SCRATCH LESSON PLAN

Bring Yourself Into Scratch: Sharing Identity, Voice & Creativity

A new school year or learning cycle is an opportunity to get to know classmates and build community based on shared values. At Scratch, we have a strong focus on building community, kindness, and respect through our Community Guidelines, as well as connecting learners with each other and with educators in meaningful ways.

This lesson presents multiple pathways for students to share their identity, voice, and creativity through development of a unique asset (a "sprite" in Scratch) that is meaningful to them. Using a combination of written and verbal reflection, digital design, and classroom discourse, learners will practice communication, coding, presentation, and feedback skills that provide an important base for establishing a positive learning community.

Audience: Classroom Teachers, Instructional Technology Specialists, Library Media Specialists, Informal Learning Environments

Time: Approx 3 hours total

- Part 1: About Me Brainstorm - 50 minutes
- Part 2: Communicating with Code - 50 minutes
- Part 3: Reflect and Share - 30 to 50 minutes

Objectives (Learners Will):

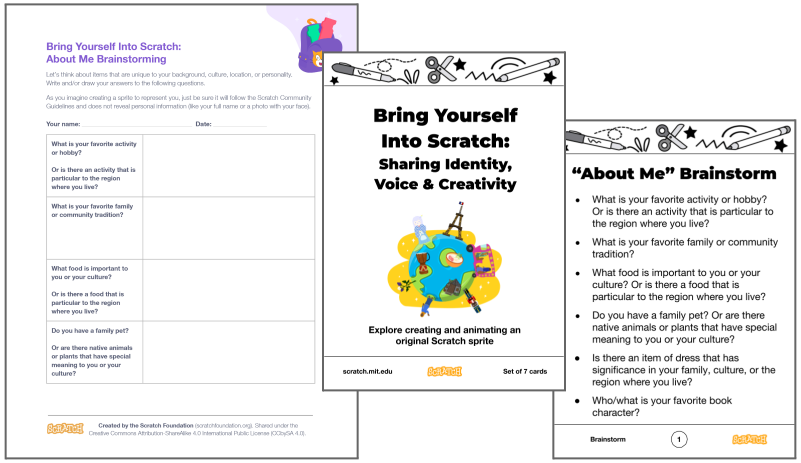
- Identify unique attributes of their personal and cultural identities
- Create an original character, called a "sprite" in Scratch, to represent aspects of their identity
- Design an animated narrative or interactive collage by adding code to their original sprite
- Reflect on their sprite design and creative process with peers
- Communicate and share their interactive projects with their learning community

For aligned standards, please see the last page of this lesson.

Part 1: About Me Brainstorm

Brainstorm (10 minutes)

Ask learners to think about what they want to share about their identity: a favorite activity, important food, family pet, key item of dress, beloved book character…anything that speaks to their unique background, culture, or personality. Use the following brainstorming sheet to spark ideas. Learners are encouraged to write and draw their answers.



Resources:

- About Me Brainstorming (Worksheet)
- Bring Yourself In Lesson Coding Cards (Student-Facing Cards) - printable cards to follow along with the lesson

Design Your Sprite (35 minutes)

Now, it is time to pick one idea and design a Scratch sprite to represent it. A "sprite" in Scratch is an object or character that can be programmed to perform actions.

Learners will use the Scratch paint editor tools to create at least one original sprite based on their brainstorming that is relevant to their culture or community. Learners may create more than one sprite if time allows.

Step 1: To start, have learners head to scratch.mit.edu, login to their account (so their work is automatically saved), and click "Create." (Alternatively, learners can use the offline editor and save their work to their computer.)

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

Step 2: Hover over the sprite menu in the lower-right corner of the sprite area and choose “Paint,” which brings you to a blank costume window under the “Costumes” tab.

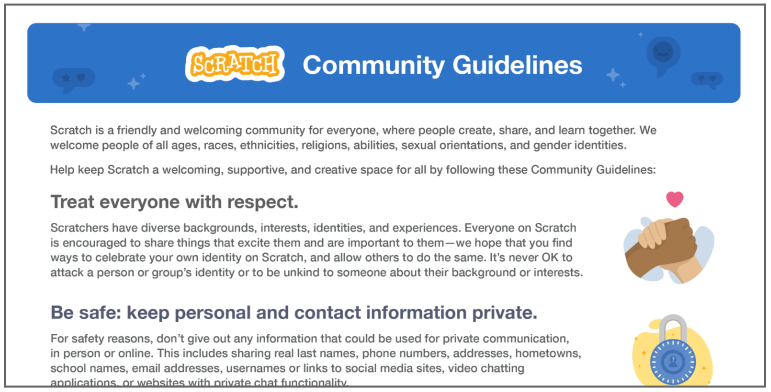
There are two modes for using the paint editor:

- Vector-mode allows you to create and edit shapes (Scratch default).
- Bitmap-mode allows you to edit photos and paint with pixels.

