



EDUCATOR GUIDE

Animate Your Name

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will gain experience with coding as they animate the letters in their name.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they animate their names, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.

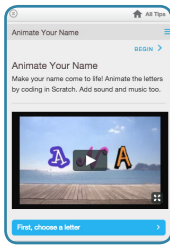


Get Ready for the Workshop

Use this checklist to prepare for the workshop.

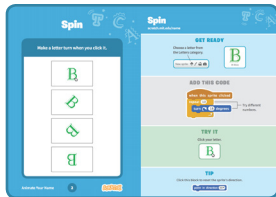
☐ Preview the Tutorial

The Animate Your Name tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:
scratch.mit.edu/name



☐ Print the Activity Cards

Print a few sets of Animate Your Name cards to have available for participants during the workshop.
scratch.mit.edu/name/cards



☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at scratch.mit.edu, or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to: scratch.mit.edu/educators

☐ Set up computers or laptops

Arrange computers so that participants can work individually or in pairs.

☐ Set up a computer with projector or large monitor

You can use a projector to show examples and demonstrate how to get started.



Imagine

Begin by gathering the participants to introduce the theme and spark ideas for projects.

Warm-up Activity: Letter Shapes

Gather the group in a circle. Ask each participant to say their name, and then have everyone in the group act out the shape of the first letter.

Provide Ideas and Inspiration

Show the introductory video for the Animate Your Name tutorial. The video shows a variety of projects for ideas and inspiration.



View at scratch.mit.edu/name or vimeo.com/llk/name

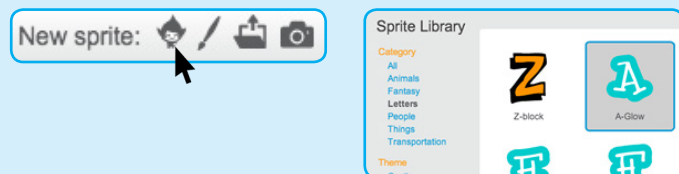


Demonstrate the First Steps

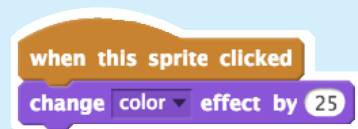


Demonstrate the first few steps of the tutorial so participants can see how to get started.

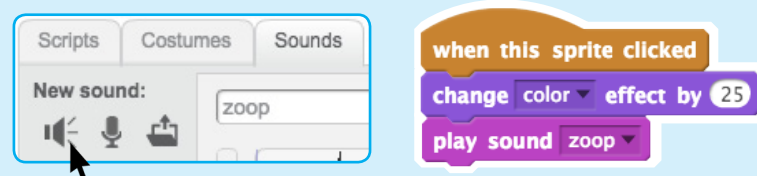
In Scratch, click Create.
Choose a letter from the Sprite Library:



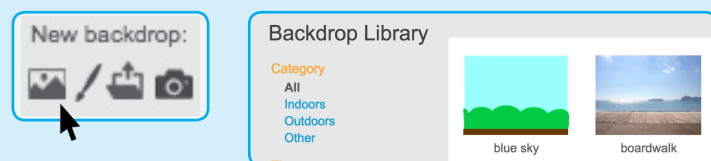
Make it do something:



Add a sound:



Choose a new backdrop:



Create



Support participants as they create interactive name projects.

Start with Prompts

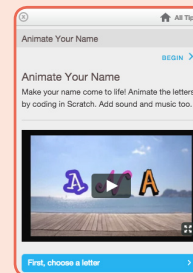
Ask participants questions to get started

Do you want to animate your name, initials, or username?

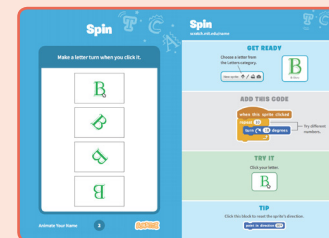
Which letter do you want to start with?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/name



Others may want to explore using the printed activity cards.

Suggest Ideas for Starting

- Choose a letter
- Add a sound
- Make it change color
- Add a backdrop



CREATE

More Things to Try

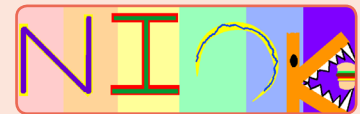
- Draw a letter
- Make it spin
- Make it glide
- Change size

Add more letters and motion!



Support collaboration

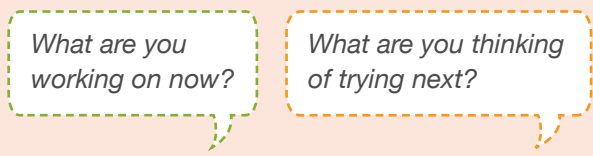
- When someone gets stuck, connect them to another participant who can help.
- See a cool idea? Ask the creator to share with others.



Encourage experimenting

Help participants feel comfortable trying different combinations of blocks and seeing what happens.

To understand their thought process, you can ask questions:

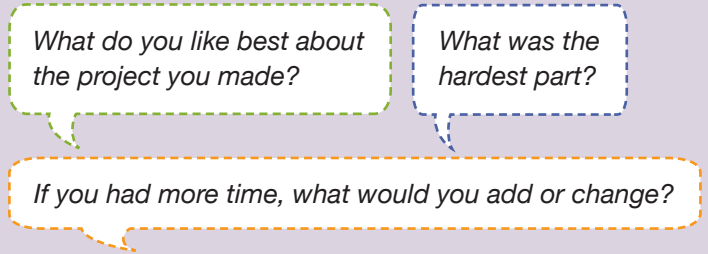


SHARE

Share

Have participants share their project with their neighbors.

Ask questions they can discuss:



What's Next?

Participants can use the ideas and concepts from this workshop to create a wide variety of projects. Here are a few variations on the animated name project you could suggest.



Other Names

Animate the name of a favorite character from a book or movie. Or, animate the letters of the name of your school or town.



Start with an Image

Have participants bring in a picture (or find a picture on the web) and animate a word that goes with the picture.



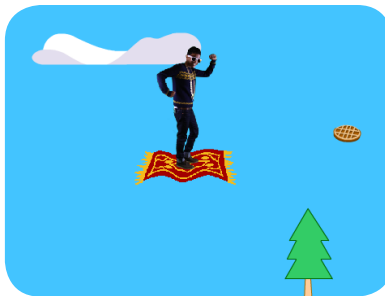
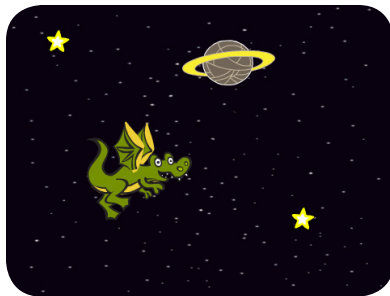
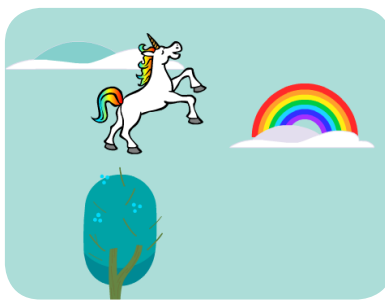
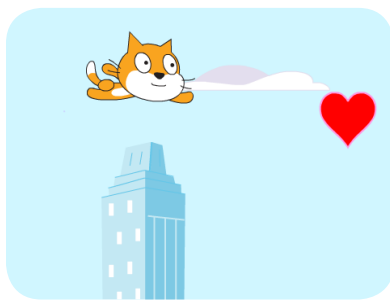
Acrostics

Make an interactive acrostic (a poem in which the first letters of each line spell out a word reading down).

EDUCATOR GUIDE

Make It Fly

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will choose a character and program it to fly.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they animate their names, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.

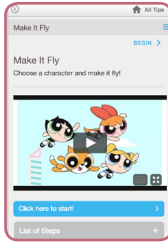
Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Make It Fly* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:

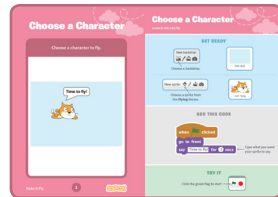
scratch.mit.edu/fly



☐ Print the Activity Cards

Print a few sets of *Make It Fly* cards to have available for participants during the workshop.

scratch.mit.edu/fly/cards



☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at scratch.mit.edu, or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to: scratch.mit.edu/educators

☐ Set up computers or laptops

Arrange computers so that participants can work individually or in pairs.

☐ Set up a computer with projector or large monitor

You can use a projector to show examples and demonstrate how to get started.

