



Let me introduce myself!

Hour of Code 2020

Scratch workshop





Let me introduce myself!	1
Specifications	1
Introduction to the Scratch interface (5 min.)	1
Hello Everyone! I live in...	2
Don't be shy! Introduce yourself and wave (20 min.)	2
Backdrop uploads and switches (15 min.)	6
Fun fact about your city (15 min.)	9
Wrap-up (5 min.)	11

This work is licensed under a
[Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).



Let me introduce myself!

Specifications

Learning Objectives

- Familiarity background changes
- Designing animations to tell a story or talk about yourself

Recommended ages or grade level

Ages 9-12 **OR** grades 3-6

Recommended duration

60 minutes

Materials

- Computer with a reliable Internet connection
- Optional: Scratch account

UN SDG: #4 “Quality Education”: Know yourself and know your origins. “Education enables upward socioeconomic mobility and is a key to escaping poverty. Over the past decade, major progress was made towards increasing access to education and school enrollment rates at all levels, particularly for girls.”

Introduction to the Scratch interface (5 min.)

Here are two fun facts about Scratch:

1. Scratch is easy and fun for kids to use.
2. It's free and it is used in over 150 countries to help young people get started with programming.

Head over to scratch.mit.edu

- Change the language (if needed).
- Look at the 3 “S” of Scratch:
 - **Stage:** where the action happens.
 - **Sprite:** the characters that are part of the program.
 - **Script:** where the code is written.
- Practice adding, deleting (right-click) and connecting blocks together.

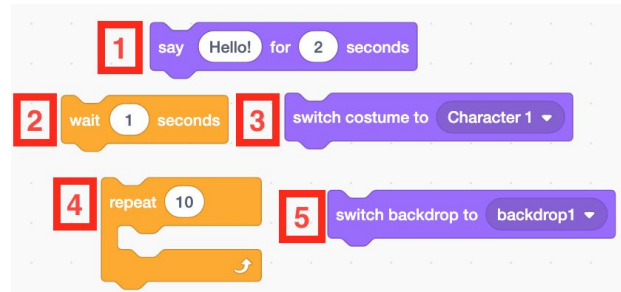


Note: Our mission today is to answer the question: **How can we tell a story with Scratch?** We will answer this by introducing ourselves and talking about the city we live in – all through the power of Scratch coding!

Hello Everyone! I live in...

Create an animation!

1. Say "Hello" for 2 seconds
2. Wait 1 second
3. Switch costume to "Character 1"
4. Repeat 10
5. Switch backdrop to "backdrop 1"

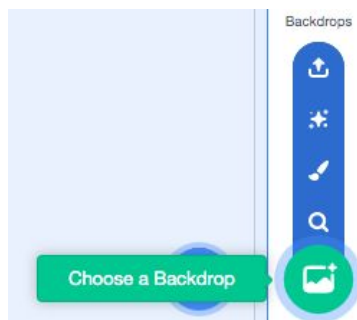


Don't be shy! Introduce yourself and wave (20 min.)

Use the **Say** and **Next** costume blocks to make a small animation.

Before we start coding, let's choose a starting backdrop either by painting one or choose one from the backdrop library.

1. Choose a backdrop from the backdrop library.



Now that you have a starting background, the next part requires you to:

1. Choose either 1 character in the **Sprite library**.
2. Go to the **Costumes** tab and choose which costume you like best. Change the colour of your character (clothes, hair, etc.) Delete the other costumes.
3. Right-click on your character to duplicate so it has 3 costumes total.

