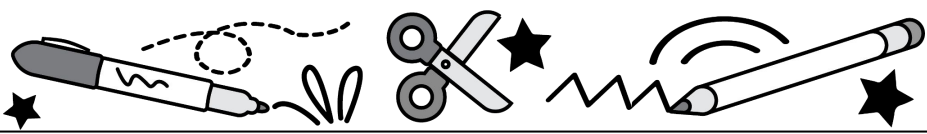


# Bring Yourself Into Scratch: Sharing Identity, Voice & Creativity

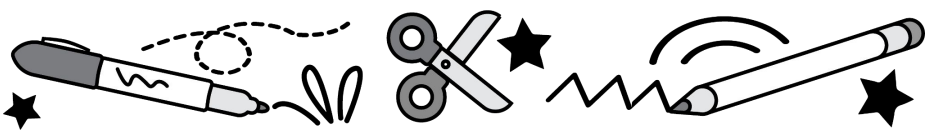


Explore creating and animating an  
original Scratch sprite



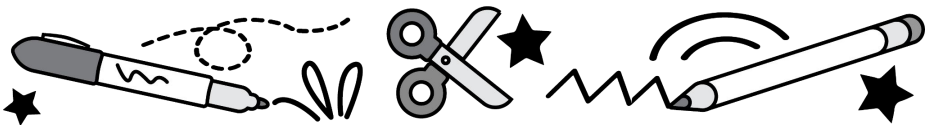
# Cards in This Pack

- “About Me” Brainstorm
- Design Your Sprite
- Using the Paint Editor
- Code the Sprite (fewer blocks; for Grades 3-5 or new Scratchers)
- Code the Sprite (additional blocks; for Grades 5+ or experienced Scratchers)
- Create an Asset Pack
- Collaborate: Export or Backpack / Collaborate: Remix



# “About Me” Brainstorm

- What is your favorite activity or hobby? Or is there an activity that is particular to the region where you live?
- What is your favorite family or community tradition?
- What food is important to you or your culture? Or is there a food that is particular to the region where you live?
- Do you have a family pet? Or are there native animals or plants that have special meaning to you or your culture?
- Is there an item of dress that has significance in your family, culture, or the region where you live?
- Who/what is your favorite book character?



# “About Me” Brainstorm

- Is there an important landmark, style of architecture, or landscape feature that has meaning to you or the region where you live?
- How do you get from place to place? Is there a mode of transport that is unique or significant to your culture or the region where you live?
- What other items unique to your community, culture, language, or location would be fun to animate in Scratch or share with your peers?

Now, it is time to **pick one idea** to turn into a unique asset (a character or a “sprite” in Scratch).

# Design Your Sprite

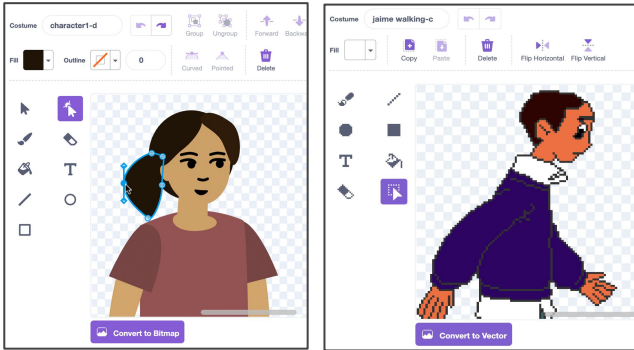


Options:

- **Create a sprite using the Scratch paint editor tools.**
- **Hand-draw:** Create a hand-drawn image to scan/photograph and upload as a sprite.
- **Remix:** Mix, match, and edit desired pieces of vector sprites already in the Scratch Library, as well as add missing elements with shape and line tools.

*Sprite examples by pondermake, SaffronChai, Chumie, algorithmar, and watse166.*

# Design Your Sprite

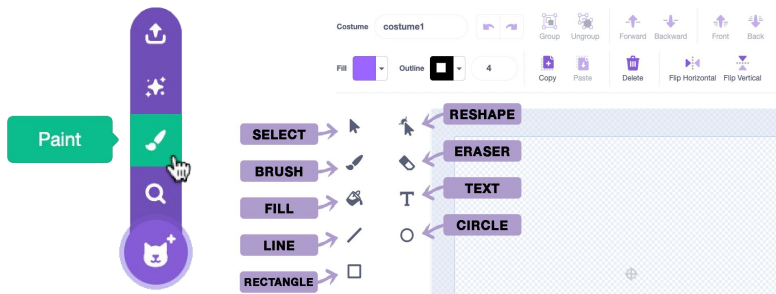


- There are two modes for using the paint editor in Scratch:
  - Vector-mode allows you to create and edit shapes (Scratch default).
  - Bitmap-mode allows you to edit photos and paint with pixels.
- We recommend using vector-mode, as it allows other users to make adjustments and add and remove elements if they remix your creations.

