

**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:

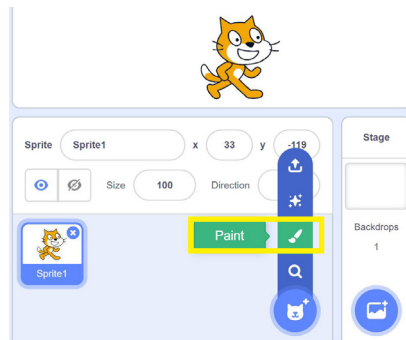
- Use xy coordinates to move sprites on the stage.
- Create an animation incorporating movement and images.
- Create an animation of a natural habitat.

Teacher Tip

Encourage discussion and sharing amongst the children. If a child encounters a difficulty, maybe someone in the class can solve it!

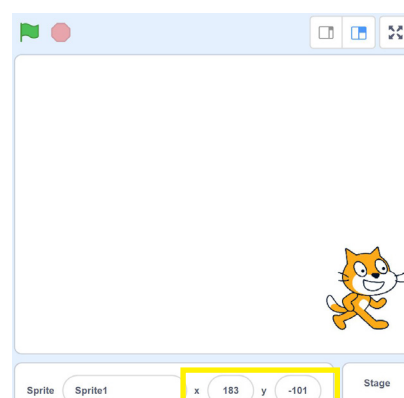
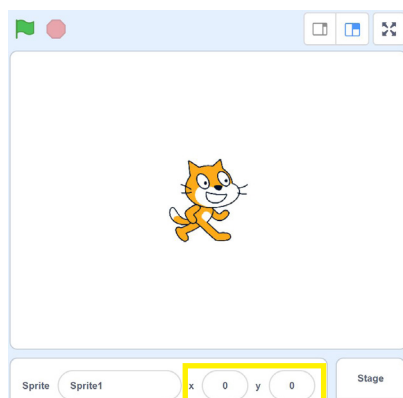
Introduction

Ask children to choose a sprite from the file. Alternatively children can draw their own sprites using the “paint new sprite” feature.

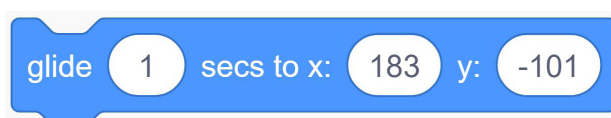


Glide

- 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 in the sprite's information box. 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. Place the sprite in this position to obtain the x y coordinates.



- Open the blue motion palette. Drag out the “glide” block.
- Click on the x y coordinates to insert your own.



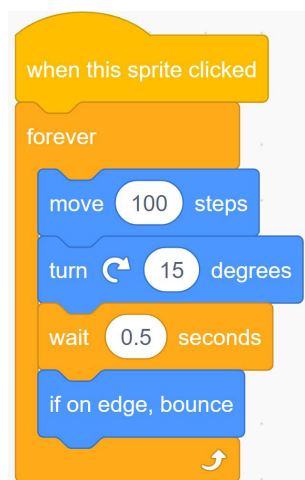
- Add a control to your script.

Challenge Time 1!

1. Select 2 bird sprites. Be as creative as you can.
2. Choose a suitable background.
3. Use the glide 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.
- From the motion palette select the “turn” blocks. Experiment with these 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 file. Be as creative as you can.
2. Choose a suitable background.
3. Use turns and motion 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 background.
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