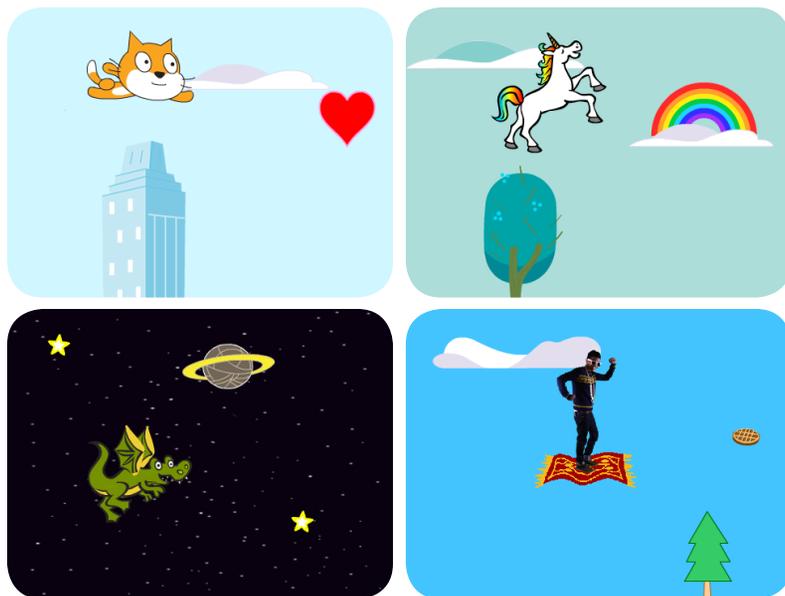


## EDUCATOR GUIDE

# 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.

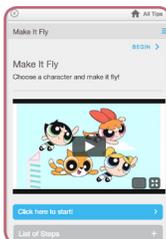
## Get Ready for the Workshop

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](https://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](https://scratch.mit.edu/fly/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: 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](https://scratch.mit.edu/fly) or [vimeo.com/ilk/fly](https://vimeo.com/ilk/fly)

## Demonstrate the First Steps



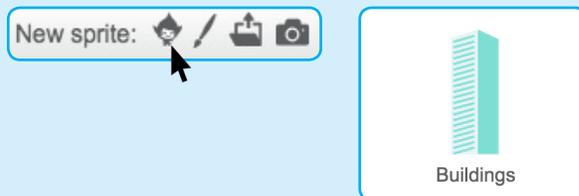
Demonstrate the first few steps of the tutorial so participants can see how to get started.

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

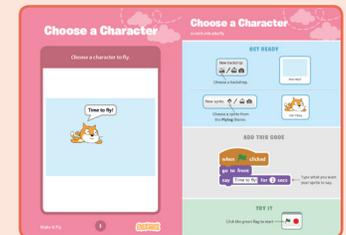
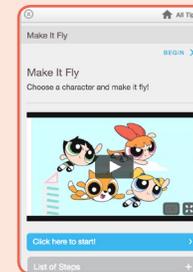
Ask participants questions to get started

*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](https://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



CREATE

### 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

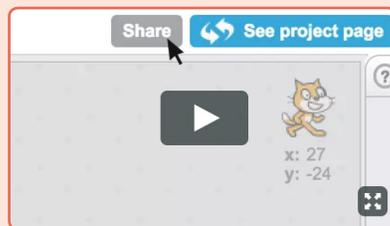
Here are some strategies to suggest to help participants fix any bugs or difficulties they encounter:

- 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](https://vimeo.com/llk/share)



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.