

Course Beginner: Lesson 5 Where is it?

Lesson Plan

Objective:

We will create application to show an object at different location using vocabulary of spatial relationship.

- Interpret the concrete instructional blocks used in the program to make the project
- Follow/Explain a given program used to make the project
- Identify/Write a program used to make the project
- Evaluate a program used to make the project

Materials:

- Head phones with microphone

Assessments:

A) Plugged:

Students will create application with different events to show an object at different location using vocabulary of spatial relationship. (Refer the Rubric to assess the Student Projects)

B) Paper Based: (Refer Student Companion)

Resources

- As part of getting ready for the lesson, watch the online video lesson to make this project on link below,
<https://codetoenhancelearning.wordpress.com/lesson-5-where-is-it/>
Also, teachers can share the link with the students for their further reference.
- The scratch file of the ready project will help you as reference and you will need it to show it to students in the beginning of the lesson. Download the scratch file of the project from the link below,
<https://scratch.mit.edu/projects/318856329/>

Plan (40 minutes + 5 minutes buffer)

Introduce the objective. (3 minutes)

[Slide 2] Teacher will introduce the objective to the kids. Teacher could read it or read it with whole class or ask a student to read the objective on the slide.

[Slide 3] Teacher defines spatial relationship and introduces vocabulary words with help of pictures.

I do (Teacher explain and demonstrates) (7 minutes)

[Slide 4] Teacher will model by thinking aloud and then brainstorm with kids to find relevant information by asking the following questions,

1) What things we will need on the stage?

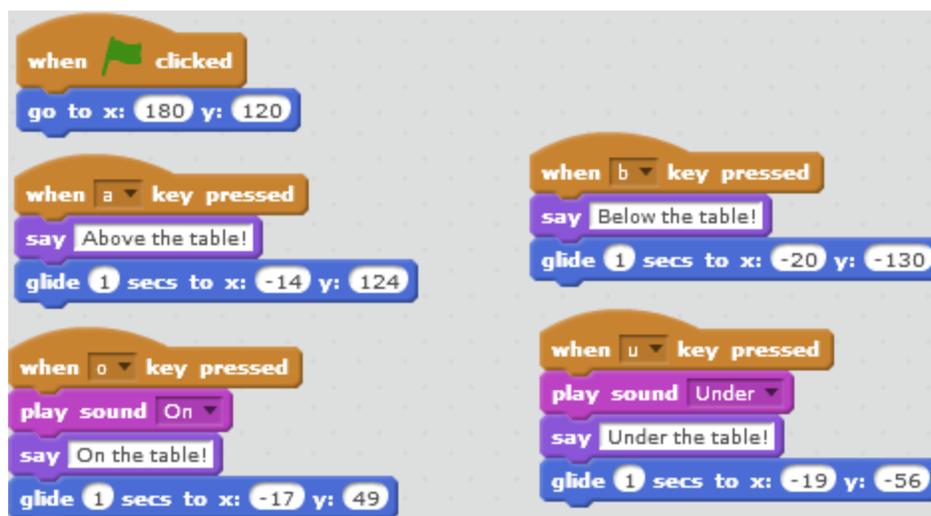
1. A backdrop with instructions on stage
2. Two sprites (i.e. a table and a glass) to show spatial relationship

2) What will happen on the stage?

1. The glass will move to a desired spatial location w.r.t to the table when a given key is pressed on the key board.
2. While the glass moves, an audio in my voice and a speech bubble would explain the spatial location.

[Slide 5] Teacher will model/demonstrate the following things as shown in the video,

- Teacher will bring backdrop, sprite and record audio needed on the stage.
- Teacher will model writing following codes to make the application using blocks. Teacher will also explain the function of the block



We do (Kids practice with teacher): (3 minutes)

[Slide 6] Teacher asks questions to kids "What you are supposed to do?" (First, they create a backdrop, then bring the pictures of things around them as sprite and then write codes to play and say about them in form of speech bubble.)

[Note: Teacher here can keep on asking "What should I do first?" then "What should I do next?" to specific student or can ask students to tag.]

[Slide 7 and 8] Teacher takes a quiz to check for the understanding of the students.

Teacher asks students to think about the response to the question, pair with the partner and discuss the response. Teacher gives them 120 seconds. Teachers ask randomly one pair to share the response after each of the questions below,

1. What will happen with the block

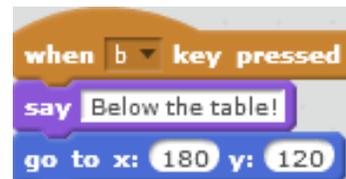


- A) sprite will directly jump to the location $x = 180$ and $y = 120$
- B) sprite will slide to the location $x = 180$ and $y = 120$ from its current location
- C) sprite will directly jump to the location $x = 180$ and $y = 120$ in 1 second
- D) sprite will slide to the location $x = 180$ and $y = 120$ from its current location in 1 second

[Correct answer is A]

2. Say Yes or No and give reason.

We want to make an application to show spatial relationship between a glass and a table. We want to write program such that When the b is pressed on the key board the sprite will say "Below the table" and then glide to the location $x = -20$ and $y = -130$ in 1 second. Will the program given work?



[Response: No. Because with the block go to the sprite will jump to the location $x = 180$ and $y = 120$ and it will not glide. Here, glide block should be used.]

You Do (Kids practice in pairs): (15 minutes)

[Slide 9] Teacher asks student to start their work to make the application. Teacher instructs kids that they have to make application to show the spatial relationship between two objects to help other kids to learn it in fun way.. They can choose any sprite and backdrop they want and like.

Also, they have to fill the graphic organizer first and then start working on their application.

[Note: Teacher can help kids if they are struggling at any point or may keep on asking questions like, what they are doing? Or what are they learning? Or ask Reflection Journal Questions?]

Assessment: (7 minutes)

[Slide 10] Teacher asks students to solve the assessments independently in the student companion. Teacher may explain what kids are supposed to do.

Closing (5 minutes)

[Slide 11] Teacher asks Reflection Questions and gives time to kids to write their responses. Teacher discusses the responses with kids.

1. What did we do today?
2. What is one thing that you liked the most?
3. What did you learn?

[Note: Students are also supposed to write the response to these questions in the student companion.]