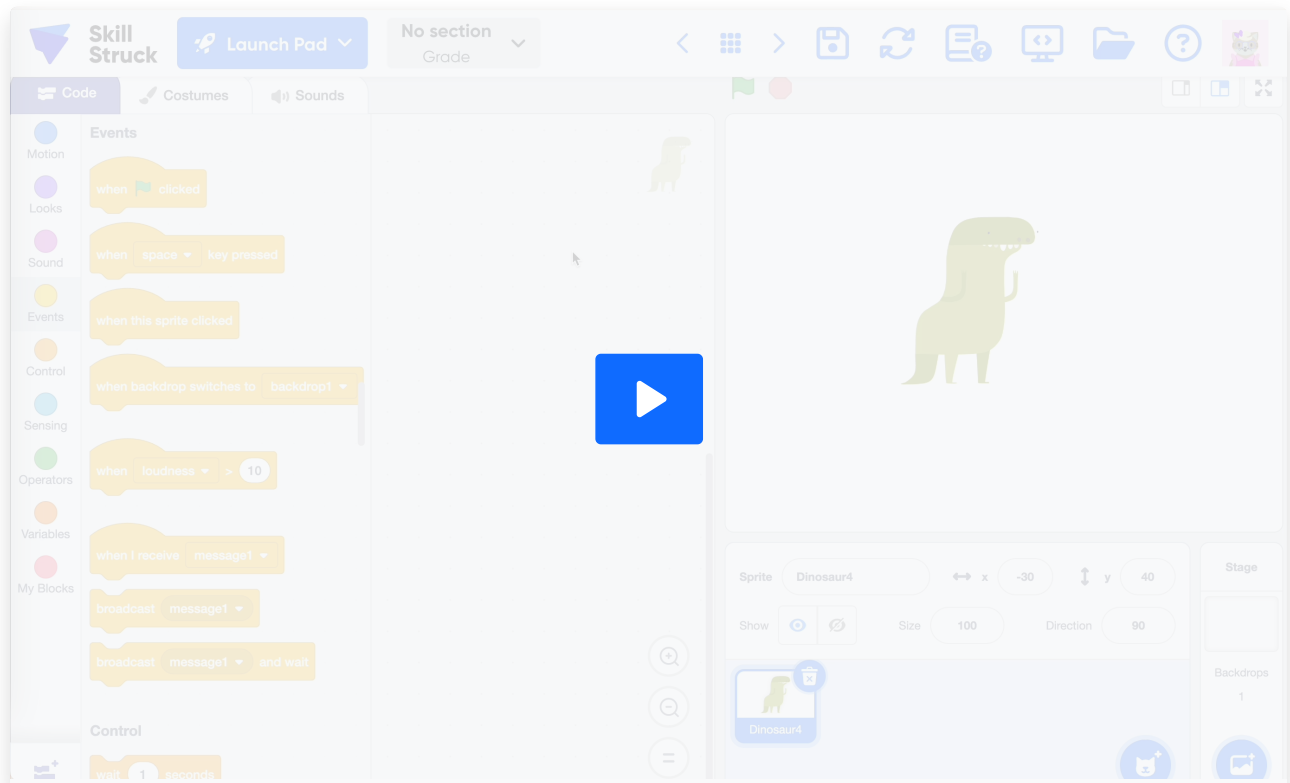


Costumes

Textbook

Costumes





Lights, Camera, Costume Change!

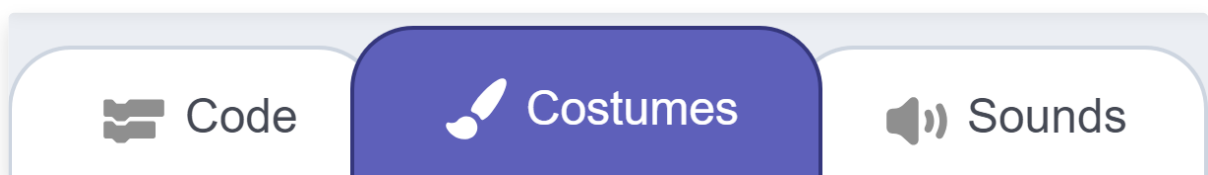
Have you ever used different outfits for a play or a display? Imagine if your sprite could do the same! In programming, **costumes** are like different looks for your sprites, letting them change how they appear whenever you want. Whether it's switching from one image to another, or creating a totally new shape, costumes give your sprite the ability to transform. Let's learn how to make your sprite show different looks and add more to your projects!

