

Getting Started with

SCRATCH

Create your own games, animations,
interactive stories, and more.



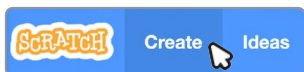


GETTING STARTED

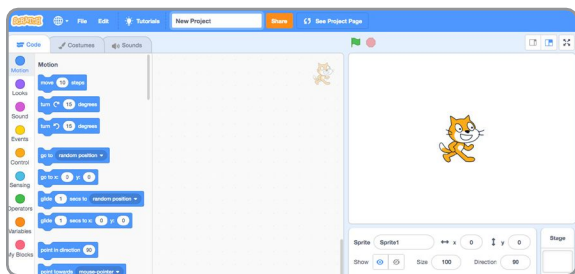
You can use Scratch online at: scratch.mit.edu

scratch.mit.edu

Once you've navigated to scratch.mit.edu, click **Create**.



This will bring you to the **Scratch Editor**, where you can start creating projects.



If your computer uses an older operating system, or your internet connection is unreliable, you can download Scratch and use it offline.



Visit: <https://scratch.mit.edu/download>
for information on downloading and installing the Scratch app.



THE SCRATCH EDITOR

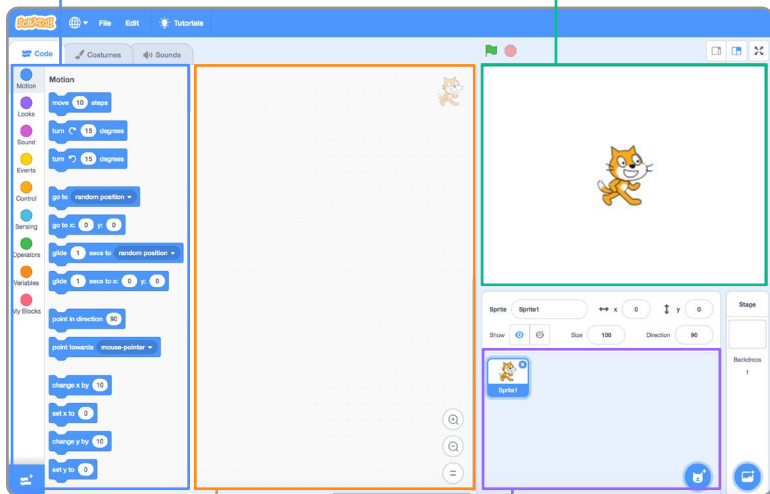
The Scratch Editor is where you create projects in Scratch. Here are its main parts:

Blocks Palette

Blocks for coding your projects

The Stage

Where your creations come to life



Coding Area

Drag in blocks and snap them together to code your sprites

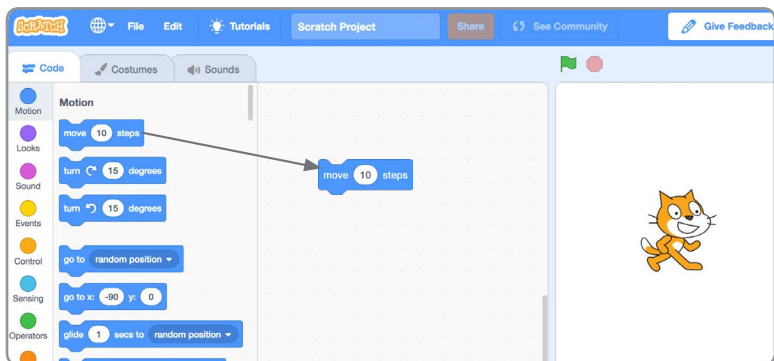
Sprite List

Click the thumbnail of a sprite to select it

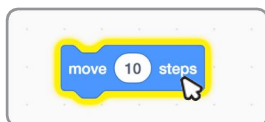


LET'S CODE!

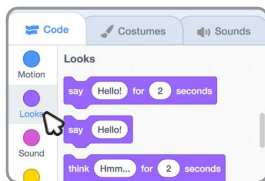
To code projects in Scratch, you snap together blocks. Start by dragging out a **move** block.



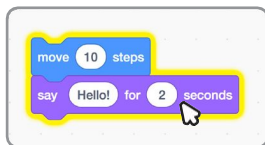
Click the block to try it.
Does your cat move?



Now say something!
Click the **Looks** category.



