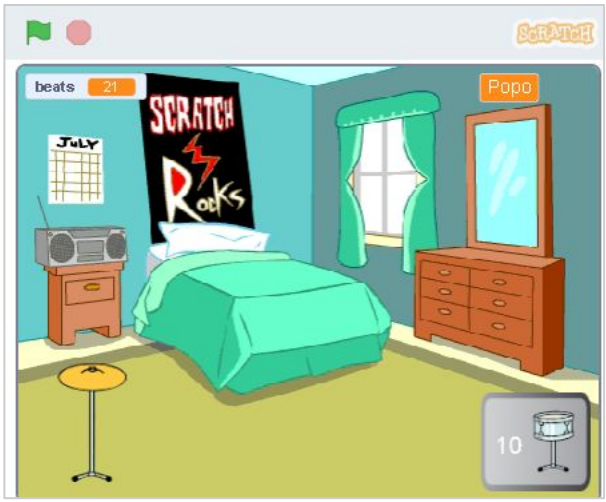
Drum Stars

Introduction

What you will make:

In this project, you will create a clicker game where you collect beats to unlock new drums and perform at bigger venues.

Open the URL (https://rpf.io/drum-star) in your browser to experience how the project work. Do not forget to set a name for yourself first.



You will learn to:

- Create a clicker game where each drum click earns beats
- Use variables to store and display scores and names
- Unlock new drums and venues using broadcast messages
- Build progression by upgrading instruments as you play

How will you open the project

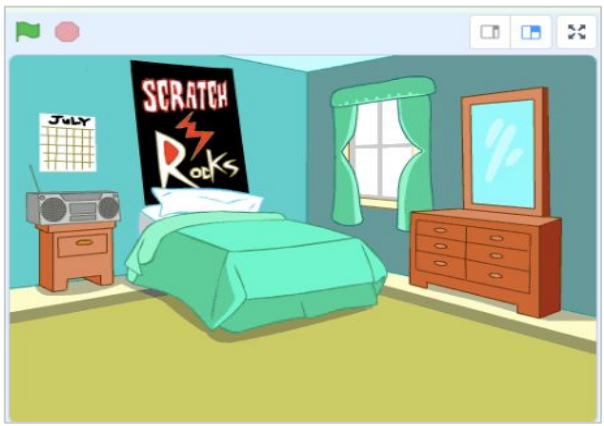
Online: Open the **Drum star -** rpf.io/starter-drum-star Scratch will open in another browser tab.

1. Set the stage

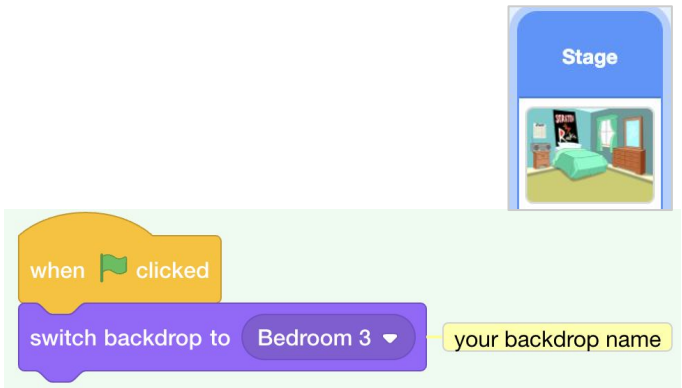
In this step, you will set the stage for your first show and choose a rock star name.
The drummer starts in a bedroom like a beginner!

Step 1:
Click **Choose a Backdrop** and search for **bedroom**.

Select a bedroom and add it to your project. We chose Bedroom 3



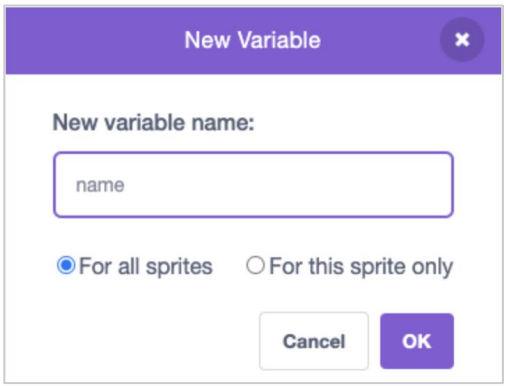
Step 2:
Click on your bedroom backdrop from the **Stage** pane and add this code:



Every musician needs to choose a rock star name.