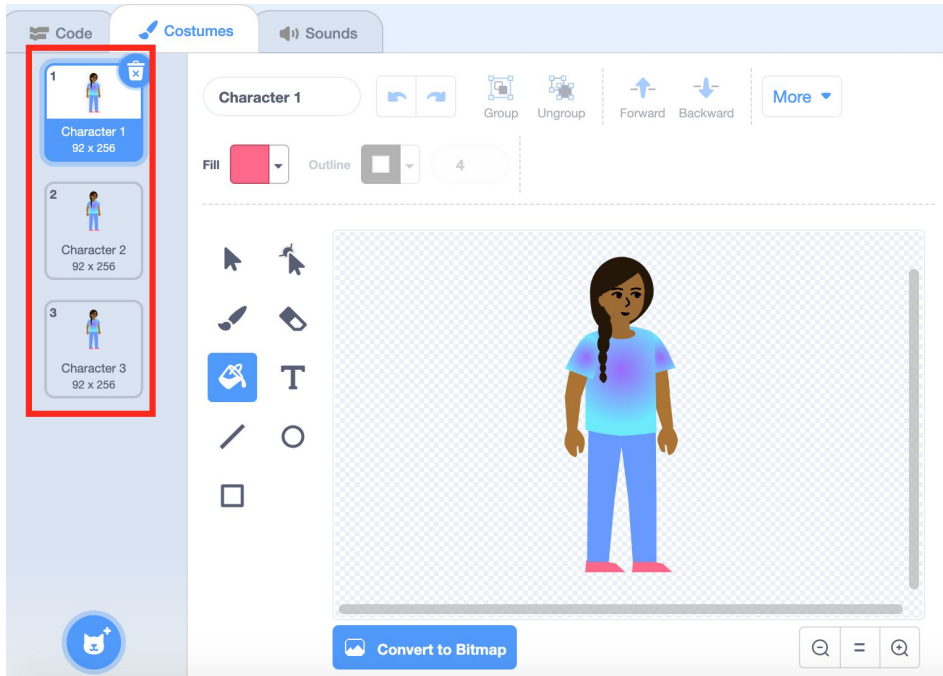
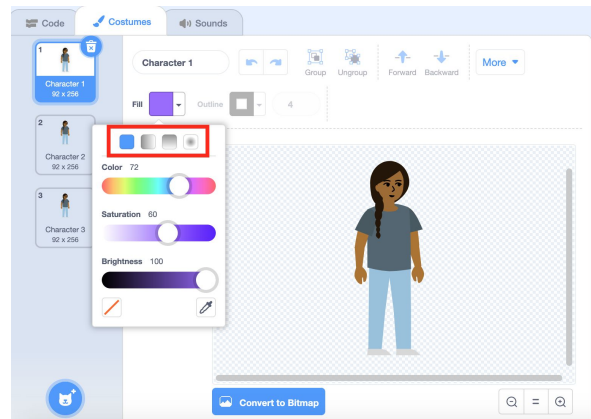
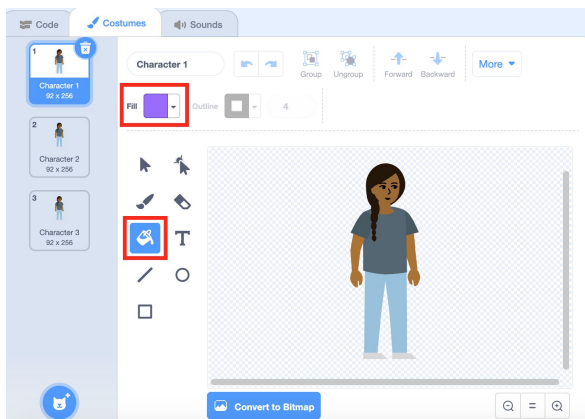


Image shows that we have our character and a total of 3 costumes.

Some tips on editing:

1. Choose the **Fill** tool (paint bucket icon).
2. Click on the colour next to the word “fill” above the editing icons.
3. Choose whatever colour you’d like by changing the colour, saturation, and brightness.
4. Above the colour, there are 4 squares. Click on them to get some cool colour effects.

