6 Fun with LOGO

LESSON PLAN
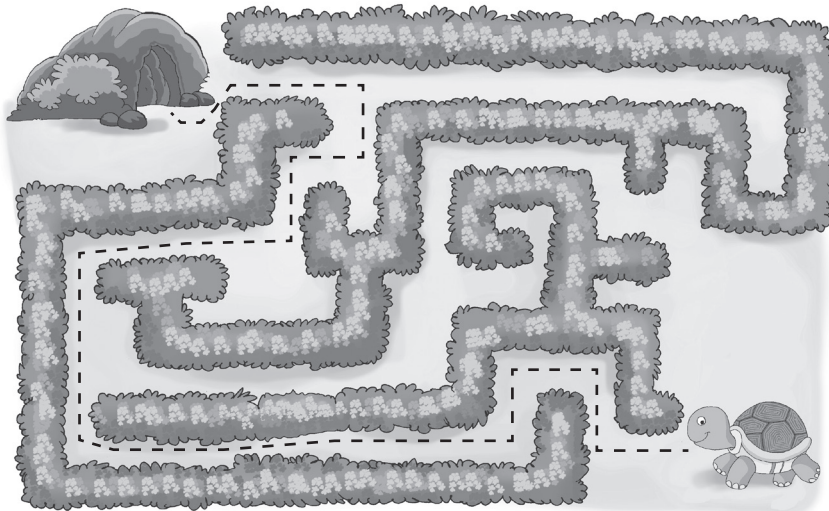
After this lesson, students will be able to:

- » State the need for a language to communicate with the computer.
- » Define a computer language.
- » Describe MSW LOGO as a computer language used to draw and colour.
- » Start LOGO.
- » Label parts of the LOGO window.
- » Describe the following components of LOGO screen:
    - o Main screen
    - o Commander Window
    - o Command Input Box
    - o Recall List Box
    - o Turtle - Head and Tail
- » Define primitives.
- » Use the following primitives with the correct syntax:
    - o FD
    - o BK
    - o RT
    - o LT

» Draw basic LOGO shapes such as:
  o Square
  o Rectangle
  o Triangle
» Exit from LOGO.

WARM UP

» Help the turtle reach its home.

Ans.

CHAPTER NOTES

» LOGO stands for 'Language of Graphics Oriented'.
» It is a computer language used for drawing and colouring shapes, doing simple calculations, printing words or sentences, etc.
» It is a very simple and easy-to-use language with simple commands.
» LOGO has a turtle-shaped pointer that moves on our commands and while moving, it draws lines in the given directions.
» MSW LOGO is a GUI-based version of LOGO developed at MIT.
» The MSW LOGO window is divided into two parts:

- o Main Screen
- o Commander Window

» The Main Screen, also called the Drawing Area, is the place where you actually draw.

» The Commander Window is where you type and execute the instruction for the turtle to draw.

» The Commander Window is further divided into two parts:
  - o Command Input Box
  - o Recall List Box

» Command Input Box is located at the lower part of the command area. It is used to type commands.

» All the commands typed in the Input box can be recalled or seen again in the Recall List box.

» The small triangle in the centre of the drawing area is called turtle.

» It is used as a pen to draw on the MSW Logo Screen.

» The turtle moves according to the commands or instructions given to it.

» It has two parts – head and tail. The pointed head shows the direction it is facing. The base of the triangle is called its tail.

» By default, the turtle is placed at the Home position.

» The FD primitive moves the turtle in the forward direction by the given number of steps, drawing a straight line in that direction.

» The turtle moves backward with the BK or BACK command.

» The RT primitive moves the head of the turtle towards the right direction by the given angle.

» The LT primitive moves the head of the turtle towards the left direction by the given angle.

» Use the BYE primitive to exit from LOGO.

DEMONSTRATION

» Starting LOGO
» Using the following primitives with the correct syntax:
   o FD
   o BK
   o RT
   o LT
» Drawing basic LOGO shapes, such as:
   o Square
   o Rectangle
   o Triangle
» Exiting from LOGO