Costumes

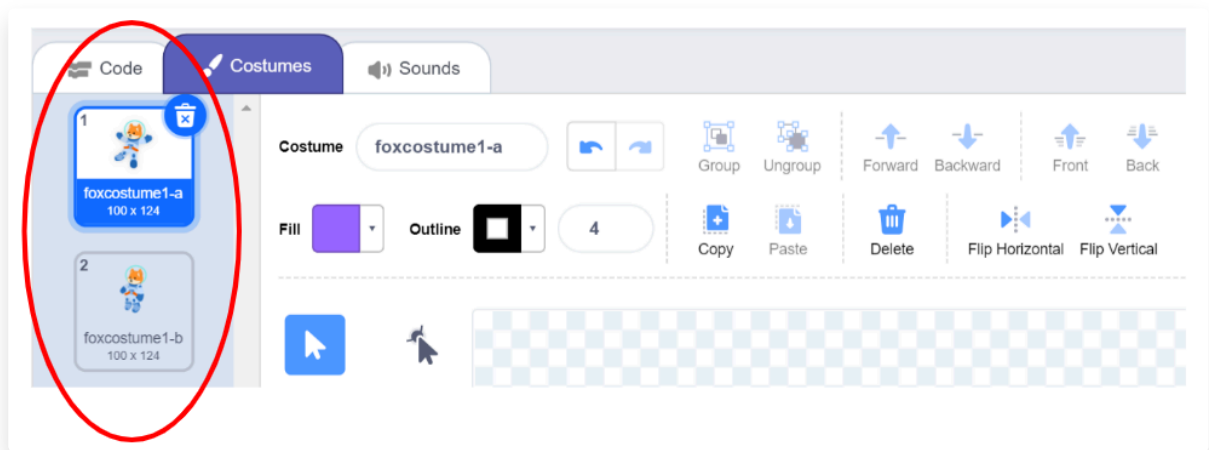
Costumes in [programming](#) are like outfits that can be worn by the sprites. The costumes allow you to change the way your sprites look!

To program using costumes:

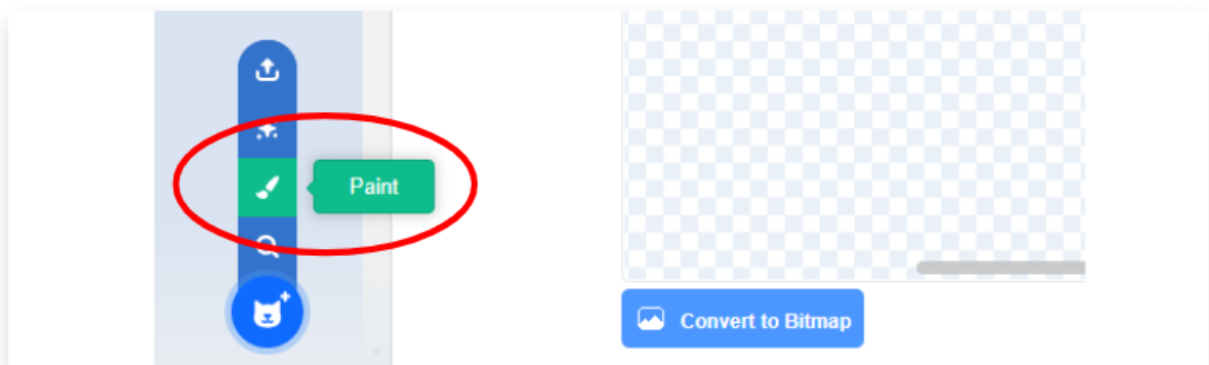
1. Select a sprite.
2. Go to the "Costumes" tab on the top left. The costume tab will show all the costumes associated with your sprite.



3. You can select a costume on the left side.



If you want to create your own costume, hover over the "Choose a Costume" sprite on the bottom left and click the paint [icon](#).



To edit a costume, select it in the "Costumes" tab and use the built-in editor. You can draw, erase, fill, and use various tools to edit the costume.

4. To switch between costumes, use the `next costume` or `switch costumes to [costume]` blocks which can be found in the Looks category.
5. Click the green flag to watch your code in action.

Critical Thinking Questions

1. How is changing a sprite's costume in programming like using different outfits for a display or presentation? Can you think of a time when a costume helped show a story or make something more interesting?
2. How do you think costumes help show different ideas or roles?

