

# CXDEGPT

Ver. 4.0

## Teacher's Manual

Extended Support for Teachers



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# Teacher's Time Table

Periods Days	0	I	п	ш	IV		^	VI	VII	VIII
Monday										
Tuesday						m				
Wednesday						∝ п				
Thursday						۷ ۷				
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	<ul> <li>First permanent tooth erupts</li> <li>Shows mature throwing and catching patterns</li> <li>Writing is now smaller and more readable</li> <li>Drawings are now more detailed, organised and have a sense of depth</li> </ul>
Cognitive	<ul> <li>Attention continues to improve, becomes more selective and adaptable</li> <li>Recall, scripted memory, and auto-biographical memory improves</li> <li>Counts on and counts down, engaging in simple addition and subtraction</li> <li>Thoughts are now more logical</li> </ul>
Language	<ul> <li>Vocabulary reaches about 10,000 words</li> <li>Vocabulary increases rapidly throughout middle childhood</li> </ul>
Emotional/Social	<ul> <li>Ability to predict and interpret emotional reactions of others enhances</li> <li>Relies more on language to express empathy</li> <li>Self-conscious emotions of pride and guilt are governed by personal responsibility</li> <li>Attends to facial and situational cues in interpreting another's feelings</li> <li>Peer interaction is now more prosocial, and physical aggression declines</li> </ul>

	Age 9 - 11 Years
Physical	Motor skills develop resulting in enhanced reflexes
Cognitive	<ul><li>Applies several memory strategies at once</li><li>Cognitive self-regulation is now improved</li></ul>
Language	<ul><li>Ability to use complex grammatical constructions enhances</li><li>Conversational strategies are now more refined</li></ul>
Emotional/Social	<ul><li>Self-esteem tends to rise</li><li>Peer groups emerge</li></ul>

	Age 11 - 20 Years
Physical	<ul> <li>If a girl, reaches peak of growth spurt</li> <li>If a girl, motor performance gradually increases and then levels off</li> <li>If a boy, reaches peak and then completes growth spurt</li> <li>If a boy, motor performance increases dramatically</li> </ul>
Cognitive	<ul><li>Is now more self-conscious and self-focused</li><li>Becomes a better everyday planner and decision maker</li></ul>
Emotional/Social	<ul><li>May show increased gender stereotyping of attitudes and behaviour</li><li>May have a conventional moral orientation</li></ul>

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





## 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."

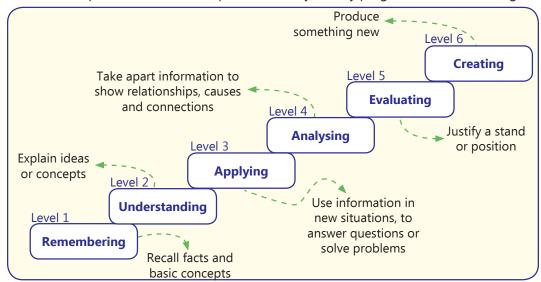
#### **Teaching Strategies**

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."

## **Lesson Plan**



## 1. Computer Hardware and Software

#### **Teaching Objectives**

Students will learn about

- Computer Hardware
- Computer Software

## Number of Periods Theory Practical 2 1

#### **Teaching Plan**

While teaching this chapter, ask the students to solve the **Test Your Knowledge** given on page 10 of the main course book.

Begin with telling the students that a computer is an electronic machine made up of various devices that help enter data, process it and give the results. Basically, a computer works on the IPO cycle.

Tell the students that the parts of the computer that can be touched are called hardware.

Tell them about computer hardware and how it is divided into five groups.

Explain the meaning of the terms input and input devices.

Tell them how keyboard, mouse, scanner, etc. are used to input data into a computer.

Make the students understand what processing devices are.

Let them know that CPU is the brain of the computer.

Tell them how CPU processes data with the help of Arithmetic Logic Unit (ALU) – for arithmetic and logical calculations, Memory Unit (MU) – for storing data and instructions and Control Unit (CU) – for coordinating between all parts of the CPU.

Tell the students the devices that show us the result of processing done by the CPU are called output devices.