LAB ACTIVITIES

A. Give the following commands to the turtle and draw the results in your notebook.

1. Forward 40
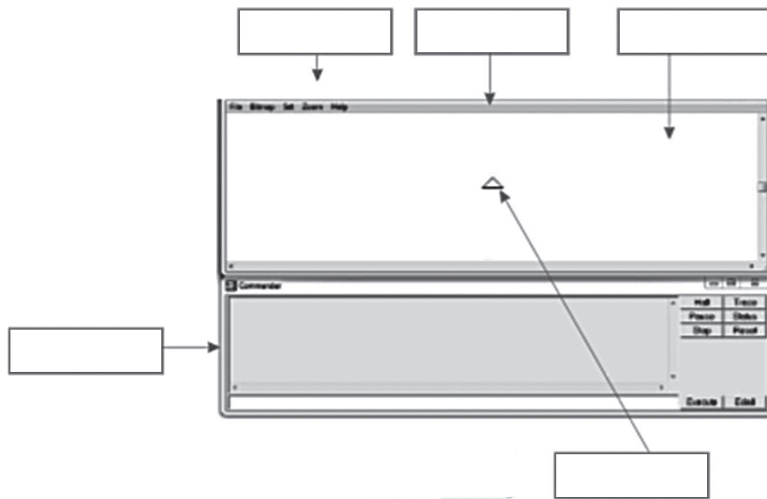2. Right 90
3. Back 60
4. Left 90

B. Write commands for the following and make on the computer.

1. 20 steps forward
2. 40 steps forward
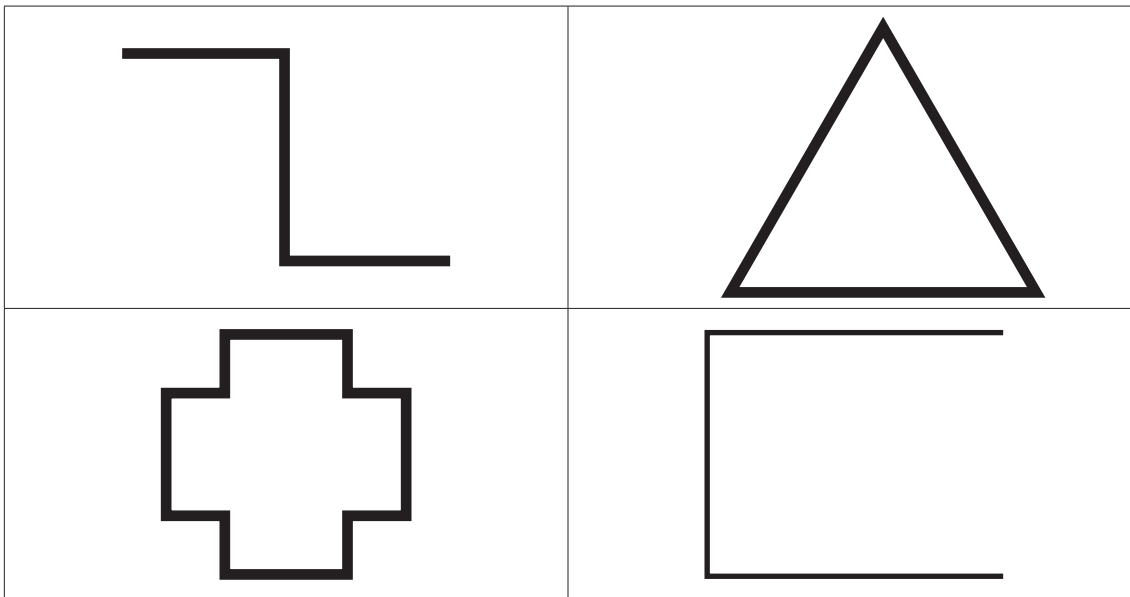3. 30 degrees right
4. 40 degrees left

ASSESSMENT

Teacher can assess the students on the basis of the following questions.

A. Label the parts of the LOGO window.

B. Draw the following in LOGO.

SUGGESTED CLASS ACTIVITIES

A. Tick (✓) the correct option.

1. LOGO stands for:
   - (a) Language of Graphic Oriented
   - (b) Line of Graphic Organisation
   - (c) Language of Graphic Organisation

2. The cursor in LOGO is called:
   - (a) Rabbit
   - (b) Triangle
   - (c) Turtle

3. The Menu bar is just below the:
   - (a) Title bar
   - (b) Taskbar
   - (c) Neither (a) nor (b)

4. The shape of the turtle is:
   - (a) A circle
   - (b) A triangle
   - (c) A rectangle

B. Fill in the blanks with suitable words given in the box.

Title   MSW LOGO   FD   Turtle

1. The version of LOGO used by Microsoft is known as _____.

2. _____ bar displays the name of the software we are working in.

3. _____ is a small triangle.

4. _____ stands for forward.

C. Write True or False.

1. The area where we can see the figures being drawn by the turtle is called Menu bar. _____

2. The main screen is also called the white screen. _____

3. LOGO is a computer language. _____

4. The Title bar is located at the top. _____