

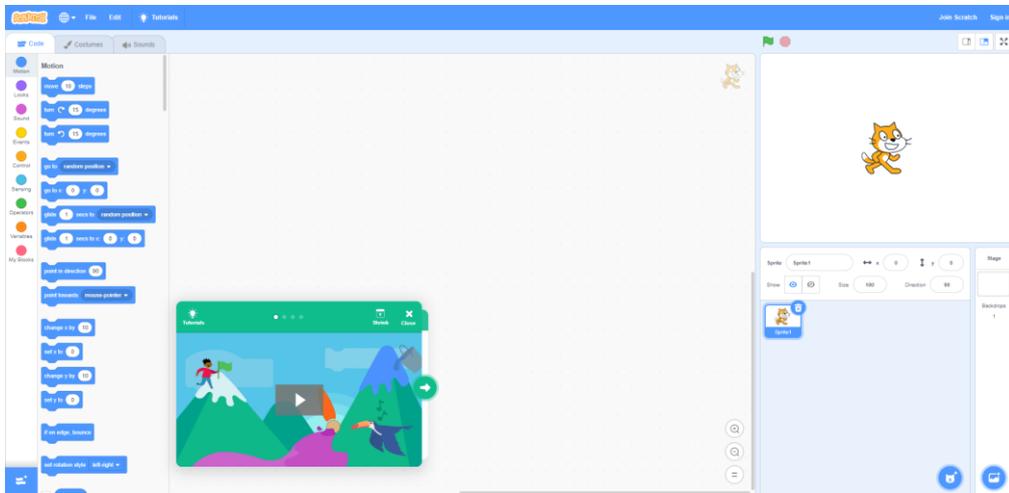
Rock Band

This project will provide you with a basic overview of the Scratch coding program, show you some basics, and most importantly make a cool thing to show off! We will be coding a rock band with a singer, drums and a banana piano.

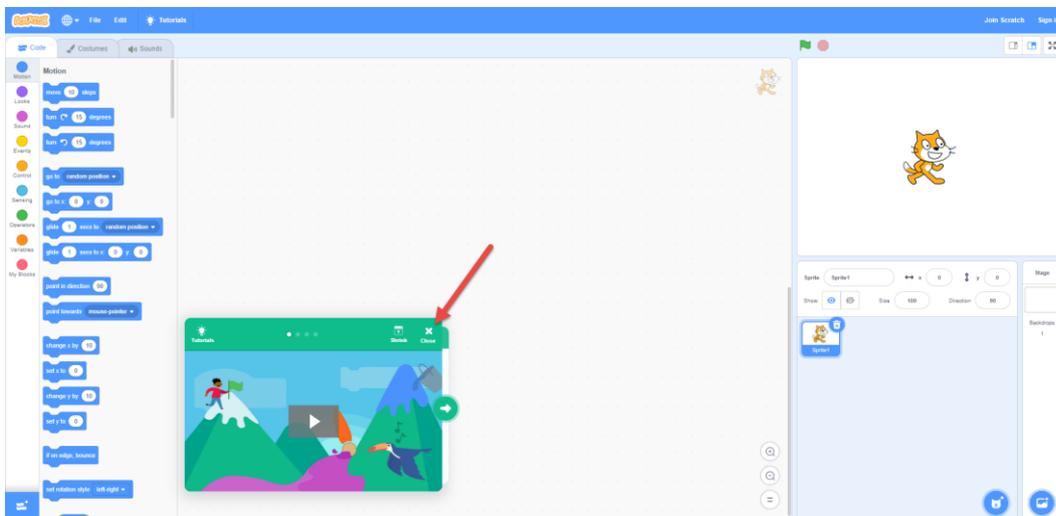
If you want to save your work you will have to join Scratch, which is free. Just press the 'join scratch' tab in the top right and sign up. This is not necessary however to use the program.

Step 1: Go to <https://scratch.mit.edu/projects/editor/?tutorial=getStarted>

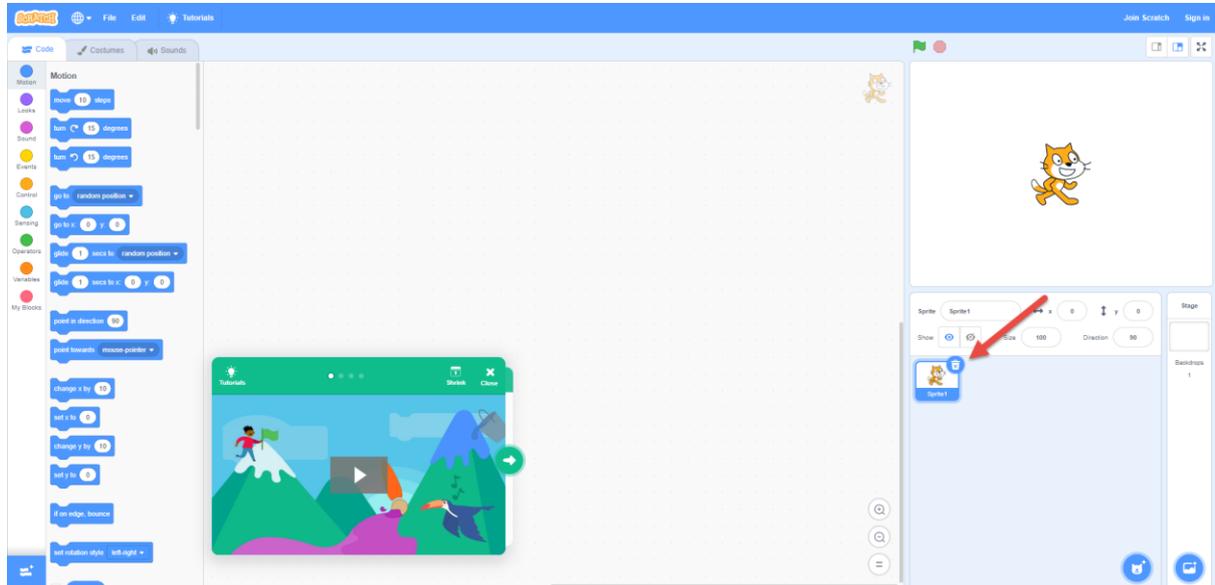
You will see this screen:



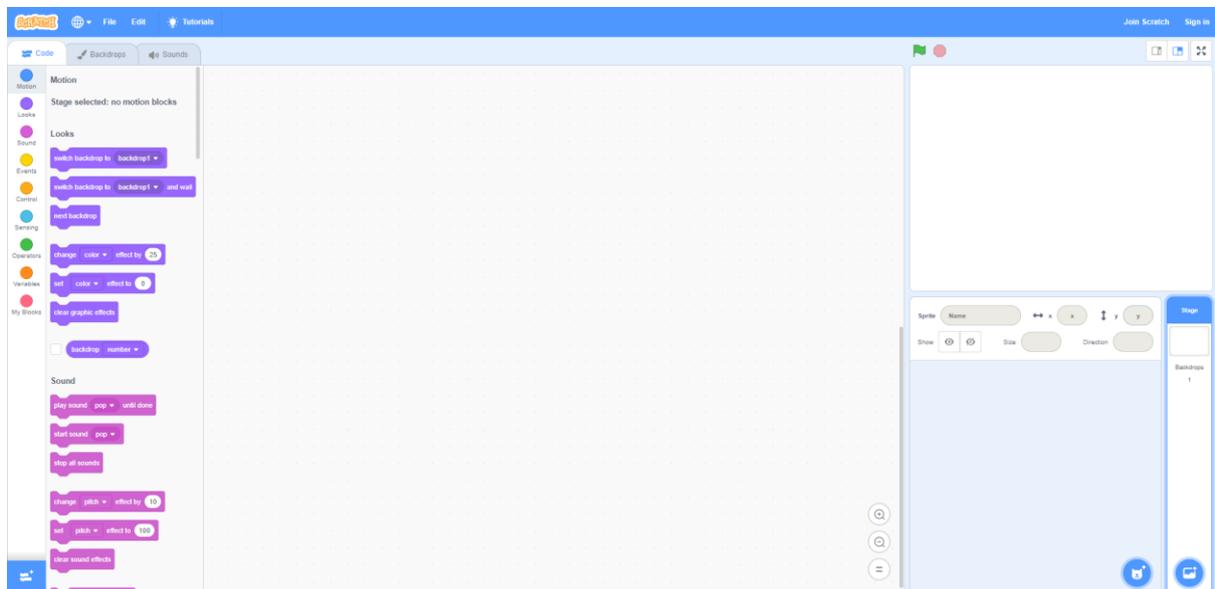
Press the X on the green **Tutorials Box**:



Press the  button next to the cat on the right hand side of the screen:



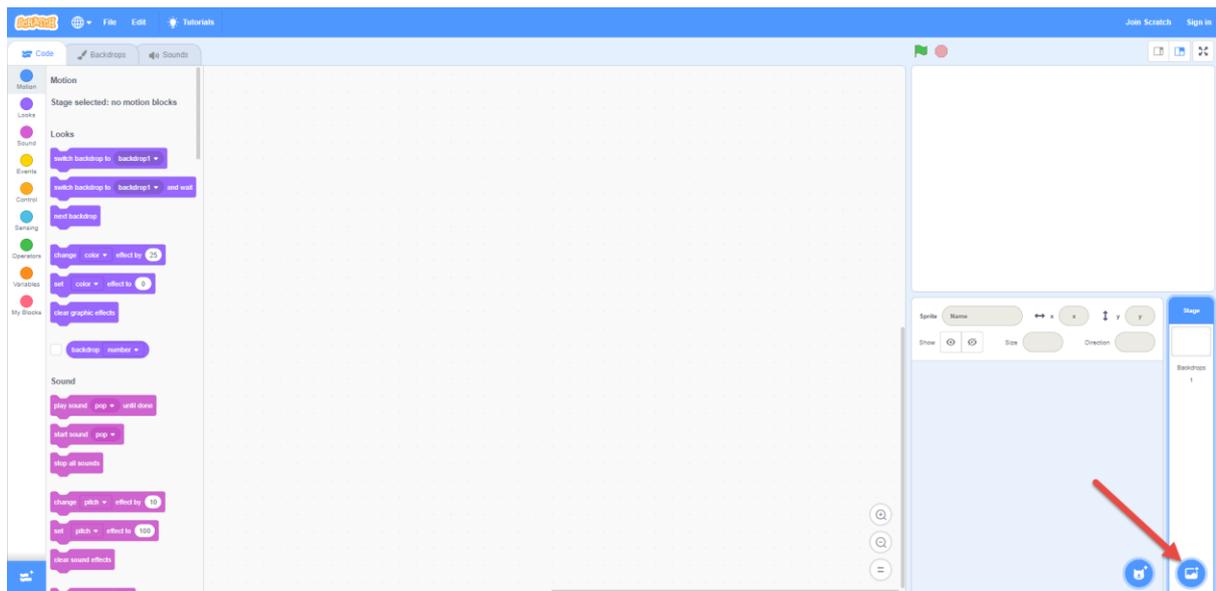
You should now have a blank screen like this:



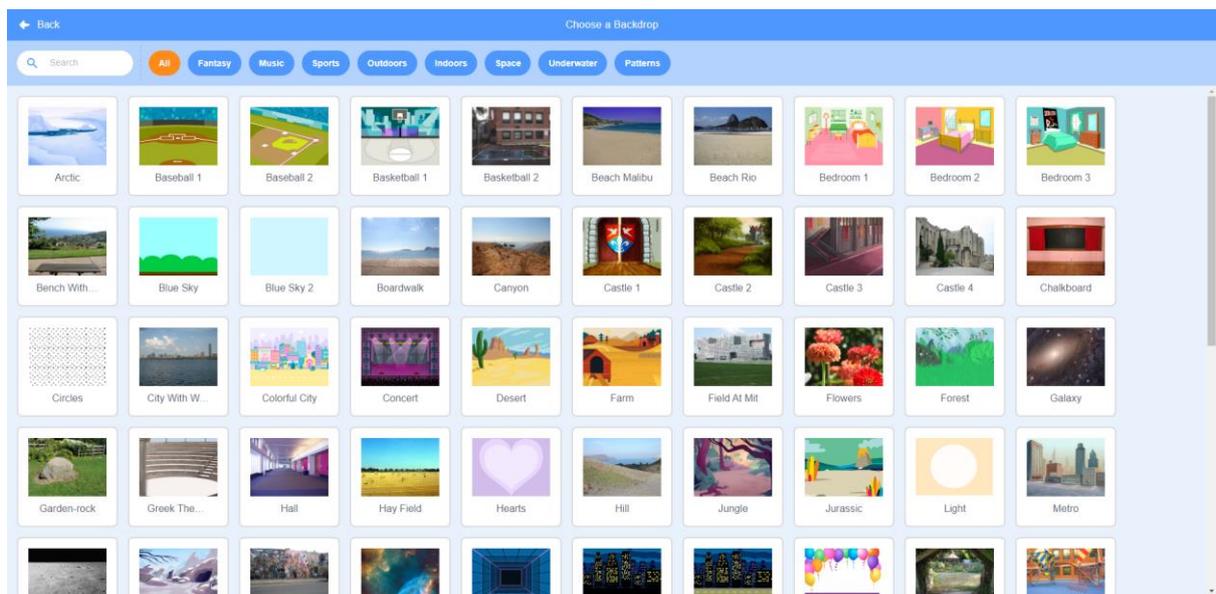
Step 2: Our project is currently a boring blank stage, let's start by choosing a **background**.



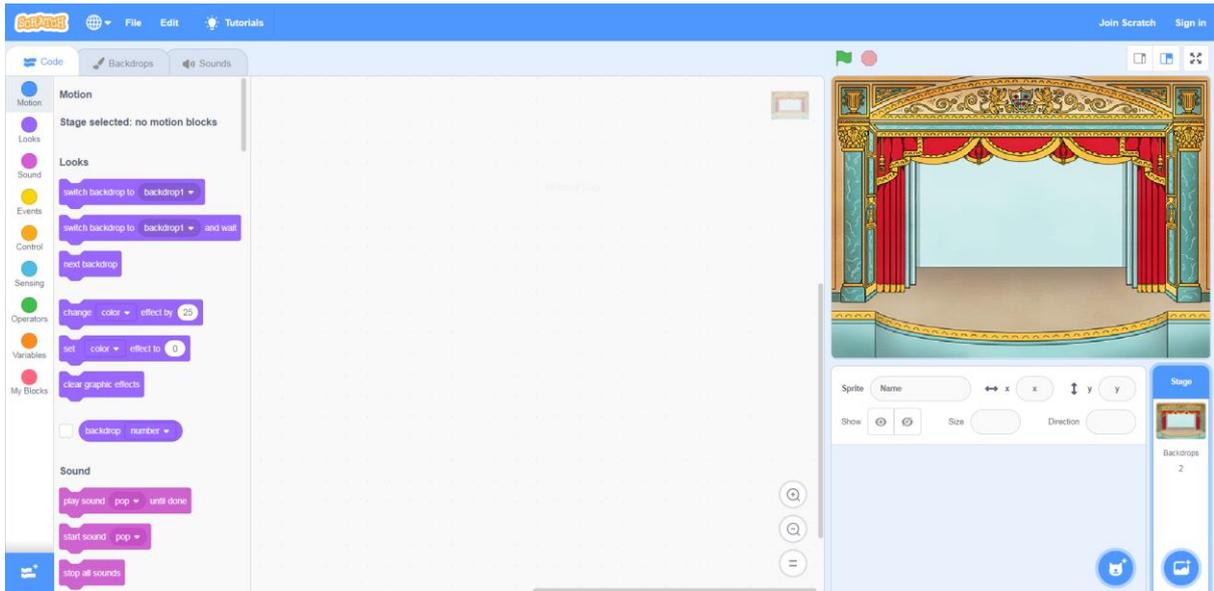
To choose a **background** press the  button in the bottom right corner of the screen, under the **stage icon**



This will bring up this screen where you can choose the **background** you like by left clicking on it:



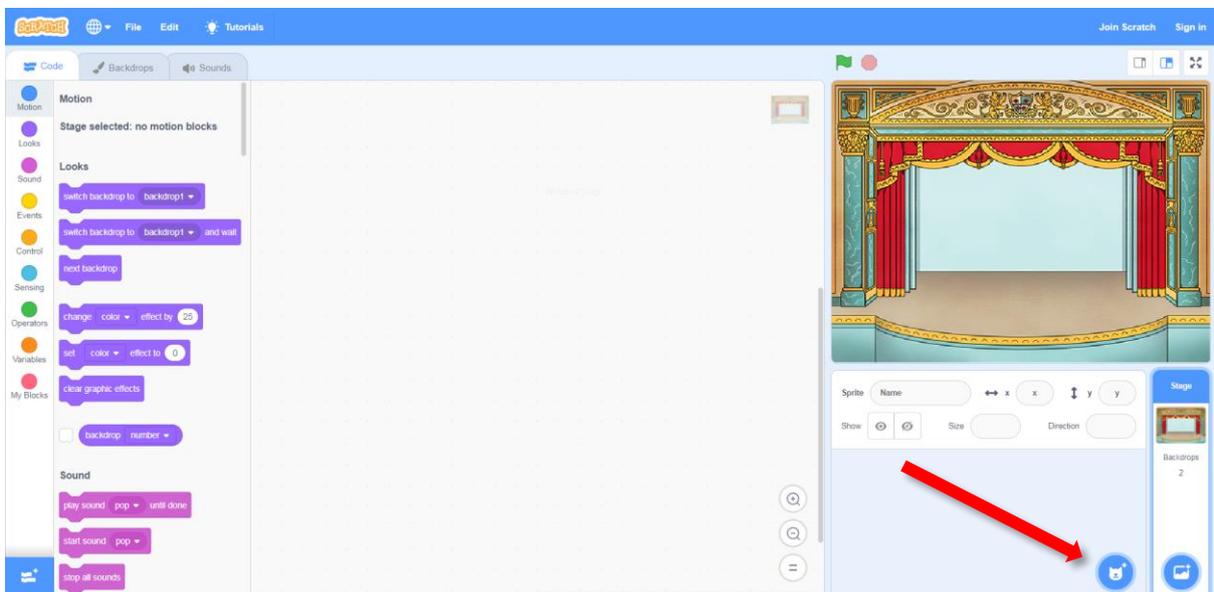
You will see the **background** you choose appear in the top right screen. I chose the "theatre".



