# Bring Your Drawings Into Scratch

The Scratch sprite library is full of a variety of characters. Let's explore creating a sprite in the Scratch editor using an uploaded original hand-drawn image or photograph. Keep in mind:

- You can choose a JPG, PNG, or SVG file.
- Please keep each of your files under 10MB.
- Do not upload materials under copyright.
- Be sure that your upload follows the Community Guidelines and does not reveal personal information (like a photo with your face).

In this guide, you'll find:

- Getting Started
- Uploading a File
- Removing the Background
- Coding Your Sprite

## Getting Started

To start your project, head to https://scratch.mit.edu and click "Create." If you have a Scratch account, be sure to log in so your work is automatically saved. If you are new to Scratch and just getting started, check out our Getting Started Guide (http://bit.ly/Scratch-Getting-Started-Guide) for more information.

You can also create a sprite in the offline editor or without being logged in to the online editor, but you'll need to save your project to your computer in order to save your work or share later.

## Uploading a File

To upload a file as a sprite, hover over the sprite menu in the lower-right corner of the sprite area and choose "**Upload**." Then, select the file you want to create a sprite from. Your image will appear on the costume tab when it has been uploaded.

There are two modes for drawing in Scratch:

- Bitmap-mode allows you to edit photos and paint with pixels.
- Vector-mode allows you to create and edit shapes.

JPG and PNG upload in bitmap-mode. SVG upload in vector-mode.
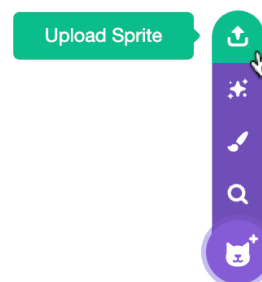
# Removing the Background

It is best if the images you chose have a transparent background, such as a PNG with transparent background or SVG file. You can remove the background using the tools in the Scratch paint editor after a file has been uploaded, or before you upload the file using online tools or software.

## Method 1: Use the Paint Editor Tools
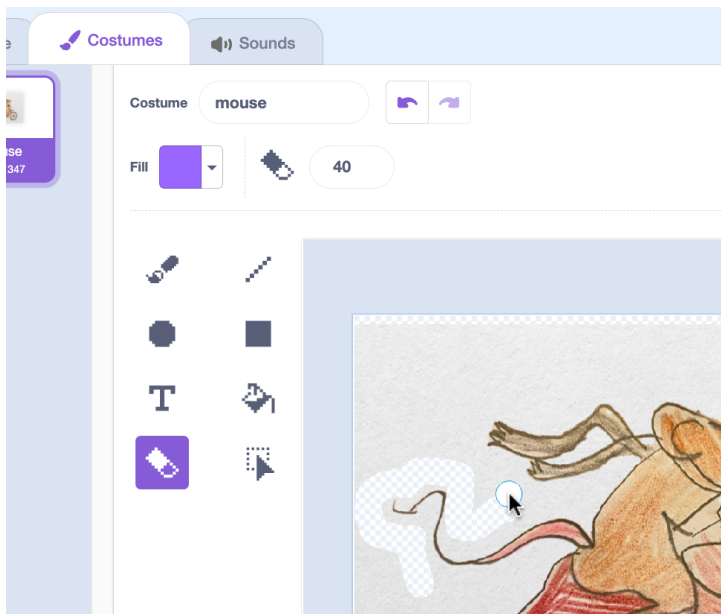


In bitmap-mode, use the paint editor tools to make edits to your image, such as erasing parts of the image you don't need. You'll know you are in bitmap-mode when you see the "Convert to Vector" button at the bottom of the screen.
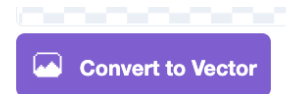
Use the **eraser** tool to remove the background or other pieces you don't want from your image.

## Method 2: Use Online Tools or Software



Free online tools such as https://www.remove.bg or https://www.adobe.com/express/feature/image/remove-background, or software like Adobe Photoshop, can be used to remove the background before the image is uploaded to Scratch.
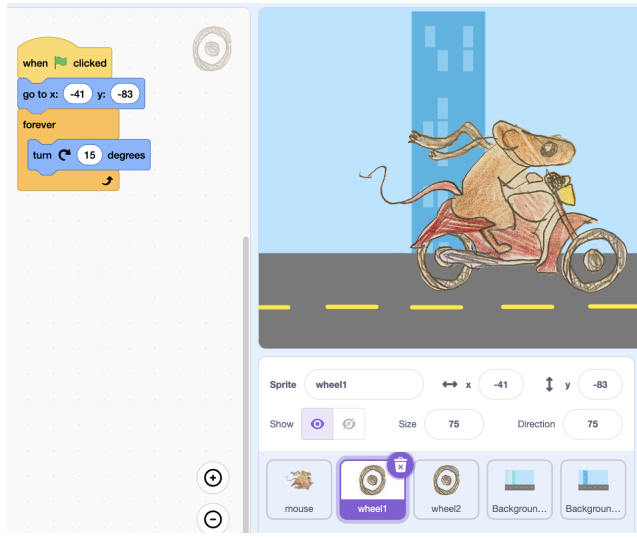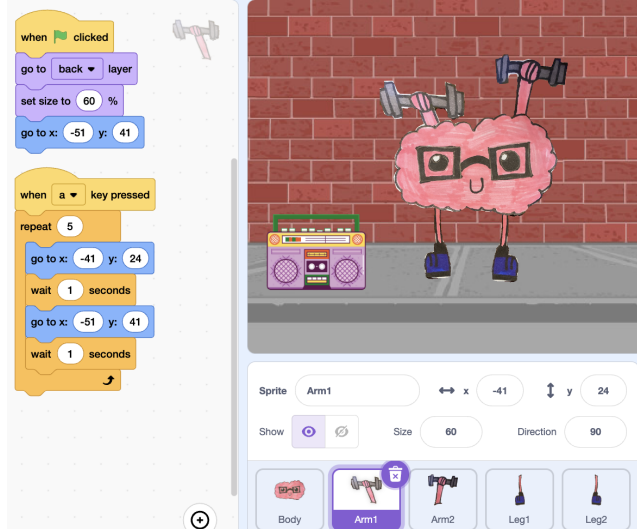
*Note: Please research these tools and use at your own risk. These are merely suggestions available at the time of this publication and not an endorsement of any product. Online tools and software are subject to updates and price changes.*

# Coding Your Sprite

Click the Code tab, then try adding a few blocks! Below are two examples, but the possibilities are endless! What will you create?

The Scratch Ideas page (https://scratch.mit.edu/ideas) is a great place to find tips for getting started, tutorials, Scratch Coding Cards, and more, before jumping into creating your first project.



Here is one example of a program where the wheel drawings were made into separate sprites. The uploaded sprite was duplicated, and the eraser tool was used to remove the wheels on one and leave only the wheel on another.

The wheel sprites were then coded to turn.

A scrolling backdrop was then added to create a sense of movement (see our Scratch YouTube
▶ How to Make a Scrolling Background… (https://youtu.be/CvSOVWyyjJl) tutorial for more information.



Here is another example of a program where the arms and legs were made into separate sprites. The uploaded sprite was duplicated, and the eraser tool was used to remove the arms and legs on one and leave only an arm or a leg on another.

The arm and leg sprites were then coded to move up and down repeatedly when keyboard keys are pressed.

*Thank you to @algorithmar's two daughters for their drawings shown in this guide.*

**Tip:** If you'd like to translate this guide, **click here to make a copy** of this Google doc.