Imagine



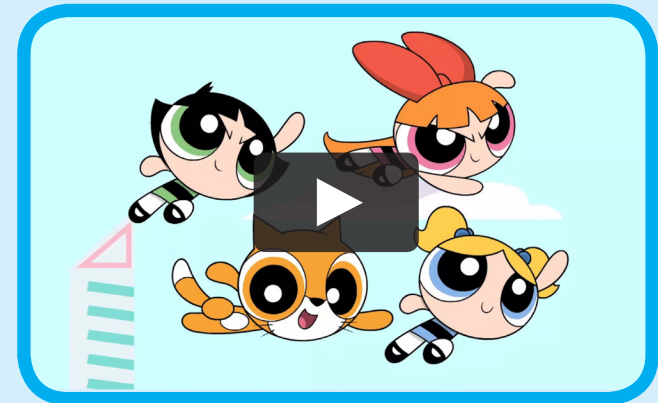
Begin by gathering the participants to introduce the theme and spark ideas for projects.

Warm-up Activity: If I Could Fly...

Gather the group in a circle and ask, “If you could fly, where would you want to go?” Suggest that they close their eyes and imagine flying through their favorite place. Ask, “Where are you? What kinds of things do you see below you?” If there’s time, have each person say where they imagined flying or something they saw on their flight.

Provide Ideas and Inspiration

Show the introductory video for the *Make It Fly* tutorial. The video shows a variety of projects for ideas and inspiration.



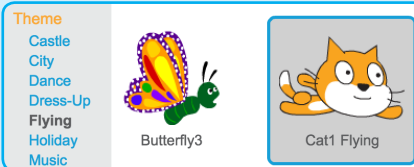
View at scratch.mit.edu/fly or vimeo.com/llk/fly

Demonstrate the First Steps

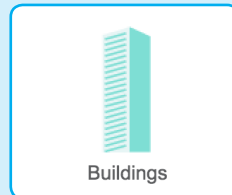


Demonstrate the first few steps of the tutorial so participants can see how to get started.

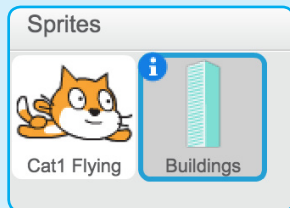
In Scratch, click Create.
Choose a flying sprite from the library:



Choose a new sprite for your character to fly past:



Make the building move across the stage to make your character look like it's flying:



Create



Support participants as they make a flying animation.

Start with Prompts

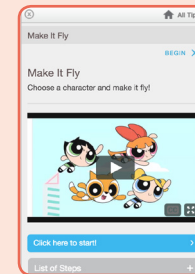
Ask participants questions to get started

What character would you like to make fly?

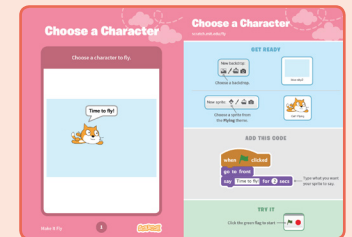
Where will your character go flying?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/fly



Others may want to explore using the printed activity cards.

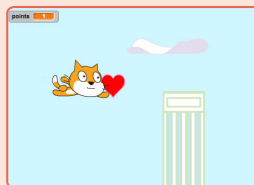
Suggest Ideas for Starting

- Choose a character
- Make the character say something
- Choose buildings or other scenery
- Make the scenery move



More Things to Try

- Switch costumes to change the scenery.
- Make your character move when you press a key.
- Add clouds and other floating objects.
- Collect points when touching an object.



Encourage Debugging

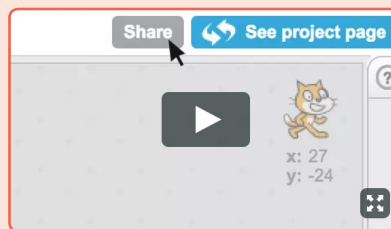
Here are some strategies to suggest to help participants fix any bugs or difficulties they encounter:

- When stuck, talk out what you're working on with someone.
- Try out small bits of code at a time to figure out what's happening at each step.
- Look closely at the blocks on the tutorial or activity cards to see if they are the same or different from the blocks you're using.
- Remember that bugs always arise when creating a computer program. Debugging is a helpful skill to know not just in coding, but throughout life.

Prepare to Share

To add instructions and credits to a project, click the button: "See project page".

This video shows how to share a project on the Scratch website:
vimeo.com/llk/share



Share

Share projects with others in the room. Organize a flying character showcase. Ask half the room show their projects, while the others view them. Then switch.

Suggest that they ask each other questions, such as:

What do you like best about the project you made?

What might you like to change or make next?

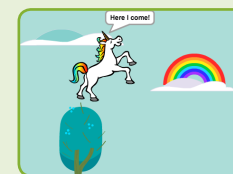
What's Next?

Participants can use the ideas and concepts from this workshop to create other projects. Here are a couple of variations on the flying character project you could suggest.



Flying Game

Make a game where you avoid some objects and try to catch others. Add or subtract points based on what your character touches.



Flying Stories

Tell a story about your flying characters. You can record your voice and play sound clips. Or, use say blocks to make voice bubbles.

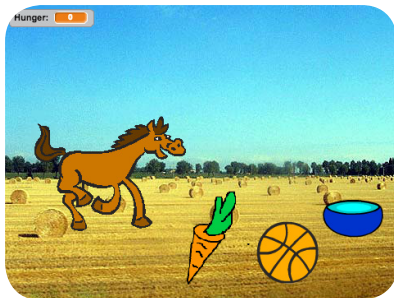
Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.



EDUCATOR GUIDE

Virtual Pet

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will create an interactive pet that can eat, drink, and play!



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they create interactive pets, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.



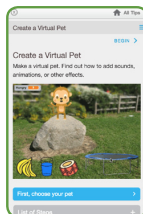
Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Virtual Pet* tutorial shows participants how to create their own projects. Preview the tutorial before the workshop and try the first few steps:

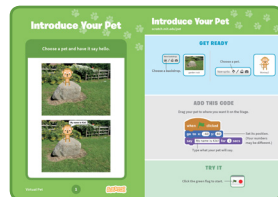
scratch.mit.edu/pet



☐ Print the Activity Cards

Print a few sets of *Virtual Pet* cards to have available for participants during the workshop.

scratch.mit.edu/pet/cards



☐ Print Scratch blocks for warm-up activity

Print and cut a script for each participant: bit.ly/ScratchBroadcastGame

☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at scratch.mit.edu, or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to:

scratch.mit.edu/educators

☐ Set up computers or laptops

Arrange computers for participants to work individually or in pairs.

☐ Set up a computer with projector or large monitor.



Imagine

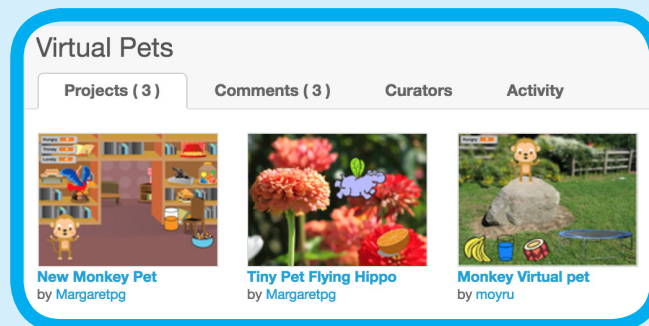
Begin by gathering the participants to introduce the theme and spark ideas for projects.

Warm-up Activity: Broadcast Game

To see how messages work in Scratch, play the *Broadcast Game*. Give each participant a piece of paper with one of the “when I receive” scripts on it (from bit.ly/ScratchBroadcastGame). Choose one person as the leader. The leader reads aloud one broadcast message at a time (e.g., “Exercise” or “Time to Dance”). Participants wait until they receive the message printed on their card, then act out the script.

Provide Ideas and Inspiration

To spark ideas, show a couple of examples of *Virtual Pet* projects from the *Virtual Pets Studio* on the Scratch website.



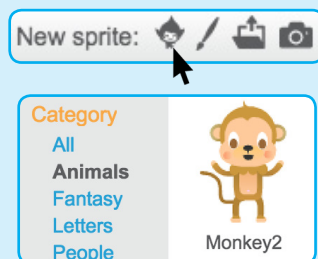
View the studio at scratch.mit.edu/studios/1275856/



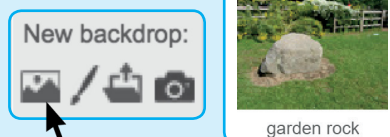
Demonstrate the First Steps

Demonstrate the first few steps of the tutorial so participants can see how to get started.

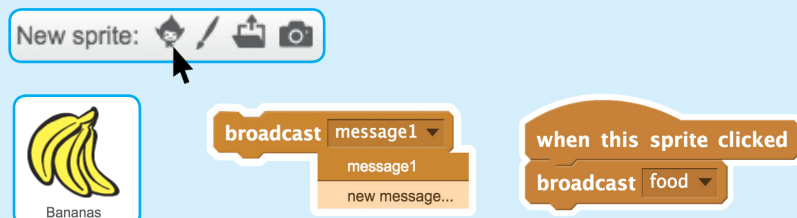
In Scratch, choose a new sprite as your pet.



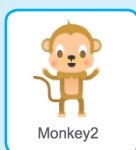
Choose a backdrop.



Add a food sprite. Broadcast a new message and name it food.



Make your pet glide to the food when it receives the message.



