



# Fun with Scratch

## LESSON PLAN

**After this lesson, students will be able to:**

- » Define a programming language.
- » Recall LOGO done previously.
- » Define Scratch as a programming language.
- » Label parts of the Scratch window.
- » Describe each component of the Scratch window.
- » Add, delete and change sprites on the stage.
- » Use simple commands from the Looks and Motion blocks.

## WARM UP

Name some of the programming languages which you have learned in your previous classes.

**Ans.** Do it yourself.

## CHAPTER NOTES

- » Computers don't understand English. You have to give them instructions in special computer languages that they can understand.
- » Scratch is one such computer language.
- » In Scratch, Sprites (objects) are manipulated on the stage (background) using various Scripts (small program segments).

- » Each sprite has its own set of scripts to control its behaviour and how it interacts with other sprites and events.
- » Scratch helps to create a program by simply dragging the blocks in the Script Area.
- » Menu bar consists of various sprite-related tasks and commands.
- » Scratch logo button takes you to the home page of the Scratch web page.
- » Globe button is used to change the interface language.
- » File menu consists of commands to open, save, open a new project, etc.
- » Edit menu consists of options to adjust the stage layout or use the Undelete option.
- » Duplicate button makes a duplicate copy of a block or sprite.
- » Delete button removes a sprite or block from the project.
- » Grow button helps in increasing the size of a sprite.
- » Shrink button helps in decreasing the size of a sprite.
- » Stage is where all the action takes place.
- » Stage button helps to switch between the default stage size to full screen mode.
- » Green flag is used to start running a project.
- » Stop button is used to stop the execution of a project.

## **DEMONSTRATION**

- » Opening and saving a project, and exiting from Scratch.
- » Adding, deleting and changing a sprite.

## **LAB ACTIVITIES**

**Using Scratch, create scenes for the following:**

1. Cat sprite in a bedroom

2. Sportsman sprite on the field
3. Girl sprite in a garden
4. Animal sprites in a jungle

## ASSESSMENT

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

### 1. Answer the following questions

- (a) What are the steps for creating a new sprite?
- (b) What are the steps for changing the sprite?
- (c) What is the purpose of the Duplicate tool?
- (d) Name all the buttons present on the Menu bar?

### 2. Name the following:

- (a) Scratch objects
- (b) Scratch background
- (c) Scratch programs
- (d) Button to change interface language

## SUGGESTED CLASS ACTIVITIES

### A. Match the following buttons with their names.

- |    |   |               |
|----|---|---------------|
| 1. |  | (a) Duplicate |
| 2. |  | (b) Delete    |
| 3. |  | (c) Grow      |
| 4. |  | (d) Shrink    |

**B. Reorder the following steps to create a simple script that moves a sprite 20 steps ahead.**

1. Double-click on 10 and replace it with 20.
2. From the Actions Library, click the Motions Category
3. Drag the move 10 steps block onto the Programming Area.
4. Now double-click the block to see the sprite move on the stage