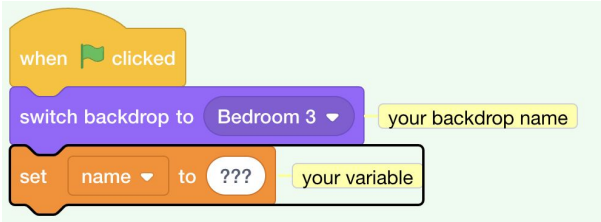
A **variable** is a way of storing numbers and/or text.

Step 3:
From the Variables blocks menu, click the **Make a Variable** button.
Call your new variable name:

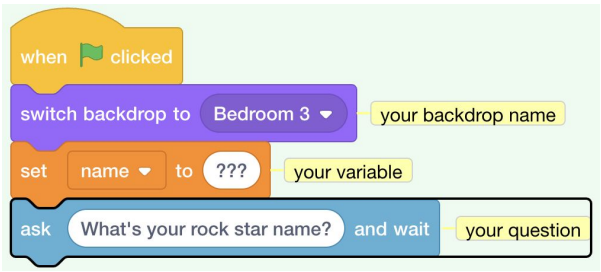


Notice: The new name variable appears on the Stage and can now be used in the Variable blocks.

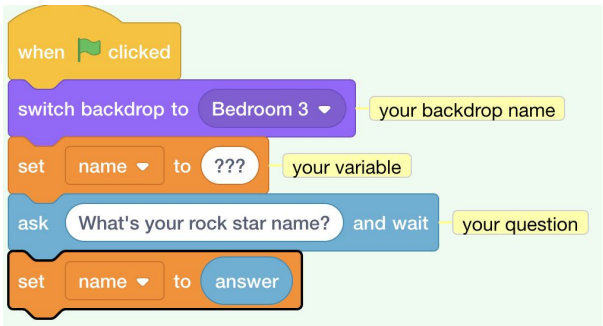
Step 4:
At the start of the project, your rockstar name is unknown.
Add a block to set name to ???



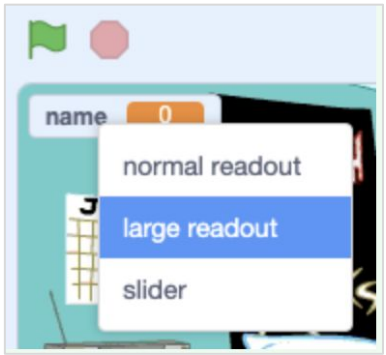
Step 5:
Click on the Sensing blocks menu and add an ask block to your code:



Step 6:
Set the name variable to the answer:



Step 7:
Right-click on the variable on the Stage and choose **large readout:**



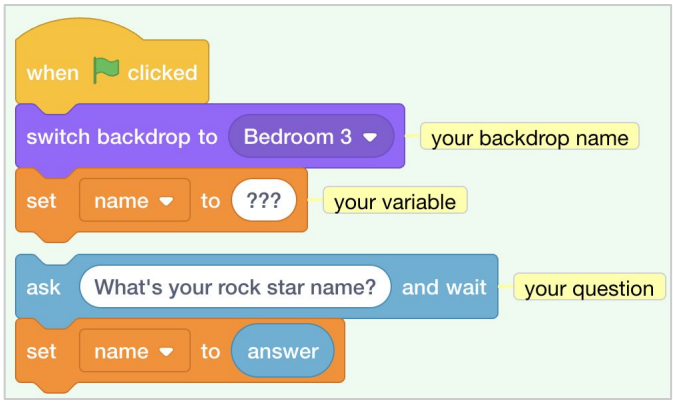
Step 8:
Drag your variable to position it top-right of the Stage:

Step 9:

Test: Run your project to make sure the variable starts as ??? then updates to your answer.

Step 10:
You don't want to type an answer every time you test your project.

