

# 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.

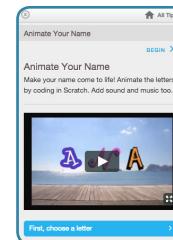


# Get Ready for the Workshop

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](https://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](https://scratch.mit.edu/name/cards)



## Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at [scratch.mit.edu](https://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](https://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

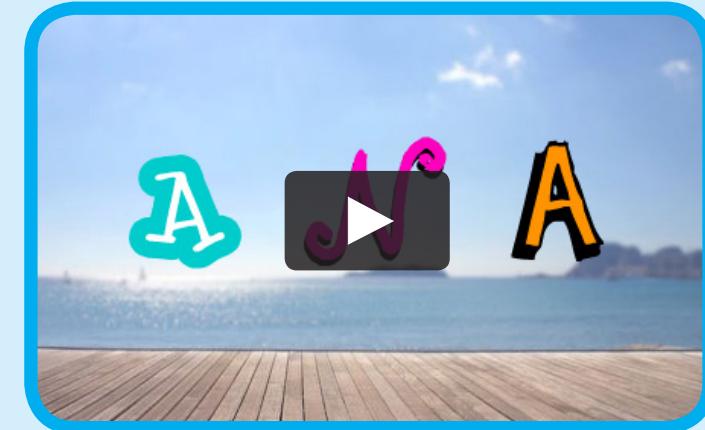
Begin by gathering the participants to introduce the theme and spark ideas for projects.

## 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](https://scratch.mit.edu/name) or [vimeo.com/llk/name](https://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:

New sprite: /

Sprite Library  
Category: All  
Animals  
Fantasy  
Letters  
People  
Things  
Transportation  
Theme: Crafts

Z-block A-Glow

**Make it do something:**

when this sprite clicked  
change color by 25

**Add a sound:**

Scripts Costumes Sounds  
New sound: zoop

when this sprite clicked  
change color by 25  
play sound zoop

**Choose a new backdrop:**

New backdrop: /

Backdrop Library  
Category: All  
Indoors  
Outdoors  
Other

blue sky boardwalk



## Create

Support participants as they create interactive name projects.

### Start with Prompts

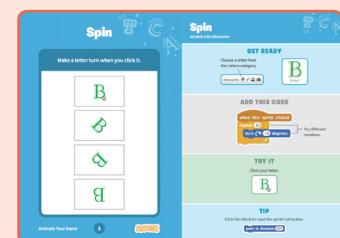
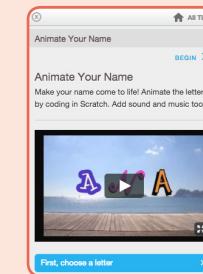
Ask participants questions to get started

*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](http://scratch.mit.edu/name)

Others may want to explore using the printed activity cards.

### Suggest Ideas for Starting

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



### 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:

*What are you working on now?*

*What are you thinking of trying next?*



# Share

Have participants share their project with their neighbors.

### 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 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.



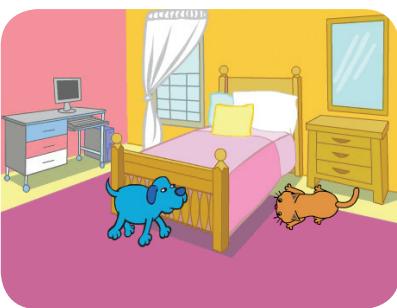
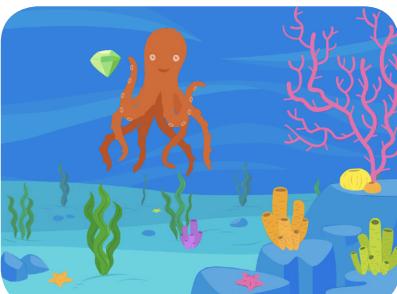
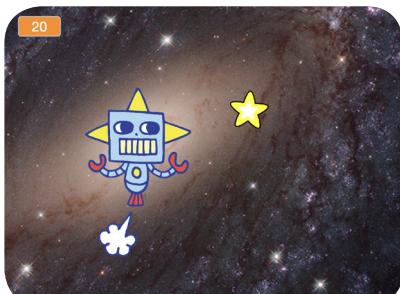
### Acrostics

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

## EDUCATOR GUIDE

# Make a Chase Game

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will make a game that includes a variable to keep score.