Create

Support participants as they make interactive pets, on their own or in pairs.

Start with Prompts

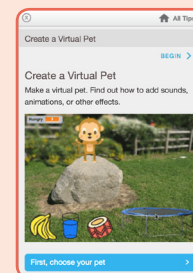
Ask participants questions to get started

What's your pet's name?
What does it like to eat?

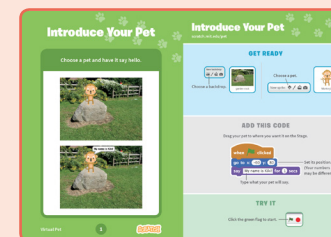
Where is your pet
going to live?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/pet



Others may want to use the printed activity cards:
scratch.mit.edu/pet/cards

Suggest Ideas for Starting

- Choose a pet and have it say hello
- Choose a backdrop
- Add a food sprite.
- Make your pet glide to the food when you click on the food.



More Things to Try

- Animate your pet
- Add other activities for your pet to do, such as drink water, jump on trampoline, or play drums
- Have your pet say what it likes
- Make your pet hungry over time



Encourage Personalization and Customization

Encourage participants to enhance and customize their projects to reflect their own style:

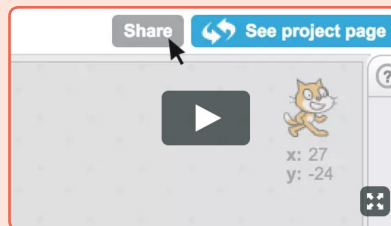
What kind of pet would you like? How would you take care of it?

Is your pet shy? Noisy? How does it like to play?

Prepare to Share

To add instructions and credits to a project, click the button: **"See project page"**.

This video shows how to share a project on the Scratch website: vimeo.com/llk/share



Share

Have a virtual pet show. Ask participants to visit and interact with two or three virtual pet projects.

Ask questions to discuss:

What ideas did you get for your own pet?

What would you like to try next?

What's Next?

Participants can use the ideas and concepts from this workshop to create a wide variety of projects. Here are a couple of variations on the virtual pet project you could suggest.



Adopt a Pet

Find a pet project in the **Virtual Pet Studio**: scratch.mit.edu/studios/1275856/
Click **See Inside** and then **Remix**. Change the pet's looks, what it eats, or how it plays!



Creature Creator

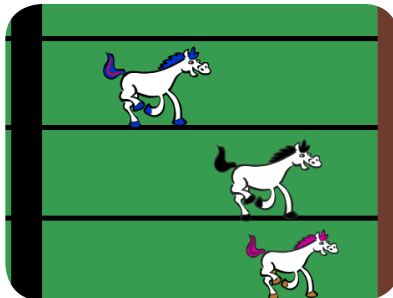
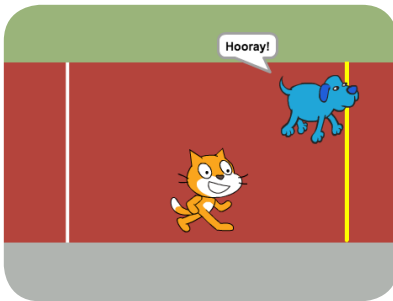
Create your own dinosaur, extraterrestrial creature, or fantasy creature. Add sounds and animations.

Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.

EDUCATOR GUIDE

Race to the Finish

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will make a game where characters race each other.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they make racing games, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.

Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Race to the Finish* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:

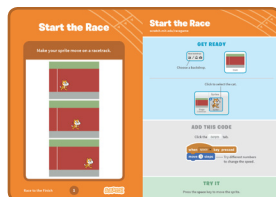
scratch.mit.edu/racegame



☐ Print the Activity Cards

Print a few sets of *Race to the Finish* cards to have available for participants during the workshop.

scratch.mit.edu/racegame/cards



☐ For the warm-up activity, print out large Scratch blocks

For the 'Scratch Cat Says' warm-up activity, print out Scratch blocks with actions participants can do (such as *move 2 steps*, *turn 90 degrees*, and *say Hello! for 2 secs*). You can download a folder with printable blocks here: bit.ly/scratchblocks-to-print

☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to: scratch.mit.edu/educators

☐ Set up computers or laptops

☐ Set up a computer with projector or large monitor

Imagine

Begin by gathering the participants to introduce the theme and spark ideas for projects.

Warm-up Activity: Scratch Cat Says

The group game 'Scratch Cat Says' is a fun way to get to know Scratch blocks. Use large-size, printed Scratch blocks with actions (such as *move*, *turn*, and *play sound*). To play the game, the leader holds up a block. If the leader calls out 'Scratch cat says' and then the block name, then everyone should do the action. If the leader just says the block name without saying 'Scratch cat says', then anyone who does the action is out of the game. The last person remaining wins the game!

Provide Ideas and Inspiration

To spark ideas, show a couple of examples of racing games from the *Race to the Finish Studio* on the Scratch website.

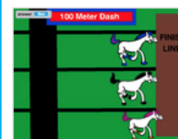
Race to the Finish Studio

Projects (3)

Comments (0)

Curators

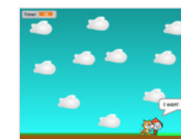
Activity



100 Meter Dash
by bsilvaR121



Race Game
by alexander2188



Race Game
by RedPawnerProductions

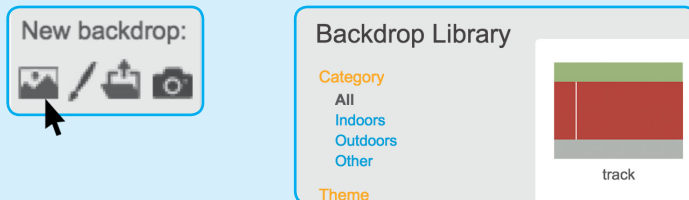
View the studio at scratch.mit.edu/studios/3547262/

Demonstrate the First Steps

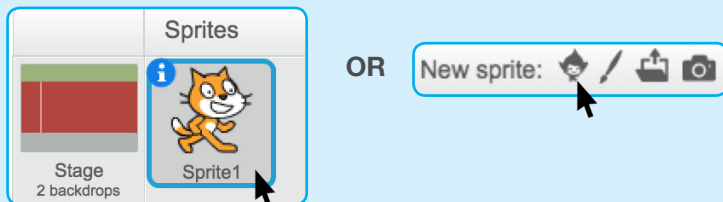


Demonstrate the first few steps of the tutorial so participants can see how to get started.

Go to Scratch to create a new project.
Choose a backdrop.



Select the cat sprite, or choose a new sprite to race.



Make your sprite move when you press a key.



Create



Support participants as they create racing games. Suggest working in pairs.

Start with Prompts

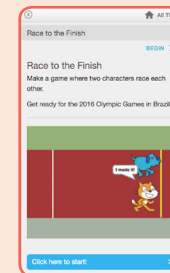
Ask participants questions to get started

What sprites would you like to race in your game?

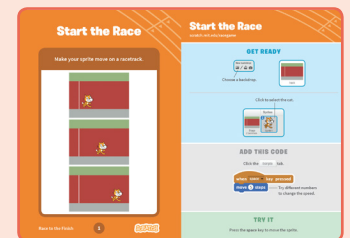
Do you want to choose animals, people, or something else?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/racegame



Others may want to explore using the printed activity cards.

Suggest Ideas for Starting

- Choose a backdrop
- Choose or draw a sprite to race and make it move with a key press
- To reset your sprite, make it go to the starting point
- Add a finish line



More Things to Try

- Choose a new sprite to add to the race
- Program it to move using a different key press
- Add a sound when the winner crosses the finish line

Creating Together

Encourage 'pair programming', where participants work together to create a program. Notice how they are working together. At regular intervals, call out for the pairs to switch who is using the mouse and keyboard to make sure that each person is contributing to the process.

Talk It Through

If participants gets stuck, talk with them to figure out what happened and what they hoped to have happen. Then brainstorm together some things to try.

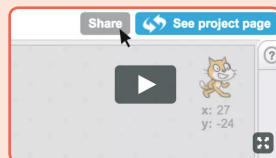
Can you show me what your project is doing now?

Is it working how you expected?

What will you try next?

Prepare to Share

To add instructions and credits to a project online, click the button: '**See project page**'. This video shows how to share a project on the Scratch website: vimeo.com/llk/share



Share

Try out each other's racing games. Play one of the games together, then switch and try the other game.

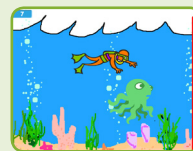
Ask questions they can discuss:

What did you notice about the games you tried?

What ideas might you add to your game?

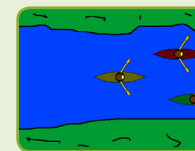
What's Next?

The *Race to the Finish* projects provide an introduction to creating games in Scratch. Here are a few ways that participants can build on the concepts they learned from this project.



Underwater Race

Make an underwater race. Choose (or draw) an ocean backdrop, then choose and program sea creatures to race.