If you are creating your own sprites, it is important you stay in the default vector-mode to create your artwork. Vector-mode allows users to adjust colors, change the shape of an object in the costume, and add and remove elements. This flexibility is important if you or another Scratcher wants to remix a sprite later.

“Paint” in the sprite menu. Vector-mode. Bitmap-mode.

Step 3: Let’s create! The video tutorial and written guide below can guide learners through more details about creating a sprite in the paint editor.



Important Note: Just be sure that your asset follows the Community Guidelines (“Be safe: keep personal and contact information private.”) and does not reveal personal information (like where you live or go to school, or a photo of your face).

Resources:

- Create a Sprite with the Scratch Paint Editor (Video Tutorial)
- Create a Sprite with the Paint Editor (Written Guide)
- Bring Yourself In Lesson Coding Cards (Student-Facing Cards) - printable cards to follow along with the lesson
- Scratch Community Guidelines Poster 8.5x11 or 18x24 (Printable Poster)

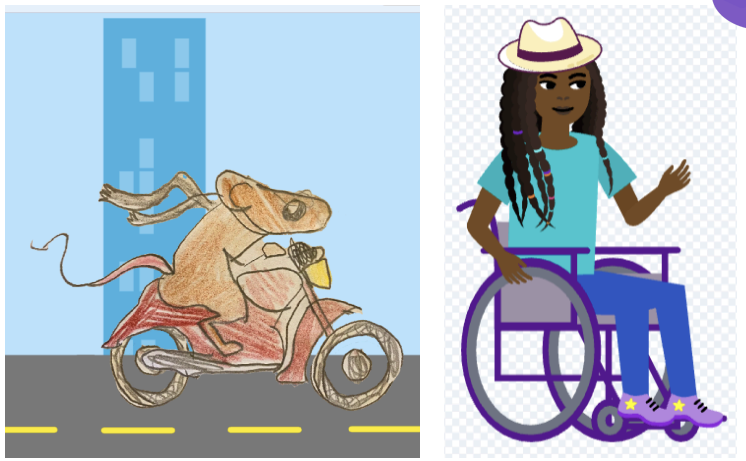
Alternative Options

Hand-draw: Learners can create a hand drawn image to be scanned/photographed and uploaded as a sprite.

- Bring Your Drawings Into Scratch (Video Tutorial)
- Bring Your Drawings Into Scratch (Written Guide)

Remix: Learners can 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.

- Remix and Re-imagine Scratch Sprites (Video Tutorial)
- Remix and Re-imagine Sprites (Written Guide)



Example of a hand-drawn image, photographed and uploaded as a sprite. A second example of multiple sprites from the sprite library combined and edited to create a new sprite.

Reflect (5 minutes)

Learners are prompted to turn-and-talk with a fellow learner about the asset they created. Prompts you can use are:

- The reason I created this sprite was… -or- This has special meaning to me because…
- If I had two more days I would add…

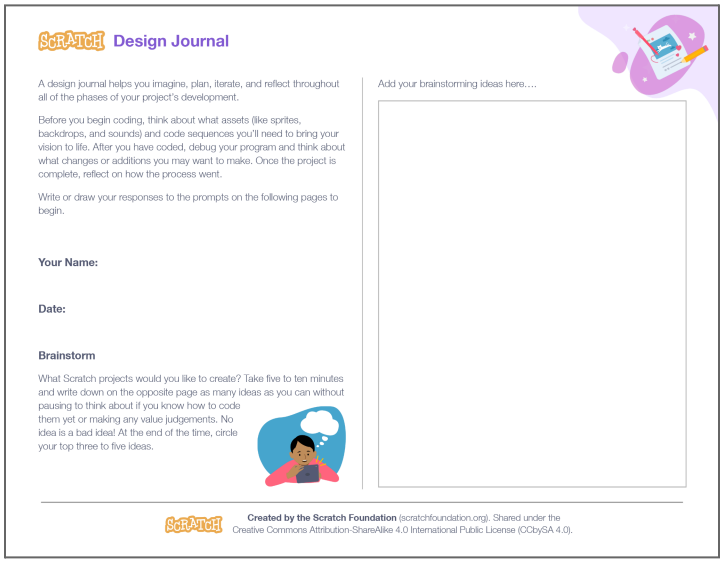
Part 2: Communicating with Code

Getting Ready to Code

Now, it is time for learners to add code to their original sprite. By doing this, learners will:

- Communicate to a viewer why they chose to create the asset they made in Part 1.
- Expand on pathways for creative expression by bringing their sprite to life with sound or movement.