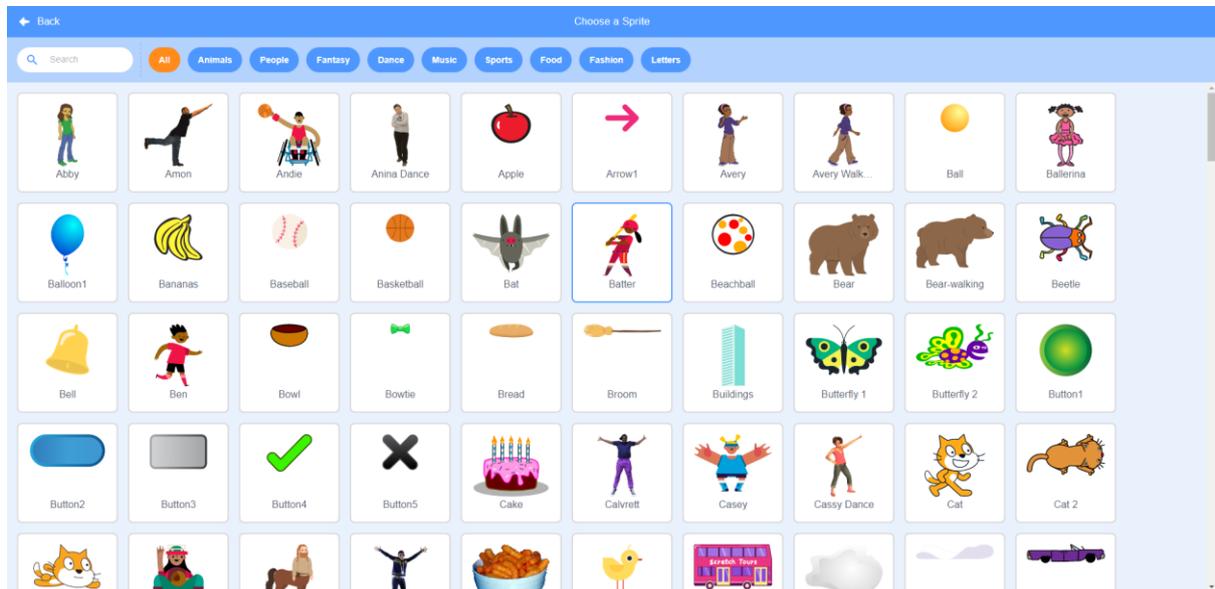
Step 3: Now that we have a **background** we need to add in the instruments for the band.



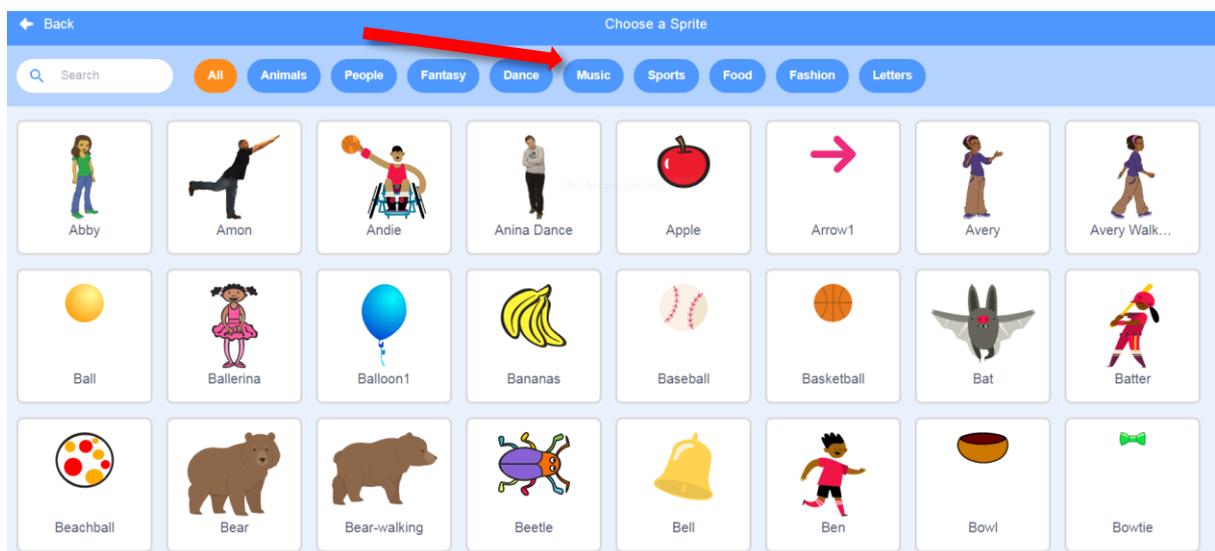
To do this we need to use **sprites**. To add a **sprite** click on the **button** on the bottom right of the screen.



This will open the **sprite screen**:



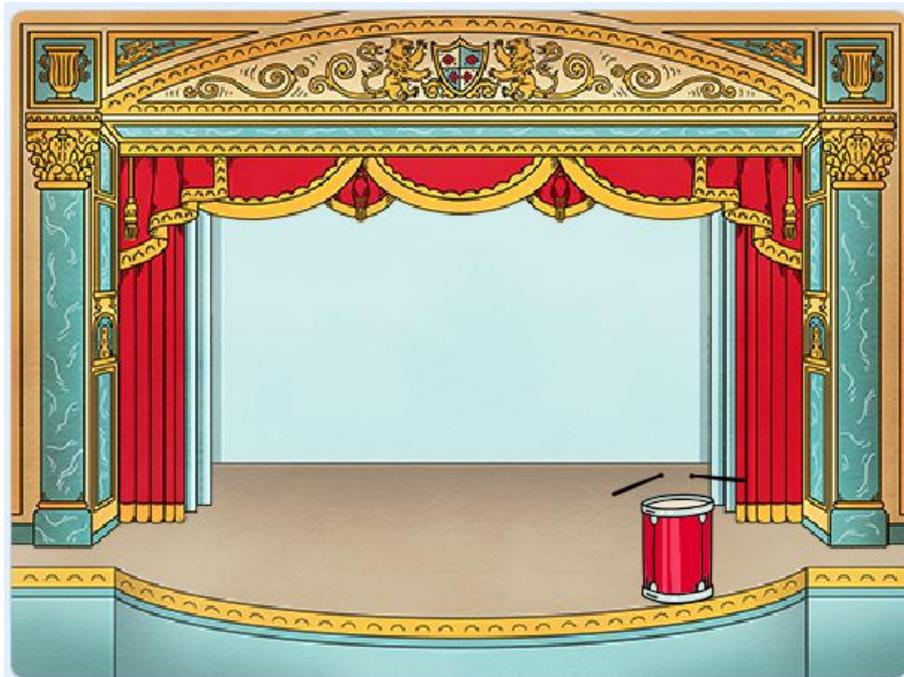
Press the **Music Tab** up the top



Left click on the drum that you want and it will be added to the **backdrop screen**.



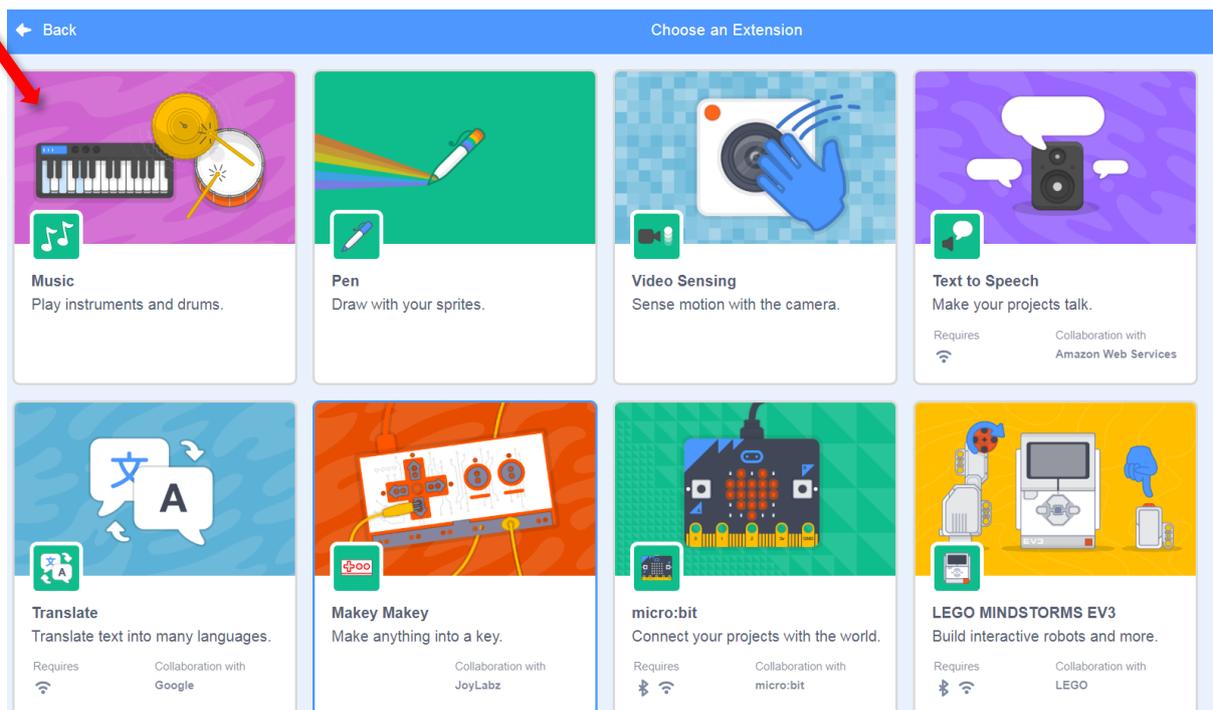
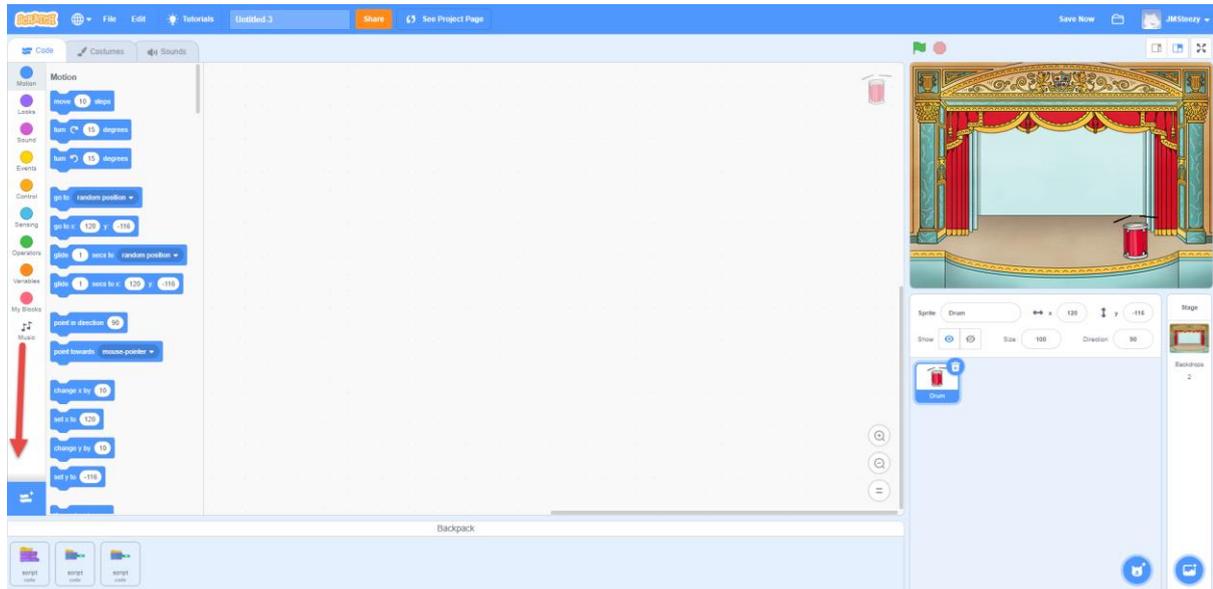
To move the drum **sprite** on the **backdrop screen**, click and drag the drum to the bottom right of the stage. Your stage should now look similar to this.