Olympic Sports

Suggest making a project that features an Olympic sport. It could be a variation on racing, such as swimming, rowing or skiing. (For examples, see the Rio Olympics Studio: scratch.mit.edu/studios/1509358/)

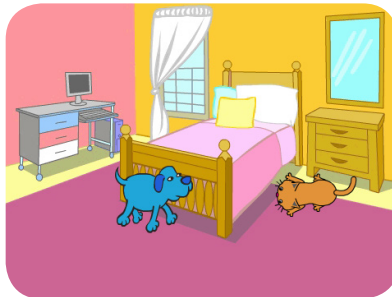
Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.



EDUCATOR GUIDE

Hide and Seek

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will make a hide-and-seek game with characters that appear and disappear.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they make hide-and-seek games, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.

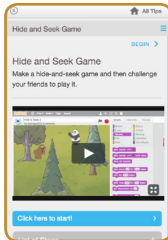
Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Hide and Seek* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:

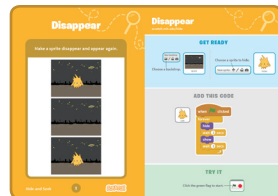
scratch.mit.edu/hide



☐ Print the Activity Cards

Print a few sets of *Hide and Seek* cards to have available for participants during the workshop.

scratch.mit.edu/hide/cards



☐ Gather materials for the warm-up activity:

For each pair, gather 3 paper cups and a small object to hide.

☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at scratch.mit.edu, or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to: scratch.mit.edu/educators

☐ Set up computers or laptops

Arrange computers so that participants can work individually or in pairs.

☐ Set up a computer with projector or large monitor

Imagine



Begin by gathering the participants to introduce the theme and spark ideas for projects.

Warm-up Activity: Guessing Game

Arrange for participants to play a guessing game. Give each pair of participants three paper cups and have them choose a small object to hide. In each pair, one person hides the object under one of the cups and moves them around. The first person guesses which cup has the object underneath. Then switch roles.

Provide Ideas and Inspiration

Show the introductory video for the *Hide and Seek* tutorial. The video shows a variety of projects for ideas and inspiration.



View at scratch.mit.edu/hide or vimeo.com/llk/hide

Demonstrate the First Steps



Demonstrate the first few steps of the tutorial so participants can see how to get started.

Go to Scratch to create a new project. Choose a backdrop.

New backdrop:



Choose a sprite to hide.

New sprite:



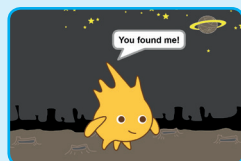
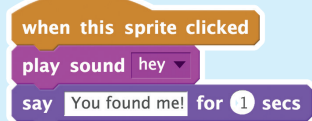
Make your sprite hide and show.



Make it keep going.



Make your sprite respond when clicked.



Create



Support participants as they create hide-and-seek games, on their own or in pairs.

Start with Prompts

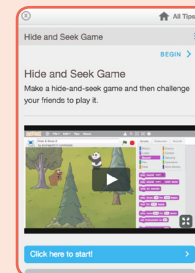
Ask participants questions to get started

Which character do you want in your game?

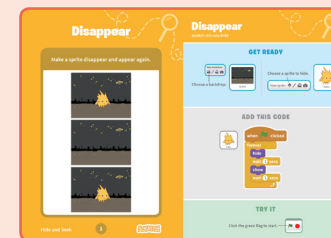
What do you want to happen when that character is clicked?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/hide



Others may want to explore using the printed activity cards
scratch.mit.edu/hide/cards

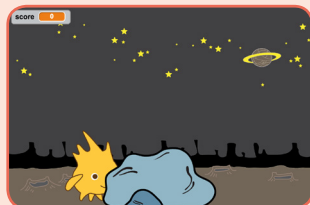
Suggest Ideas for Starting

- Choose a bear or other sprite
- Make it hide and show
- Make it do something when clicked
- Play with the timing



More Things to Try

- Move around
- Score points
- Make hiding places
- Add more characters



Many Paths, Many Styles

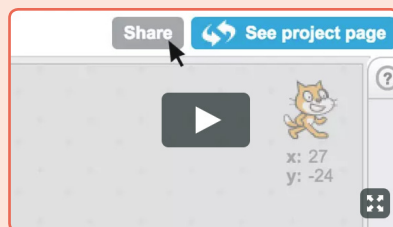
Different participants will approach projects in different ways. Celebrate this diversity, and allow them to go at their own pace and follow their own paths.



Prepare to Share

To add instructions and credits to a project, click the button: "**See project page**".

This video shows how to share a project on the Scratch website: vimeo.com/llk/share



Share

Have participants gather in small groups and take turns playing each other's games.

Ask them to think about these questions:

What did you like best about the games you tried?

Did you get some ideas for your own game? What would you like to try next?

What's Next?

Here are a couple variations on the hide-and-seek project that you can suggest.



Neighborhood Hide-and-Seek

Make a game featuring a place you know. Import a photograph of your room, school, or neighborhood. Create a new sprite from a drawing or photo to find in that place.

Invent a Variation:

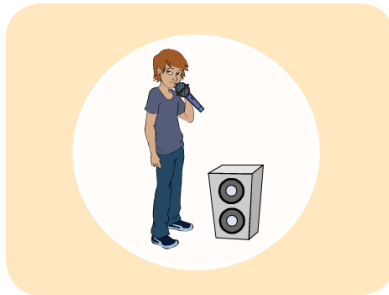
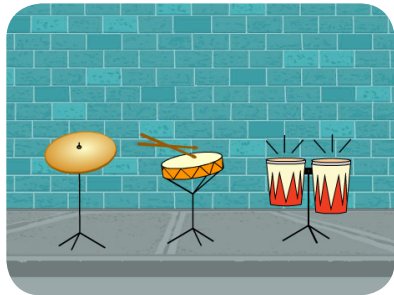
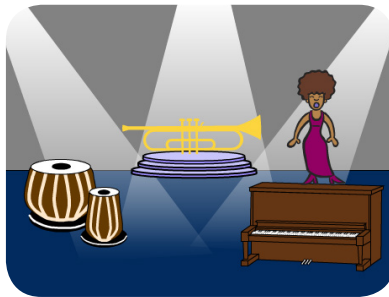
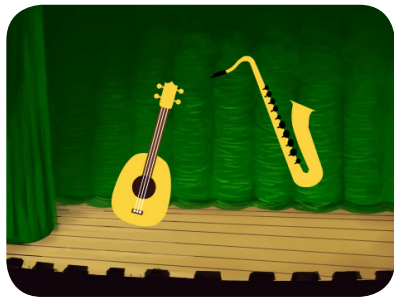
Another way to get started is to remix a project, such as from the **Hide-and-Seek Studio**: scratch.mit.edu/studios/1614974/. When participants see a project they like, they can click the **See Inside** button and then the **Remix** button. Then, make changes to customize the game. Remember to add credits on the Project Page.

Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.

EDUCATOR GUIDE

Make Music

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will choose instruments, add sounds, and press keys to play music.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they create musical projects, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.

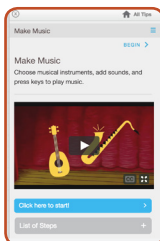
Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Make Music* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:

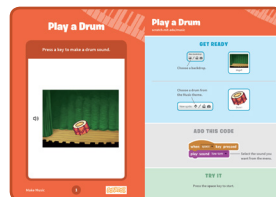
scratch.mit.edu/music



☐ Print the Activity Cards

Print a few sets of *Make Music* cards to have available for participants during the workshop.

scratch.mit.edu/music/cards



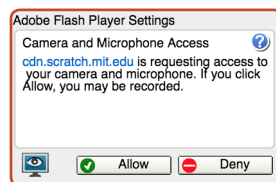
☐ Make sure participants have Scratch accounts

☐ Check sound on computers or laptops

Check to make sure that the sound output is working on the computers or laptops. You may want to make headphones available (including headphone splitters to allow participants to listen together).

☐ Check microphone if recording sounds (optional)

For the optional step of recording sounds, see if the computers have a microphone (sound input) turned on or added. Tip: To record sounds in Scratch, participants will need to check “Allow” to give Scratch access to the microphone:



Imagine



Begin by gathering the participants to introduce the theme and spark ideas for projects.

Warm-up Activity: Repeat a Rhythm

Gather the group in a circle and get ready to make music. Take turns tapping or clapping a short rhythm, then have the group repeat it back.

Provide Ideas and Inspiration

Show the introductory video for the *Make Music* tutorial. The video shows a variety of projects for ideas and inspiration.



View at scratch.mit.edu/music or vimeo.com/llk/music

Demonstrate the First Steps



Demonstrate the first few steps of the tutorial so participants can see how to get started.

In Scratch, choose a new sprite and select a drum from the Music theme.

New sprite:

Theme

Castle
City
Dance
Dress-Up
Flying
Holiday
Music
Space



Drum-Conga

Make the drum play a sound when you press a key:

when space key pressed
play sound high conga

Make it play a rhythm:

when space key pressed
play sound high conga
wait 0.25 secs
play sound high conga
wait 0.25 secs

Choose an instrument from the music theme and make it play a note.