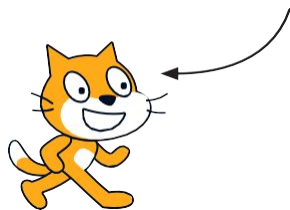
Drag out a **say** block.
Snap it onto the **move** block. Click on your blocks to try them.





WHAT IS A SPRITE?

In Scratch, any character or object is called a sprite. Every new project in Scratch starts with the Cat sprite.



Want to choose a different sprite?



Click the New Sprite icon.

Or, hover over the **New Sprite** icon to see more options.

Upload an image from your computer.

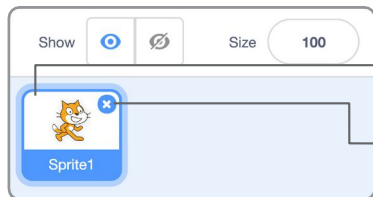
Draw your own sprite.



Click for a surprise sprite!

Choose a sprite from the library.

Want to **delete a sprite** from your project?



First, select the sprite by clicking on its thumbnail in the Sprite List.

Then, click here to delete the sprite.



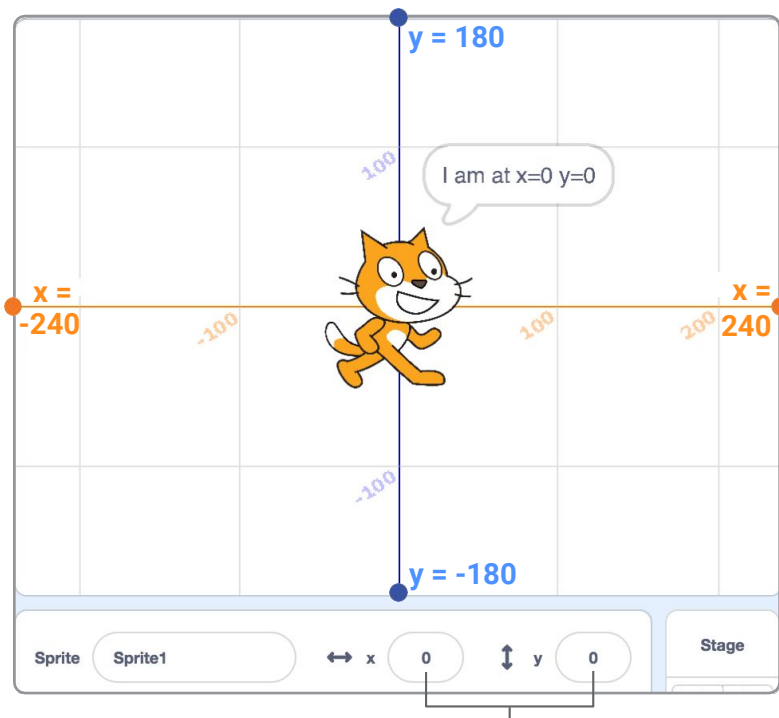
WHERE IS YOUR SPRITE?

Every sprite has an **x** and **y** position on the Stage.

x is the position of the sprite from left-to-right.

y is the position from top-to-bottom.

At the very center of the stage, **x** is 0 and **y** is 0.



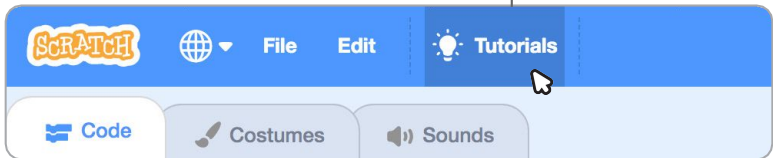
When you move your sprite, you can see its **x** and **y** position change.



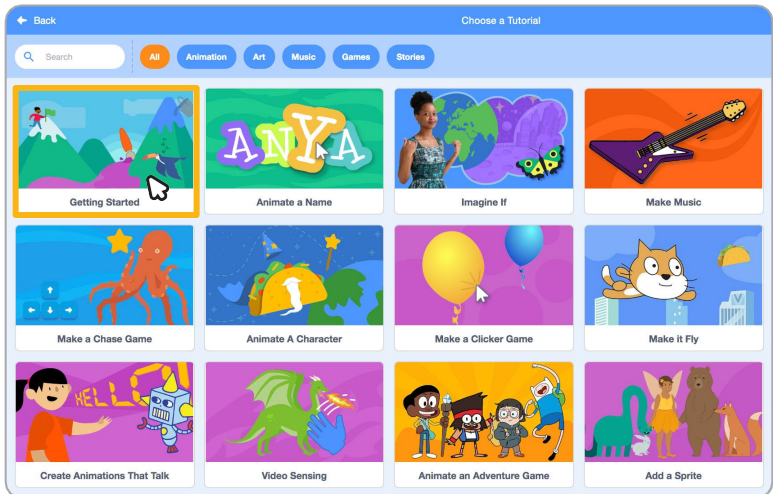
TUTORIALS

There are a range of tutorials available in the Scratch **Tutorials Library**, which guide learners in creating projects with Scratch. Students can get started making their own stories, animations, and games.

