

TOUCHPAD

PLUS Ver. 3.2

8

TEACHER'S MANUAL

Extended Support for Teachers



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DEVELOPMENT MILESTONES IN A CHILD

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



Age
5 - 8 Years

Physical

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

Cognitive

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

Language

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

Emotional/ Social

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

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

Age
9 - 11 Years

Physical

- Motor skills develop resulting in enhanced reflexes

Cognitive

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

Language

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

Emotional/ Social

- Self-esteem tends to rise
- Peer groups emerge

Age
11 - 20 Years

Physical

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

Cognitive

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

Emotional/ Social

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

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

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

TEACHING PEDAGOGIES



Lesson Plans

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

A lesson plan addresses and integrates three key components:

- ✦ Learning objectives
- ✦ Learning activities
- ✦ Assessment to check the student's understanding

A lesson plan provides an outline of the teaching goals:

Before the class

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

During the class

Present the lesson plan.

After the class

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

“Knowing yourself is the beginning of all wisdom.”

Teaching Strategies

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



Bloom's Taxonomy

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



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

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

Teaching Objectives

Students will learn about

- ✦ Computer Network
- ✦ Need for Computer Network
- ✦ Advantages of Computer Network
- ✦ Components of a Communication System
- ✦ Network Terminologies
- ✦ Devices Required for a Network
- ✦ Types of Networks
- ✦ Topology
- ✦ Network Architecture
- ✦ Wireless Networking Technology
- ✦ Protocol

Number of Periods	
Theory	Practical
3	1

Teaching Plan

While teaching this chapter, tell the students that the process of connecting computers and peripheral devices with each other to exchange data is called computer networking.

Tell the students about the meaning and basics of computer network.

Share with the students the need for computer network – for resource sharing and for communication.

Discuss with the students the advantages of a computer network.

Tell the student components of a communication system.

Introduce network terms like Server (host computer), Client (dependent on server), Internet, Intranet, URL, ISP, IP address, DNS, Web page, Website, Web portal, Hypertext, Link, Hyperlink and Bandwidth.

Explain the different types of servers to the students covering dedicated server, print server, database server, network server and web server.

Tell the students about the components required for a network covering NIC, hub/switch, router, modem and networking cable.

Share with the students that on the basis of geographical area covered, the networks can be classified into LAN (Local Area Network), MAN (Metropolitan Area Network), WAN (Wide Area Network), PAN (Personal Area Network) and CAN (Campus Area Network).

Introduce Topology as geometric arrangement of computers or nodes in a network.

Explain the difference between different types of topologies covering bus topology, ring topology, star topology, tree topology and mesh topology.

Tell the students that the network architecture defines the overall design of the computer network.

Share with the students the two types of network architectures as Peer-to-Peer network and Client-Server network.

Share with the students about the wireless networking technologies detailing about Wi-Fi and Bluetooth.

Introduce Protocol as a set of rules that govern the communication between the computers on a network.

Discuss briefly about the different types of protocols explaining about HTTP, HTTPS, FTP, TC/IP, POP3, IMAP and SMTP.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. Define computer network.
- Q. What is the need for a computer network?
- Q. What are the advantages of a computer network?
- Q. Define server / client.
- Q. What are the different types of computer servers?
- Q. What are the components required for a network?
- Q. Define LAN / MAN / WAN / PAN / CAN.
- Q. Define Topology.
- Q. Name different types of topologies.
- Q. What is meant by protocol?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 17, 18 and 19 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on Page 19 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Page 20 in the main course book. This will enhance the ability of the students and serve as a Information Literacy and Technology Literacy activity.

Suggested Activity

Ask the students to make models of different types of topologies using marbles and used wire pieces / straws.