# Using the Paint Editor

scratch.mit.edu











## TOOLS TO TRY



|  |  |
|--|--|
|  | Click and drag with the Line, Circle, or Rectangle tools to <b>create a shape</b> . Hold down the Shift key while dragging to create equal sides, or 45 and 90 degree angles with lines. |
|  | Using the Select tool, select a shape and click and drag one of the corner points to <b>resize</b> it.   |
|  | To <b>rotate</b> a shape once you've made it, use the Select tool to grab the anchor under the shape and drag it. Hold down the Shift key while dragging to rotate at 45 degree angles.  |
|  | Using the Reshape tool, click on one of the points of a shape and <b>move the point</b> around to alter the shape. Click + Shift key to select and move multiple points at once.         |
|  | Using the Reshape tool, click on a part of the shape that doesn't have a point to <b>add a new point</b> , or click on a point and press "Delete" to <b>remove a point</b> .             |

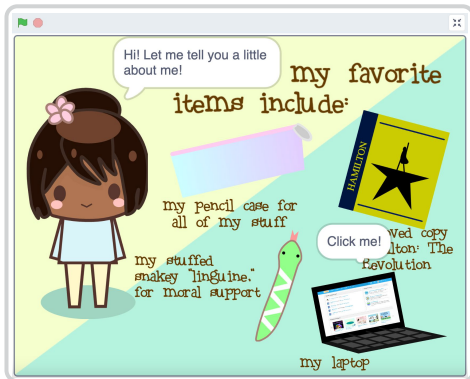
# Using the Paint Editor

scratch.mit.edu

|  |   |
|--|---|
| <br>Curved   | Using the Reshape tool, click on a point and choose whether it is <b>curved or pointed</b> . Click on a point and drag rotate the handles attached to the point to <b>alter the shape of a curve</b> .  |
| <br>Copy   | Using the Select tool, select a shape and click the buttons on the top menu to <b>copy and paste</b> a duplicate.   |
| <br>Flip Vertical  | Using the Select tool, select a shape and click the flip horizontal or flip vertical buttons on the top menu to <b>flip</b> a shape.  |
| <br>Forward  | Using the Select tool, select a shape and click the Forward, Backward, Front, or Back buttons to change the <b>layer order</b> .  |
| <br> | Select the fill from the dropdown and use the fill (paint bucket) tool to adjust a shape's color. Or using the Select tool, select a shape and then use the Fill and Outline dropdowns to adjust the <b>color, saturation, brightness, and outline</b> . You can also choose to use a <b>gradient</b> . Use the eyedropper to select a color from another shape. Use the red strikethrough to fill with no color. |
| <br>Group  | Using the select tool and holding down the "Shift" key, select multiple shapes to <b>group</b> them (helpful to move several shapes together).  |
|    | Use the brush tool for <b>freehand line drawing</b> . The example to the right shows hand drawn whiskers.   |
|    | Use the <b>eraser</b> tool to remove parts of the drawing from <i>all</i> shapes and layers it comes into contact with when clicking and dragging. You can use the reshape tool to then adjust the new points created.  |
|    | The <b>text</b> tool comes with a dropdown list of font options to choose from, and Fill and Outline dropdowns to change text color and outline.  |



# Code Your Sprite



*Communicate to a viewer why you chose to create this asset/this sprite.*

*Options:*

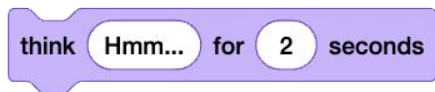
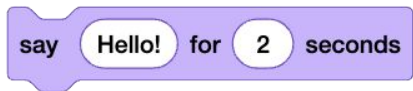
- Write text on the screen using the text tool in the paint editor
- Record your voice and use a block to play the sound
- Have the sprite talk

*Project example is a remix of an original project by cantaloupe.*

# Code Your Sprite

scratch.mit.edu

## BLOCKS TO TRY



Animate your original sprite. Options include:

- using blocks to hear or see what you want to say on the stage
- adding text or custom backgrounds
- using motion blocks to give the sprite movement

# Code Your Sprite



*Communicate to a viewer why you chose to create this asset/this sprite.*

*Options:*

- Write text on the screen using the text tool in the paint editor
- Record your voice and use a block to play the sound
- Have the sprite talk