Now you can add **code** so that the drum makes a sound when you click on it.

Step 4: Now we will add in the **music block**, which is an **extension** built in to **Scratch**. To access this

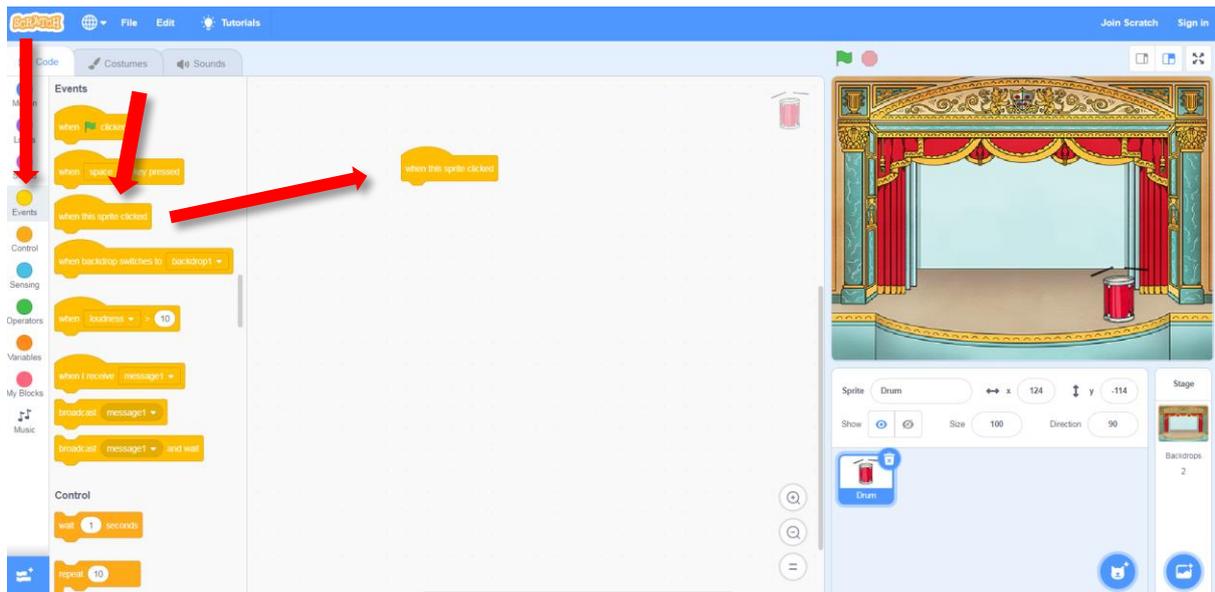
extension click on the add **extension**  **button** and select **Music**.

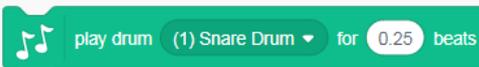


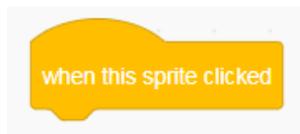
You will now see a new **Music Tab** appear on the left hand side of screen.

Step 5: We are now going to start **coding** our drum. Click on the **Events Tab** on the left hand side of

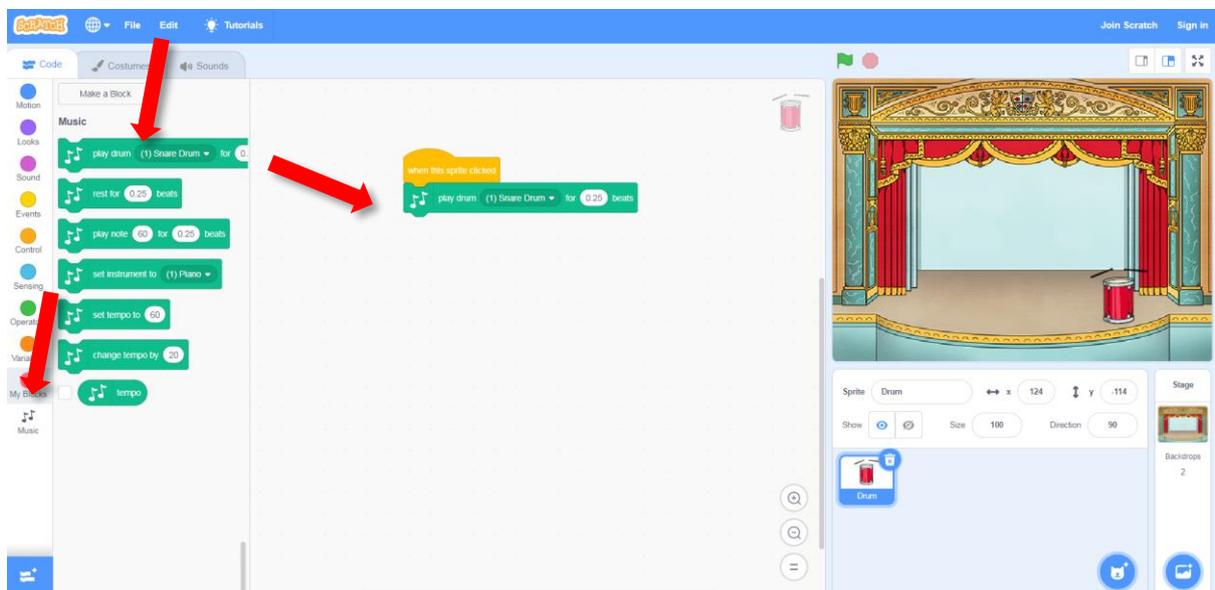
the screen and drag and drop a **block**  onto the **workspace**.



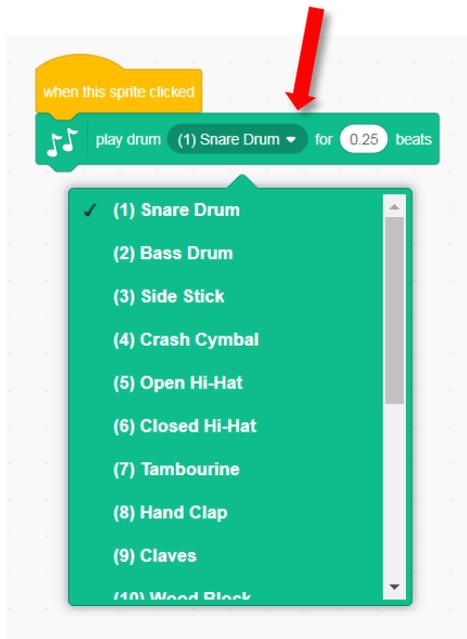
Click on the music tab and drop the  block under the



block. Make sure the blocks are connected together.



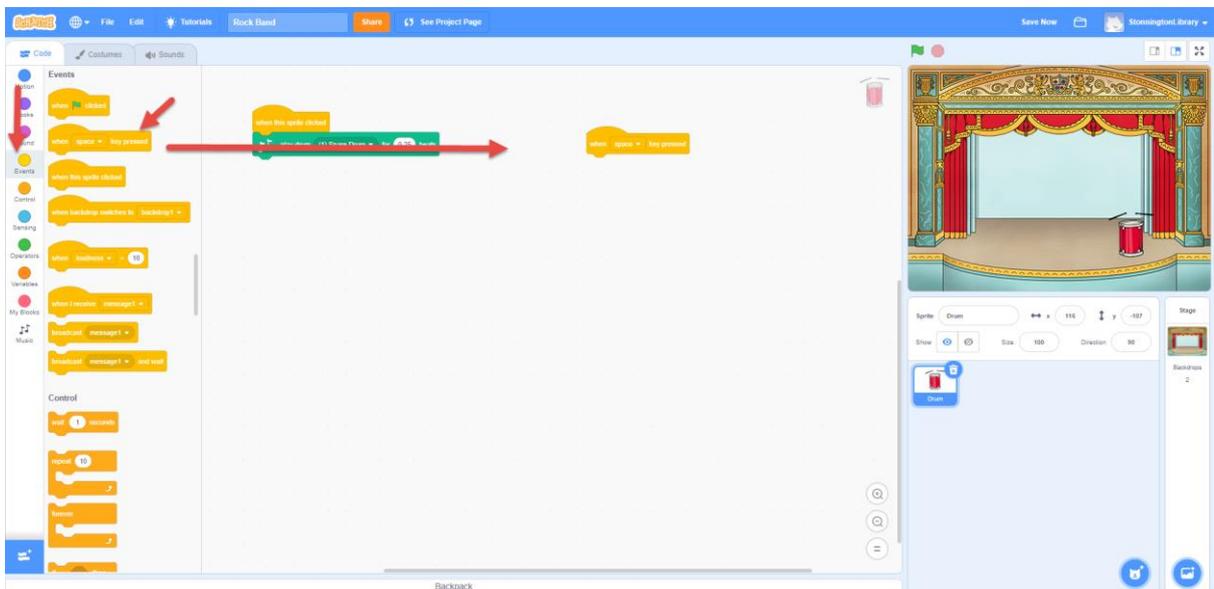
Click on the drum to try it out. You can change the sound of the drum by clicking on the “play drum” drop down menu.