Explain that the result can be in any of these forms: display on the monitor, print by the printer, sound from the speakers.

Explain the meaning of the terms output and output devices.

Make the students understand the meaning of the term storage.



Tell them examples of some commonly used storage devices and basic features of each of the storage device.

Explain the meaning of the terms hybrid and hybrid devices.

Make the students aware of computer software.

Share some examples of software with the students.

Introduce the students to the two broad categories of software as system software and application software.

Tell the students the importance of system software for the functioning of the computer system.

Ask the students to solve the exercises **Topic Flashback** and **Quick Quiz** given on pages 14 and 15.

Ensure that the scope of **For The Teacher** section given at the end of the chapter has been covered.

#### **Extension**

Ask the students some oral questions based on this chapter.

- Q. How does a computer work?
- Q. Explain Computer Hardware.
- Q. What are input devices?
- Q. Write a note on: Keyboard / Mouse / Scanner / Joystick / Touchscreen / Microphone / Web Camera and Light Pen.
- Q. What is a processing device?
- Q. Why is CPU called the brain of the computer?
- Q. Explain parts of a CPU.
- Q. What are output devices?
- Q. Write a note on: Monitor / Speakers / Printer.
- Q. Define plotter and projector.
- Q. What are storage devices?
- Q. Give examples of some storage devices.
- Q. What are hybrid devices?
- Q. Give examples of some hybrid devices.
- Q. What is a software?
- Q. Explain application software and system software.

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 16 and 17 in the main course book. Tell the students to try sections such as **Scratch Your Brain** and **A Better Me** given on page 17 in the main course book.



Take the students to the computer lab and let them practise the activity given in the **Explore in the Lab** section on page 17 in the main course book. This will enhance the ability of the students and foster Creativity and Technology Literacy skills.

Ask the students to complete the elements like **Art Integration Learning** given on page 12 and **Experiential Learning** given on page 14 at home and show it to him/her the next day.

#### **Suggested Activity**

Ask the students to prepare a comparative table on chart paper comparing different groups of hardware on various parameters with the help of examples and pictures/drawings.

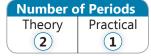
## 2. Windows 10

#### **Teaching Objectives**

Students will learn about

Windows 10 Desktop

Control Buttons



#### **Teaching Plan**

Before starting the chapter, ask the students to solve the question in **Test Your Knowledge** given on page 21 of the main course book.

Begin with explaining the students that operating system is one of the most important software as without this software we cannot use our computer at all.

Give a brief introduction of Microsoft Windows.

Let the students know about the Windows 10 Desktop and its components.

Demonstrate to the students the steps to sort icons on the desktop.

Introduce the students to the taskbar and its components covering Start button, Opened program and Notification Area.

Give a brief description of desktop background.

Demonstrate to the students the steps involved in changing the desktop background.

Tell the students about Task View and Control Buttons.

Ask the students to solve the exercises **Topic Flashback** and **Quick Quiz** given on pages 24 and 26.

Ensure that the scope of **For The Teacher** section given at the end of the chapter has been covered.

#### **Extension**

Ask the students some oral questions based on this chapter.

Q. What is the importance of an operating system?



- Q. Give examples of some popular operating systems.
- Q. What is Windows 10 desktop?
- O. Define icons.
- Q. What is taskbar?
- O. What is notification area in Windows 10?
- Q. What are the steps to change the desktop background?
- Q. What is Task View?
- O. What are control buttons?

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 26 and 27 in the main course book. Tell the students to try sections such as **Scratch Your Brain** and **SDG Activity** given on pages 27 and 28 in the main course book.

Take the students to the computer lab and let them practise the activity given in the **Explore in the Lab** section on page 28 in the main course book. This will enhance the ability of the students and foster Productivity & Accountability and Information Literacy skills.

Ask the students to complete the elements like **Art Integration Learning** given on page 25 at home and show it to him/her the next day.

#### **Suggested Activity**

Ask the students to change desktop background and the position of taskbar.

