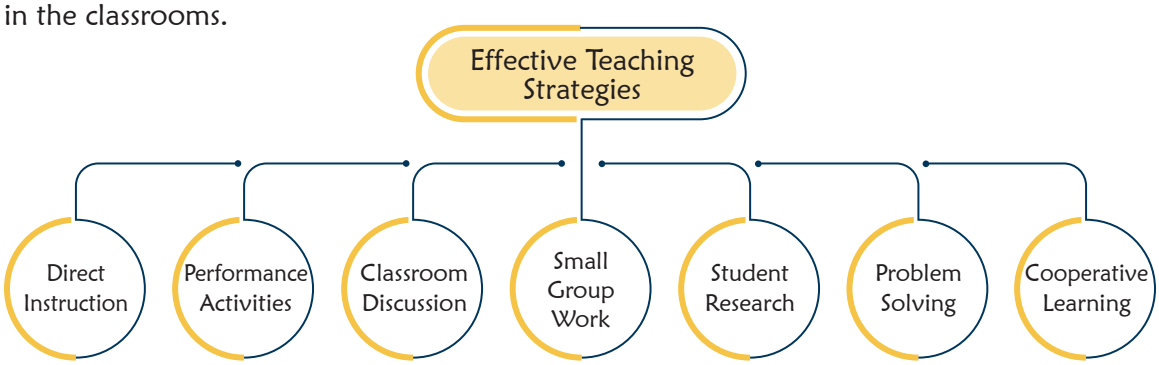
After the class

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

> "Knowing yourself is the beginning of all wisdom."

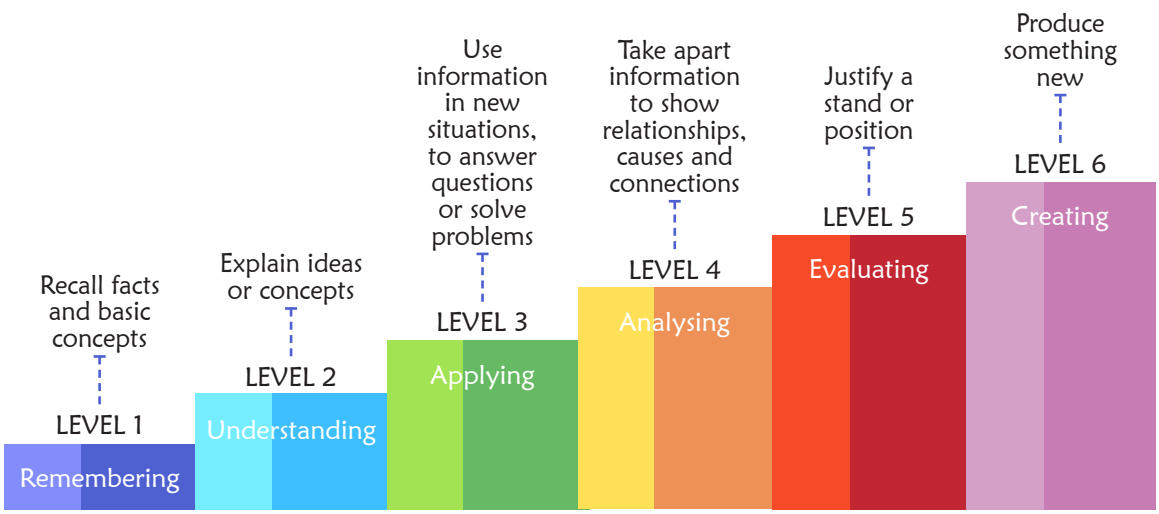
Teaching Strategies

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."

CLASS 6

LESSON PLAN

1 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	2

Teaching Plan

Before starting the chapter, ask the students to solve the question in **Let's Plug-in** given on Page 7 of the main course book.

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

Show to the students how sound and audio files can be inserted into a presentation.

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 inserting the action button.

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

Ask the student to solve the exercise **Let's Catch Up** given on page 11.

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 exercises given on Pages 15 and 16 in the main course book as **Test Your Skills**. Tell the students to try sections under **Tech Zone**– **Let's Solve** and **Let's Explore** given on Page 16 in the main course book to imbibe Critical Thinking and Technology Literacy.

Take the students to the computer lab and let them practice the activity given in the **Tech Practice** section on Page 17 in the main course book. This will enhance the ability of the students and serve as a Creativity 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.