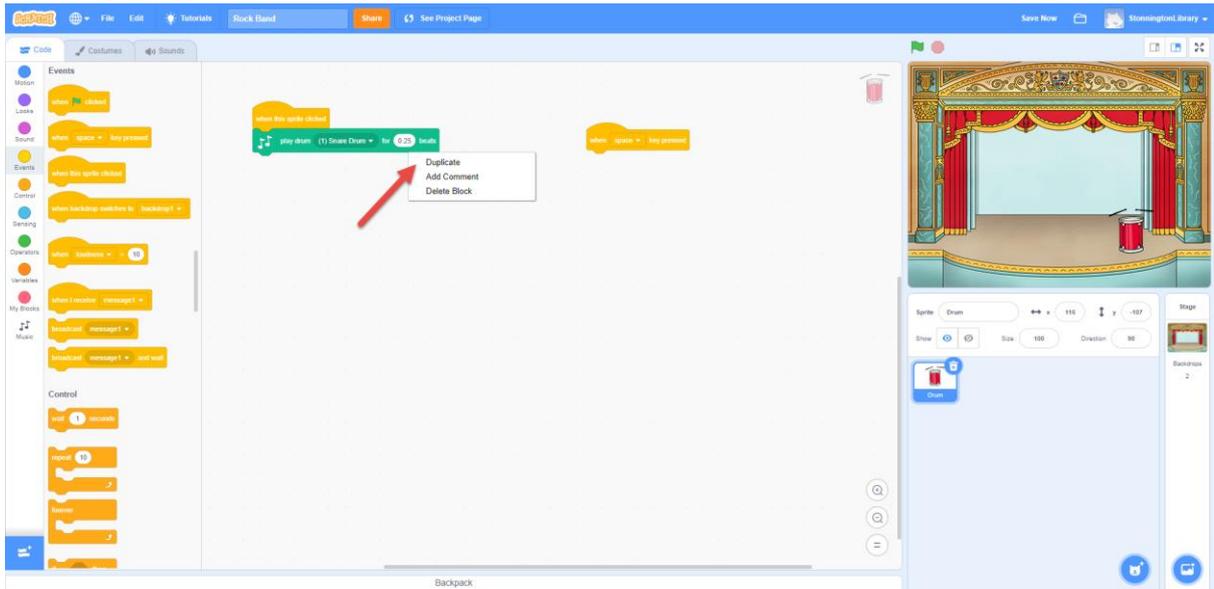
You can also get the drum to make a sound when the spacebar is pressed.



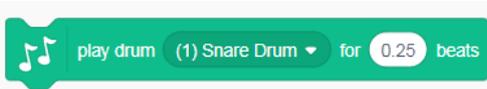
Select the **Events Tab** and drag the **when space key pressed** block on to the **workspace**.



If you want to copy your **code**, you can right click on it and select **duplicate**.



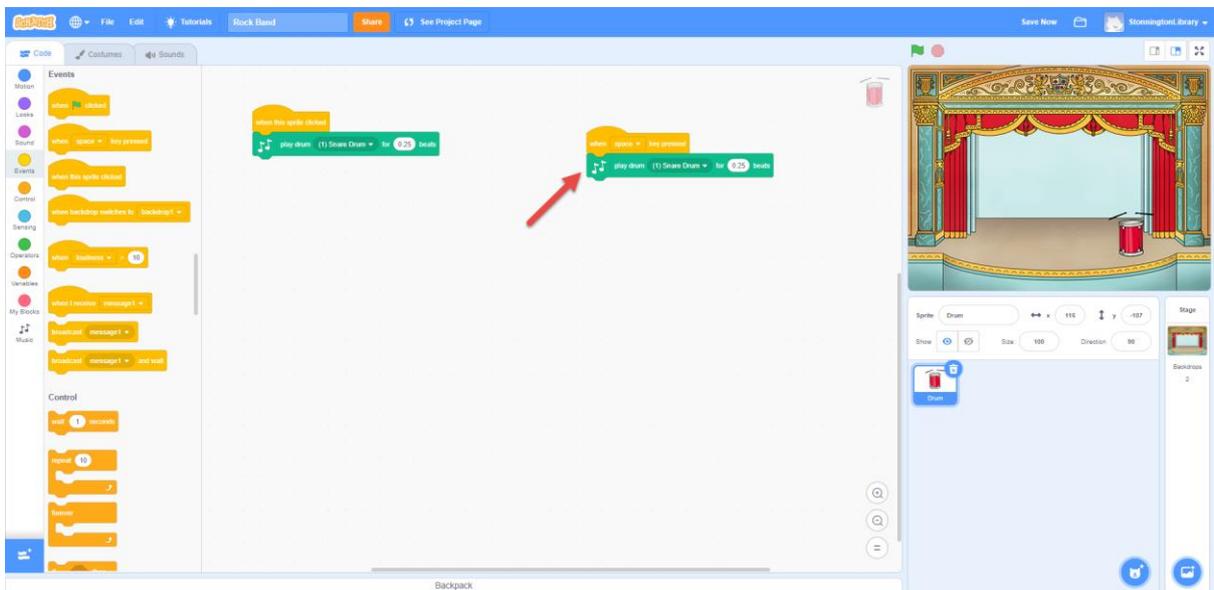
You can then drag and drop the

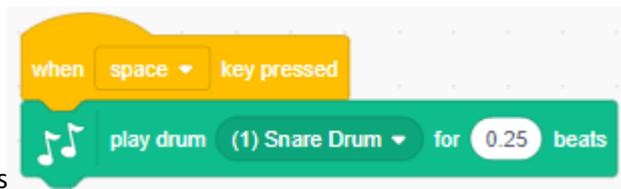


block under the



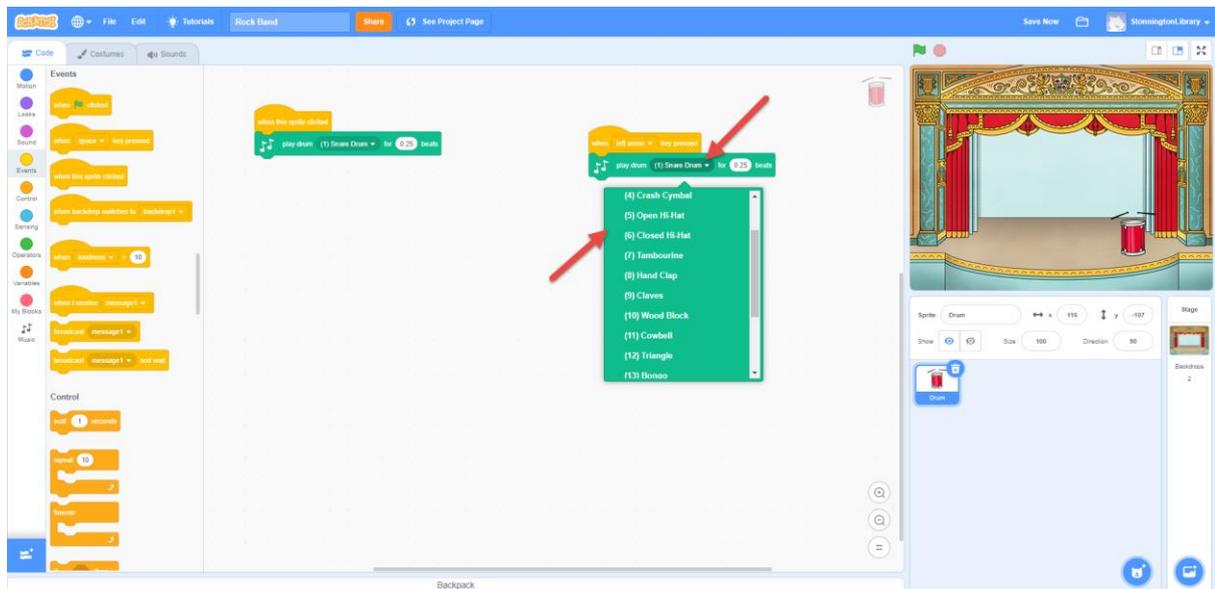
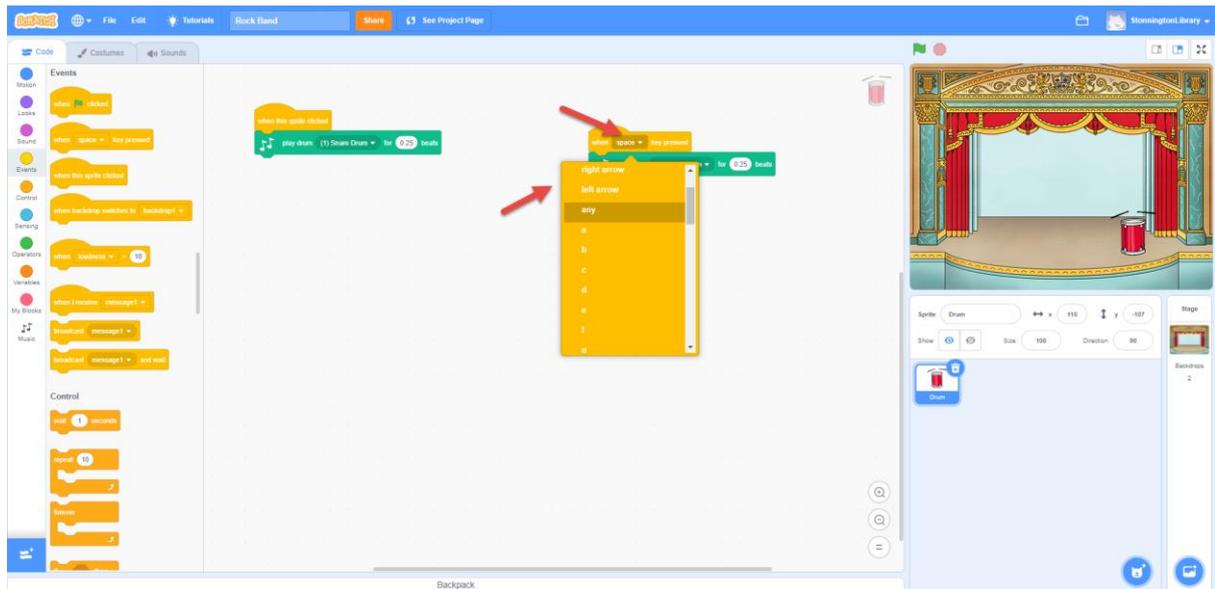
block so that they join.