## 3. Let's Learn Paint 3D

#### **Teaching Objectives**

Students will learn about

Paint 3D

Components of Paint 3D Window

Creating 3D Shapes

Rotating a 3D Shape

Adding Text

Opening a Saved Drawing

Starting Paint 3D

Creating 2D Shapes

Selecting a Shape

Changing Colour of a Shape

Saving the Drawing

Number o	f Periods
Theory	Practical
2	2

#### **Teaching Plan**

Before starting the chapter, ask the students to solve the question in **Test Your Knowledge** given on page 30 of the main course book.



Begin with the introduction of Paint 3D and the steps involved in starting Paint 3D.

Make the students aware about all the components of Paint 3D window:

- Title bar displays the name of the program and the name of your drawing on the top-left corner.
- Menu displays options such as New, Open, Insert, Save and Save As.
- Canvas is the area where you can create or draw your shape or you can say it is the drawing area of Paint 3D.
- Brushes Tool opens a panel on the right side of the drawing area and displays brush options, and colour palette. It has options Brushes Option and Color Palette.
- 2D Shapes Tool replaces brushes option and displays a 2D shapes library with options like line and curve and 2D shapes to select from.
- 3D Shapes Tool replaces the Brushes options and displays options like Open 3D library, 3D Doodle, 3D Objects and 3D Models to select from.

Show the steps involved in creating 2D and 3D shapes with example.

Explain the steps involved in selecting a shape and changing colour in a shape.

Demonstrate the steps involved in creating 2D and 3D text with example.

Show to the students the steps involved in saving and opening a drawing.

Ask the students to solve the exercises **Topic Flashback** and **Quick Quiz** given on pages 36 and 37.

Ensure that the scope of **For The Teacher** section given at the end of the chapter has been covered.

#### **Extension**

Ask the students some oral questions based on this chapter.

- Q. What can Paint 3D be used for in computers?
- Q. State the use of Shapes / Text / Brushes Tool.

- Q. How can we add 3D shape and text?
- Q. How can a drawing be saved?
- Q. How can we open a saved drawing?

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 37 and 38 in the main course book. Tell the students to try sections such as **Scratch Your Brain**, **A Better Me** and **SDG Activity** given on page 39 in the main course book.

Take the students to the computer lab and let them practise the activity given in the **Explore in the Lab** section on page 39 in the main course book. This will enhance the ability of the students and foster Creativity and Technology Literacy skills.

Ask the students to complete the elements like **Interdisciplinary Learning** given on page 34 at home and **Art Integration Learning** given on page 37 in the computer lab and show it to him/her the next day.



#### **Suggested Activity**

Ask the students to draw a bus using shape tool and also add 3D text in the drawing.

## 4. Editing in Word 2019

#### **Teaching Objectives**

Students will learn about

Uses of Word 2019

Selecting the Text

Saving a Document

Exiting Word

Components of Word 2019 Window

Editing the Text

Opening a Saved Document

Number o	of Periods
Theory	Practical
(2)	(2)

#### **Teaching Plan**

Before starting the chapter, ask the students to solve the question in **Test Your Knowledge** given on page 42 of the main course book.

While teaching this chapter, tell the students that Word 2019 is word processing software in the category of application software.

Make the students aware of the various uses of Word 2019.

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

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

Familiarize the students that while working on MS Word, some frequently used keys other than alphabet and number keys are Spacebar, Enter, Delete and Backspace.

Demonstrate to the students the steps involved in:

- Creating a new Word file
- Saving a document
- Printing a document

- Typing text
- Opening a saved document

Closing Word 2019

Ask the students to solve the exercises Topic Flashback and Quick Quiz given on page 47.

Ensure that the scope of For The Teacher section given at the end of the chapter has been covered.

#### **Extension**

Ask the students some oral questions based on this chapter.

- O. What is MS Word?
- Q. What is a word processor?



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

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 48 and 49 in the main course book. Tell the students to try sections such as **Scratch Your Brain** and **SDG Activity** given on pages 49 and 50 in the main course book.

Take the students to the computer lab and let them practise the activity given in the **Explore in the Lab** section on page 50 in the main course book. This will enhance the ability of the students and foster Productivity & Accountability and Information Literacy skills.