2 Introduction to LibreOffice Base

Teaching Objectives

Students will learn about

- ✦ Concept of a Database
- ✦ Types of Databases
- ✦ Advantages of a Database System
- ✦ Terms Related to a Database
- ✦ LibreOffice Base
- ✦ Data Types in LibreOffice Base
- ✦ Types of Views in LibreOffice Base
- ✦ Rules for Writing a Field Name in LibreOffice Base
- ✦ Creating a Table
- ✦ Exiting LibreOffice Base

Teaching Plan

While teaching this chapter, tell the students that the computerized database system was introduced in 1960s.

Introduce:

- Database as organizing data in a manner which helps to store and retrieve a large amount of data efficiently.
- Database Management System as a collection of programs required to store and retrieve data from a database.

Number of Periods	
Theory	Practical
3	2

Explain to the students the meaning of the two types of databases – Flat File Database and Relational Database.

Share with the students the advantages of a database system.

Draw on board and explain the structure of a database to the students explaining about table, fields, records, primary key, query, report and form.

Introduce LibreOffice Base as a powerful and easy to use Relational Database Management System and is a part of LibreOffice.

Demonstrate the steps to start LibreOffice Base.

Familiarize the students with the various components of LibreOffice base window covering Title Bar, Menu Bar, Toolbar, Database Pane, Tasks Pane, Description Pane, Tables/Queries/Form/Reports pane and Status bar.

Demonstrate to the students the two ways of creating a database as:

- Creating a database
- Opening an existing database

Explain different data types used in LibreOffice Base covering Text, Number, Integer, Decimal, Images, Yes/No, Date, Time and Others.

Discuss with the students the use of the different types of views in LibreOffice Base as Datasheet view and Design view.

Share with the students the rules for defining field names in LibreOffice Base.

Tell the students that Tables can be created in two ways.

Demonstrate to the students the steps to create a Table:

- In Design view
- In wizard view

Show to the students the steps to exit LibreOffice Base.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. Define database.
- Q. What is Database Management System?
- Q. Expand DBMS.
- Q. Name the different types of databases.
- Q. What type of database is LibreOffice Base?
- Q. Give any two advantages of Database System.
- Q. Define Table / Query / Report / Form.

- Q. Name any three data types used in LibreOffice Base.
- Q. What are the rules for writing field names?
- Q. What is the use of Field Name / Description in the Table design window?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 33 to 35 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on Pages 35 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Page 36 in the main course book. This will enhance the ability of the students and serve as a Technology Literacy activity.

Suggested Activity

Ask the students to create a table storing information about details of their ten friends and sort the records in the table in alphabetical order.

3 More on LibreOffice Base

Teaching Objectives

Students will learn about

- ✦ Forms in LibreOffice Base
- ✦ Queries in LibreOffice Base
- ✦ Reports in LibreOffice Base

Number of Periods	
Theory	Practical
2	2

Teaching Plan

While teaching this chapter, tell the students that Base is used to create tables and maintain records in a database along with preparing Forms, Queries and Reports.

Introduce Forms as objects used to add, edit and display data from tables in a user friendly manner.

Share with the students that a Form can be displayed in three views – Design View and Layout View.

Demonstrate to the students the steps to create a Form.

Familiarize the students with the Navigation Bar of the Form window to view and navigate between records in a Table.

Introduce Query as the object that can give information which the user might not be able to find by looking at the Table directly.

Explain the different types of Queries as: Select Query, Parameter Query, Action Query, Crosstab Query and Aggregate Query.

Tell the students about the relationship between the Primary Key and the Foreign Key.

Show to the students the steps to define relationships between tables.

Demonstrate the steps to create a query.

Introduce Report as an object used to organize and present data in a user friendly format for printing purpose.

Demonstrate the steps to:

- Create a Report
- Print a Report

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

Extension

Ask the students some oral questions based on this chapter.

- Q. Define Form / Query / Report.
- Q. Name the different views in which a Form can be displayed.
- Q. Name the different types of Forms in Base.
- Q. Where is Navigation Bar located?
- Q. Name the different types of Queries.
- Q. Define Primary Key / Foreign key.
- Q. Name any four parameters of Query window.

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 45 to 47 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on Page 47 and 48 in the main course book.