You can get to the Tutorials Library from the Scratch Editor by clicking the **Tutorials** button.



The **Getting Started** tutorial will walk you through the basics.

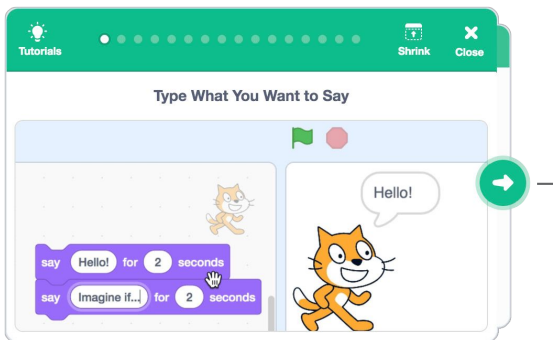




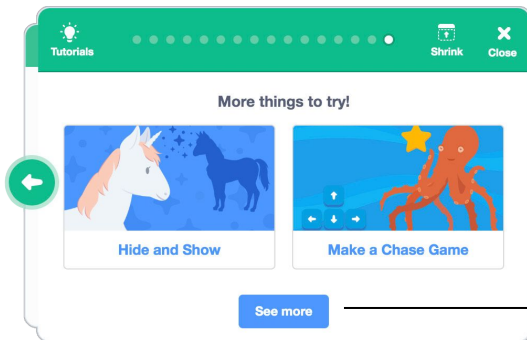
TUTORIALS

Once you've selected the tutorial, it will open in the Scratch Editor.

Click the green arrow to see each step.



When you've reached the end of a tutorial you can select another tutorial, and keep adding to your project.



Click here to see all the Tutorials.

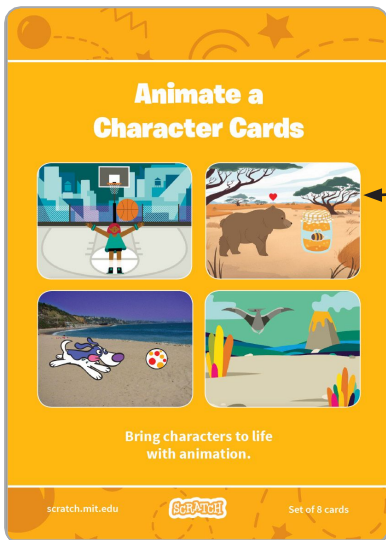


CODING CARDS

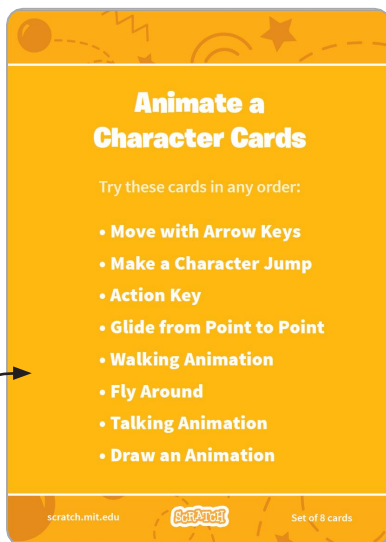
The Scratch **Coding Cards** provide another way to learn to create projects with Scratch. Download the cards at scratch.mit.edu/ideas.

Each set of cards starts with a title card, which shows you what you can create.

The **Animate a Character** cards are a great set to start with.



Examples of what you can create



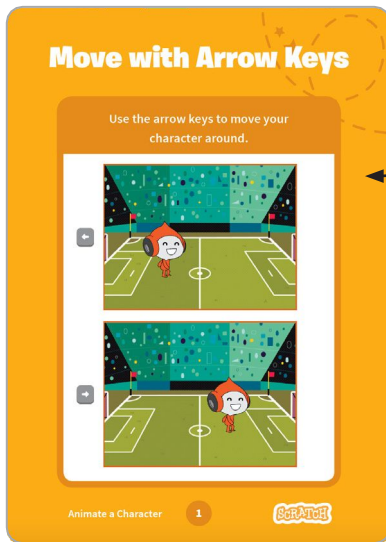
A list of all the cards in this set



USING THE CODING CARDS

After each title card is a series of cards walking you through each step of creating a project.