Ask the students to complete the elements like **Interdisciplinary Learning** given on page 45 and **Experiential Learning** given on page 47 in the computer lab.

#### **Suggested Activity**

Ask the students to create a Word document on Myself. The students should take a printout of the document and paste it in their computer notebook / practical file.

## 5. Formatting in Word 2019

#### **Teaching Objectives**

Students will learn about

Applying Bold, Italic or Underline

Text Effects

Applying Borders

Adding Bullets and Numbering

Changing Font, Font Size and Font Colour

Aligning the Text

Applying Shading to the Selected Text

## Number of Periods Theory Practical 2 2

#### **Teaching Plan**

Before starting the chapter, ask the students to solve the question in **Test Your Knowledge** given on page 52 of the main course book.

Begin with the introduction of formatting as changing the appearance and arrangement of the text.

Make the students aware of the formatting features of Word 2019 like applying Bold, Italic or Underline to change the appearance of the text.

Explain what font is and how font, its size and colour can be changed.

Let the students know about text effects.

Tell them about alignment and what steps should be taken to change alignment.

Make the students understand that application of borders can decorate a document.

Let them know how to apply an artistic border to a page.

Bring it to the knowledge of the students that shading can be applied to the selected text to make it visually attractive.

Also explain to them that a bullet is a small symbol used to mark each item in a list and how bullets can be added and numbering can be done.

Show the students the method of adding bullets or numbers to the items in a list.

Ask the students to solve the exercises **Topic Flashback** and **Quick Quiz** given on pages 54 and 57. Ensure that the scope of **For The Teacher** section given at the end of the chapter has been covered.

#### **Extension**

Ask the students some oral questions based on this chapter.

- Q. How can a text be beautified?
- Q. Define formatting a text.
- O. What is the default font / font size of text in a document?
- Q. What is the difference between bold and italic format of the text?
- Q. What are text effects?
- Q. Define text alignment.
- Q. What are the different types of text alignment options?
- Q. Why is shading added to text?
- Q. What are bullets?
- O. When are bullets or numbers added to text?

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 58 and 59 in the main course book. Tell the students to try sections such as **Scratch Your Brain** and **SDG Activity** given on pages 59 and 60 in the main course book.

Take the students to the computer lab and let them practice the activity given in the **Explore in the Lab** section on page 60 in the main course book. This will enhance the ability of the students and foster Productivity & Accountability and Information Literacy skills.

Ask the students to complete the elements like **Art Integration Learning** given on page 53 and **Interdisciplinary Learning** given on page 56 in the computer lab.

#### **Suggested Activity**

Ask the students to write a paragraph on My Favourite Sport in Word 2019 applying various formatting features to make the paragraph attractive.

## 6. Internet

#### **Teaching Objectives**

Students will learn about

What is Internet?
■ Uses of Internet

Requirements for an Internet Connection Requirements for an Internet Terms

Disadvantages of Internet
Internet Etiquettes

Number o	of Periods
Theory	Practical
(2)	3

#### **Teaching Plan**

Before starting the chapter, ask the students to solve the question in **Test Your Knowledge** given on page 62 of the main course book.

While teaching this chapter, tell the students that computers connected to a network can share data and files efficiently without any delay.

Make the students learn that internet is a global network of millions of computers and computer networks.

Share with the students the various requirements for an internet connection covering computer system, telephone/cable line, modem, web browser and Internet Service Provider (ISP).

Explain the meaning of some common internet terms like URL, Web Browser, Home Page, Website and Web page.

Introduce Uniform Resource Locator (URL) as a unique address or website address used for locating websites.

Tell the students about the disadvantages of Internet.

Ask the students to solve the exercise **Topic Flashback** given on page 66.

Ensure that the scope of **For The Teacher** section given at the end of the chapter has been covered.

#### **Extension**

Ask the students some oral questions based on this chapter.

- Q. What is a computer network?
- Q. What is Internet?
- Q. What are the uses of Internet?
- Q. What are the requirements for an Internet connection?
- Q. Define URL, Web Browser, Home Page, Website and Web page.

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 68 to 70 in the main course book. Tell the students to try sections such as **Scratch Your Brain** and **A Better Me** given on page 70 in the main course book.