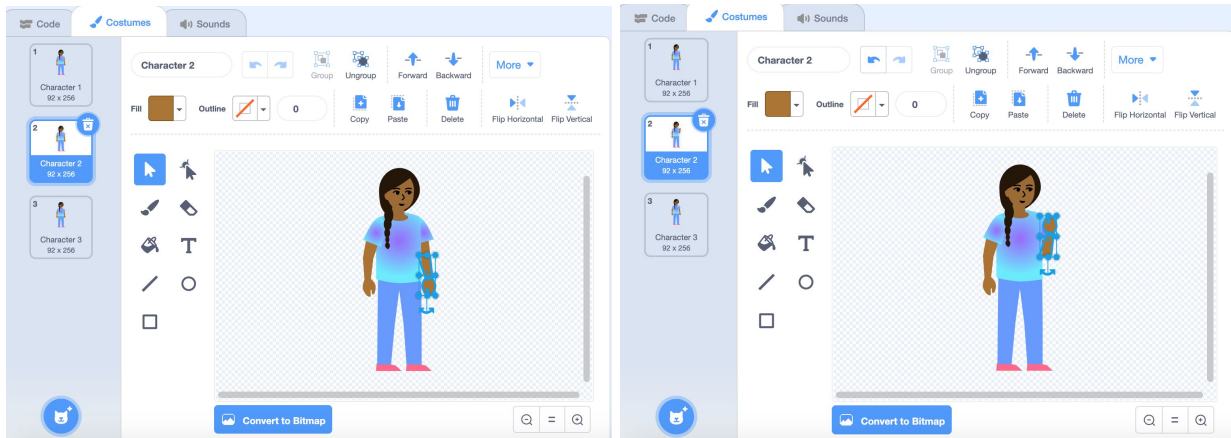


After you have your character and 3 costumes, start editing Character 2 and 3's body to create an animation of waving:

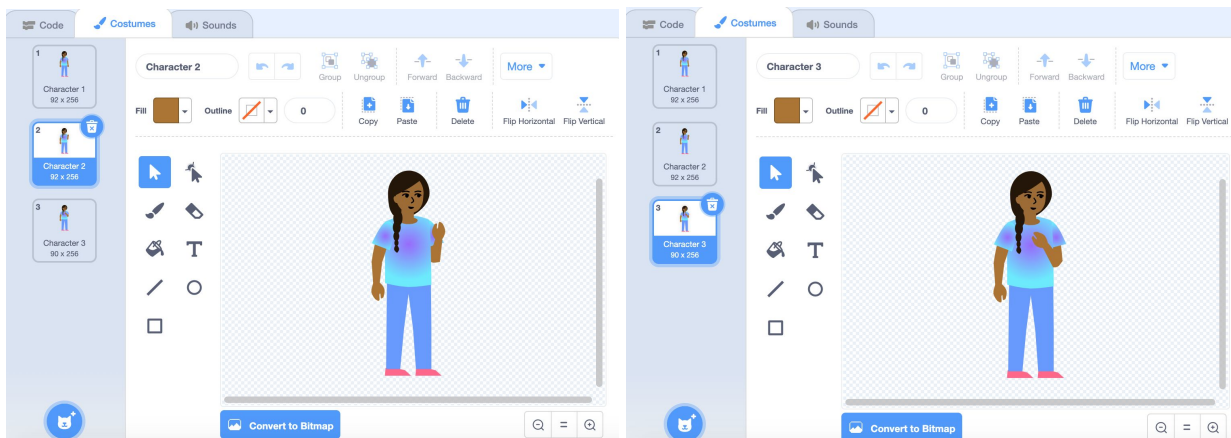
1. Click on the **Select** tool to select one of the forearms of “Character2”.



2. Rotate the arm 180 degrees into a wave position. You may need to flip your arm by clicking on the **Flip Horizontal** button at the top.
3. Edit “Character 3” costume in a similar way.
4. Flip back and forth between “Character2” and “Character3”. It should look like your character is waving.



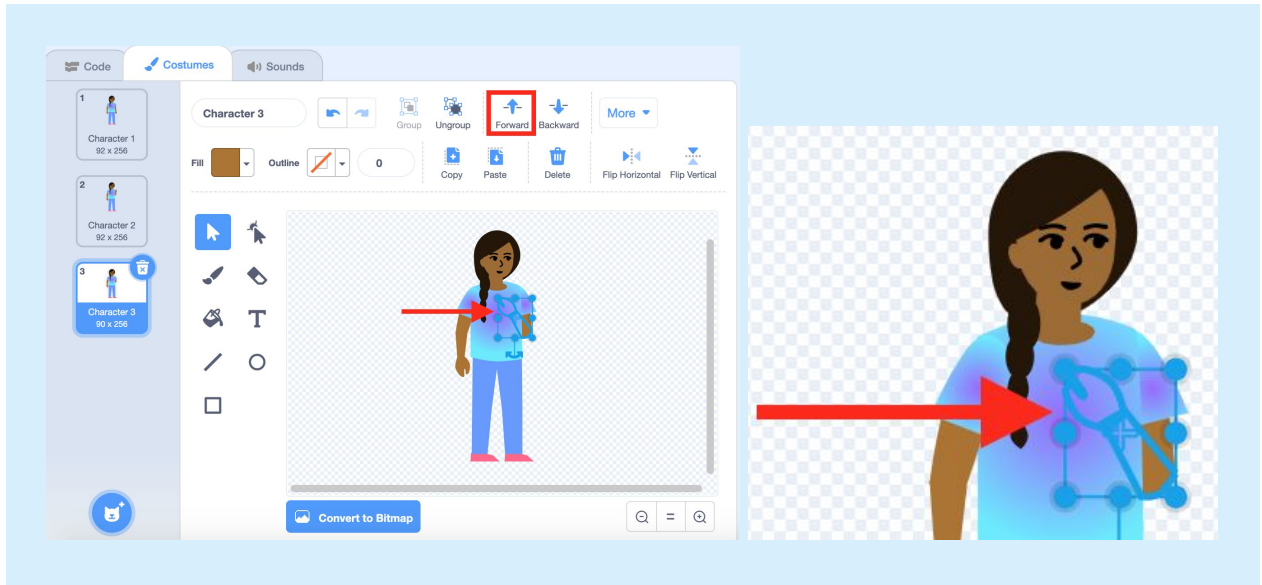
By rotating the arm on our character then we can animate waving. What else could you animate?