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

Suggested Activity

Using the Table created in the previous chapter create a query to display names of friends whose name starts with A or D.

Teaching Objectives

Students will learn about

- ✦ Components of GIMP Window
- ✦ Retouching Tools
- ✦ Correction Tools

Number of Periods	
Theory	Practical
2	2

Teaching Plan

While teaching this chapter, tell the students that GIMP is used for creating and editing images in order to make them look attractive.

Familiarize the students with the components of GIMP covering Menu Bar, Toolbox, Foreground/Background Color, Tool options, Image window, Ruler, Layer Palette and Brushes/Patterns/Fonts tab.

Introduce retouching tools as the tools used to add or remove features to an image.

Demonstrate the use of Retouching Tools like:

- Healing Brush Tool (used to repair dark spots, scratches, etc.)
- Clone Stamp Tool (used to duplicate parts of an image)

Demonstrate the use of Correction Tools like:

- Blur Tool (used to blur parts of an image)
- Smudge Tool (used to show image as wet paint on the image has been spread by finger)
- Dodge Tool (used to improve quality of an image)

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

Extension

Ask the students some oral questions based on this chapter.

- Q. What is GIMP used for?
- Q. What are Retouching Tools?
- Q. Name some important retouching tools in GIMP.
- Q. What is the use of Correction tools in GIMP?
- Q. Name the important correction tools of GIMP.

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 55 to 57 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on Pages 57 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Page 57 in the main course book. This will enhance the ability of the students and serve as a Technology Literacy activity.

Suggested Activity

Ask the students to arrange a scanned copy of their passport size photo and apply retouching and correction tools to beautify the image.

5

Layers and Filters in GIMP

Teaching Objectives

Students will learn about

- ✦ Working with Layers
- ✦ Merging Two Images
- ✦ Filters
- ✦ Changing the On-Screen Size of Image
- ✦ Changing the Print Size of Image

Number of Periods

Theory

2

Practical

3

Teaching Plan

While teaching this chapter, tell the students that GIMP is used for editing images for making them look interesting.

Introduce Layers as transparent sheets containing objects which are stacked on top of each other so that individual properties of an object can be edited without affecting other objects.

Explain how to create a new layer and deleting a layer, re-ordering a layer, renaming a layer, hiding a layer and flattening layer from an image.

Demonstrate how to merge two images to the students.

Introduce Filters as tools which are used to modify an image in a variety of ways. Also, show them how to apply filters to images.

Show the steps involved in:

- Changing the on-screen size of image
- Changing the print size of image

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

Extension

Ask the students some oral questions based on this chapter.

- Q. What are layers?
- Q. What is the use of Layers in GIMP?
- Q. What are filters?
- Q. What is the use of filters in GIMP?
- Q. How can you change the on-screen size of image?
- Q. How can you change the print of image in GIMP?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 66 to 68 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler and Hands-On given on Page 68 and 69 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Page 69 in the main course book. This will enhance the ability of the students and serve as a Critical Thinking and Technology Literacy activity.

Suggested Activity

Ask the students to draw a labeled diagram of the GIMP Tools panel in your computer practical file or notebook.

6

More on HTML

Teaching Objectives

Students will learn about

- ✦ Inserting Images
- ✦ Linking Web Pages
- ✦ Frames

Teaching Plan

While teaching this chapter, tell the students that HTML allows inserting images and frames on web pages as well as interlinking them.

Tell the students that HTML supports JPEG, GIF and PNG image formats.

Tell the students that tag is used to insert images and it takes the attributes as SRC, WIDTH, HEIGHT and ALT.

Number of Periods	
Theory	Practical
2	3

Demonstrate to the students the use of tag and its attributes.

Explain the Linking web pages and it's two types:

- Internal linking
- External linking

Make the students understand that a hyperlink is an underlined text or an image which when clicked takes the user to some other location.

Share with the students that <A> is used to create links and the attributes that this tag can take are – HREF and TARGET.