New sprite:



Saxophone

when up arrow key pressed
play sound C2 sax

Create



Support participants as they create musical projects, on their own or in pairs.

Start with Prompts

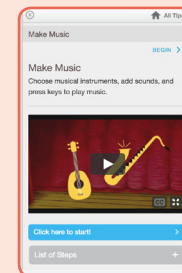
Ask participants questions to get started

Which instruments or sounds do you want to try first?

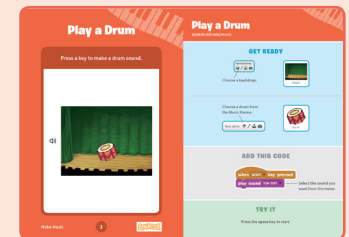
What kind of rhythms or musical patterns can you make?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial: scratch.mit.edu/music



Others may want to explore using the printed activity cards.

Suggest Ideas for Starting

- Choose a drum or other instrument
- Press a key to play a sound
- Create a rhythm
- Try changing the rhythm



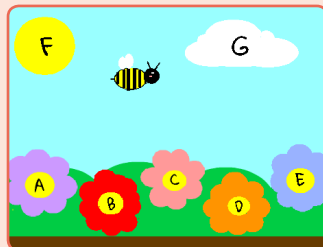
More Things to Try

- Add musical instruments
- Play with musical patterns
- Play a random note or sound
- Add animation
- Use beatbox sounds in a loop
- Record short sounds to play

Keep going! Expanding and enhancing projects

Check in with participants as they work and offer support to take their projects further.

- Suggest that participants experiment with new instruments and ways of adding sound to their projects.
- Get inspired by someone else's project: What have they tried? What variations might you try?

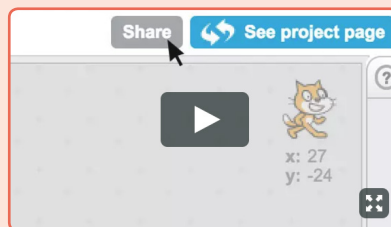


Prepare to Share

Suggest adding instructions so others know how to play the project, such as which keys to press.

To add instructions and credits to a project online, click the button: 'See project page'.

This video shows how to share a project on the Scratch website: vimeo.com/llk/share



Share

Have participants walk around the room to see and listen to each others' musical projects on their computers or laptops.

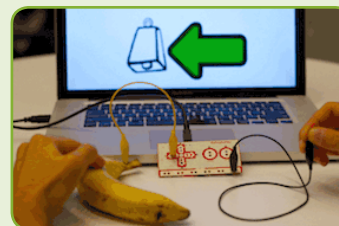
Reflect as a group:

What do you like best about the project you made or heard?"

What else might you like to add?"

What's Next?

If you have access to Makey Makey boards (makeymakey.com), you can connect a Scratch project to the physical world. Participants can interact with their musical projects using coins, clay, cardboard, and more.



Scratch + Makey Makey

To learn how to use Makey Makey with Scratch, see scratch.mit.edu/makeydrum or scratch.mit.edu/makeypiano

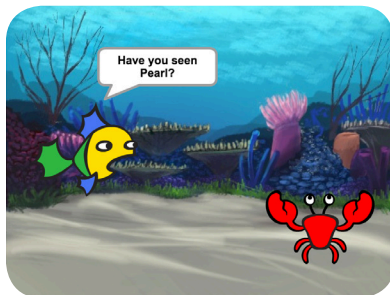
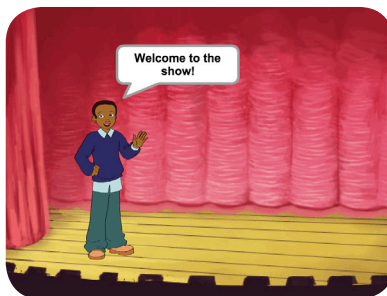
Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.



EDUCATOR GUIDE

Create a Story

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will create a story with settings, characters, and dialogue.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they create story projects, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.



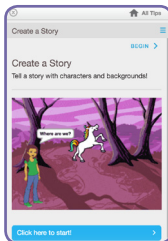
Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Create a Story* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:

scratch.mit.edu/story



☐ Print the Activity Cards

Print a few sets of *Create a Story* cards to have available for participants during the workshop.

scratch.mit.edu/story/cards



☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at scratch.mit.edu, or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to:

scratch.mit.edu/educators

☐ Set up a studio for project sharing on Scratch

Set up a studio so participants will be able to add their projects. Go to your **My Stuff** page, then click the **+ New Studio** button. Type in a name for the studio (such as 'Our Fashion Projects').

☐ Set up computers or laptops

Arrange computers so that participants can work individually or in pairs.



Imagine

Begin by gathering the participants to introduce the theme and spark ideas for projects.

Warm-up Activity: Draw a Hat

Give each participant a piece of paper. Ask them to think of a favorite character (for example, from a book, movie, or their imagination). Then, ask them to imagine a new scene. Where could their character go? Who would they meet there? What would they say? Suggest that they write or draw the scene from their story. Ask them to share their scene with someone else in the group.

Provide Ideas and Inspiration

Show some example Story projects to spark ideas. You can find some in the *Create a Story examples Studio* on the Scratch website.

Create a Story Examples

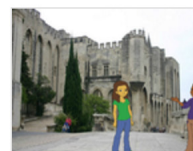
Projects (4)

Comments (0)

Curators

Activity

Add projects



Create a story
by harleyquinn99000



How Scratch Cat met G...
by logogreen



Zodiac story
by camstah

View the studio at: scratch.mit.edu/studios/3757922



Demonstrate the First Steps



Demonstrate the first few steps of the tutorial so participants can see how to get started.

In Scratch, click **Create**.

Choose a setting from the **Backdrop library**:

New backdrop:



Backdrop Library

Category
All
Indoors
Outdoors
Other



pathway



slopes

Choose a character from the **Sprite library**:

New sprite:



Sprite Library

Category
All
Animals
Fantasy
Letters
People

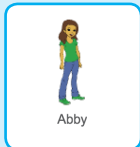


Abby



Devin

Start your story:



Abby

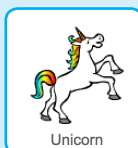
when clicked

switch backdrop to pathway

say I want to explore! for 2 secs

Choose a new character and make it appear:

New sprite:



Unicorn

when clicked

hide

wait 2 secs

show



Create



Support participants as they create Story projects, on their own or in pairs.

Start with Prompts

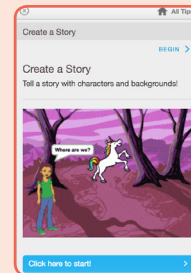
Ask participants questions to get started

Where will your story take place?

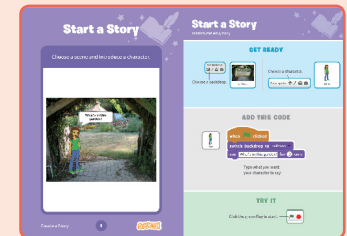
What will happen first?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/story



Others may want to explore using the activity cards:
scratch.mit.edu/story/cards

Suggest Ideas for Starting

- Choose a backdrop.
- Choose a character.
- Make a character say something
- Make a character hide and show.



CREATE

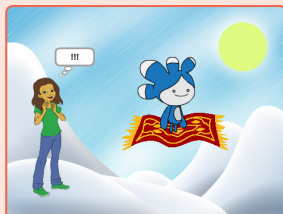
More Things to Try

- Switch backdrops.
- Make your characters have a conversation.
- Move your characters.
- Change something when you click on it.



Support Tinkering

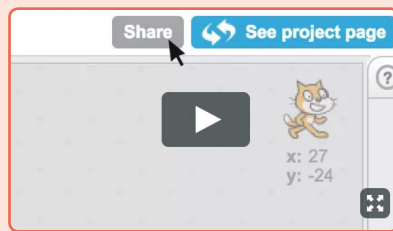
Scratch is designed to support creating by experimenting and tinkering. So, your participants may want to start their stories without planning beforehand. As they create, one idea can spark another. Celebrate their sparks of creativity and the unexpected turns their stories may take.



Prepare to Share

To add instructions and credits to a project, click the button: "See project page".

This video shows how to share a project on the Scratch website:
vimeo.com/1lk/share



SHARE

Share

Help the participants add their projects to a shared studio in Scratch. Give them a link to the studio. Then they can click 'Add Projects' at the bottom of the page.

Ask for volunteers to show their project to the group.

What's Next?

Participants can use these ideas and concepts to create a variety of projects. Here are some variations on the story project you could suggest:



Retell a story

Start with a story you know and make it in Scratch. Imagine a new ending or a different setting.



Neighbourhood story

Take photos of your classroom, school, or neighborhood and use them as backdrops in your story.



