EDUCATOR GUIDE

Animate a Character

With this guide, you can plan and lead a one-hour workshop using Scratch. Participants will gain experience with coding as they bring characters to life with animation.

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 characters, 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 a Character* tutorial shows participants how to create their own projects. Preview the tutorial before your workshop and try the first few steps: [scratch.mit.edu/tutorials](http://scratch.mit.edu/tutorials)

- **Print the Activity Cards**
  Print a few sets of *Animate a Character* cards to have available for participants during the workshop. [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: Favorite Characters**

Gather the group in a circle. Ask each participant to say their name, then share a favorite character from a book, movie, or TV show, and one or two of their favorite things about that character.

**Provide Ideas and Inspiration**

To spark ideas, watch the *Animate a Character* video at the start of the tutorial. The video shows a variety of projects to spark ideas and inspiration.

View the [scratch.mit.edu/ideas](http://scratch.mit.edu/ideas)
Demonstrate the First Steps

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

Choose a backdrop. Choose a character to animate.

Make your sprite move right and left with arrow keys:

<table>
<thead>
<tr>
<th>Choose right arrow</th>
<th>key pressed</th>
<th>change x by 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose left arrow</td>
<td>key pressed</td>
<td>change x by -10</td>
</tr>
</tbody>
</table>

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

Helpful Hint: Understanding x y coordinates will help participants figure out how to move sprites around the stage.

<table>
<thead>
<tr>
<th>x = -240</th>
<th>y = 180</th>
</tr>
</thead>
<tbody>
<tr>
<td>x = 240</td>
<td>y = -180</td>
</tr>
</tbody>
</table>

y is the position on the Stage from top to bottom.

x is the position on the Stage from right to left.

Create

Support participants as they create animated Scratch projects.

Start with Prompts

Ask participants questions to get started

Which character would you like to animate?

What do you want your character to do?

Provide Resources

Offer options for getting started

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

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

Suggest Ideas for Starting

- Choose a character to animate.
- Animate your character: make it jump, fly, glide or talk!
- Choose a backdrop.
More Things to Try

- Try combining more than one kind of animation.
- If you’re not sure what to do, pick a card and try something new.
- Add a second character or object to animate.

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

The Animate a Character activity can be done in any order, with a range of different character and object sprites.

Encourage students to try new things:

- What will your character do next?
- How can you make your animation interactive?

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. Encourage them to continue developing their projects into games, stories or interactive art with the resources listed below.

Find these projects in the Tutorials library: scratch.mit.edu/ideas

Create a Story
Choose characters, add conversation, and bring your story to life.

Chase Game
Make a game where you chase a character to score points.

Video Sensing
Interact with characters and objects in Scratch with video sensing.

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