2 More on Excel 2016

Teaching Objectives

Students will learn about

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

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to solve the question in **Let's Plug-in** given on Page 18 of the main course book.

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

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 cut, copy and paste the data.

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.

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.

Introduce to the students AutoFill feature of Excel as automatically filling a series of data in the worksheet and the steps involved in the same.

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.

Ask the student to solve the exercise **Let's Catch Up** given on page 29.

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 exercises given on Pages 31 and 32 in the main course book as **Test Your Skills**. Tell the students to try sections under **Tech Zone**– **Let's Solve** and **Let's Explore** given on Page 33 in the main course book to imbibe Critical Thinking and Technology Literacy skills in them.

Take the students to the computer lab and let them practice the activity given in the **Tech Practice** section on Page 33 in the main course book. This will enhance the ability of the students and serve as a Productivity & Accountability activity.

Suggested Activity

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

3 Formulas and Functions in Excel 2016

Teaching Objectives

Students will learn about

- Types of Data in Excel
- Understanding Cell Range
- References to Other Worksheets
- Different Ways to Enter a Formula
- Cell Referencing in Formulas and its Types
- Functions

Number of Periods	
Theory	Practical
2	2

Teaching Plan

Before starting the chapter, ask the students to solve the question in **Let's Plug-in** given on Page 35 of the main course book.

Introduce data type in Excel to the students.

While teaching this chapter, tell the students that Excel has some built-in formulas called functions.

Share with the students the different ways to enter a formula in Excel.

Explain the students about cell range and demonstrate the steps to select and assign a name to a cell range.

Introduce cell referencing as use of cell address while writing a formula.

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

Tell the students about rules for using Functions, 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 statistical functions – MAX, MIN and AVERAGE.

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

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 is the order of operation followed 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 exercises given on Pages 46 to 48 in the main course book as **Test Your Skills**. Tell the students to try sections under **Tech Zone**– **Let's Solve** and **Let's Explore** given on Pages 48 and 49 in the main course book to imbibe Productivity & Accountability, Critical Thinking and Communication skills in them.

Take the students to the computer lab and let them practice the activity given in the **Tech Practice** section on Page 49 in the main course book. This will enhance the ability of the students and serve as a 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.

4 Introduction to Animate 2024

Teaching Objectives

Students will learn about

- Starting Adobe Animate 2024
- Components of the Animate 2024 Window
- Creating Shapes in Animate 2024
- Creating a Symbol in Animate 2024
- Creating a Document in Animate 2024
- Saving a Document in Animate 2024
- Gradient Fill

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to solve the question in **Let's Plug-in** given on Page 50 of the main course book.

Tell the students about Animate 2024 and the steps to start the application.

Show the students how to create a document in Animate 2024 with labeled steps.

Explain the components of Animate 2024 window: stage, timeline, tools panel, properties panel, library panel, menu bar along with the functions.

Show the students the steps involved to save a program.

Demonstrate to the students the steps involved to create shapes in Animate 2024.

Explain the use of gradient fill in Animate 2024.

Show the students the steps involved to create a symbol in Animate 2024.

Ask the student to solve the exercise **Let's Catch Up** given on page 57.

Extension

Ask the students some oral questions based on this chapter.

Q. What is Animate 2024?

Q. How to create a document in Animate 2024?

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 exercises given on Pages 59 and 60 in the main course book as **Test Your Skills**. Tell the students to try sections under **Tech Zone**– **Let's Solve** and **Let's Explore** given on Pages 60 and 61 in the main course book to imbibe Critical Thinking, Technology Literacy and Creativity skills in them.

Take the students to the computer lab and let them practice the activity given in the **Tech Practice** section on Page 61 in the main course book. This will enhance the ability of the students and serve as a Creativity activity.

Suggested Activity

Ask the students to create any shape in Animate 2024 using the tools taught in this chapter.

5 Computer Malware

Teaching Objectives

Students will learn about

- Malware
- Trojan Horse
- Ransomware
- Computer Virus
- Firewall
- Worms
- Spyware
- Rootkit
- Antivirus

Number of Periods	
Theory	Practical
2	1

Teaching Plan

Before starting the chapter, ask the students to solve the question in **Let's Plug-in** given on Page 65 of the main course book.

Introduce malware as a type of malicious program designed to damage or carryout other unwanted actions on a computer system.