Using two costumes, you are able to animate our character waving.

Note: During the editing process, you may notice that parts of our picture are hidden behind other parts ie. an arm is behind the body (seen below). If you want to change that then select the part you want to bring forward and press the **Forward** icon at the top of the page.

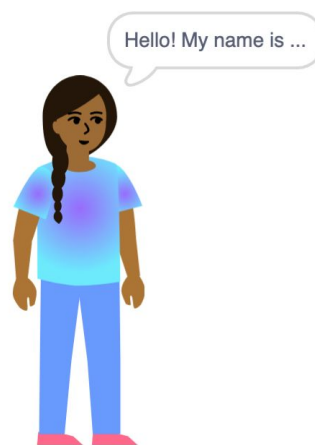
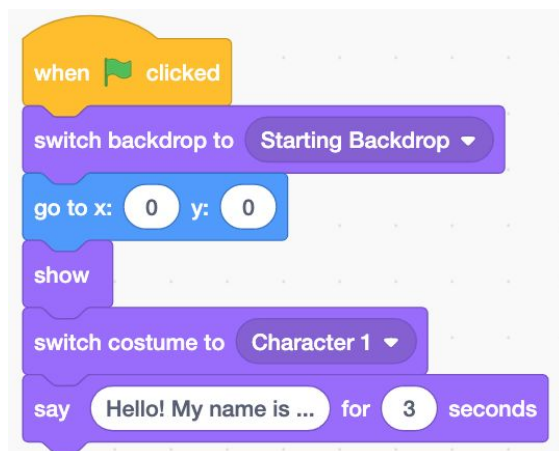




Press the **Forward** button and the top of the page to bring a part of a character forward so it's visible.

Code your character:

1. Add a **When "GreenFlag" clicked** block.
2. Insert a **Move to x, y** block.
3. Insert a **Show** block.
4. Insert a **Change costume to Character 1** (neutral and arms down costume).
5. Insert a **Say "Hello! My name is ..."** block. Put your name in the ...



The code above allows our character to appear on the screen and introduce themselves.

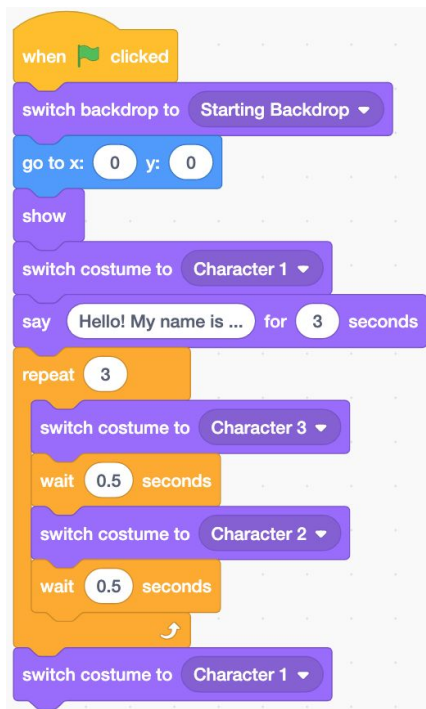
Now, create an animation:

6. Add a **Repeat 3 times** block.
7. Insert a **Switch Costume to Character 3** block into the **Repeat** block.
8. Insert a **Wait 0.5 seconds** block into the **Repeat** block.
9. Insert a **Switch Costume to Character 2** block into the **Repeat** block.



