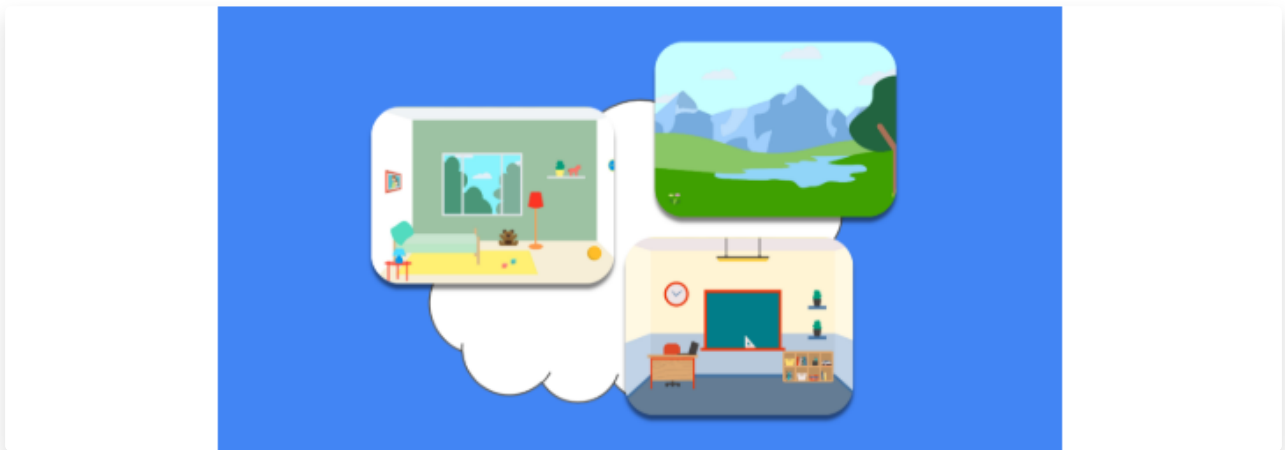


Multiple Scenes

Textbook

Multiple Scenes



That's Scene!

Penny and Chris were sitting in the computer lab. Mrs. Newton stood at the front of the room.

"Today," Mrs. Newton said, "we are going to learn how to create multiple scenes in our algorithms. Who can guess what a scene is?"

Penny raised her hand. "Is a scene like a picture or a background?"

"Great thinking, Penny!" Mrs. Newton said. "A scene is more than just a background. It's a part of your story where something happens. You can have different scenes, like one for the beginning and others for the middle or end."

Chris looked interested. "So I can have more than one place in my story?"

"Exactly!" Mrs. Newton replied. "You can have as many scenes as you want in your animation. For example, in the first scene, your character might start in a forest. In the next scene, they could be in a castle. Each scene is a new part of the story."

Penny asked, "So I can make my animation go from one place to another with different scenes?"

"Yes!" Mrs. Newton said. "And you can switch between scenes using code. Just like turning the pages of a book, each scene shows a new moment in your story."

Chris started thinking about his animation. "What if I want to create an animation with three different scenes? One in a jungle, one on the moon, and one under the ocean?"

"You would use the desert background, space background, and beach background," Mrs. Newton explained. "Then add the Go to Page block to move between them."

What Are Multiple Scenes?

Multiple scenes are different parts of a program where action happens. Each scene can have:

- Its own background
- Different sprite actions
- New parts of your story
- Different code blocks

How Scenes Work

Think of scenes like pages in a book:

- Scene 1: Beginning of story
- Scene 2: Middle of story
- Scene 3: End of story

Each scene needs:

1. A background
2. Sprites
3. Code for that scene
4. Transition to next scene

The Go to Page Block

The Go to Page block:

- Moves from one scene to another
- Goes at the end of scene code
- Tells the program which scene is next
- Creates smooth transitions

Example sequence:

1. Scene 1 code runs
2. Go to Page 2
3. Scene 2 code runs
4. Go to Page 3
5. Scene 3 code runs

Planning Multiple Scenes

Before coding, plan your scenes:

- **Scene 1:** Where does story start?
- **Scene 2:** What happens next?
- **Scene 3:** How does it end?

