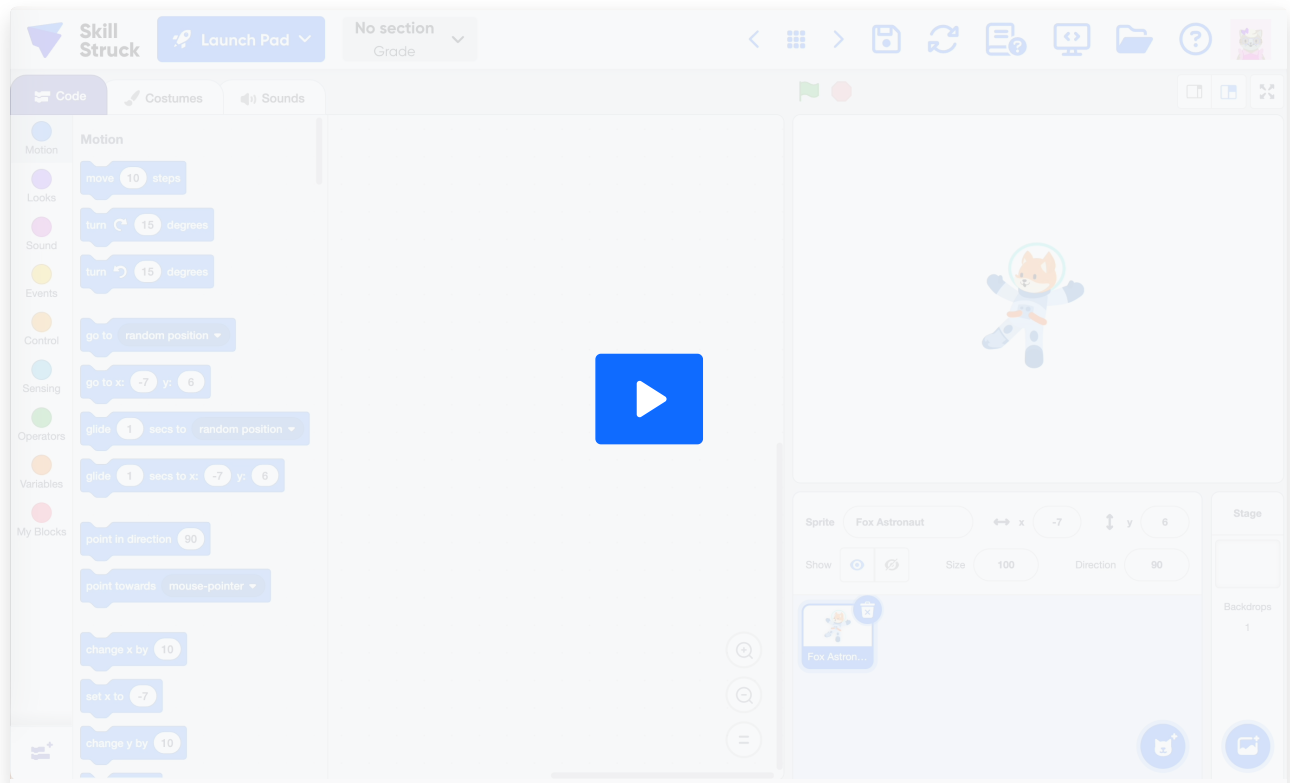


## Using the Drawing Tool

### Textbook

## Using the Drawing Tool



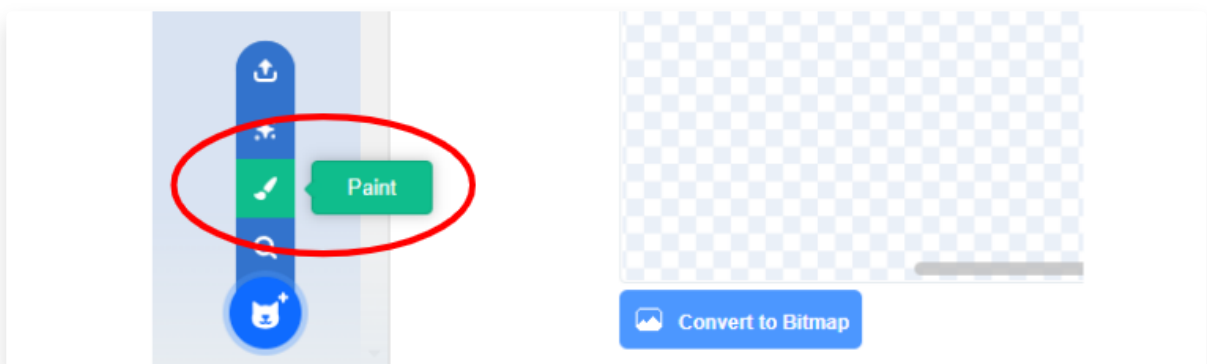


Drawing is a beautiful form of creativity. What do you like to draw? Do you like to use pen or a pencil? Or do you prefer painting? Have you ever used watercolor to make a painting? Art can be so much fun! In coding, we can also use a tool that helps us to be creative. This is called the drawing tool. Let's learn how to use it.