Round-robin story

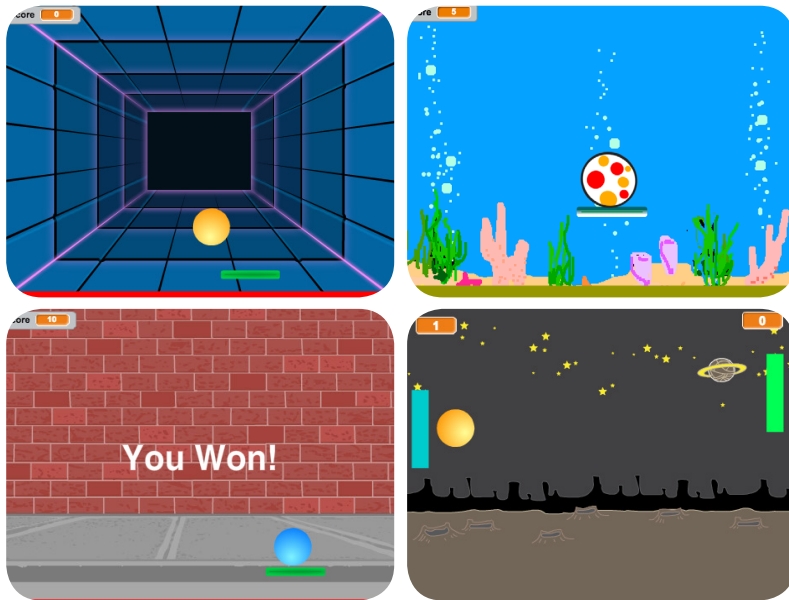
Give everyone 5 minutes to start a story. Then, have them switch to the next computer to add to the story. Repeat.

Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.

EDUCATOR GUIDE

Pong Game

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will gain experience with coding as they design a bouncing ball game.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they make games, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.

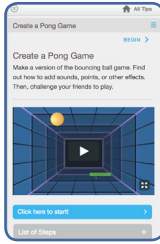
Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Pong Game* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:

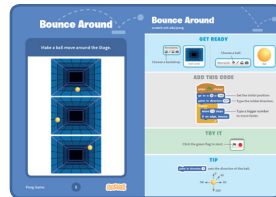
scratch.mit.edu/pong



☐ Print the Activity Cards

Print a few sets of *Pong Game* cards to have available for participants during the workshop.

scratch.mit.edu/pong/cards



☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at scratch.mit.edu, or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to: scratch.mit.edu/educators

☐ Set up computers or laptops

Arrange computers so that participants can work individually or in pairs.

☐ Set up a computer with projector or large monitor

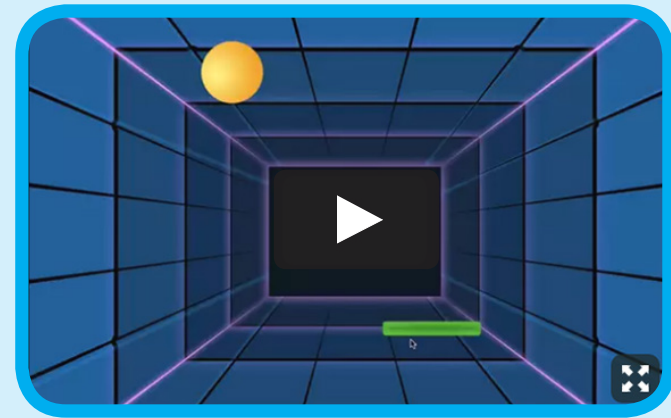
You can use a projector to show examples and demonstrate how to get started.

Imagine

Begin by gathering the participants to introduce the theme and spark ideas for projects.

Provide Ideas and Inspiration

Show the introductory video for the *Pong Game* tutorial. The video shows pong games with a variety of themes, such as space pong (using images of planets for the ball and stars for the backdrop).



View at scratch.mit.edu/pong or vimeo.com/llk/pong

Warm-up Activity: Bouncing Ideas

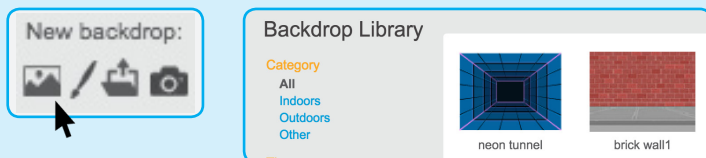
To get participants thinking about a theme for their game, take turns calling out a theme, such as pizza pong or flower pong and brainstorming ideas for the type of images they could use to represent the theme.

Demonstrate the First Steps

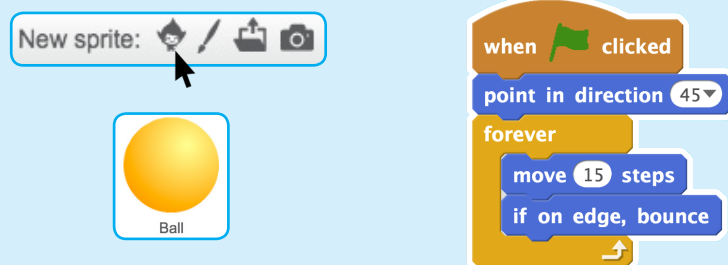


Demonstrate the first few steps of the tutorial so participants can see how to get started.

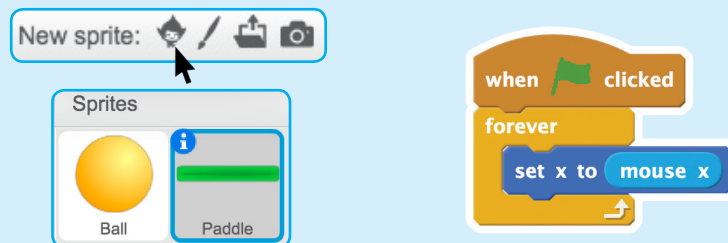
Go to the Scratch website. Click Create.
Choose a new backdrop:



Choose a ball sprite and make it bounce around:



Add a paddle sprite and control it with the mouse:



Create



Support participants as they create pong games, on their own or in pairs.

Start with Prompts

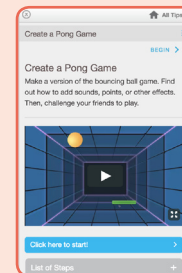
Ask participants questions to get started

What background do you want for your game?

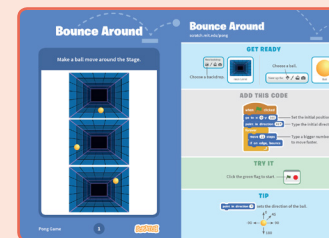
What color or type of ball?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/pong



Others may want to use the printed activity cards.

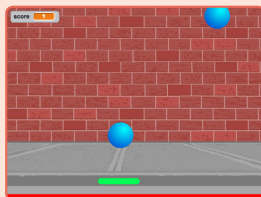
Suggest Ideas for Starting

- Choose a backdrop
- Choose or draw a ball sprite and make it bounce around
- Add a paddle sprite that you can control
- Make the ball bounce off the paddle



More Things to Try

- Add sounds and color effects
- Keep score by adding a variable
- Add a way to win or lose the game
- Change the backdrop when you reach a certain number of points
- Duplicate the ball for an added challenge



Offer strategies for problem solving

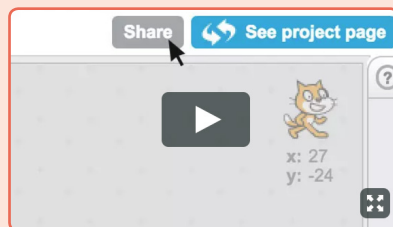
- Talk out what you're working on with someone
- Try out small bits of code at a time to figure out what's happening at each step
- Look closely at the blocks on the tutorial or activity cards to see if they are the same or different from the blocks you're using
- Look at the code for other pong games on the Scratch site



Prepare to Share

To add instructions and credits to a project online, click the button: **'See project page'**.

This video shows how to share a project on the Scratch website:
vimeo.com/11k/share



Share

Have participants share their projects with others in the room.

Ask questions to encourage reflection:

What did you notice about the games you tried?

What ideas might you add to your game?

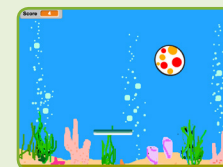
What's Next?

Here are a couple of other directions you could suggest:



Two-Player Game

For a more advanced project, try making a two-player game. To make a new version of your own project, click **File > Save as a Copy**.



Remix a Game

A different way to make a pong game is to remix someone else's project, adding images and ideas. Find a project to remix in the **Pong Game Studio**:
scratch.mit.edu/studios/644508/
 Click **'See inside'**, then click the **'Remix'** button.

Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.

EDUCATOR GUIDE

Fashion Game

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will gain experience with coding as they design a fashion game.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they create their fashion games, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.