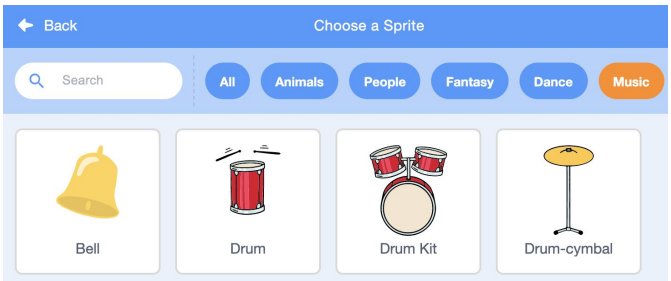
Drag the last two blocks of code away from the rest of the script.



2. Starter drum

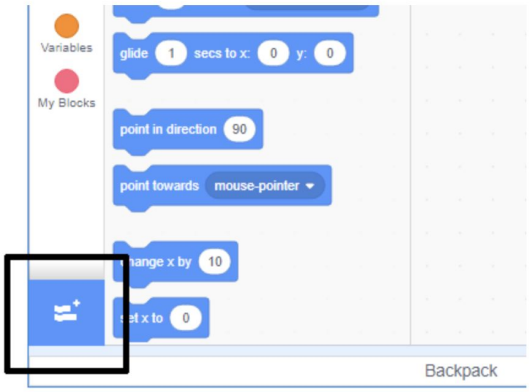
You will add a **cymbal** sprite that you can click to earn beats and play a sound.

Step 1:
Click **Choose a Sprite** and search cymbal.

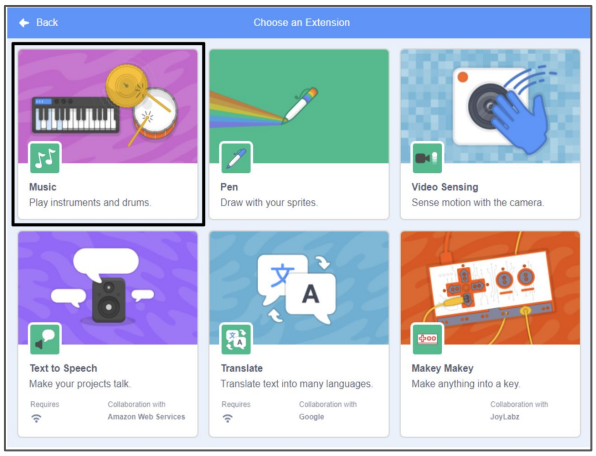


Step 2:
Add the **Drum-cymbal** sprite and position it on the Stage:

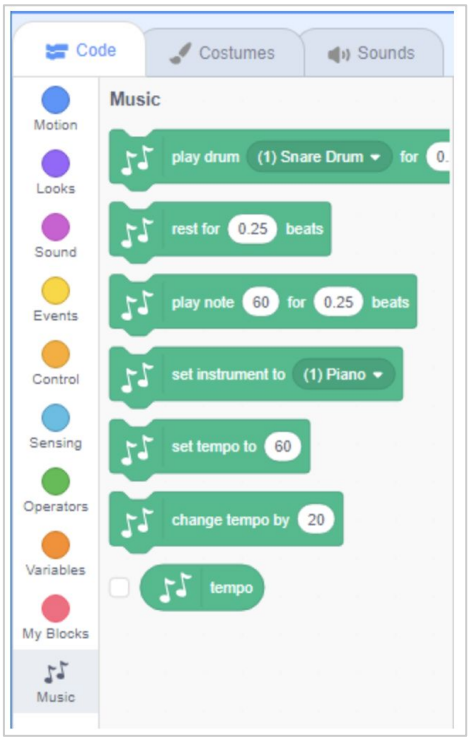
Step 3:
Click on **Music extension** button in the bottom left-hand corner, to add Music blocks in Scratch.



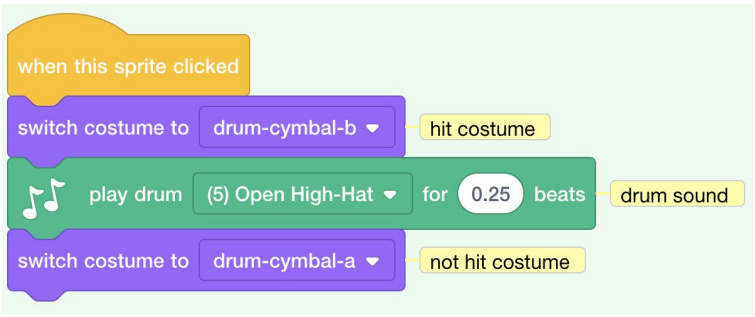
Step 4:
Click on the **Music** box to add it.