10. Insert a **Wait 0.5 seconds** block into the **Repeat** block.

11. Below the **Repeat** block insert a **Switch Costume to Character 1** block.

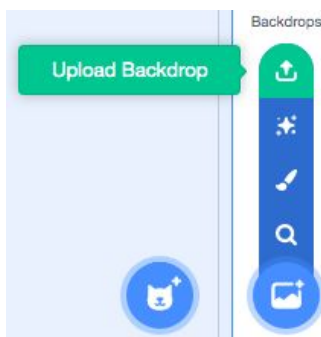


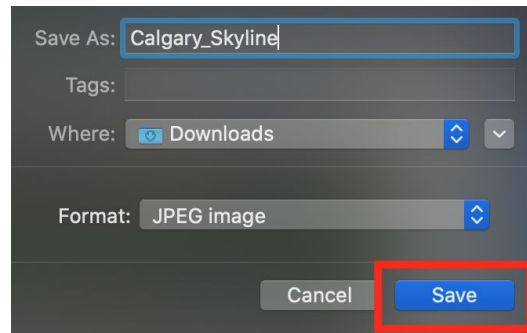
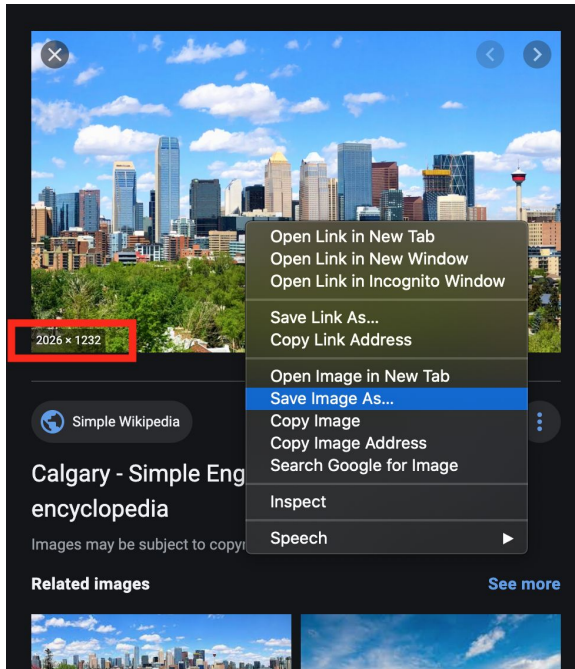
The code above shows a quick animation of our character introducing themselves and then waving!

Backdrop uploads and switches (15 min.)

You will learn how to upload images to Scratch (to show where you live) and how to use a backdrop switch block.

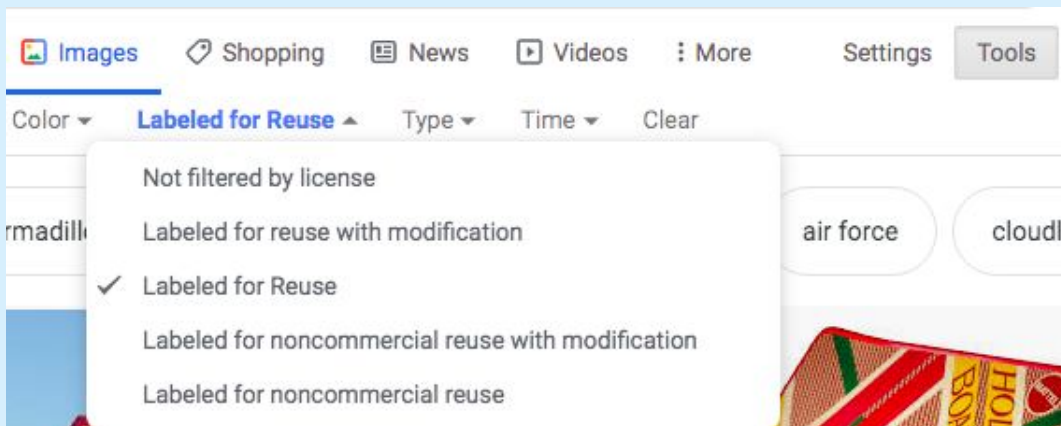
1. Search for a picture of your hometown online.
2. Save the picture to your laptop – somewhere easy to find like the desktop.
3. Hover over the backdrop icon and click on the **Upload backdrop** button.
4. Upload your image from your desktop.