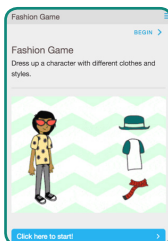
Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Fashion Game* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:

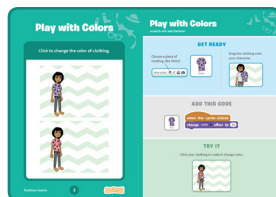
scratch.mit.edu/fashion



☐ Print the Activity Cards

Print a few sets of *Fashion Game* cards to have available for participants during the workshop.

scratch.mit.edu/fashion/cards



☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at scratch.mit.edu, or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to:

scratch.mit.edu/educators

☐ Set up computers or laptops

Arrange computers so that participants can work individually or in pairs.

☐ Set up a computer with projector or large monitor

You can use a projector to show examples and demonstrate how to get started.



Imagine

Begin by gathering the participants to introduce the theme and spark ideas for projects.

Warm-up Activity: Draw a Hat

Give the participants a minute or two to sketch an imaginary hat with paper and pen. It could be a fashion statement, silly party hat, or a useful invention. When would you wear it? Have the participants show their hats to their neighbors.

Provide Ideas and Inspiration

Show some example *Fashion Game* projects to spark ideas. You can find some in the *Fashion Studio* on the Scratch website.

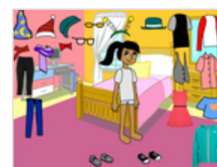
Fashion Studio

Projects (9)

Comments (0)

Curators

Activity



Fashion Dani Fashion
by 21bretzA



Dani Fashion
by Unicorn87093



Dress up Bun-bun
by LillyMoon15

View the studio at: scratch.mit.edu/studios/1424746

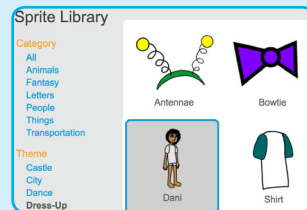


Demonstrate the First Steps

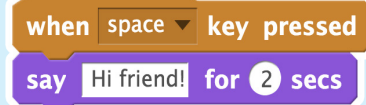


Demonstrate the first few steps of the tutorial so participants can see how to get started.

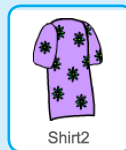
In Scratch, click Create.
Choose Dani from the Sprite Library:



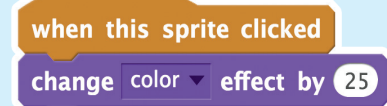
Tell Dani to say something:



Add an item of clothing:



Make the clothing change colors when you click it:



Create



Support participants as they design projects with a set of clothes to dress up a character.

Start with Prompts

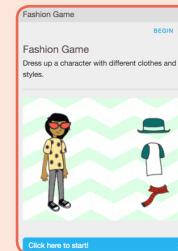
Ask participants questions to get started

What colors do you want the clothes to be?

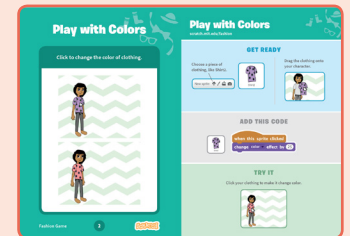
What clothing item will you add first?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/fashion



Others may want to explore using the activity cards:
scratch.mit.edu/fashion/cards

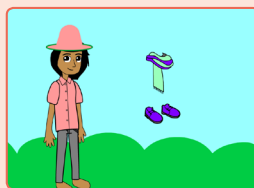
Suggest Ideas for Starting

- Pick Dani or another character
- Say something
- Pick an item of clothing
- Change the clothing's style
- Add more clothes
- Choose a backdrop



More Things to Try

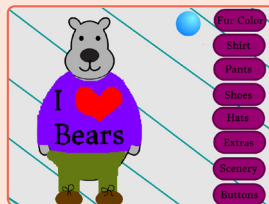
- Make the clothes glide into place.
- Reset position of the clothes when you press the green flag.
- Draw your own character or clothes.



Support Personalization

Encourage participants to customize their projects based on their own personal style and interests. Every project will be different!

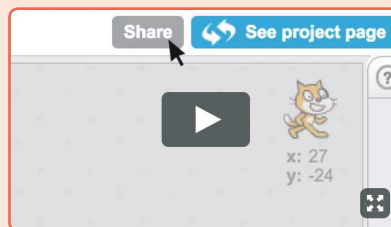
*What kind of character
do you want to dress up?
What is their style?*



Prepare to Share

To add instructions and credits to a project, click the button: "See project page".

This video shows how to share a project on the Scratch website:
vimeo.com/llk/share



Share

Have a virtual fashion show. Ask participants to share their fashion games with each other.

Ask questions they can discuss:

*What do you like best about
the project you made?*

*What was the
hardest part?*

If you had more time, what would you add or change?

What's Next?

Participants can use these ideas and concepts to create a variety of projects. Here are two variations on the fashion game project you could suggest:



Historical Fashion

Research the fashion of a particular time and place in history and make a dress-up game based on that style. To find sample projects, search on Scratch for "historical fashion".



Design a Shoe

Instead of making a game based on an entire outfit, zoom in and make a game that lets you design a shoe, hat, necklace, t-shirt, or nail art.

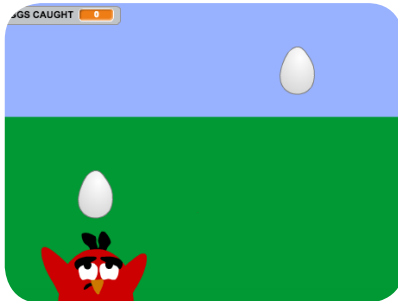
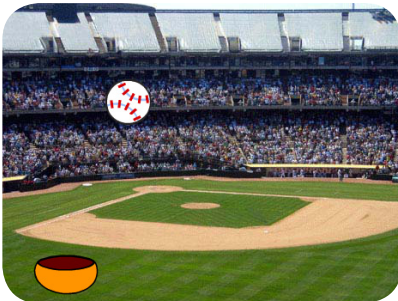
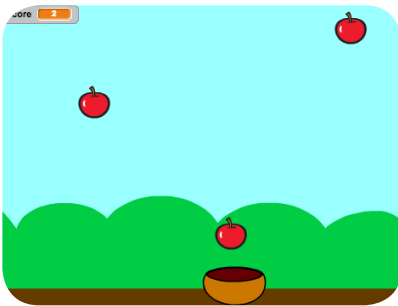
Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.



EDUCATOR GUIDE

Catch Game

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will make a game where they catch things falling from the sky.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they make catch games, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.

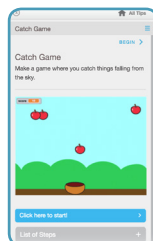
Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Catch Game* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:

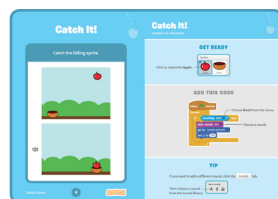
scratch.mit.edu/catch



☐ Print the Activity Cards

Print a few sets of *Catch Game* cards to have available for participants during the workshop.

scratch.mit.edu/catch/cards



☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at scratch.mit.edu, or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to:

scratch.mit.edu/educators

☐ Set up computers or laptops

Arrange computers so that participants can work individually or in pairs.

☐ Set up a computer with projector or large monitor

You can use a projector to show examples and demonstrate how to get started.

Imagine

Begin by gathering the participants to introduce the theme and spark ideas for projects.

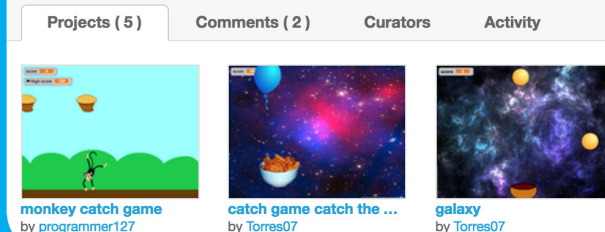
Warm-Up Activity: Make a Wish!

Gather the participants in a circle. Ask, “What do you wish could fall from the sky?” and give an example, such as a favorite food or flower. Then, toss a ball of yarn to someone. The person who catches the ball shares what they would like to fall from the sky. Then they toss the ball to someone, until each person has shared what they imagine.

Provide Ideas and Inspiration

To spark ideas, you can show a couple of examples of catch games from the *Catch Game Studio* on the Scratch website.

Catch Game Studio



View the studio at scratch.mit.edu/studios/3553067/

Demonstrate the First Steps



Demonstrate the first few steps of the tutorial so participants can see how to get started.

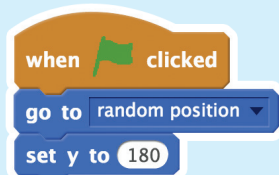
In Scratch, choose a new sprite to fall.



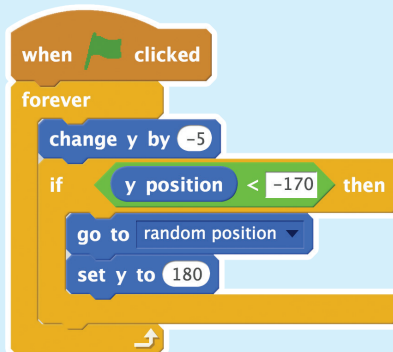
Choose a backdrop.