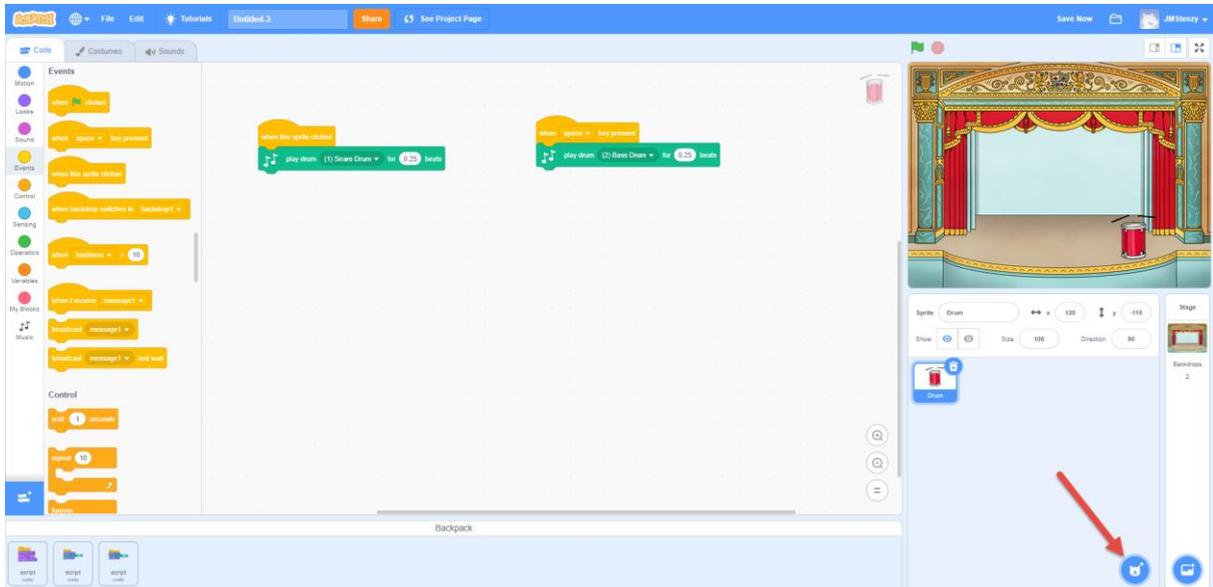
It will look like this

You can also change the key pressed and sound options from the **drop down menus** for more customisation.

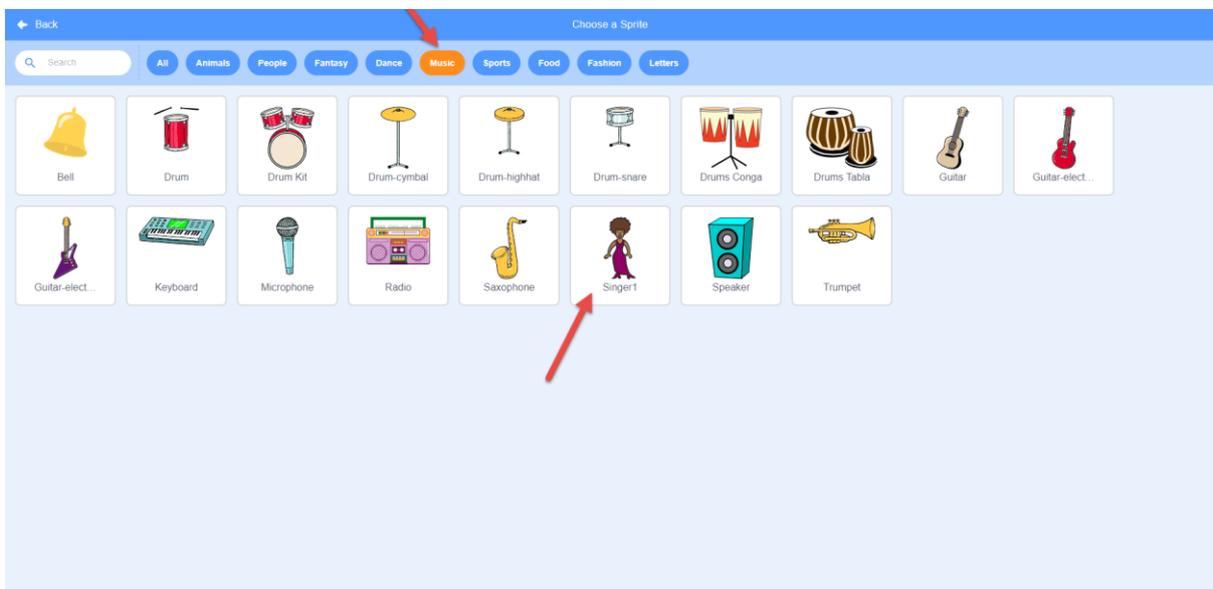




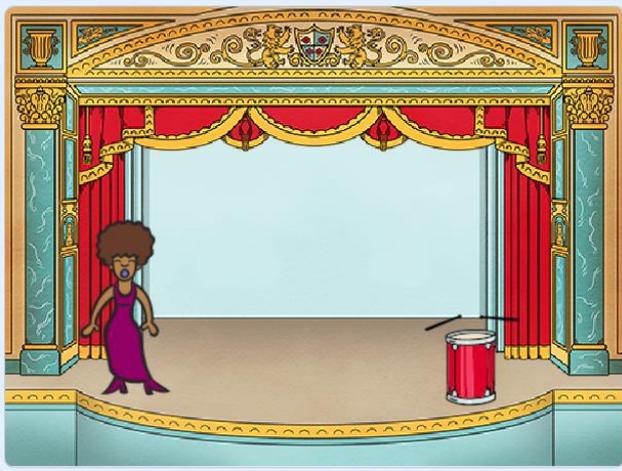
Step 6: Now you will add a singer to your stage. Click on the **button** to choose a **sprite** to add a singer to our rock band.



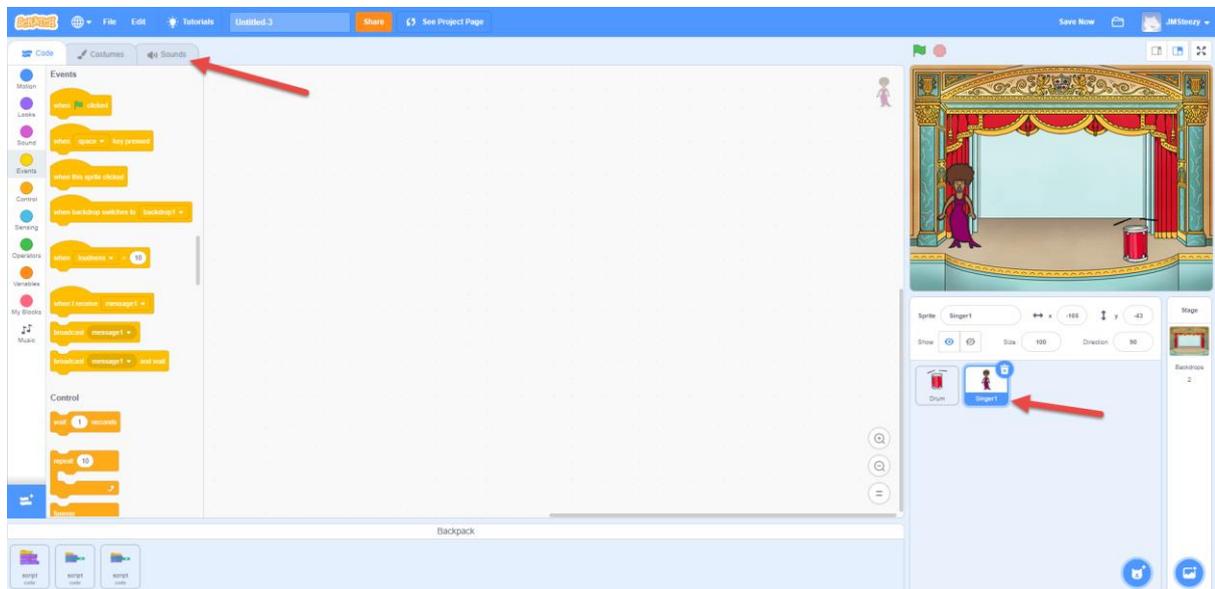
Then choose the **Music Tab** on the top of the screen and select the singer **sprite**