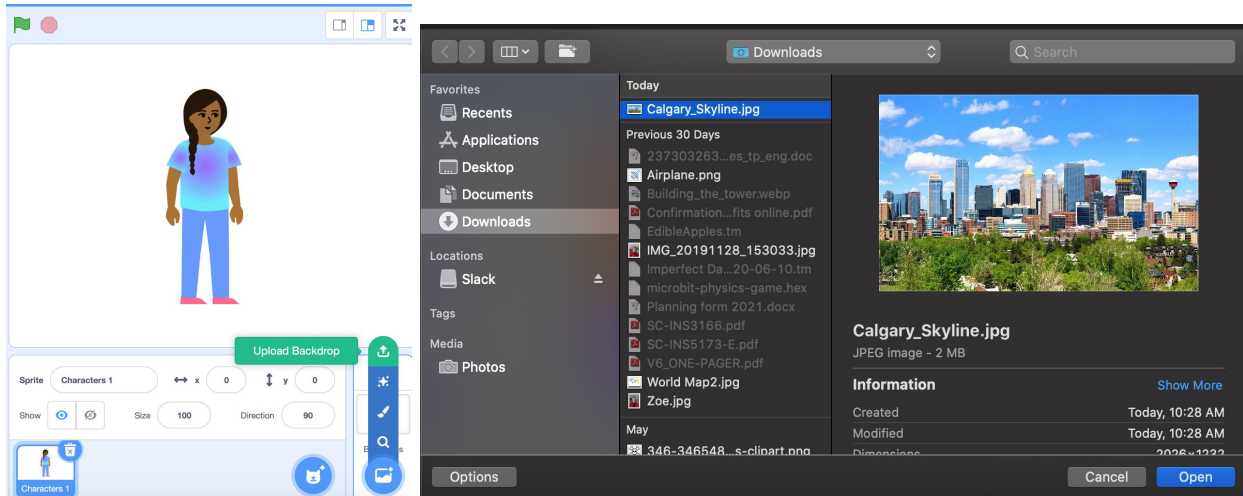




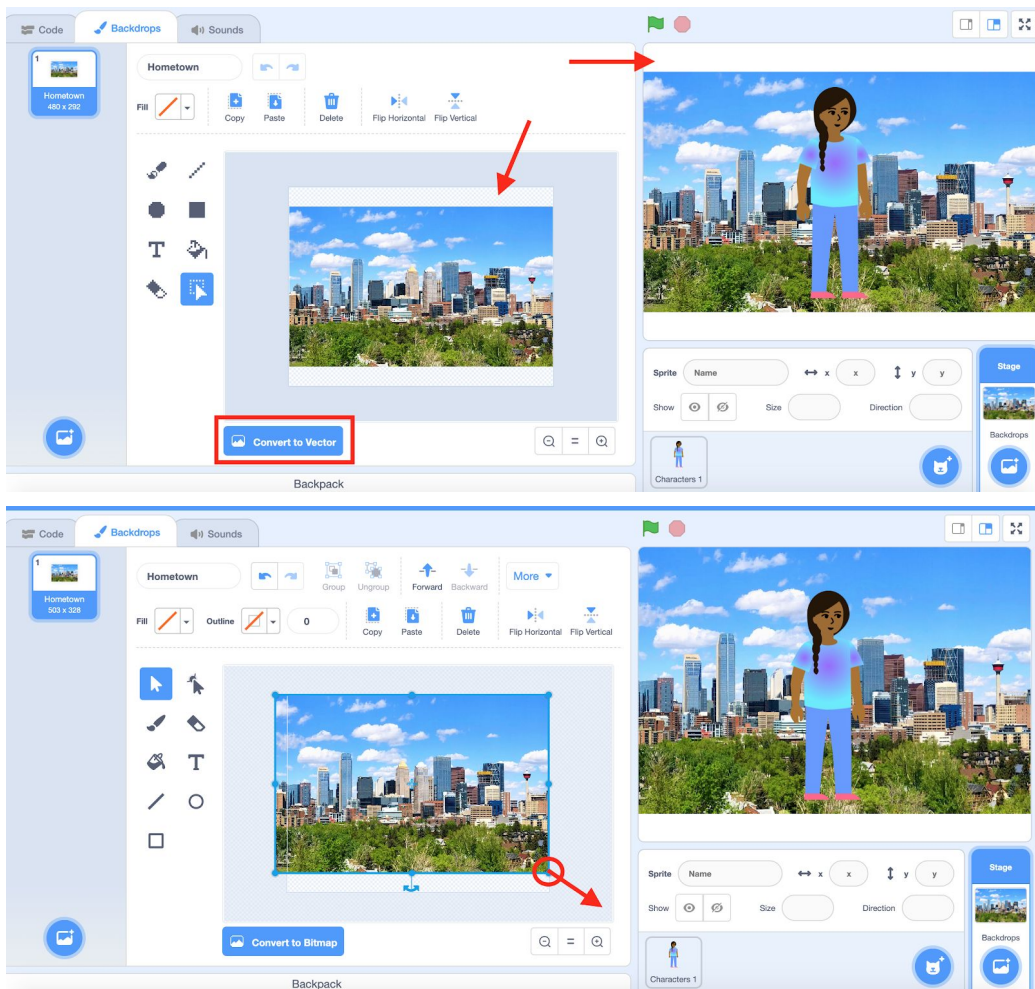
Do a quick internet search for a picture of your hometown. Some iconic buildings are always nice! Save the image to your desktop or downloads.