Make your sprite start from a random spot at the top.



Then, make it fall down repeatedly.



Create



Support participants as they create catch games. Suggest working in pairs.

Start with Prompts

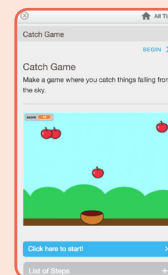
Ask participants questions to get started

What would you like to catch? How will you catch it?

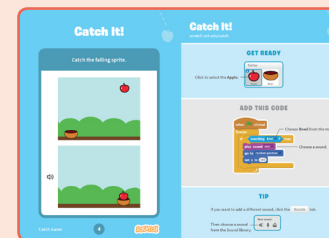
Which backdrop would you like to choose for your game?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/catch



Others may want to explore using printed activity cards:
scratch.mit.edu/catch/cards

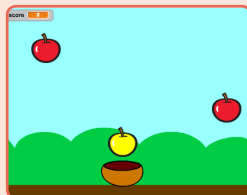
Suggest Ideas for Starting

- Choose a backdrop
- Choose or draw an object to fall
- Make it fall down repeatedly from the top.
- Select a catcher and make it move with arrow keys.



More Things to Try

- Make a script to catch the falling sprite
- Add a point when it's caught
- Add sounds
- Use the duplicate tool to make more falling sprites
- Add a bonus sprite that scores extra points



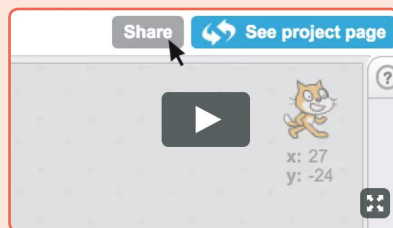
Encourage Tinkering

- Encourage participants to feel comfortable trying combinations of blocks and seeing what happens.
- Suggest participants look inside other catch games to see the code.
- If they find code they like, they can drag the scripts or sprites into the backpack to reuse in their own project.

Prepare to Share

To add instructions and credits to a project, click the button: **"See project page"**.

This video shows how to share a project on the Scratch website: vimeo.com/llk/share



Share

Have participants share their projects with their neighbors.

Ask questions that encourage reflection:

What do you like best about your game?

If you had more time, what would you add or change?

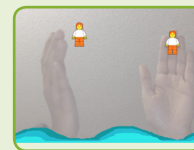
What's Next?

The *Catch Game* projects provide an introduction to creating interactive games in Scratch. Here are a few ways that participants can build on the concepts they learned from this project.



Add a Level

Encourage participants to experiment with how they might add a level to their game.



Video Sensing

If the computers have web cameras attached or built-in, participants can make a game that they interact with by moving their body. To start, play with the project: **Save the Mini-Figs** (scratch.mit.edu/projects/10123832/). Then, remix to customize the sprites and scripts.

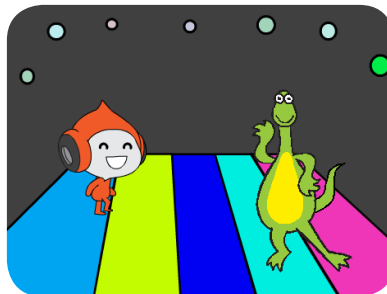
Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.



EDUCATOR GUIDE

Let's Dance

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will create an animated dance scene, combining music and dance moves.



Workshop Overview

Here's a suggested agenda for a one-hour workshop:



IMAGINE
10 minutes

First, gather as a group to introduce the theme and spark ideas.



CREATE
40 minutes

Next, help participants as they create dance projects, working at their own pace.



SHARE
10 minutes

At the end of the session, gather together to share and reflect.

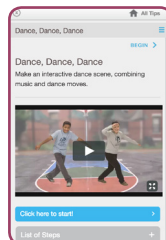
Get Ready for the Workshop

Use this checklist to prepare for the workshop.

☐ Preview the Tutorial

The *Let's Dance* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps:

scratch.mit.edu/dance



☐ Print the Activity Cards

Print a few sets of *Let's Dance* cards to have available for participants during the workshop.

scratch.mit.edu/dance/cards



☐ Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at scratch.mit.edu, or you can set up student accounts if you have a Teacher Account. To request a Teacher Account, go to:

scratch.mit.edu/educators

☐ Set up a studio for project sharing on Scratch

Set up a studio so participants will be able to add their projects. Go to your **My Stuff** page, then click the **+ New Studio** button. Type in a name for the studio (such as 'Our Dance Projects').

☐ Check sound on computers or laptops

Check to make sure that the sound output is working on the computers or laptops.

Imagine

Begin by gathering the participants to introduce the theme and spark ideas for projects.

Warm-up Activity: Share a Dance Move

Put on music with a beat, and bring the group together in a circle. Do a dance move while you say your first name to the beat of the music. Then ask the group to copy what you did. Go around the circle taking turns, with each person saying their name and doing a move for others to repeat.

Spark Ideas and Inspiration

Show the introductory video for the *Let's Dance* tutorial. The video shows a variety of projects for ideas and inspiration.



View at scratch.mit.edu/dance or vimeo.com/llk/dance

Demonstrate the First Steps



Demonstrate the first few steps of the tutorial so participants can see how to get started.

Go to Scratch to create a new project. Choose a backdrop.

New backdrop:



basketball-court1-a

Add a dancer from the Sprite library.

New sprite:



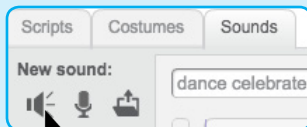
Theme

Castle
City
Dance
Dress-Up
Flying
Holiday



Anina Hip-Hop

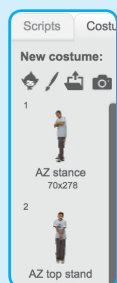
Add music from the Sound library.



dance celebrate

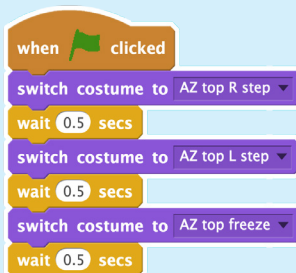


Code a dance sequence.



AZ stance 70x278

AZ top stand 74x934



Create



Support participants as they make dance projects, on their own or in pairs.

Start with Prompts

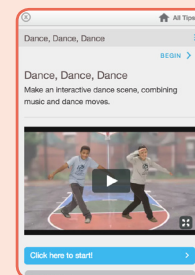
Ask participants questions to get started

Which dancer will you choose?

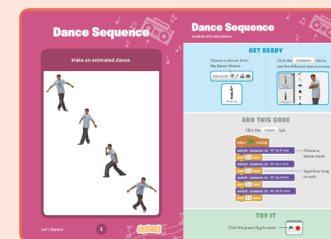
Where will they dance?

Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:
scratch.mit.edu/dance



Others may want to explore using the printed activity cards.

Suggest Ideas for Starting

- Choose a backdrop
- Add a dancer
- Add music
- Choose dance moves by switching costumes
- Code a dance sequence



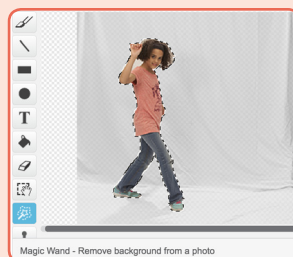
More Things to Try

- Add a repeat loop
- Adjust the timing to sync the dance with the music
- Add more dancers
- Change backdrops
- Add colors and effects

Add Your Own Dance Moves

If you have time, here's a way to personalize your project:

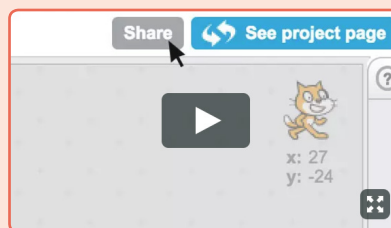
- Find a solid color wall that is well-lit
- Take photos of yourself doing different dance moves
- Import the photos as costumes into Scratch
- Use the magic wand to remove the background, see <http://bit.ly/scratchmagicwand>



Prepare to Share

To add instructions and credits to a project, click the button: "See project page".

This video shows how to share a project on the Scratch website: vimeo.com/11k/share



Share

Help the participants add their projects to a shared studio in Scratch. Give them a link to the studio. Then they can click 'Add Projects' at the bottom of the page.

Ask for volunteers to show their project to the group. Everyone can dance along!

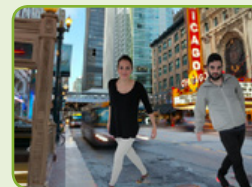
What's Next?

Participants can use the ideas from this workshop to create a variety of dance projects. Here are a couple of different approaches:



Dance Together

Give each person 3 to 5 minutes to start a dance party project. Then, have them switch to the next computer and add a dancer. Keep switching for several rounds, adding a dancer to each. Then let participants return to see (and finish) the project they originally started.



Where Will you Dance?

Take a photograph of a park or other favorite place, import it into Scratch and use it as a backdrop for a dance animation.

Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.