Step 5:
The Music section then appears at the bottom of the blocks menu.



Step 6:
Add a script to make the cymbal **switch costume** and **play a drum sound**:

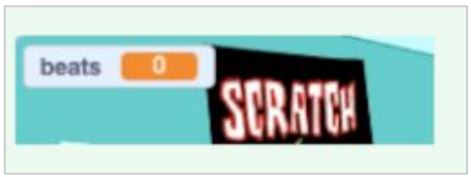


Step 7:
Test: Test your cymbal by clicking on it.

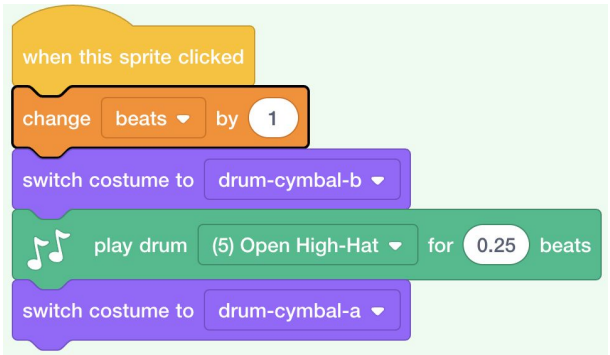
You should hear a sound and see the costume change.

The Drum-cymbal sprite will earn you one beat each time you click it.

Step 8:
Create a variable (for all sprites) called beats:

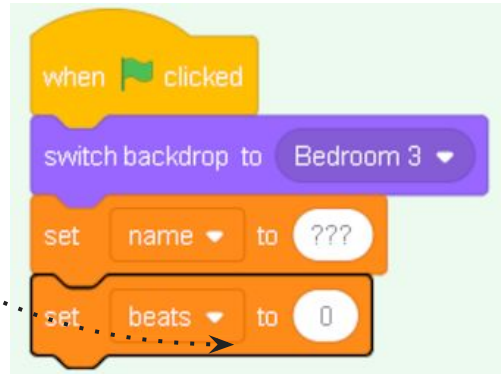


Step 9:
Add a block to change beats by 1 when the **Drum-cymbal** sprite is clicked:



Step 10:
The beats variable needs to start at 0 beats when you start a new game. For this:

- Click on the Stage pane and then the **Code** tab.
- Add a block to set beats to 0:



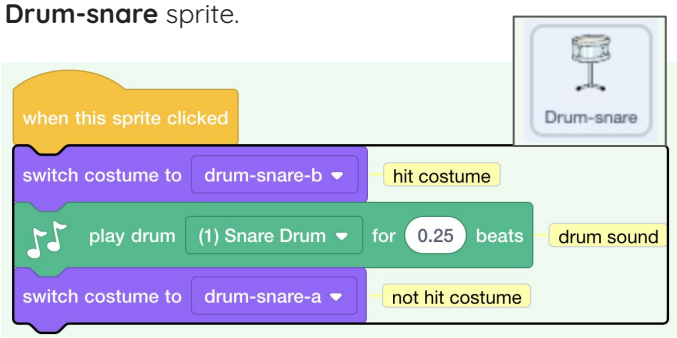
Step 11:
Test: Click the green flag and make sure your beats variable starts at 0.

3. Next drum

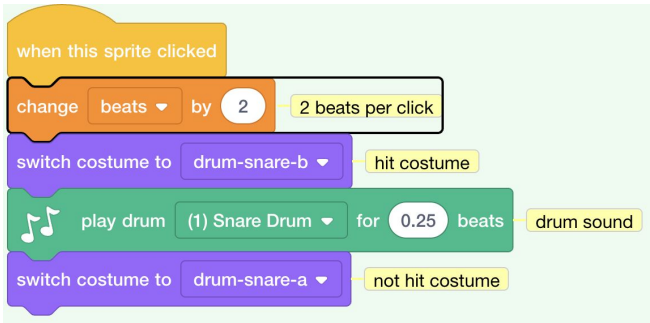
Add the **Drum-snare** sprite to your project and position it on the Stage:

Step 1:
Drag the when this sprite clicked script from the **Drum-cymbal** sprite to the **Drum-snare** sprite.