Questions (5)

1. What is a costume?

MULTIPLE CHOICE

Choose the correct answer:

- A. An outfit that changes how someone or something looks
- B. A code block that programs your sprite to jump
- C. A musical sound

MULTIPLE CHOICE

2. Which tab lets you see all the costume options for a sprite?

Choose the correct answer:

- A. Code tab
- B. Costume tab
- C. Sounds tab

MULTIPLE CHOICE

3. How can you create your own costume for a sprite?

Choose the correct answer:

- A. Click the "Play" button
- B. Click the green flag
- C. Type in a new name for your sprite
- D. Hover over the "Choose a Costume" sprite and click the paint icon

MULTIPLE CHOICE

4. What can you do with the built-in editor when editing a costume?

Choose the correct answer:

- A. Write code
- B. Record sounds
- C. Draw, erase, fill, and use various tools
- D. Change the sprite's name

MULTIPLE CHOICE

5. Which blocks do you use to switch between costumes in programming?

Choose the correct answer:

- A. Move and jump blocks
- B. Looks category blocks like "next costume" or "switch costume to [costume]"
- C. Sound and music blocks
- D. Timer and countdown blocks

Games (2)

1. Costumes Typing Game

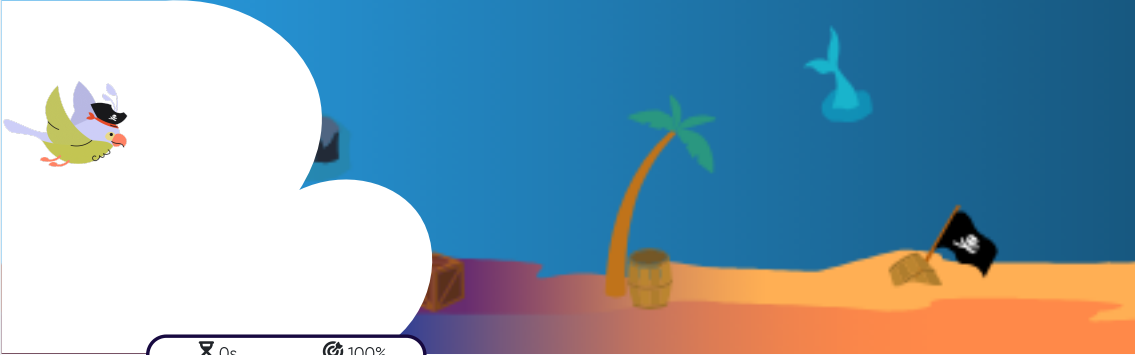
Full Screen

Audio

Instructions

Restart

Pause



0s 100%

Costumes in programming

2. Costumes Memory Game

Full Screen

Audio

Instructions

Answer Key

Pause

Flips: 0

1

2

3


4

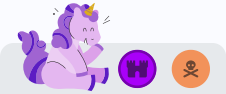
5

6

7

8





Blocks Pro Challenges (3)

1. Colorful Balloon

Challenge

Textbook

Colorful Balloon

Select the balloon sprite.

Program the balloon so it changes to a different color costume when you press different keys.

Requirements

0/2

3 Looks

3 Event

Blocks must be connected to an Event block in order to pass the requirements

Submit

Code

Costumes

Sounds

Motion

move 10 steps

turn 15 degrees

turn 15 degrees

go to random position

go to x: 0 y: 0

glide 1 secs to random position

glide 1 secs to x: 0 y: 0

point in direction 90

point towards mouse-pointer

change x by 10

set x to 0

change y by 10

set y to 0

if on edge, bounce

set rotation style left-right

x position

Sprite

Sprite1

x 0 y 0

Size 100 Direction 90

Sprite1

Stage

Backdrops 1

2. Swimming Jellyfish

Challenge

Textbook

Swimming Jellyfish

Select 4 jellyfish sprites.

Change the costumes of the jellyfish so all the jellyfish look different.

Program each jellyfish to glide to a random position when the green flag is clicked.

Requirements

0/2

4 Motion

4 Event

Blocks must be connected to an Event block in order to pass the requirements

Submit

Code

Costumes

Sounds

Motion

move 10 steps

turn 15 degrees

turn 15 degrees

go to random position

go to x: 0 y: 0

glide 1 secs to random position

glide 1 secs to x: 0 y: 0

point in direction 90

point towards mouse-pointer

change x by 10

set x to 0

change y by 10

set y to 0

if on edge, bounce

set rotation style left-right

x position

Sprite

Sprite1

x 0 y 0

Size 100 Direction 90

Sprite1

Stage

Backdrops 1

3. Flying Toucan

Flying Toucan

Program a toucan to fly across the scene using its different costumes.

Program the toucan so when the green flag is clicked, it will switch the costume, move forward, wait, switch to the next costume, and wait again.

Make sure your code is inside a forever loop.