## 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 chase 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 *Make a Chase Game* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps,



## Print the Activity Cards

Print a few sets of *Chase Game* cards to have available for participants during the workshop. You can download the cards at: [scratch.mit.edu/ideas](http://scratch.mit.edu/ideas)



## Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at [scratch.mit.edu](http://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](http://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: Imaginary Chase

Gather the participants in a circle. Start by giving an example of one thing chasing another, such as “The dog is chasing the dinosaur.” The next person adds on, such as, “The dinosaur is chasing a donut.” The following person adds on by saying, “The donut is chasing a duck.” or whatever creature or object they choose. Continue until each person has added on to this imaginary game of chase.

## Provide Ideas and Inspiration

To spark ideas, watch the *Make a Chase Game* video at the start of the tutorial.



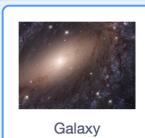
View the video at [scratch.mit.edu/chase](http://scratch.mit.edu/chase)

## Demonstrate the First Steps

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



### Choose a backdrop.



Galaxy

### Choose a sprite, like Robot.



Robot

### Make your sprite move right and left with arrow keys.

**when right arrow key pressed**

change x by 10

Choose **right arrow** from the menu.

**when left arrow key pressed**

change x by -10

Choose **left arrow** from the menu.

Type a minus sign to move left.

Press the **left arrow** and **right arrow** keys on your keyboard to move.



### Discuss next steps they can try, such as coding the sprite to move up and down and adding a sprite to chase.



Star



## Create

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

### Start with Prompts

Ask participants questions to get started

Which backdrop would you like to choose for your game?

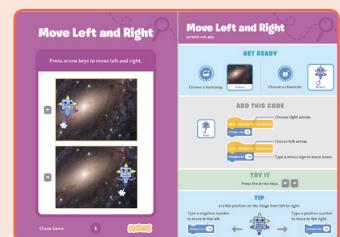
Who do you want as the main character in your game? What will it chase?

### Provide Resources

Offer options for getting started



Some participants may want to follow the online tutorial:  
[scratch.mit.edu/chase](http://scratch.mit.edu/chase)



Others may want to explore using the printed cards:  
[scratch.mit.edu/ideas](http://scratch.mit.edu/ideas)

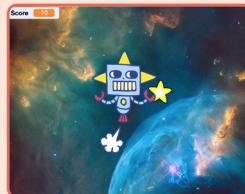
### Suggest Ideas for Starting

- Choose a backdrop
- Choose or draw a main character
- Make it move with arrow keys.
- Select an object to chase.



### More Things to Try

- Code the star or other sprite to chase
- Add a variable to keep score
- Add sounds
- Add a level
- Show a message when reaching the new level



### Encourage Tinkering

- Encourage participants to feel comfortable trying combinations of blocks and seeing what happens.
- Suggest participants look inside other chase 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”**.



[See project page](#)



# 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?

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



### Add Obstacles

For a more complex game, add obstacles to avoid. Subtract points when you hit the obstacles.



### Make a Two-Player Game

For an extra challenge, make a version of the game that allows two players to play.



### Video Sensing

If the computers have a web camera attached or built-in, learners can make a game that they interact by moving their bodies. See the Video Sensing tutorial and educator guide for support.

Created by the Scratch Team



# 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](https://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](https://scratch.mit.edu/story/cards)



## Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at [scratch.mit.edu](https://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](https://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.

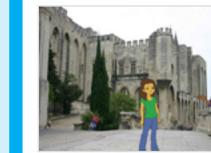
## Provide Ideas and Inspiration

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 GOBO  
by logogreen



Zodiac story  
by camstah

View the studio at: [scratch.mit.edu/studios/3757922](https://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:

when green flag clicked  
switch backdrop to pathway  
say I want to explore! for 2 secs

Abby

Choose a new character and make it appear:

New sprite:

Unicorn

when green flag clicked  
hide  
wait 2 secs  
show



## Create

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

### Start with Prompts

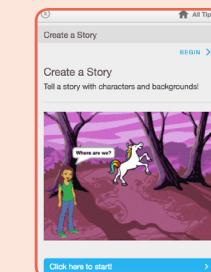
Ask participants questions to get started