Step 2:
Change the costume and the drum sound for the **Drum-snare** sprite.

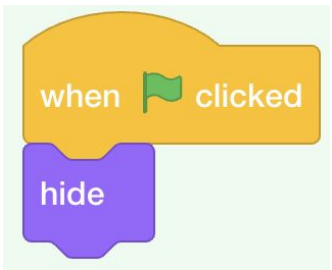


Step 3:
Change the number of beats earned to 2:

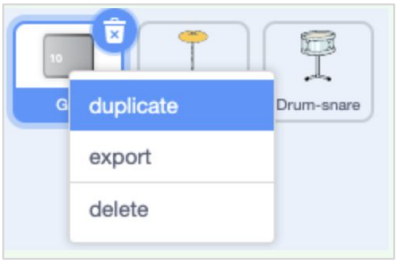


The next drum is not available when you start the project. It has to be earned with beats.

Step 4:
Add a script to the Drum-snare sprite to hide it at the start of the project.



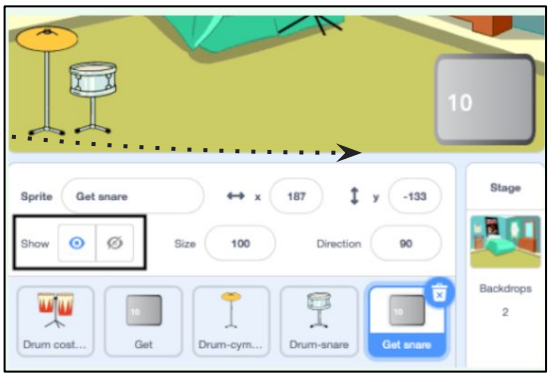
Step 5:
Add a button to show which drum is the next and how many beats it will cost.
Duplicate the **Get** sprite:



Step 6:
Change the visibility to **Show**.

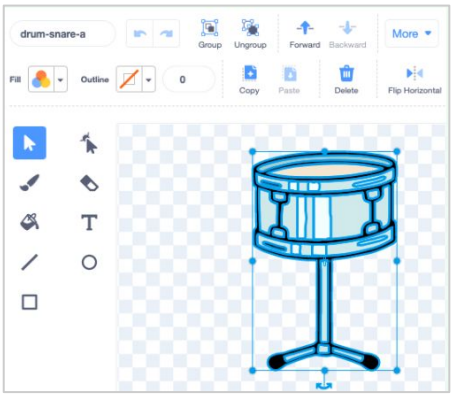
Step 7:
Change its name to Get snare

Step 8:
Position it in the bottom-right corner of the Stage:



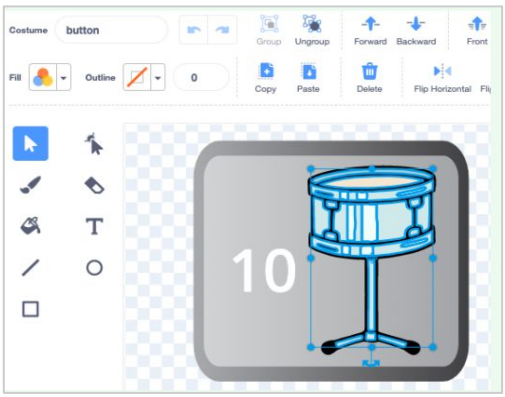
Step 9:
Click on the **Drum-snare** sprite and go to the **Costumes** tab.

Use the **Select** (arrow) tool to highlight the 'not hit' costume of your drum. Click on the **Group** icon then the **Copy** icon:

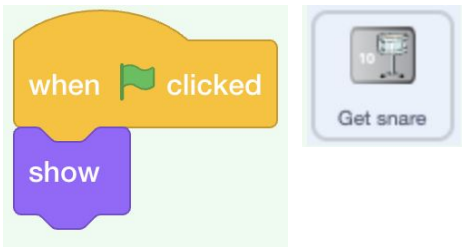


Step 10:
Click on your **Get snare** sprite and **Paste** the snare costume.