Add your own sprites, backdrops and more!



The front of each card shows you what you can create.



The back shows you how to do it.



GET CREATIVE!

Encourage students to use their imagination as you create projects. There are many different ways they can make their Scratch projects unique.

You can choose or draw your own characters.



Choose a sound or record your own.



Try changing numbers or adding blocks to your code to see what happens.



Experiment and customize your project however you want!

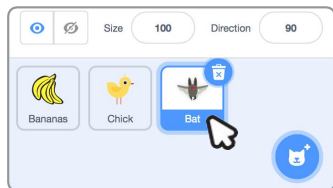


GET CREATIVE WITH SPRITES!

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1

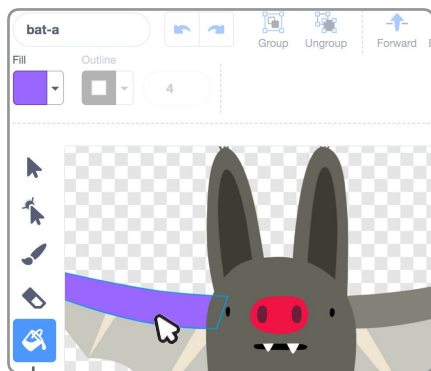
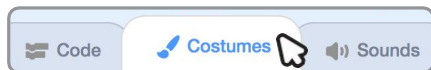
Scratch has its own paint tools, which allow you to customize sprites from the library, or even create sprites of your own.

Let's start by editing a sprite from the library.



Select a sprite to edit by clicking on it in the Sprite list.

Click the **Costumes** tab at the top left to see the paint tools.



The paint tools allow you to recolor sprites, add to them with a paint brush, and change them in a variety of ways.

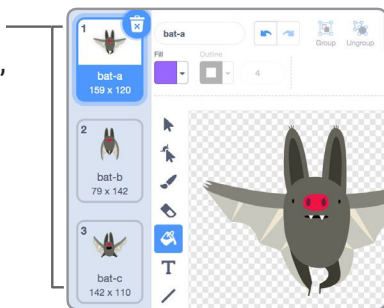
You can use the **paint bucket** tool to recolor different parts of a sprite.



GET CREATIVE WITH SPRITES!

Some sprites, like the Bat sprite have multiple costumes, or poses.

You can see a sprite's costumes by clicking the **Costumes** tab.



If your sprite only has one costume, right click on the costume to duplicate it (On Mac control + click).



Now you can modify the second costume using the paint tools, so your sprite has two different poses or facial expressions.

Click the **Code** tab, then try adding these blocks.

when this sprite clicked

next costume

wait 0.5 seconds

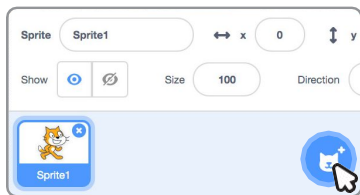
next costume



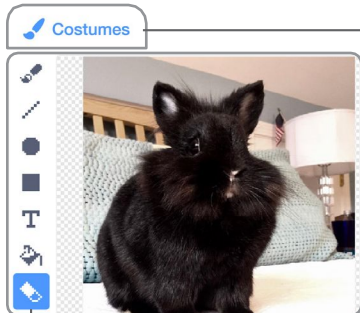
ADD YOUR OWN PHOTOS

There are many ways to create your own sprites and artwork using the Scratch paint tools.

You can create your own sprites by uploading photos or images and erasing the background.

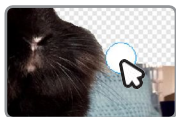


Hover over the New Sprite button, then select **Upload Sprite**.



Next click the **Costumes** tab. You will see bitmap tools for editing your image.

Click the **eraser** icon and use the eraser tool to remove the background from your photo.



Tip: to adjust the size of the eraser, type a larger or smaller number.

There are two modes for drawing in Scratch:

1. **Bitmap Mode** allows you to edit photos and paint with pixels.
2. **Vector Mode** allows you to create and edit shapes.

Tip: If you'd like to remix and customize this guide, click the following link to access the Google doc version: bit.ly/Scratch-Guide



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