*Project example is a remix of an original project by cantaloupe.*

# Code Your Sprite

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## BLOCKS TO TRY

when this sprite clicked

when  key pressed

when I receive

broadcast

play sound  until done

next costume

next backdrop

say  for  seconds

speak

turn  degrees

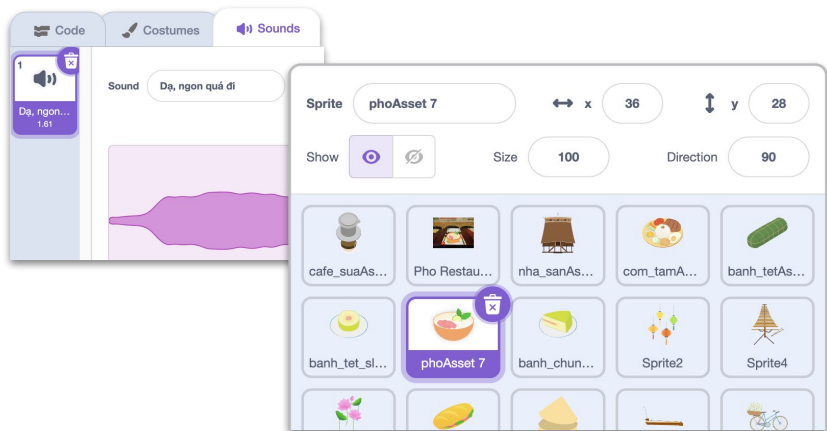
glide  secs to x:  y:

change  effect by

set size to  %

Animate your original sprite, along with one or more other sprites, in a digital collage. Use motion blocks and event blocks (like “broadcast” or “when clicked”) to trigger action or make the project interactive.

# Create an Asset Pack

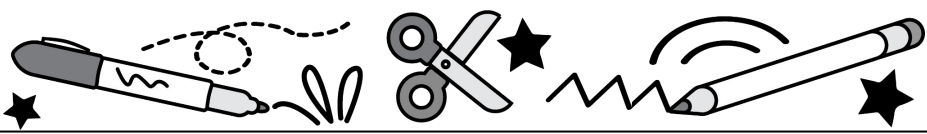


Assets, in Scratch, can include:

- sprites
- costumes
- sounds
- backdrops
- code snippets

An **asset pack** is a collection of assets related to a specific theme, project type, cultural event, cultural symbols or customs, geographical region, or idea.

*Asset Pack example made by STEAM for Vietnam.*

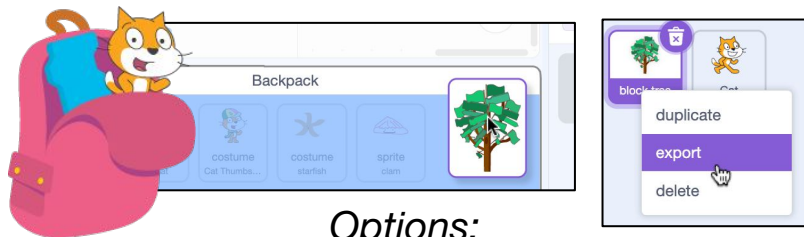


# Create an Asset Pack

- **Name your sprite** and costumes with something descriptive.
- Consider creating **multiple costumes** for your sprite to show animation or variation.
- Consider adding at least one **related sound** for each sprite you create. Upload a sound or create an original sound by recording yourself, or noises in your environment.
- When creating an asset pack to share, we recommend creating your **backdrop as a sprite** instead, for easy backpacking or exporting.
- If you did not make a sound or an image yourself or you remixed someone else's creation, it is important to **provide credit** in the Notes and Credits section.

# Collaborate:

## Export or Backpack



*Options:*

- **Export a sprite, costume, or sound:**  
Right-click the asset. Choose “export.” To add the asset to a project, choose the **upload** option in the sprite, costume, or sound menu to upload from your files.
- **Backpack a sprite, costume, or sound:**  
You must be logged in to access the backpack at the bottom of the editor screen. Click it to open the backpack and drag-and-drop a sprite, costume, or sound inside. To add the asset to a different project, open the backpack and drag-and-drop the asset into the sprite, costume, or sound area.



# Collaborate: Remix

 Remix

Scratch embraces remix culture. Remixing is when you build upon someone else's projects, code, ideas, images, or anything else shared on Scratch to make your own unique creation.

When remixing an asset, **make changes** like:

- adding code to animate the asset
- placing it in a new scene with other assets or add related sounds
- using the tools in the paint or sound editor to make adjustments to it
- adding additional elements you felt were missing

Just make sure that you **give credit** to whomever created the original asset in the Notes and Credits section.