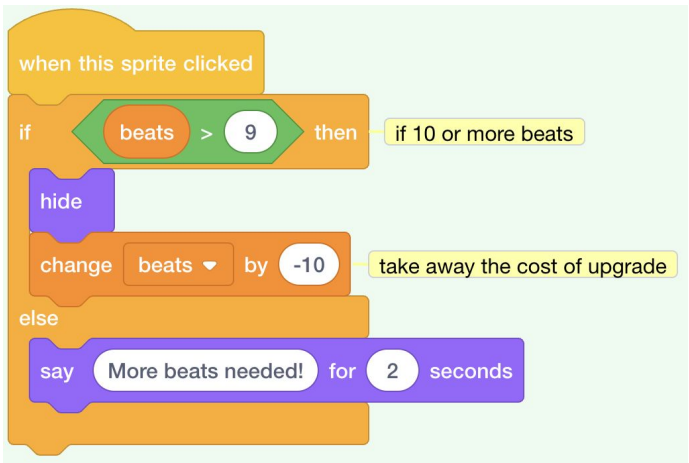
You might need to resize and position it to fit your button:



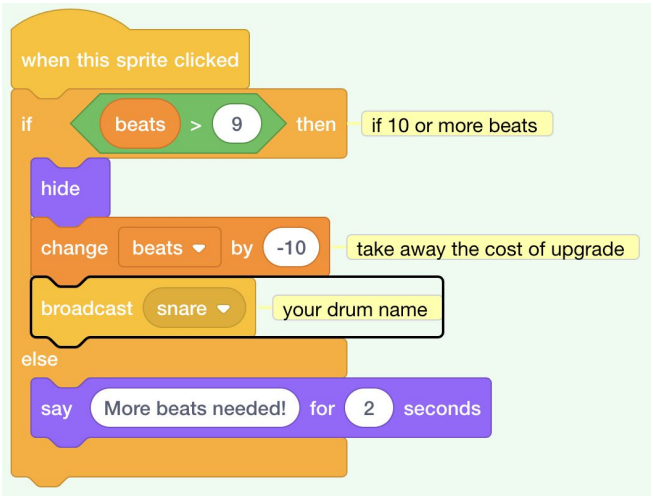
Step 11:
Click on the **Code** tab and add a script to show the **Get snare** sprite at the start of the project:



Step 12:
Add this code to unlock the next drum if the player has enough beats, or say More beats needed! if they do not have enough:

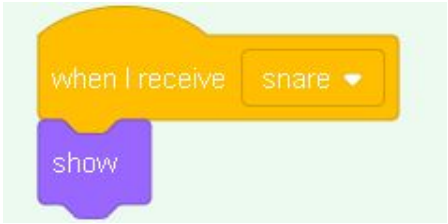


Step 13:
Add a broadcast block to send a new snare message:



Step 14:
Click on the **Drum-snare** sprite.

Step 15:
Add this script:

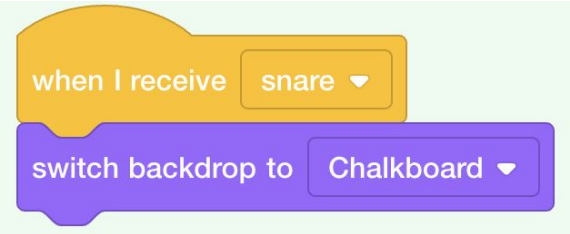


Step 15:
Test: Run your project.
You should not be able to unlock the next drum before you have enough beats.

When you unlock new drums, you can play at bigger venues! Add another backdrop. We chose **Chalkboard** to play our second gig at school.

Tip: Choose a venue that's a small step up from a bedroom. You want to save bigger venues for later!