Take the students to the computer lab and let them practise the activity given in the **Explore in the Lab** section on page 71 in the main course book. This will enhance the ability of the students and foster Communication and Information Literacy skills.

Ask the students to complete the elements like **Experiential Learning** given on page 64 at home and **Interdisciplinary Learning** given on page 68 in the computer lab and show it to him/her the next day.

#### **Suggested Activity**

Ask the students to prepare a report on some more uses of Internet and present the observations to the class.

## 7. Stepwise Thinking

#### **Teaching Objectives**

Students will learn about

- Simple Instructions
- Decision Making
- Loops
- Understanding Programs

Number o	f Periods
Theory	Practical
2	0

#### **Teaching Plan**

Before starting the chapter, ask the students to solve the question in **Test Your Knowledge** given on page 76 of the main course book.

Begin with description of simple instructions and make them understand how the order of instructions is important to do a task successfully.

Explain the Stepwise Thinking to the students with the steps involved in the process using suitable examples.

Tell the students about decision making and give a brief introduction about it.

Introduce Looping to the students with simple example.

Ask the students to solve the exercises **Topic Flashback** and **Quick Quiz** given on pages 79 and 81.

Ensure that the scope of **For The Teacher** section given at the end of the chapter has been covered.



#### **Extension**

Ask the students some oral questions based on this chapter.

- O. What are instructions?
- Q. Write the sequence of instructions to make a fruit salad.
- Q. What is stepwise thinking?
- Q. What decision making?
- Q. Write a decision making situation involving 'if', 'then' and 'otherwise'.
- Q, Define loopinhg.

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 81 and 82 in the main course book. Tell the students to try sections such as **Scratch Your Brain** and **SDG Activity** given on pages 82 and 83 in the main course book.

Take the students to the computer lab and let them practise the activity given in the **Explore in the Lab** section on page 83 in the main course book. This will enhance the ability of the students and foster Creativity and Information Literacy skills.

Ask the students to complete the elements like **Art Integration Learning** given on page 78 at home and show it to him/her the next day and **Experiential Learning** given on page 80 in the class.

#### **Suggested Activity**

Ask the students to write a decision making situation.

### 8. Let's Learn Scratch

#### **Teaching Objectives**

Students will learn about

- Scratch
- Blocks
- Changing the Backdrop
- Creating a New Project
- Opening a Project

- Components of Scratch Window
- Adding a Sprite
- Changing Appearance of the Sprite
- Saving a Project
- Exiting Scratch

Number o	of Periods
Theory 2	Practical 3

#### **Teaching Plan**

Before starting the chapter, ask the students to solve the question in **Test Your Knowledge** given on page 85 of the main course book.



While teaching this chapter, tell the students that Scratch is a block-based programming language.

Demonstrate to the students the steps to start Scratch 3.0.

Make the students understand the features of Scratch.

Familiarise the students with the various components of Scratch window covering Sprites Info pane, Sprite, Stage, Blocks Palette, Scripts Area, Coding Area, Blocks Menu, Backdrop, Tabs, Green Flag and Stop button.

Introduce Motion Blocks for changing placement, direction, rotation and movement of sprites.

Tell the students the method of identifying Motion Blocks which are colour coded as blue.

Show to the students the steps to choose a sprite from the Library.

Make the students recall backdrop as background of the stage.

Tell the students the steps to change the backdrop in Scratch.

Demonstrate the use of Motion Blocks by developing new project.

Tell the steps to save a program, opening a project and exiting Scratch.

Ask the students to solve the exercises **Topic Flashback** and **Quick Quiz** given on pages 89 and 92.

Ensure that the scope of **For The Teacher** section given at the end of the chapter has been covered.

#### **Extension**

Ask the students some oral questions based on this chapter.

- Q. What is Scratch?
- O. What are the features of Scratch?
- Q. Name the various components of Scratch window.
- Q. Define Sprite / Stage / Scripts Area / Green Flag / Stop button.
- O. What is a backdrop in Scratch?
- Q. What is the use of Motion block?
- O. What is the colour code for Motion block?
- Q. What are the steps to save a project in Scratch?
- Q. What are the steps to open a project in Scratch?
- Q. What are the steps to exit Scratch?