Demonstrate the change the look and style of hyperlinks in different states:

a:link: used to set the style for an unvisited link.

a:visited: used to set the style for a link that the user has visited.

a:hover: used to set the style for a link when the mouse pointer moves over it.

a:active: used to set the style for a link when it is clicked.

Introduce Frames as a feature to display more than one web page on a single screen of the web browser.

Tell the students that the <IFRAME> tag can take SRC, HEIGHT, WIDTH and NAME as attributes.

Demonstrate the use of <IFRAME> tags to create frames on a web page.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. Which tag is used to insert images on a web page?
- Q. State the use of SRC / WIDTH / ALT attribute of IMG tag.
- Q. Which image formats are supported by HTML?
- Q. What is the use of MARQUEE tag?
- Q. Which tag is used to link web pages?
- Q. Name the attributes that can be taken by IFRAME tag.

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 85 to 87 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on Page 87 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Pages 88 in the main course book. This will enhance the ability of the students and serve as a Critical Thinking and Technology Literacy activity.

Suggested Activity

Ask the students to create an e-shopping web site listing categories of items on home page and details of items on separate category pages.

7

Google Apps

Teaching Objectives

Students will learn about

- ★ Google
- ★ Apps of Google

Number of Periods	
Theory	Practical
4	3

Teaching Plan

While teaching this chapter, brief the students about Google and mobile apps.

Introduce Google to the students along with the history.

Explain the Google Apps to the students in detail like Gmail, Google Drive, Google Maps, Google Docs, Google Sheets, Google Slides and YouTube.

Explain the following components of Google Drive to the students along with the steps involved in:

- What can you store in Google Drive?
- How much can you store in Google Drive?
- Using google drive
- Features of Google Drive

Demonstrate the features of Google Maps to the students along with the steps involved in it.

Demonstrate the opening/ importing an existing word document for editing in Google Docs to the students along with the steps involved in it.

Explain the following components of Google Sheets to the students along with the steps involved in:

- Features of Google Sheets
- Creating and Saving a New Google Sheet
- Sharing a File
- Protecting Data

Explain the following components of Google Slides to the students along with the steps involved in:

- Features of Google Slides
- Creating a New Presentation

Explain the following components of YouTube to the students along with the steps involved in:

- Features of YouTube
- How to Create YouTube Account
- Uploading a Video on YouTube

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

Extension

Ask the students some oral questions based on this chapter.

- Q. What are Google Apps?
- Q. What is Gmail?
- Q. What is Google Drive?
- Q. What is Google Maps?
- Q. What is Google Docs?
- Q. What is Google Sheets?
- Q. What is Google Slides?
- Q. What is YouTube?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 103 to 105 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on Pages 105 and 106 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Page 106 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 create a document in Google Docs and a presentation in Google Slides on 'Environment Day'.

8

App Development

Teaching Objectives

Students will learn about

- ✦ What is an App?
- ✦ The Android and iOS

- ✦ Categories of Mobile Apps
- ✦ Varieties of Apps
- ✦ Downloading and Installing the App
- ✦ Developing an App

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Tell the students that an App is a software program primarily developed for hand-held smart devices such as mobile and tablet.

Explain to the students the difference between the Android and iOS in detail.

Demonstrate the categories of Mobile Apps to the students with example, that are:

- Native Apps
- Web Apps
- Hybrid Apps

Explain the following categories of varieties Apps to the students along with the examples:

- Gaming Apps
- Productivity Apps
- Entertainment Apps
- Utility Apps
- Educational Apps
- Social Networking Apps
- Communication Apps
- E-Commerce Apps

Explain to the students the steps involved in downloading and installing the Apps.

Explain to the students the steps involved in developing an App.

Extension

Ask the students some oral questions based on this chapter.

Q. What is an App?

Q. Define the following:

- Gaming Apps
- Productivity Apps
- Entertainment Apps
- Utility Apps
- Educational Apps
- SocialNetworkingApps
- Communication Apps
- E-Commerce Apps

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

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 121 to 123 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on pages 123 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Page 124 in the main course book. This will enhance the ability of the students and serve as a Initiative and Technology Literacy activity.