Note: Make sure your image is a good size i.e. at least 750x480. Larger images will have better resolution when uploaded. Also, make sure to check the copyrights using the **Tools** button.





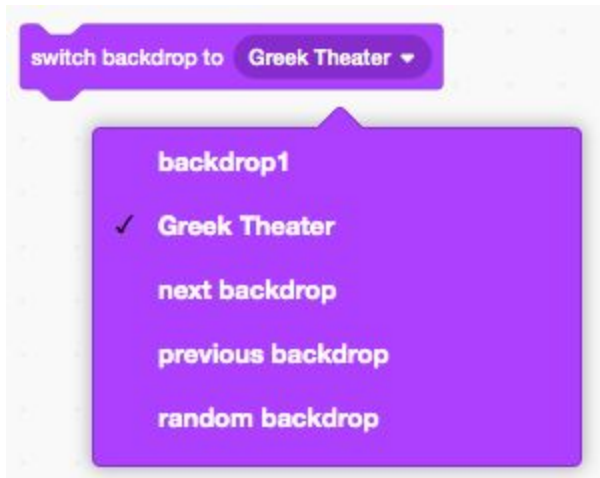
Upload your own backdrop to Scratch using the "Upload Backdrop" icon.



Some images will not fill the entire backdrop space. It's a quick fix to edit.



Here's how a **switch backdrop to** block works. You can click on the drop menu to access all the backdrops.

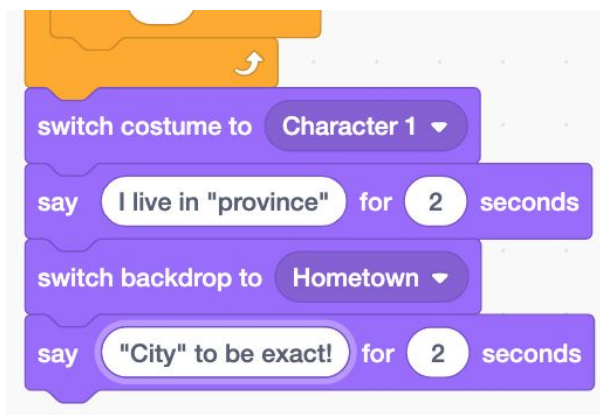


Fun fact about your city (15 min.)

Say where you live with a backdrop change and state a fun fact about your city.

1. Insert **Say "I live in (province)"**.
2. Insert **Switch to Backdrop 1**.
3. Insert **Say "In (city) to be exact"**.

Note: This new set of code continues from the previous code which introduced our character in the first part of the activity.