Choose backgrounds that match:

- House → School → Field
- Beach → Ocean → Island
- Earth → Space → Moon

Coding Scene Transitions

Basic scene structure:

1. On Play Event
2. Sprite actions for Scene 1
3. Wait block (optional)
4. Go to Page 2
5. New actions for Scene 2



Organizing Your Scenes

Keep track by:

- Numbering scenes in order
- Planning sprite movements
- Matching backgrounds to story
- Testing transitions between scenes

Debugging Scene Issues

Common problems:

- **Scene won't change:** Check Go to Page block
- **Wrong scene appears:** Verify page numbers
- **Sprites disappear:** Add sprites to each scene
- **Code stops working:** Check event blocks for each scene

Adding Text Labels

You can add text to scenes:

- Label each scene number
- Add story titles
- Include instructions
- Create credits

Scene Examples Using Available Backgrounds

Adventure story:

1. House (start at home)
2. Desert (journey begins)
3. Mountains (challenge)
4. House (safe return)

Space story:

1. School (learning about space)
2. Earth (preparing for launch)
3. Space (exploring stars)
4. Earth (landing safely)

Critical Thinking Questions

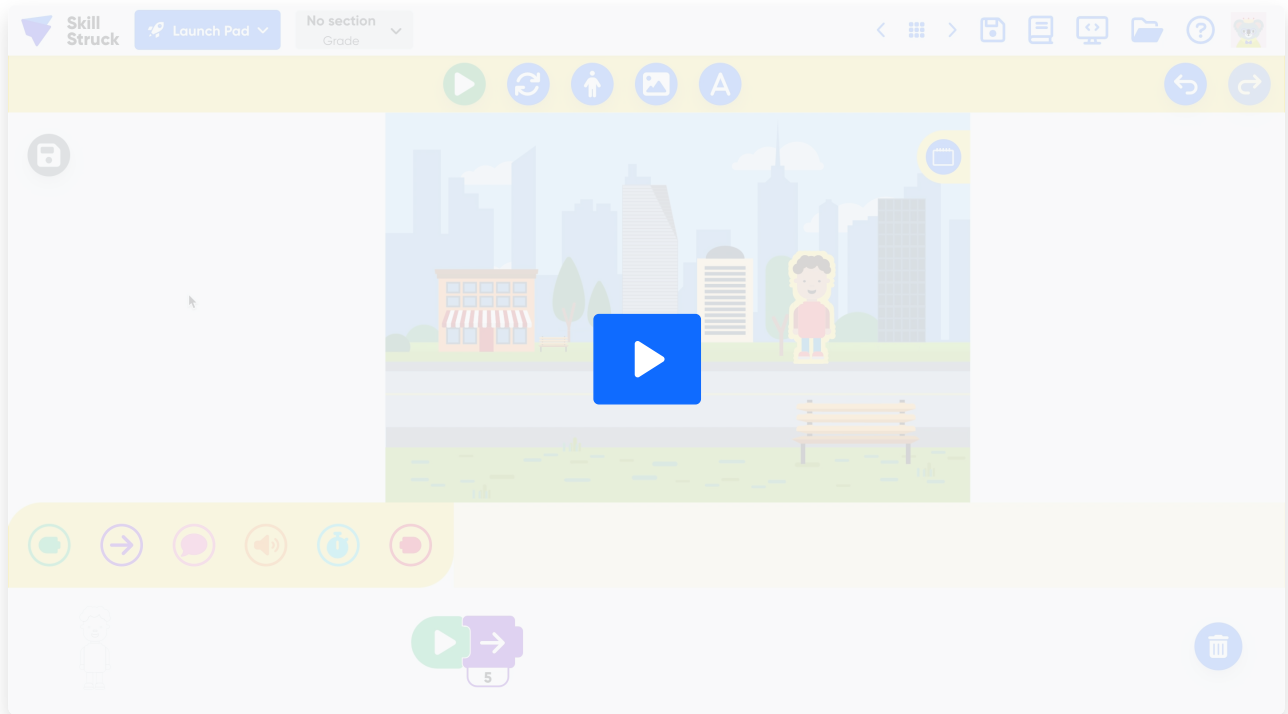
1. How do multiple scenes help tell a better story than one scene?
2. What happens if you forget to add a Go to Page block?
3. Why is planning your scenes important before coding?

Sentence Stems

- "Each scene shows (blank space) in my story."
- "I use multiple scenes to (blank space)."
- "The Go to Page block (blank space)."