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](https://scratch.mit.edu/story)

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



### More Things to Try

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



### Support Tinkering

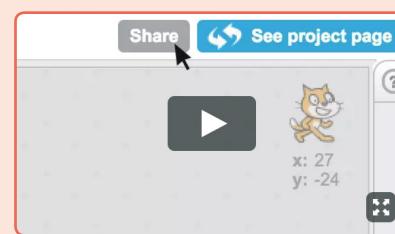
Scratch is designed to support creating by experimenting and tinkering. So, your participants may want to start their stories without planning beforehand. As they create, one idea can spark another. Celebrate their sparks of creativity and the unexpected turns their stories may take.



### 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/llk/share](https://vimeo.com/llk/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

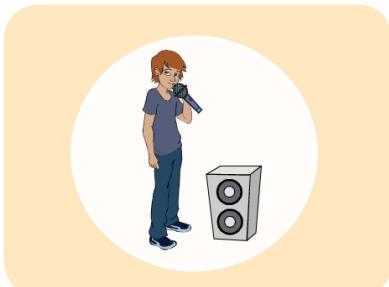
Give everyone 5 minutes to start a story. Then, have them switch to the next computer to add to the story. Repeat.



# 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.



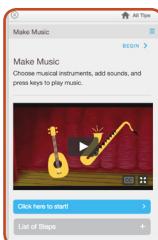
# Get Ready for the Workshop

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](http://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](http://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](http://scratch.mit.edu/music) or [vimeo.com/llk/music](https://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



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

**when space key pressed**  
play sound [high conga v]

Make it play a rhythm:

**when space key pressed**  
play sound [high conga v]  
wait [0.25 secs]  
play sound [high conga v]  
wait [0.25 secs]

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

New sprite:



**when up arrow key pressed**  
play sound [C2 sax v]

## Create

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



### Start with Prompts

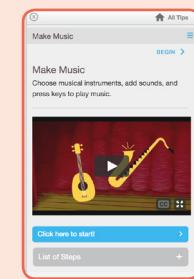
Ask participants questions to get started

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](http://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



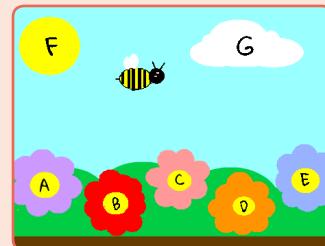
### More Things to Try

- 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?

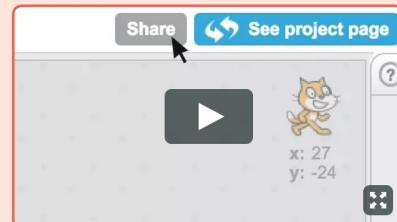


### Prepare to Share

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](https://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.

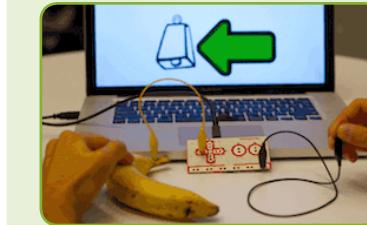
### Reflect as a group:

*"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](http://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

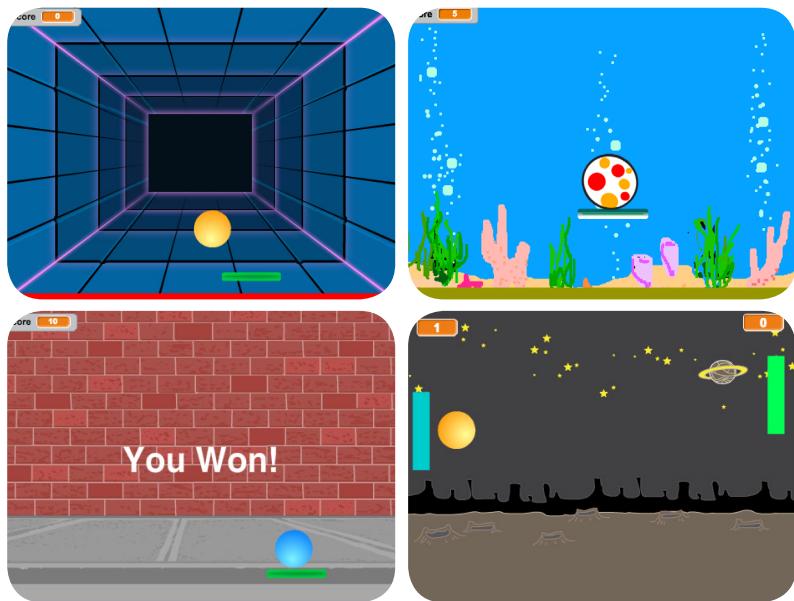
To learn how to use Makey Makey with Scratch, see [scratch.mit.edu/makeydrum](http://scratch.mit.edu/makeydrum) or [scratch.mit.edu/makeypiano](http://scratch.mit.edu/makeypiano)