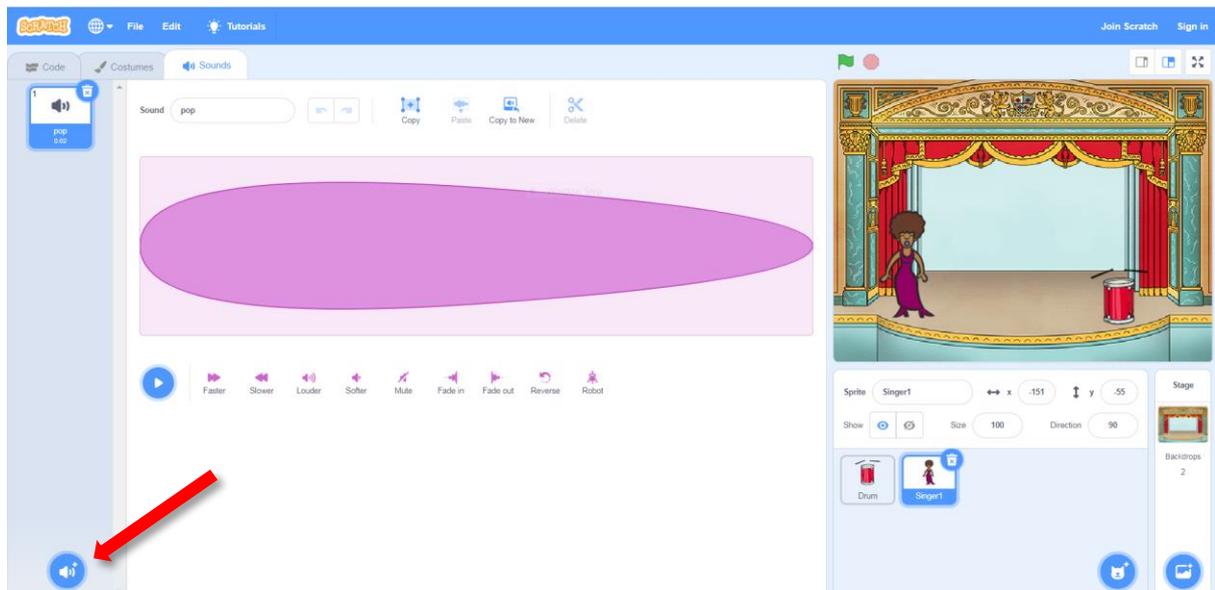
Move the singer to the best spot on your stage.



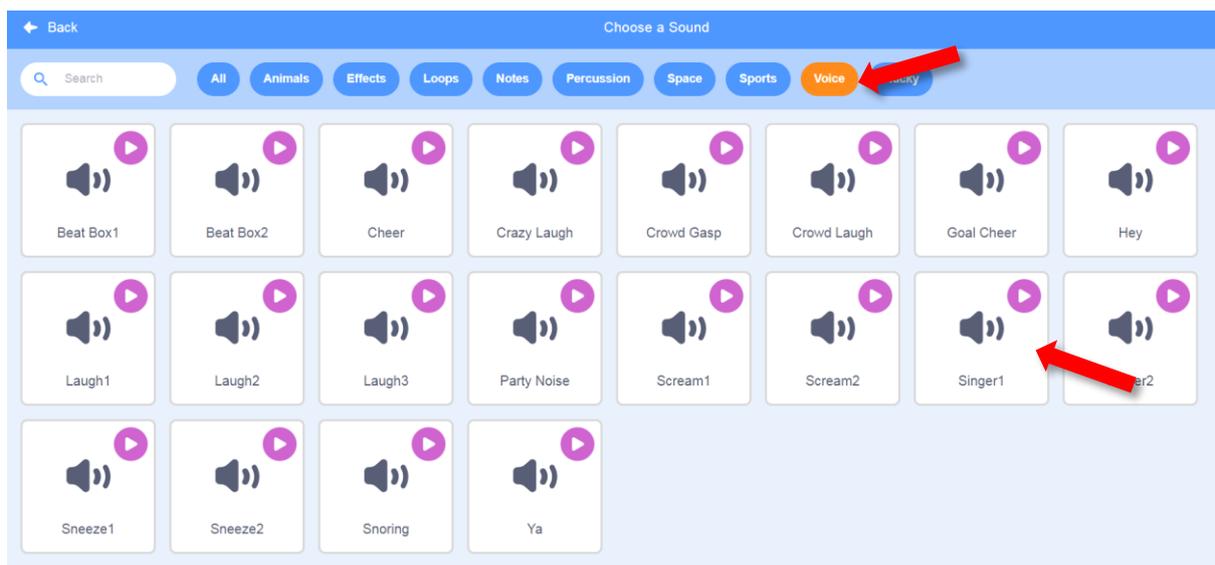
Step 7: Make sure you have selected your singer sprite. Then click on the **Sounds Tab** and click choose a sound.



Then click on the  button on the bottom left.

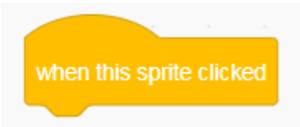
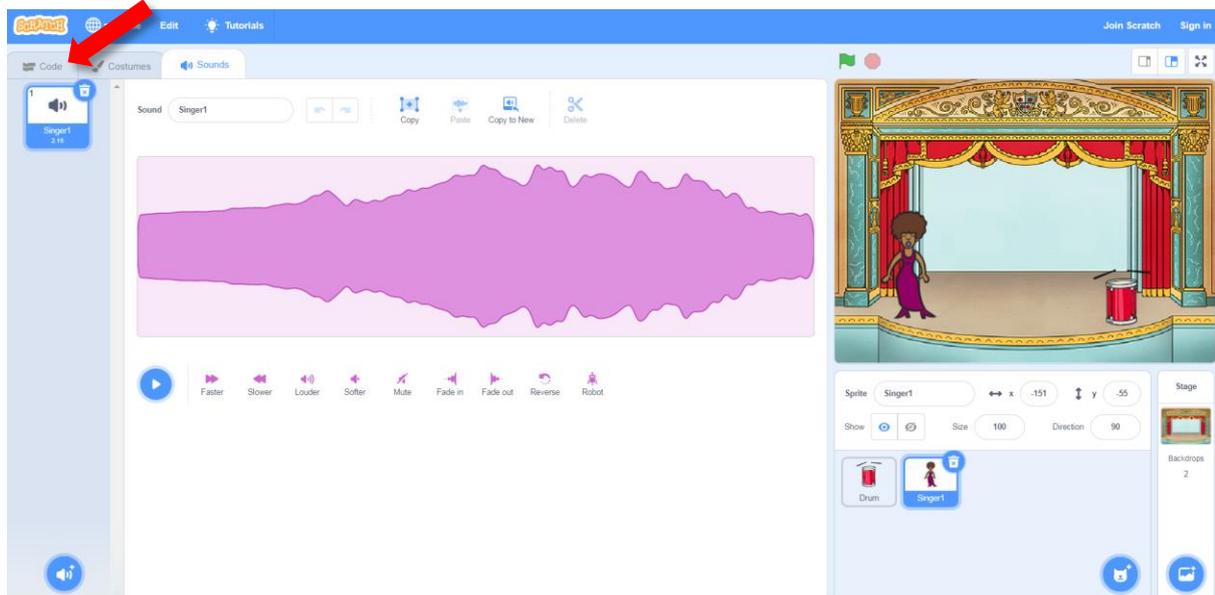


Click on **voice** from the list at the top and choose a sound for the singer sprite.

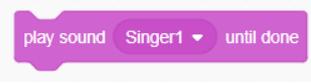
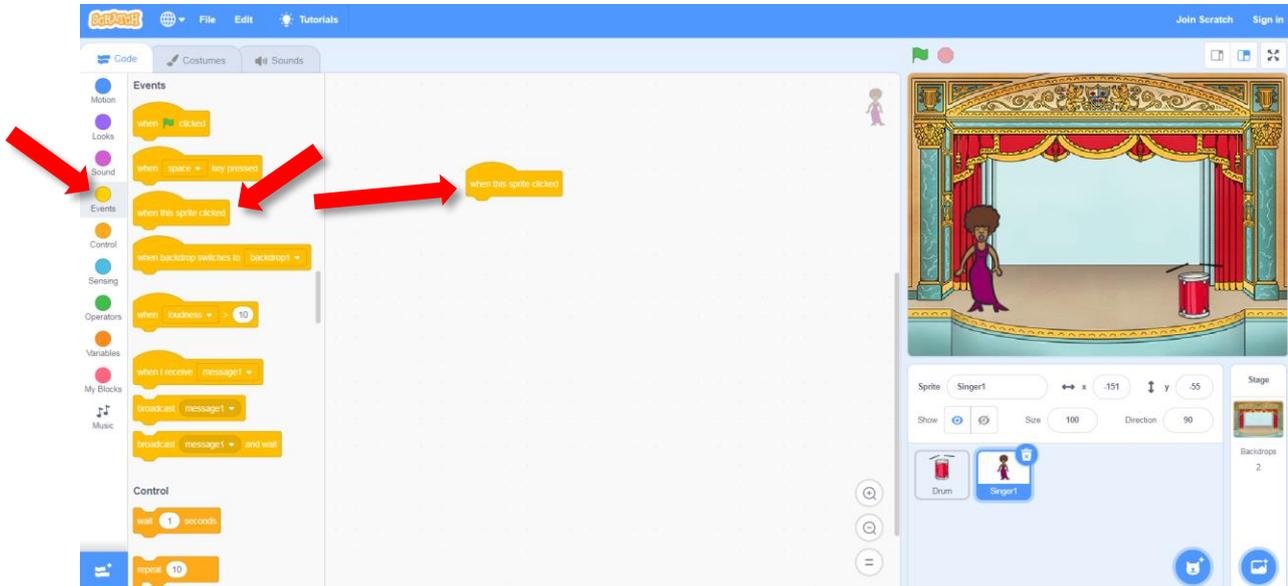


I used 'Singer 1'

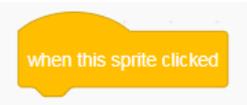
Now we are going to start coding the singer **sprite** click on the top left tab **Code Tab** to return to the **workspace**.