Suggested Activity

Ask the students to develop an App for reciting tables with your help.

9

Algorithmic Intelligence

Teaching Objectives

Students will learn about

- ✦ Multiple Conditions in a Program
- ✦ Loops in a Program

Teaching Plan

Number of Periods	
Theory	Practical
3	3

Begin with introduction of multiple conditions in a program based on algorithmic intelligence.

Let them know that the conditional statements are used in a program to instruct the computer to make a decision.

Make the students aware of multiple conditions like If... And/Or... followed by Then... Else.

Make the students understand that a loop is used to execute instructions or a block of code multiple times, without writing it repeatedly.

Explain to the students that a loop is a sequence of instructions when repeated for a fixed number of times or until the condition is true.

Also let them know that there are two types of loops. They are Counting loops and Conditional loops.

Extension

Ask the students some oral questions based on this chapter.

- Q. What are conditional statements used for?
- Q. What is the result of the computer's decision for a condition?
- Q. What is the result of 'If... And' condition in a program based on algorithmic intelligence?
- Q. What is the result of 'If... Or' condition in a program based on algorithmic intelligence?
- Q. What is a loop?
- Q. What is a loop used for?
- Q. How many types of loops are there in a program? Name them.

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 129 to 132 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on Pages 132 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Page 133 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to write any if-then-else conditional statements.

10 Loops in Python

Teaching Objectives

Students will learn about

- ✦ The for Statement
- ✦ The while Statement
- ✦ The Infinite Loop
- ✦ The Jump Statements
- ✦ Some More Programs

Teaching Plan

Number of Periods	
Theory	Practical
3	1

While teaching this chapter, tell the students about Python has some looping statements.

Demonstrate to the students the steps involved in using these statements using programs and syntax are:

- a. FOR statement
 - using the range() function
- b. WHILE statement
 - while loop using else statement
- c. Infinite loop
- d. JUMP statement
 - break statement
 - continue statement

Demonstrate to the students some more programs and syntax.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. What are looping statement?
- Q. What is the function of FOR statement?
- Q. What is the function of WHILE statement?
- Q. What is the function of JUMP statement?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 143 and 144 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on Pages 145 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Page 145 in the main course book. This will enhance the ability of the students and serve as a Technology Literacy and Critical Thinking activity.

Suggested Activity

Ask the students to make a list of series where you can apply the FOR and JUMP statements.

11

Latest Technological Developments

Teaching Objectives

Students will learn about

- ★ Artificial Intelligence
- ★ Machine Learning
- ★ Internet Of Things (IoT)
- ★ Augmented Reality and Virtual Reality
- ★ Blockchain
- ★ Robotics
- ★ Data Science
- ★ Edge Computing
- ★ 3D Printing

Teaching Plan

Demonstrate Artificial Intelligence to the students along with the main areas of AI. Tell the students that Robotics is a branch of engineering that uses technologies such as Artificial Intelligence and Machine Learning.

Familiarise the students with some popular robots.

Number of Periods	
Theory	Practical
2	1

Explain the following to the students along with the examples in detail:

- Machine learning
- Data science
- Internet of things(IOT)
- Edge computing
- Augmented reality and Virtual reality
- 3D printing
- Blockchain

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

Extension

Ask the students some oral questions based on this chapter.

- Q. What is an Artificial Intelligence?
- Q. What is an Augmented Reality?
- Q. What is a Virtual Reality?
- Q. What is an Internet of Things?
- Q. What is 3D Printing?
- Q. What is Blockchain?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 153 to 155 in the main course book as Checkpoint. Tell the students to try different activities under Mind Boggler given on Pages 155 in the main course book.

Take the students to the computer lab and let them practice the activity given in the Lab Session section on Page 155 in the main course book. This will enhance the ability of the students and serve as a Technology Literacy activity.

Suggested Activity

Ask the students to try any digital assistant like Alexa or Siri and ask "What is Virtual Reality?".