Multiple Scenes

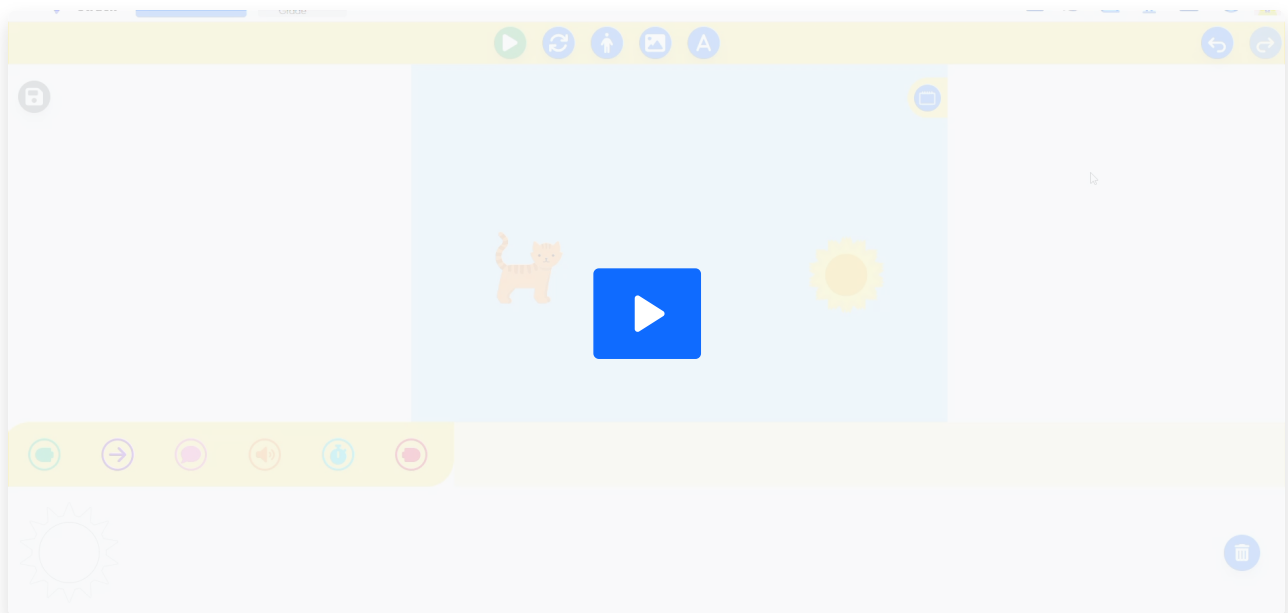
Watch the video to learn how to code multiple scenes.



Code [algorithms](#) and build a story with multiple scenes.

Adding Text

Along with choosing sprites and backgrounds, you can add text to your scenes! This is super helpful if you want to label each of your scenes! Watch the video below to learn about adding text.



Questions (5)

1. True or False: You can build a story with multiple scenes.

MULTIPLE CHOICE

Choose the correct answer:

- A. True
- B. False

2. What is a scene?

MULTIPLE CHOICE

Choose the correct answer:

- A. A part of the story with action
- B. A list of characters
- C. A title for your project
- D. A movie clip

3. Why do programs have more than one scene?

MULTIPLE CHOICE

Choose the correct answer:

- A. To mix up the scene
- B. To use more colors
- C. To show different parts of the story
- D. To make the characters disappear

4. How can you switch between scenes?

MULTIPLE CHOICE

Choose the correct answer:

- A. By clicking on the screen
- B. By drawing new characters
- C. By erasing the old scene
- D. By using code or timing

5. Which of these would be a good example of three different scenes?

MULTIPLE CHOICE

Choose the correct answer:

- A. Dog, Cat, Mouse
- B. Jungle, Moon, Classroom
- C. Cup, Spoon, Plate
- D. Front Door, hallway, giraffe

Games (2)