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:

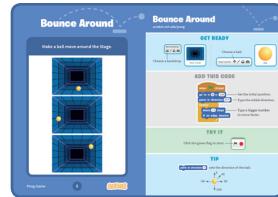
[scratch.mit.edu/pong](https://scratch.mit.edu/pong)



## 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](https://scratch.mit.edu/pong/cards)



## Make sure participants have Scratch accounts

Participants can sign up for their own Scratch accounts at [scratch.mit.edu](https://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](https://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

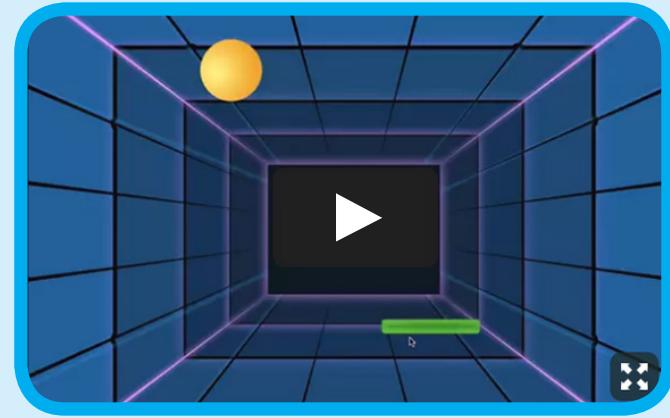
You can use a projector to show examples and demonstrate how to get started.

# 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](https://scratch.mit.edu/pong) or [vimeo.com/lkk/pong](https://vimeo.com/lkk/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:**

New backdrop: Backdrop Library  
Category: All Indoors Outdoors Other

neon tunnel brick wall1

**Choose a ball sprite and make it bounce around:**

New sprite: Ball

when green flag clicked  
point in direction 45  
forever  
move 15 steps  
if on edge, bounce

**Add a paddle sprite and control it with the mouse:**

New sprite: Sprites  
Ball Paddle

when green flag clicked  
forever  
set x to (mouse x)

## Create

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

### Start with Prompts

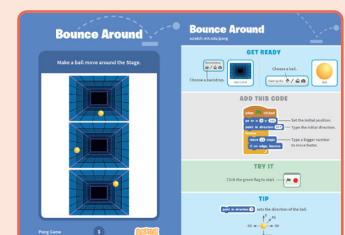
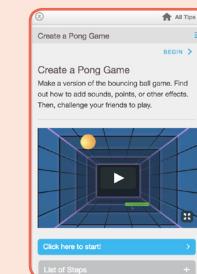
Ask participants questions to get started

*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](http://scratch.mit.edu/pong)

Others may want to use the printed activity cards.

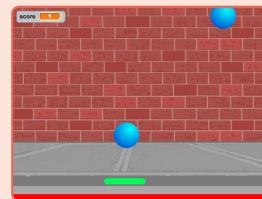
### Suggest Ideas for Starting

- 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

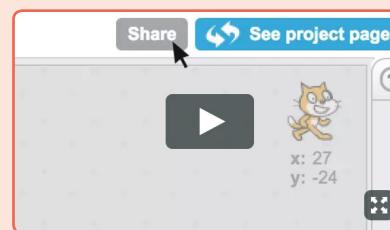
- Talk out what you're working on with someone
- Try out small bits of code at a time to figure out what's happening at each step
- Look closely at the blocks on the tutorial or activity cards to see if they are the same or different from the blocks you're using
- Look at the code for other pong games 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/llk/share](https://vimeo.com/llk/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/](https://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.