Introduce worms as a type of malware that has the capability to replicate itself without any human interaction.

Tell the students about trojan horse, spyware, ransomware and rootkit.

While teaching this chapter, tell the students that a computer virus can destroy the programs and files saved in a computer. Introduce computer virus as a program that can infect the system and/or duplicate itself reducing the storage space.

Share examples of some computer viruses with the students. Tell the students about the harms that may be caused by a computer virus. Explain to the students the various methods by which a computer system may get infected with virus.

Make the students aware of the symptoms that tell that a computer system is infected by a computer virus.

Explain in detail to the students the various methods by which prevention can be taken from a computer virus.

Introduce the students to the concept of antivirus as a program developed to detect and remove virus from a computer system.

Share the names of some commonly used antivirus programs.

Ask the students to solve the exercise **Let's Catch Up** given on page 69.

Extension

Ask the students some oral questions based on this chapter.

Q. What is a computer virus?

Q. State any two harms caused by a computer virus.

Q. State any two methods by which a computer may get infected by Computer Virus.

Q. State any two symptoms that show that a computer system has been infected by a virus.

Q. State any two ways in which the user can prevent from a computer virus.

Q. What is antivirus program?

Q. What is the main purpose of an antivirus program?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 71 and 72 in the main course book as **Test Your Skills**. Tell the students to try sections under **Tech Zone**– **Let's Solve**, **Let's Explore** and **Let's Get Better** given on Page 73 in the main course book to imbibe Critical Thinking, Collaboration and Leadership & Responsibility skills in them.

Take the students to the computer lab and let them practice the activity given in the **Tech Practice** section on Page 73 in the main course book. This will enhance the ability of the students and serve as a Creativity and Technology Literacy activity.

Suggested Activity

Ask the students to collect information about any computer virus and narrate it in the class.

6 Introduction to HTML5 and CSS3

Teaching Objectives

Students will learn about

- HTML
- Rules for Writing HTML5 Codes
- Creating and Saving an HTML Document
- Editing an Existing HTML Document
- Tags and Attributes
- HTML5 Document Structure
- Introducing CSS3

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to solve the question in **Let's Plug-in** given on Page 74 of the main course book.

While teaching this chapter, tell the students that websites consist of number of pages called 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 HTML codes.

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

Demonstrate to the students the steps involved in:

- Creating a HTML document
- Saving a HTML document
- Previewing a web page.

Tell the students about the meaning and use of basic HTML tags covering <HTML>, <HEAD>, <TITLE> and <BODY> tags alone with their attributes.

Tell the students about CSS3.

Explain the students the types of CSS covering Inline CSS, Internal CSS and External CSS.

Show the students the method of editing an existing HTML document.

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 HTML codes.

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

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

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

Q. What are different types of CSS?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 83 and 84 in the main course book as **Test Your Skills**. Tell the students to try sections under **Tech Zone**– **Let's Solve**, **Let's Explore** and **Let's Get Better** given on Pages 84 and 85 in the main course book to imbibe Critical Thinking, Initiative, Technology Literacy, Leadership & Responsibility and Creativity skills in them.

Take the students to the computer lab and let them practice the activity given in the **Tech Practice** section on Page 85 in the main course book. This will enhance the ability of the students and serve as a Initiative activity.

Suggested Activity

Ask the students to develop a similar web page in HTML.

7 Algorithm and Flowchart

Teaching Objectives

Students will learn about

- Algorithm
- Uses of an Algorithm
- Defining Flowcharts
- Solving Problems using Algorithms and Flowcharts
- Characteristics of a Good Algorithm
- Writing an Algorithm

Number of Periods	
Theory	Practical
2	2

Teaching Plan

Before starting the chapter, ask the students to solve the question in **Let's Plug-in** given on Page 87 of the main course book.

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 and 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 diagrammatic representation of 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.

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

Ask the students to solve the question in **Let's Catch Up** on page 92.

Extension

Ask the students some oral questions based on this chapter.

Q. What is an algorithm?

Q. What is a flowchart?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 93 to 95 in the main course book as **Test Your Skills**. Tell the students to try sections under **Tech Zone**– **Let's Solve**, **Let's Explore** and **Let's Get Better** given on Page 95 in the main course book to imbibe Critical Thinking, Technology Literacy and Creativity skills in them.