## The Drawing Tool

Drawing opens a world of possibilities! To use the drawing tool:

1. Click the Costumes tab on the top left.
2. Hover over the "Choose a Costume" sprite on the bottom left and click the paint [icon](#).



3. Explore the brush, fill can, eraser, line, square, circle, and reshaping tool.

Note: Your creation will move as one on the scene.

4. Create a stick figure drawing.
5. When you are done making your creation, go back to the Code tab and select your drawing. Code an [algorithm](#) to move your stick figure creation.

Practice building algorithms using the drawing tool in the challenges.

## Critical Thinking Questions

1. How is using the drawing tool in coding similar to creating art with crayons or paint? What can you do with your drawing after you create it?
2. Why do you think the drawing tool is important in coding? How can it help you tell a story or create something fun on the screen?

### Questions (5)

**1. True or False: The drawing you create will move as one on the scene.**

MULTIPLE CHOICE

**Choose the correct answer:**

- A. True
- B. False

**2. True or False: You can draw anything you want using the drawing tool!**

MULTIPLE CHOICE

**Choose the correct answer:**

- A. True
- B. False

**3. Where do you access the drawing tools?**

MULTIPLE CHOICE

**Choose the correct answer:**

- A. Backdrops tab
- B. Costumes tab
- C. Sound tab
- D. Code tab

**4. Which tool would you use to draw a perfect circle in Scratch?**

MULTIPLE CHOICE

**Choose the correct answer:**

- A. Brush tool
- B. Line tool
- C. Fill tool
- D. Circle tool

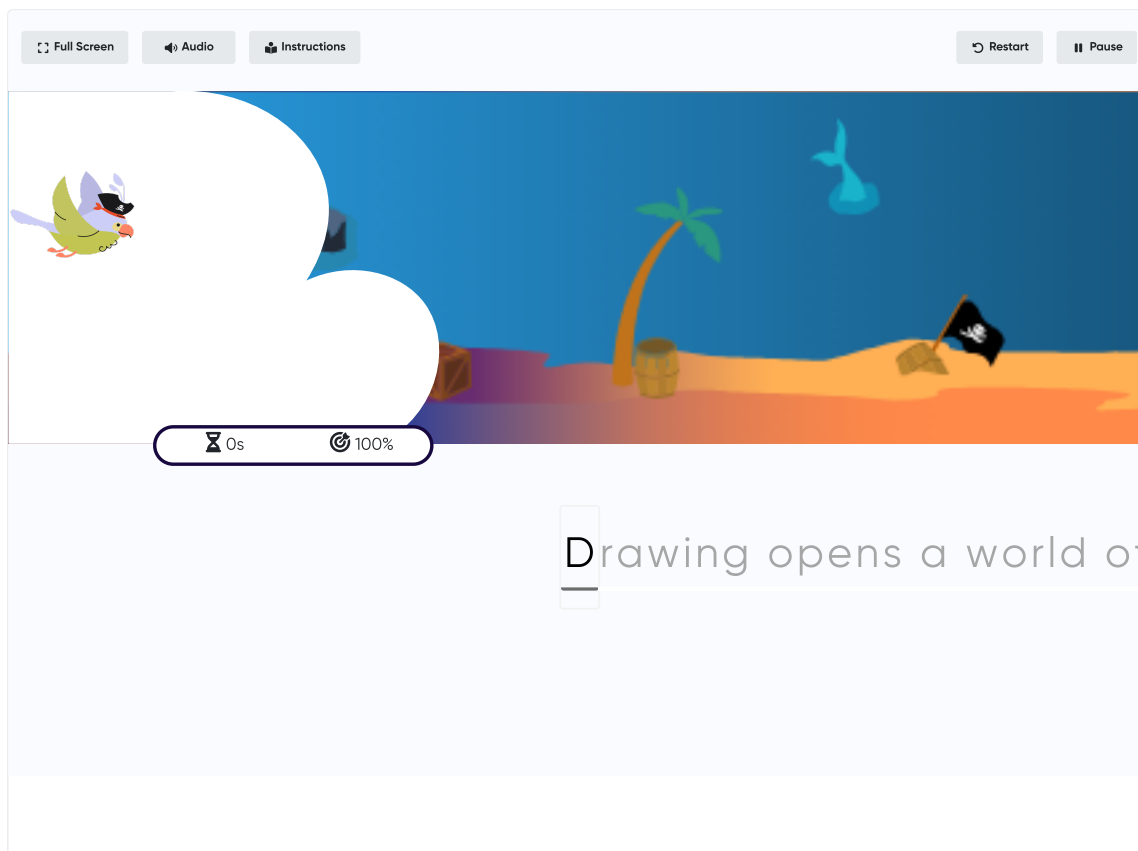
## 5. What can you use the eraser tool for in the drawing tool?