Step 16:
Click on the Stage and add code to the Stage to switch backdrop when the upgrade message is received:



Step 17:

Test: Run your project**.**

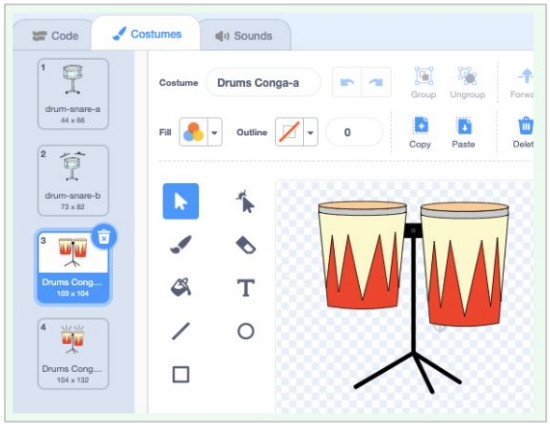
4. More drums!

In this step, you will choose which drum to add.

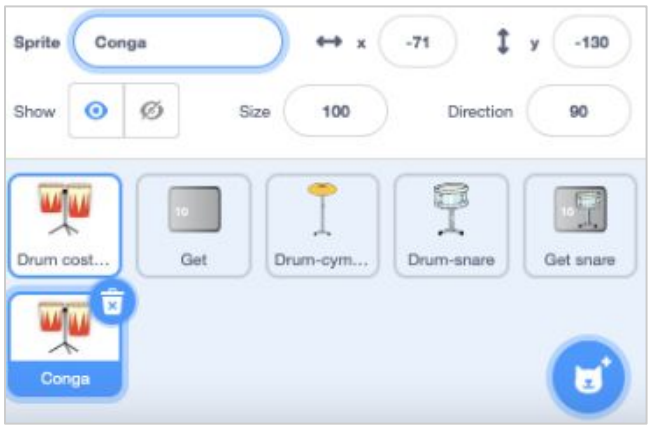
Step 1:
Duplicate the **Drum-snare** sprite:

Step 2:
Click on the **Drum Costumes** sprite and select the **Costumes** tab, Choose **Conga** to unlock next.

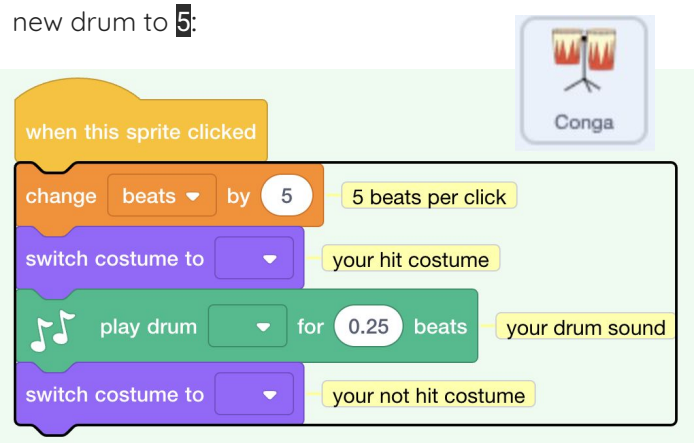
Step 3:
Drag the 'hit' and 'not hit' costumes of your drum. Drop them Into the **Drum-snare 2** sprite.



Step 4:
Name the new drum to match the costumes you choose.



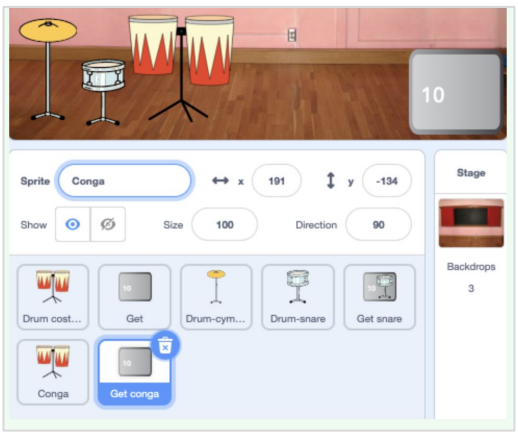
Step 5:
Click on the **Code** tab. Change the code to use the correct costumes and choose a sound for your new drum.
Change the number of beats you earn by clicking the new drum to 5:



Step 6:
Drag your new drum into position on the Stage

Step 7:
Duplicate the **Get snare** sprite and position it in the bottom-right corner of the Stage.