1. Multiple Scenes Typing Race

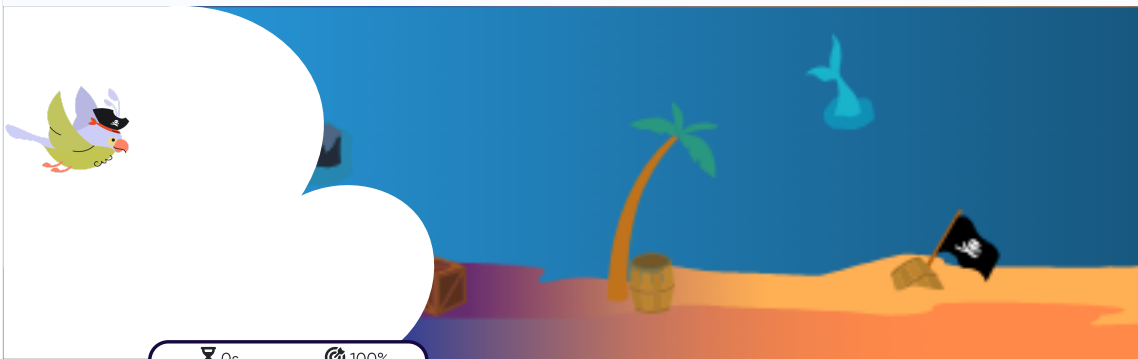
Full Screen

Audio

Instructions

Restart

Pause



0s

100%

switch scenes using code

2. Multiple Scenes Matching

Determine if each algorithm includes multiple scenes or not.

Full Screen

Audio

Instructions

Answer Key

Pause


Clear All

Check Matches

Attempts: 0

Multiple Scenes

One Scene



Blocks Challenges (5)

1. School Day



School Day

Build an algorithm that shows us what you do to get ready for school. Use at least 2 different backgrounds.

2 8 4 2



Submit ↑



2. Create Your Own Story!



Create Your Own Story!

Create a story using at least 2 sprite characters and 2 backgrounds!

2 12 3 2



Submit ↑



3. Schools Out!



Schools Out!

It's the first day of summer break and you're ready to have a fun day! Code 2 friends planning a day of fun then show them having that fun day! Use at least 2 different scenes.

3 8 6 4

Submit ↑



4. Tag!



Tag!

It's recess and it's time to play tag!

Code one student running from the other, and at some point make one student touch – or “tag” – the other. When the student is tagged, have the tagger say “Tag you’re it!”. The students should be playing tag within at least two different scenes.

Hint: Use the control blocks to change your sprite's speeds during the game!

2 10 1 2 2

Submit ↑



5. Lift Off!



Lift Off!

Did you know rockets can reach speeds over 17,000 miles per hour! That is fast enough to circle Earth in less than 2 hours! Using the earth and space scenes, code a rocket lifting off from earth and going into space.

2 8 1 2



Submit ↑



Answer Keys & Solutions

Questions

1. True or False: You can build a story with multiple scenes.

MULTIPLE CHOICE

Correct Answer:

- A. True ✓ Correct
- B. False ✗ Incorrect

Explanation:

Think about your favorite book? Does it stay in one place?

2. What is a scene?

MULTIPLE CHOICE

Correct Answer:

- A. A part of the story with action ✓ Correct
- B. A list of characters ✗ Incorrect
- C. A title for your project ✗ Incorrect
- D. A movie clip ✗ Incorrect

Explanation:

It's like a part of a story where something happens.

3. Why do programs have more than one scene?

MULTIPLE CHOICE

Correct Answer:

- A. To mix up the scene ✗ Incorrect
- B. To use more colors ✗ Incorrect
- C. To show different parts of the story ✓ Correct

D. To make the characters disappear

✗ Incorrect

Explanation:

Stories often happen in more than one place.

4. How can you switch between scenes?

MULTIPLE CHOICE

Correct Answer:

A. By clicking on the screen

✗ Incorrect

B. By drawing new characters

✗ Incorrect

C. By erasing the old scene

✗ Incorrect

D. By using code or timing

✓ Correct

Explanation:

It's something you can write or set up to make things move.

5. Which of these would be a good example of three different scenes?

MULTIPLE CHOICE

Correct Answer:

A. Dog, Cat, Mouse

✗ Incorrect

B. Jungle, Moon, Classroom

✓ Correct

C. Cup, Spoon, Plate

✗ Incorrect

D. Front Door, hallway, giraffe

✗ Incorrect

Explanation:

Think of places that are very different from each other.



Games

1. Multiple Scenes Typing Race

Typing game - no answer key needed. Students practice typing the provided content.

2. Multiple Scenes Matching

Matching Game Solutions:

1.  Algorithm when sprite is pressed, it moves 2, hops, goes to scene 2 →
2.  Algorithm, when play is pressed a sound woosh and 1 move right repeats forever →

Students must drag items from the left to match with corresponding items on the right.