Choose the correct answer:

- A. Change the sprite's size
- B. Fill colors in shapes
- C. Remove parts of your drawing
- D. Draw straight lines

## Games (3)

### 1. Using the Drawing Tool Typing



## 2. Using the Drawing Tool Matching

Full Screen

Audio

Instructions




Answer Key

Pause

Clear All

Check Matches




Attempts: 0



The paintbrush

The eraser


The circle tool



The fill can

The line tool

The square tool



## 3. Using the Drawing Tool Memory

Full Screen

Audio

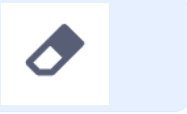
Instructions

Answer Key

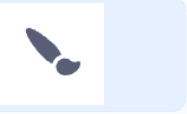
Pause

Flips: 0

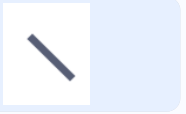
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# Blocks Pro Challenges (3)

## 1. Maze Explorer

Challenge

Textbook

### Maze Explorer

Draw a maze with multiple paths and obstacles. You will control a character to move through the maze to reach the end of it. To do this, create a program that allows you to move the character using the arrow keys. The character should not be able to pass through walls or barriers.

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

Sprite1

x 0 y 0

Size 100 Direction 90

Sprite1

Stage

Backdrops 1

## 2. Story Illustration

Challenge

Textbook

### Story Illustration

Create illustrations for a short story using the drawing tool. Draw scenes, characters, and objects related to your story.

For example, if the story is about a magical adventure, draw a castle, a dragon, and a brave hero.

Use at least one look block and switch between at least 3 backdrops.

Requirements

0/2

1

Looks

1

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

Sprite1

x 0 y 0

Size 100 Direction 90

Sprite1

Stage

Backdrops 1

### 3. Pixel Art Gallery

Challenge

Textbook

#### Pixel Art Gallery

Create your own pixel art gallery with at least 3 drawings. Use the drawing tool to design small images of your own creation. It could be an object, person, or anything that comes to mind!

Then, move your art pieces on the screen to create your own gallery.

#### Requirements

0/4

1 Motion

1 Looks

1 Event

1 Control

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

Submit

CodeCostumesSounds

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

Sprite1

x 0 y 0

Size 100 Direction 90

Sprite1

Stage

Backdrops 1

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## Answer Keys & Solutions

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### Questions

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1. True or False: The drawing you create will move as one on the scene.

MULTIPLE CHOICE

Correct Answer:

A. True ✓ Correct

B. False ✗ Incorrect

**Explanation:**

You can't separate what you draw.

2. True or False: You can draw anything you want using the drawing tool!

MULTIPLE CHOICE

Correct Answer:

A. True ✓ Correct

B. False ✗ Incorrect

**Explanation:**

Be as creative as you want when drawing.

3. Where do you access the drawing tools?

MULTIPLE CHOICE

Correct Answer:

A. Backdrops tab ✗ Incorrect

B. Costumes tab ✓ Correct

C. Sound tab ✗ Incorrect

D. Code tab ✗ Incorrect



**Explanation:**

Drawing tools are used to create costumes for sprites.

**4. Which tool would you use to draw a perfect circle in Scratch?**

MULTIPLE CHOICE

**Correct Answer:**

- |                |             |
|----------------|-------------|
| A. Brush tool  | ✗ Incorrect |
| B. Line tool   | ✗ Incorrect |
| C. Fill tool   | ✗ Incorrect |
| D. Circle tool | ✓ Correct   |

**Explanation:**

This tool is specifically designed for drawing circles.

**5. What can you use the eraser tool for in the drawing tool?**

MULTIPLE CHOICE

**Correct Answer:**

- |                                 |             |
|---------------------------------|-------------|
| A. Change the sprite's size     | ✗ Incorrect |
| B. Fill colors in shapes        | ✗ Incorrect |
| C. Remove parts of your drawing | ✓ Correct   |
| D. Draw straight lines          | ✗ Incorrect |

**Explanation:**







The eraser tool has a specific function related to drawing.

**Games****1. Using the Drawing Tool Typing**

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

## 2. Using the Drawing Tool Matching













### Matching Game Solutions:

1.  A paintbrush icon →
2.  The eraser icon. →
3.  The fill can icon →
4.  A line icon →
5.  A square icon →
6.  A circle icon →

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

## 3. Using the Drawing Tool Memory

### Memory Game Pairs:

1.  A paintbrush icon ↔  A paintbrush icon
2.  The eraser icon ↔  The eraser icon
3.  The fill can icon ↔  The fill can icon
4.  A line icon ↔  A line icon
5.  A square icon ↔  A square icon
6.  A circle icon ↔  A circle icon

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