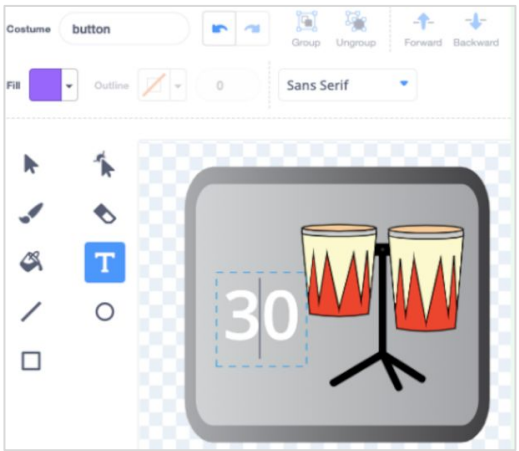
Change its name (for example Get conga):



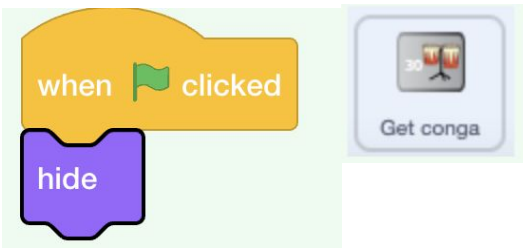
Step 8:
Delete the **snare drum** from the new 'Get' button costume.

Step 9:
Copy the 'not hit' costume for your new drum and paste it to the new 'Get' button costume.

Step 10:
Click on the **Text** tool and change the number to 30 to show the cost of the new drum.



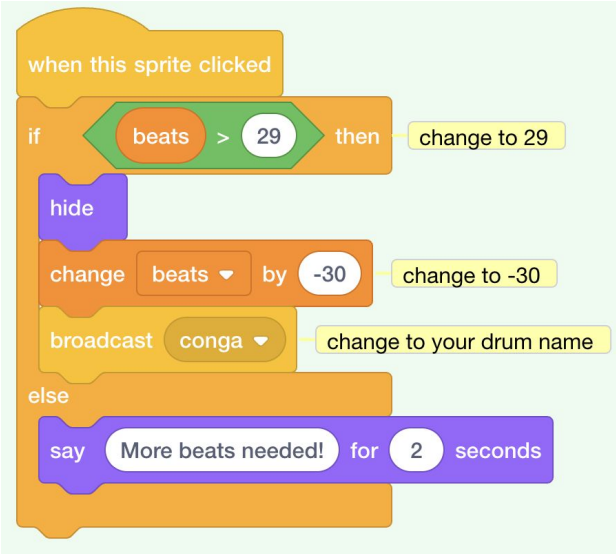
Step 11:
Your new 'Get' button should hide at the start.



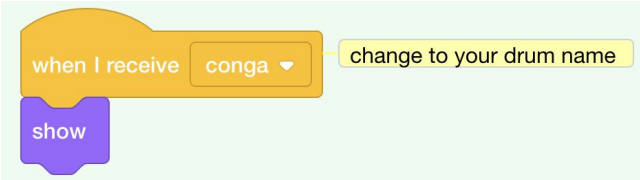
Step 12:
Add a when I receive script that your new 'Get' button will show when the player unlocks the snare drum.

Step 13:
Change:

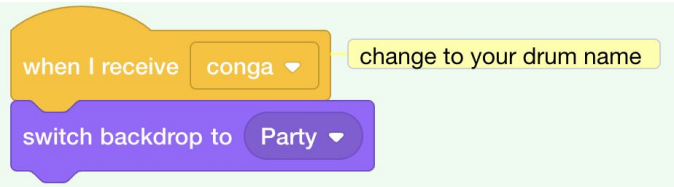
- The number of beats needed to unlock this drum
- The number of beats that are removed when the player unlocks this drum.
- The message that is broadcast when the player gets the new drum.



Step 14:
Click your new drum sprite and change the when I receive snare script to show it when your new drum is unlocked:



Step 15:
Add the **Party** backdrop.
Add a script to the Stage to switch the backdrop when the player upgrades to the new drum



Step 16:
Test: Click the green flag to start the game.
You should get unlock your new drum if you earn enough beats. What happens if you click the button before you have earned enough beats?

5. Play

It's time to make your game work just the way that you want it to.

If you separated the ask block on the Stage, put it back.

Test: Click the green flag and set your rock star name!

You should see the name displayed on the Stage changes.