How to write games, animations and stories using SCRATCH for primary schools

Lesson Plan 2
In the Jungle

Mathematical Skills / Concepts
Scratch Features
Curricular Links
Problem Solving, XY Coordinates, Angles
Glide, Turn
Mathematics, Art, Science

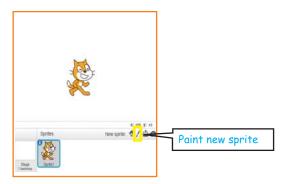## Learning Objectives

The child will:

- Use xy coordinates to move sprites on the stage.
- Create an animation incorporating movement and images.
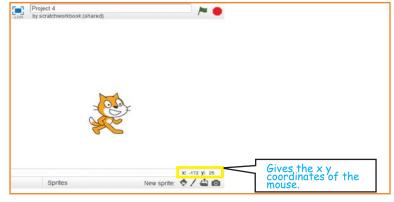- Create an animation of a natural habitat.

Introduction

Ask children to choose a sprite from the library. Alternatively children can draw their own sprites using the "paint new sprite" button.
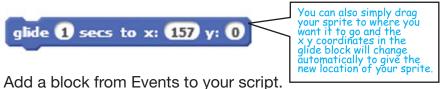

Paint new sprite

Glide

- To glide down children will need to experiment with positions on the x and y axis. Ask children to move the sprite on the stage. Observe the xy coordinates changing on the bottom right of the stage. Try to move the sprite to (0,0). Show the children how the x coordinates change as the sprite moves left to right, and the y coordinates change as the sprite moves up and down.
- Decide where you want your sprite to move to. Hover the mouse over this position to obtain the x y coordinates.

Gives the x y coordinates of the mouse.

- Click on Motion. Drag out the "glide" block.
- Click on the x y coordinates to type your own values.

You can also simply drag your sprite to where you want it to go and the x y coordinates in the glide block will change automatically to give the new location of your sprite.

- Add a block from Events to your script.

Challenge Time 1!

1. Select 2 bird sprites. Be as creative as you can.
2. Choose a suitable backdrop.
3. Use the glide block to make the sprites move across the screen.
4. Change the glide time and see what happens.

Turns

- Turning a sprite is based on the degrees of a circle. A full turn is 360 degrees.
- Click on Motion and experiment with the "turn" blocks. Incorporate different degree values. It is important to add a wait block in order to slow the turns.

Challenge Time 2!

1. Select 2 transport sprites from library. Be as creative as you can.
2. Choose a suitable backdrop.
3. Use the turn and move blocks to make them move across the screen.
4. Change the amount of degrees in your turn and see what happens.

Ultimate Challenge!

1. Select a jungle backdrop.
2. Select some jungle sprites.
3. Using different types of movement (left/right, up/down, glide, turn) create a jungle animation.
4. Have a look at classmates projects. Tell them what you like and suggest ideas to make their project even better!

Notes