Take the students to the computer lab and let them practice the activity given in the **Tech Practice** section on Page 96 in the main course book. This will enhance the ability of the students and serve as a Critical Thinking activity.

Suggested Activity

Ask the students to find some questions which can be solved using algorithm and flowchart.

8 Introduction to Programming

Teaching Objectives

Students will learn about

- Computer Languages
- Python
- Installing Python
- Language Translato
- Features of Python
- Programming in Python

- Input and Output
- Data Types
- Operators
- Some More Programs
- Variables in Python
- Comments in Python
- Precedence of Operators

Number of Periods	
Theory	Practical
2	1

Teaching Plan

Before starting the chapter, ask the students to solve the question in **Let's Plug-in** given on Page 97 of the main course book.

While teaching this chapter, tell the students that computer language is the medium by which instructions are transmitted to the computer to perform a specific task.

- **Program** – a set of instructions given to CPU in a pre-defined sequence to complete a task.
- **Computer language** – means by which data and instructions are transmitted to the computer.
- **Syntax** – the grammar of a computer language.
- **Programming** – process of writing a program.
- **Programmers** – people who write computer programs.

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**, **COBOL**, **FORTRAN**, **PASCAL**, etc.), fourth generation languages (examples: **Visual Basic**, **Oracle**, **SQL**, **JAVA**, **C++**, 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.

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

Introduce the students with Python and its use.

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

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

Demonstrate the students the steps to install Python.

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

- Script Mode
- Interactive Mode

Share with the students the working in Script mode and demonstrate the steps involved in the four step process, i.e.,

- Creating a new file
- Writing a program
- Saving Python program
- Running a Python program

Explain to the students the Input, print and Output functions in a Python program with syntax and pictures.

Tell the students the Variables in Python along with the declaring and initializing a variable with syntax.

Explain to the students the Data Types and Comments in Python with syntax.

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

Explain to the students about Operators in Python and its types along with the syntax and description of that are:

- Arithmetic Operators
- Assignment Operators
- Logical Operators
- Relational Operators

Tell the students about the Precedence of Operators with the help of sample programs in Python.

Ask the students to solve the question in **Let's Catch Up** on page 106.

Extension

Ask the students some oral questions based on this chapter.

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.
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?
Q. What are operators in Python?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 114 to 116 in the main course book as **Test Your Skills**. Tell the students to try sections under **Tech Zone**– **Let's Solve** and **Let's Explore** given on pages 116 and 117 in the main course book to imbibe Critical Thinking, and Technology Literacy skills in them.

Take the students to the computer lab and let them practice the activity given in the **Tech Practice** section on Page 117 in the main course book. This will enhance the ability of the students and serve as a Critical Thinking activity.

Suggested Activity

Ask the students to collect more information about the computer languages and translators.

9 Intelligence and AI Approaches

Teaching Objectives

Students will learn about

- Intelligence
- AI Approach
- Types of Intelligence

Number of Periods	
Theory	Practical
2	1

Teaching Plan

Before starting the chapter, ask the students to solve the question in **Let's Plug-in** given on Page 118 of the main course book.

Define the meaning of Intelligence to the students.

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

- Spatial
- Naturalistic

- Musical
- Existential
- Bodily-kinesthetic
- Intra-personal
- Logical-Mathematical
- Interpersonal
- Linguistic

Visual-Spatial Intelligence:

- Love reading and writing
- Good at putting puzzles together
- Recognise patterns easily
- Visualise things easily
- Love drawing and painting

Make the students do some activities for exploring Intelligence.

Define the AI Approach which simulate human attribute:

- Rule Based Approach
- Learning Based Approach

Ask the students to solve the question in **Let's Catch Up** on pages 120 and 122.

Extension

Ask the students some oral questions based on this chapter.

Q. Define Intelligence.

Q. Define the qualities of these:

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

Q. Define the two AI approaches:

- Rule Based Approach
- Learning Based Approach

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 123 and 124 in the main course book as **Test Your Skills**. Tell the students to try sections under **Tech Zone**– **Let's Solve** and **Let's Explore** given on Pages 124 and 125 in the main course book to imbibe Critical Thinking and Information Literacy skills in them.

Take the students to the computer lab and let them practice the activity given in the **Tech Practice** section on Page 125 in the main course book. This will enhance the ability of the students and serve as a Productivity & Accountability activity.

Suggested Activity

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