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 92 and 93 in the main course book. Tell the students to try sections such as **Scratch Your Brain** given on pages 93 and 94 in the main course book.

Take the students to the computer lab and let them practise the activity given in the **Explore in the Lab** section on page 94 in the main course book. This will enhance the ability of the students and foster Creativity and Technology Literacy skills.



Ask the students to complete the elements like **Interdisciplinary Learning** given on page 91 in the computer lab.

#### **Suggested Activity**

Ask the students to develop a program of speaking and moving cat in Scratch.

## 9. Google Blockly Games

#### **Teaching Objectives**

Students will learn about

- Starting Blockly
- Puzzle Game
- Maze Game

## Number of Periods Theory Practical 1

#### **Teaching Plan**

Before starting the chapter, ask the students to solve the question in **Test Your Knowledge** given on page 97 of the main course book.

Begin with the description of Google Blockly Games.

Explain to the students that Google Blockly games help us learn block-based programming quickly and easily.

Let the students know how to start Blockly.

Make the students aware of Puzzle game.

Tell the students that the Puzzle game teaches the user to:

Join blocks

Create stacks of blocks

Change instructions in the variable blocks

Play stack of blocks inside a container block

Explain to the students how to play the Maze game.

Ask the students to solve the exercises **Topic Flashback** and **Quick Quiz** given on pages 100 and 103.

Ensure that the scope of **For The Teacher** section 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 Blockly games?
- Q. What is play-way programming platform?
- Q. Write the steps to start Blockly.



- Q. What is Puzzle game?
- Q. What does Puzzle game icon teach the user?
- Q. Define Maze game.
- Q. Name the blocks used in Maze game.
- Q. What does the Maze game icon teach its user?

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 103 and 104 in the main course book. Tell the students to try sections such as **Scratch Your Brain** given on page 104 in the main course book.

Take the students to the computer lab and let them practise the activity given in the **Explore in the Lab** section on page 105 in the main course book. This will enhance the ability of the students and foster Creativity and Technology Literacy skills.

Ask the students to complete the elements like **Interdisciplinary Learning** given on page 100 and **Art integration Learning** given on page 102 at home and show it to him/her the next day.

#### **Suggested Activity**

Try some making some other blockly game at home.

## 10. Al-Enabled Devices

#### **Teaching Objectives**

Students will learn about

Smartphones

Smart Doorbells

Smart Speakers

Smart TVs

□ Driverless Cars

Number o	of Periods
Theory	Practical

#### **Teaching Plan**

Before starting the chapter, ask the students to solve the question in **Test Your Knowledge** given on page 107 of the main course book.

Explain the meaning of AI enabled devices to the students with proper and simple examples.

Tell the students about AI around us and what purpose AI serves in real life.

Define the following to the students:

- Smartphones
- Smartwatches



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- Chatbot
- Smart TVs
- Driverless Cars
- Smart Doorbells
- Smart Speakers
- Relate all these to their daily life routine.

Ask the students to solve the exercises **Topic Flashback** and **Quick Quiz** given on page 109.

Ensure that the scope of For The Teacher section given at the end of the chapter has been covered.

#### **Extension**

Ask the students some oral questions based on this chapter.

- Q. Define the following:
  - Smartphones
  - Smartwatch
  - Chatbot
  - Smart TV
  - Driverless Car
  - Smart Doorbell
  - Smart Speakers

#### **Evaluation**

After explaining the chapter, let the students do the exercises given on pages 110 and 111 in the main course book. Tell the students to try sections such as **Scratch Your Brain**, **A Better Me** and **SDG Activity** given on pages 111 and 112 in the main course book.

Take the students to the computer lab and let them practise the activity given in the **Explore in the Lab** section on page 112 in the main course book. This will enhance the ability of the students and foster an Information and Technology Literacy skills.

Ask the students to complete the elements like **Experiential Learning** given on page 109 at home and show it to him/her the next day.

#### **Suggested Activity**

Ask the students to research about more smart devices around them.