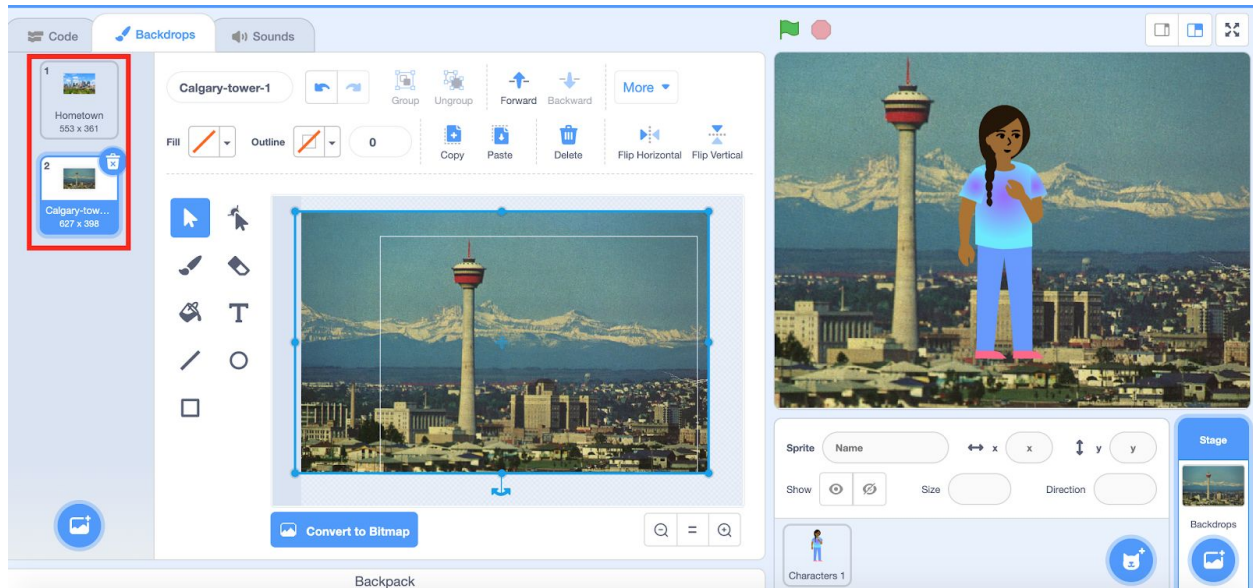
This switch backdrop block is helpful for changing locations very quickly!



Now state a fun fact about your town. This will require at least one more background change:

1. Think of your fun fact and find a new image online.
2. Upload this image to Scratch as a new backdrop.

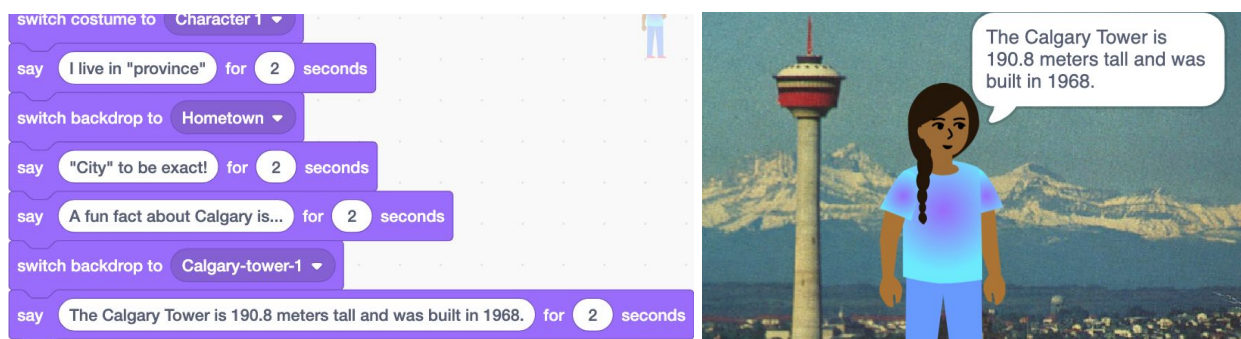
Note: The following instructions show an example for a fun fact about Calgary.



Upload your own backdrop using the **Upload Backdrop** icon.

Let's start coding our fun fact:

1. Insert **Say "A fun fact about Calgary is..."**
2. Insert **Switch backdrop to Calgary_Tower_1**
3. Insert **Say "The Calgary tower is 190.8 meters tall and was built in 1968."**



Our fun fact about the Calgary Tower starts with a backdrop change to show the grand Tower and then use a **Say ""** block to state your fact.



Wrap-up (5 min.)

Show your animation to your parents and friends. Don't forget to save your project!

No Scratch account?

If a participant doesn't have a Scratch account, they can save their project on the computer or a USB stick. When the account will be created, it will be simple to reopen the project and make it public or private depending on their settings.