Optional (15 minutes): Scratch Design Journal (Worksheet) - This can be used to help students imagine, plan, iterate, and reflect throughout all of the phases of their project's development. If you opt to set aside time for planning, the overall lesson time will be extended, or you may opt to plan in one session and code in a separate session.



SCRATCH Design Journal

A design journal helps you imagine, plan, iterate, and reflect throughout all of the phases of your project's development.

Before you begin coding, think about what assets (like sprites, backdrops, and sounds) and code sequences you'll need to bring your vision to life. After you have coded, debug your program and think about what changes or additions you may want to make. Once the project is complete, reflect on how the process went.

Write or draw your responses to the prompts on the following pages to begin.

Your Name:

Date:

Brainstorm

What Scratch projects would you like to create? Take five to ten minutes and write down on the opposite page as many ideas as you can without pausing to think about if you know how to code them yet or making any value judgements. No idea is a bad idea! At the end of the time, circle your top three to five ideas.

Add your brainstorming ideas here....

Created by the Scratch Foundation (scratchfoundation.org). Shared under the Creative Commons Attribution-ShareAlike 4.0 International Public License (CCbySA 4.0).

Demonstration (10 minutes)

Share the resources below or facilitate a coding tutorial to demonstrate how learners might code their original asset.

Resources:

- Bring Yourself In Lesson Coding Cards (Student-Facing Cards) - printable cards students can use to follow along
- Getting Started Guide (Written Guide) - If you are new to Scratch, this resource has helpful information.
- Scratch Ideas Page (Webpage) - This is a great place to find short tutorials and Scratch Coding Cards.

Project example is a remix of an original project by cantalloupe.

Code the Sprite (40 minutes)

Step 1: To start, have learners head to https://scratch.mit.edu and login to their account to access their saved original sprite project (or upload their project file to the offline editor).

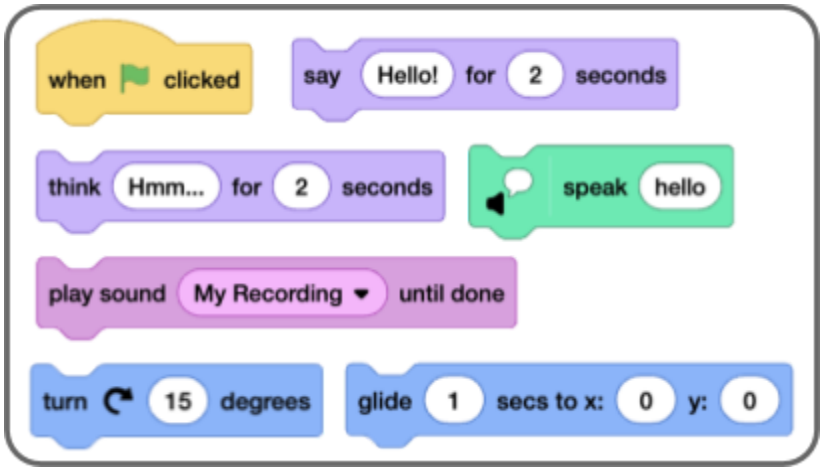
Step 2: Share the block examples provided below. Highlighting blocks to try helps those learners who need extra scaffolding or ideas to get started.