Requirements

0/4

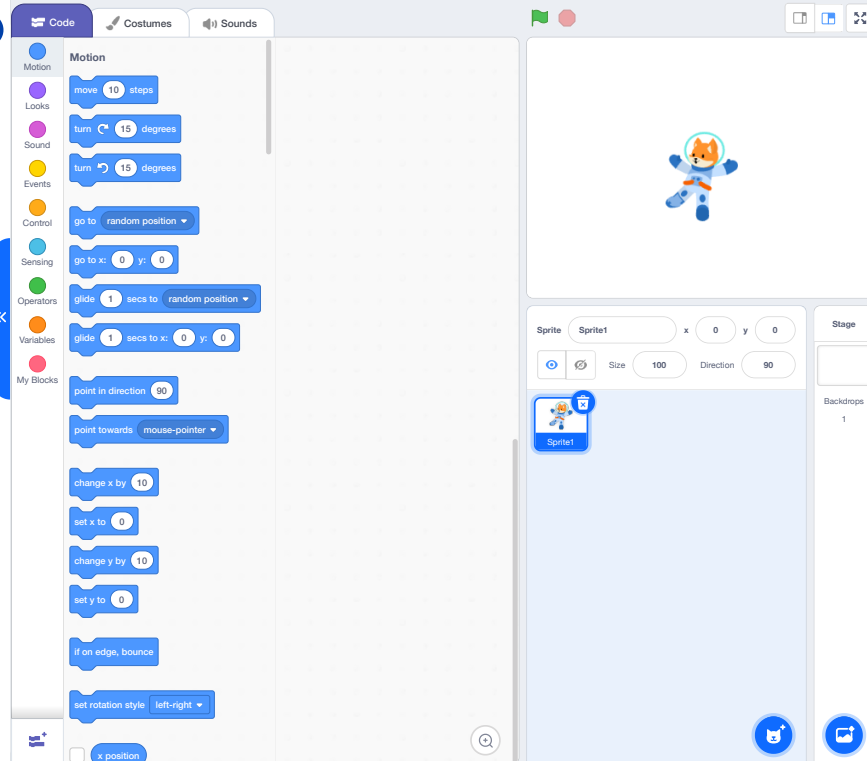
1 Motion

2 Looks

1 Event

3 Control

Blocks must be connected to an Event block in order to pass the requirements



The image shows the Scratch code editor interface. The 'Code' tab is selected, displaying a script for a toucan sprite. The script is as follows:

```
when green flag clicked
  go to random position
  glide 1 secs to random position
  glide 1 secs to x: 0 y: 0
  point in direction 90
  point towards mouse-pointer
  change x by 10
  set x to 0
  change y by 10
  set y to 0
  if on edge, bounce
  set rotation style left-right
```

The script is currently inside a 'when green flag clicked' event block. The 'x position' checkbox is unchecked. The right side of the interface shows the stage with a toucan sprite and the 'Sprite' and 'Stage' panels.

Answer Keys & Solutions

Questions

1. What is a costume?

MULTIPLE CHOICE

Correct Answer:

- A. An outfit that changes how someone or something looks ✓ Correct
- B. A code block that programs your sprite to jump ✗ Incorrect
- C. A musical sound ✗ Incorrect

Explanation:

People wear costumes to change their appearance.

2. Which tab lets you see all the costume options for a sprite?

MULTIPLE CHOICE

Correct Answer:

- A. Code tab ✗ Incorrect
- B. Costume tab ✓ Correct
- C. Sounds tab ✗ Incorrect

Explanation:

The code tab has the blocks and the sounds tab has different noises.

3. How can you create your own costume for a sprite?

MULTIPLE CHOICE

Correct Answer:

- A. Click the "Play" button ✗ Incorrect
- B. Click the green flag ✗ Incorrect
- C. Type in a new name for your sprite ✗ Incorrect

D. Hover over the "Choose a Costume" sprite and click the paint icon

✓ Correct

Explanation:

Pay attention to the steps described for creating costumes.

4. What can you do with the built-in editor when editing a costume?

MULTIPLE CHOICE

Correct Answer:

A. Write code

✗ Incorrect

B. Record sounds

✗ Incorrect

C. Draw, erase, fill, and use various tools

✓ Correct

D. Change the sprite's name

✗ Incorrect

Explanation:

Consider the actions you can take to modify a sprite's appearance.

5. Which blocks do you use to switch between costumes in programming?

MULTIPLE CHOICE

Correct Answer:

A. Move and jump blocks

✗ Incorrect

B. Looks category blocks like "next costume" or "switch costume to [costume]"

✓ Correct

C. Sound and music blocks

✗ Incorrect

D. Timer and countdown blocks

✗ Incorrect

Explanation:

Look for blocks related to changing the appearance of sprites.









Games

1. Costumes Typing Game

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

2. Costumes Memory Game

Memory Game Pairs:

1.  The paint icon ↔  The paint icon
2.  The purple costumes tag ↔  The purple costumes tag
3.  A green cat icon that says "choose a costume" ↔  A green cat icon that says "choose a costume"
4.  A paintbrush icon ↔  A paintbrush icon

Students must find all matching pairs by flipping cards and remembering their positions.