Grade 3-5:

Learners will animate their original sprite. Options include using blocks to hear or see a narrative on the screen, adding text or custom backgrounds, as well as using motion blocks to give the sprite movement. Blocks to try include those to the left. →

Additional Resources:

- Sounds in Scratch: Add, Record, and Use Text to Speech Blocks (Video Tutorial and Written Guide)

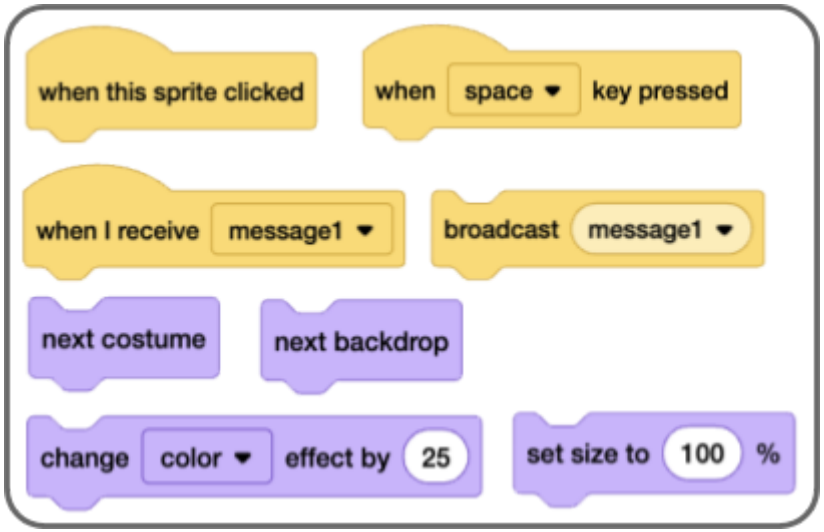


Grade 5+:

Learners will animate their 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. Blocks to try include those for grade 3-5 above, plus those to the left. →

Additional Resources:

- How to Make an "About Me" Project in Scratch (Video Tutorial)



Part 3: Reflect and Share

Reflect (15 minutes)

Learners can reflect on their project creation and process as they complete the Bring Yourself Into Scratch Sharing Sheet. Next, their peers are encouraged to leave feedback or comments on the sheet for the creator as they view the projects in a studio or participate in the gallery walk.

Resources:

- Bring Yourself Into Scratch: Sharing Sheet (Worksheet)

Share Option #1: Create a Class Studio to Gather Shared Projects

Studios are a space on Scratch where users can come together to make, share, and collect projects related to a particular theme, idea, or prompt. Set up a class studio* for your learners and add their original asset projects. Learners are encouraged to take time to look at projects and read/listen/interact with them to learn more about their peers.

Resources:

- Teacher Account Guide (Written Guide) - This resource contains information on setting up teacher accounts and student accounts, managing classes, and class studios.
- Scratch Studios Guide (Written Guide) - General information on setting up and managing.

**Note: Learners need a Scratch account and access to the online editor to participate in this option.*

Share Option #2: Gallery Walk

Have each participant's project open on their computer or other device. Participants can walk around a room, or take turns sharing their screen in a virtual space, to experience each other's creations. Or display one project at a time on a large screen. Learners are encouraged to take time to look at projects and read/listen/interact with them to learn more about their peers.

More Things to Try

- Create Your Own Asset Pack (Written Guide) - 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. Created more than one asset? Package them together to share.
- Remixing and Using Assets (Video) - If you have found an asset or asset pack from other Scratchers you'd like to use in your project, find out ways to gather assets and provide credit.
- Debugging Reflection (Worksheet) - Dive into the practice of debugging with learners and use this reflection sheet to help them explore.
- Debugging Strategies Posters (Printable Posters)
- Getting Started in the Online Community (Written Guide) - A guide all about the Scratch Online Community.

Standards Aligned

CSTA Standards	ISTE Standards	CASEL Framework	RITEC Indicators
Link to full standards	Link to full standards	Link to full standards	Link to full standards
Grade 3-5 • 1B-AP-08 - Compare & refine algorithms • 1B-AP-10 - Create programs • 1B-AP-11 - Decompose problems • 1B-AP-15 - Test and debug • 1B-IC-20 - Seek diverse perspectives *Grades 6-8* • 2-AP-11 - Create clearly named variables • 2-AP-12 - Design & iteratively develop programs • 2-AP-13 - Decompose problems into parts • 2-AP-16 - Incorporate existing code, media, & libraries	• 1.2.b Online Interactions • 1.5.c Decompose Problems • 1.5.d Algorithmic Thinking • 1.6.b Creative Communicator • 1.6.c Communicate Complex Ideas • 1.7.a Global Connections	• Self-awareness • Social Awareness • Relationship Skills	• Competence • Relationships • Creativity • Identities • Diversity, equity and inclusion

This lesson also fulfills all three of the ISB Indicators of Playful Learning (Choice, Delight, Wonder), developed by the Pedagogy of Play (PoP) research project at Harvard University.

Tip: If you'd like to translate this guide, **click here to make a copy** of this Google doc.