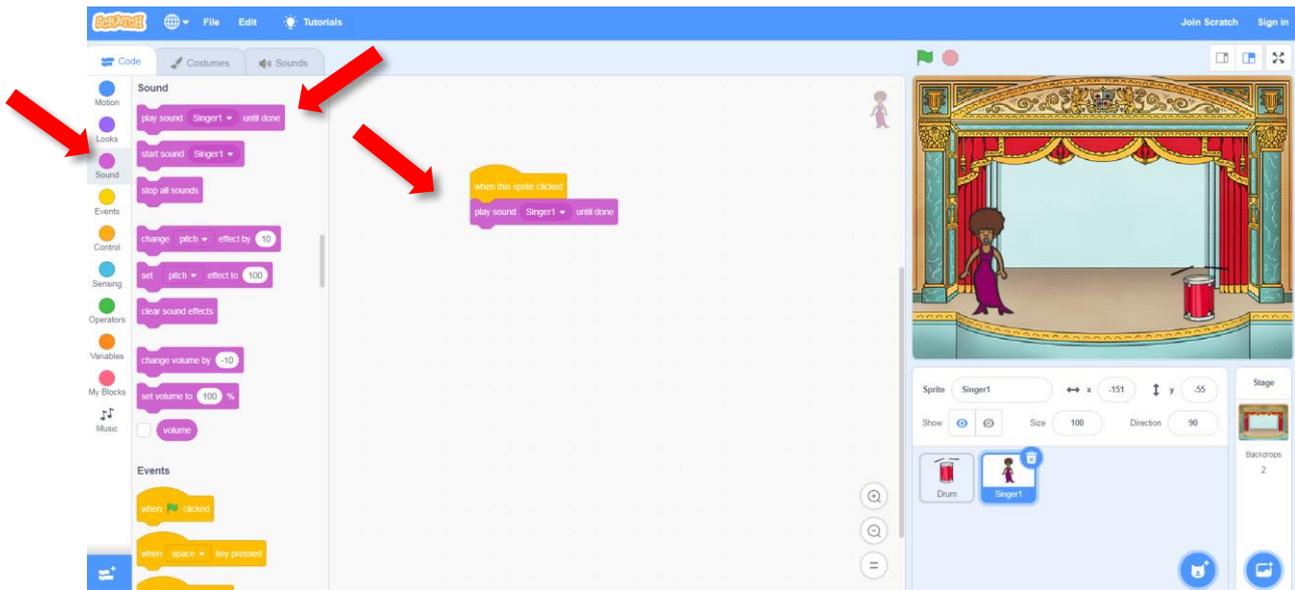
Click on the **Events Tab** to the left and drag the **block** onto the **workspace**



Click on the **Sound Tab** and select the **block** and drag onto the



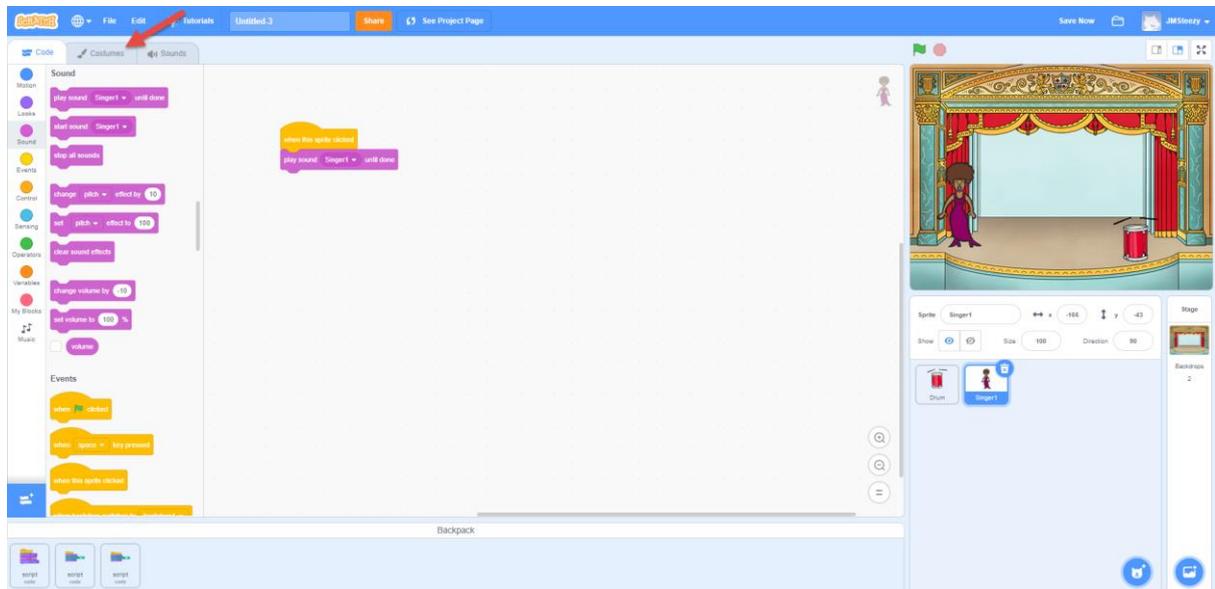
workspace under the **block**.



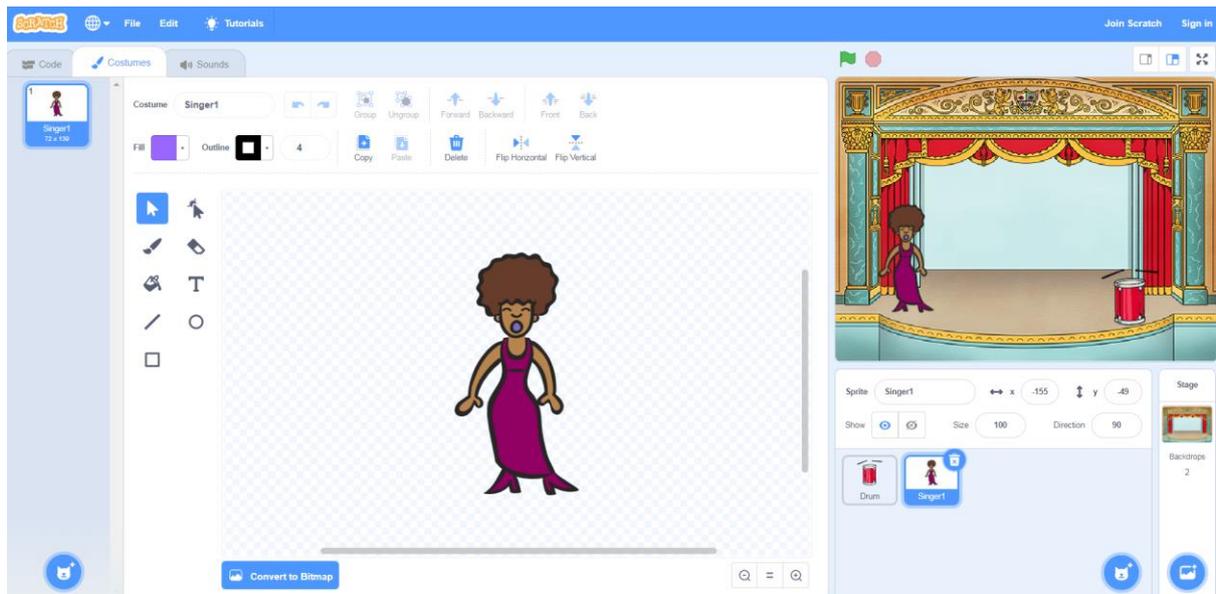
Click on the singer sprite on stage to make her sing.

Step 8: Lets make our singer look like she is singing, by using **costumes**. Let's change how our singer **sprite** looks when you click on her, by creating a new costume.

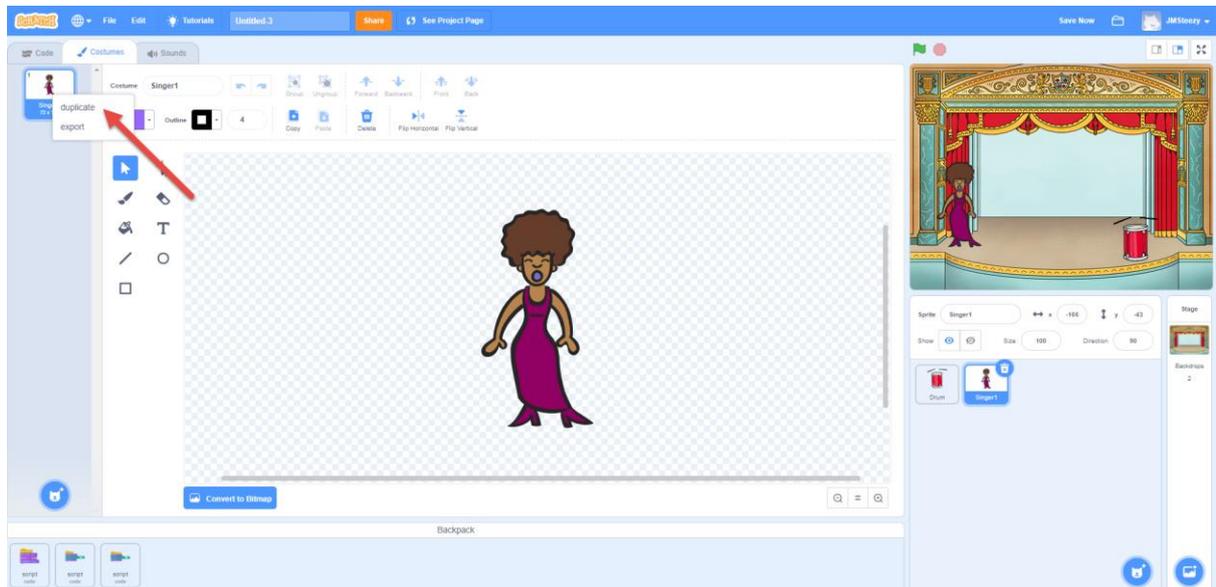
Click on the **Costumes Tab** on the top of the screen.



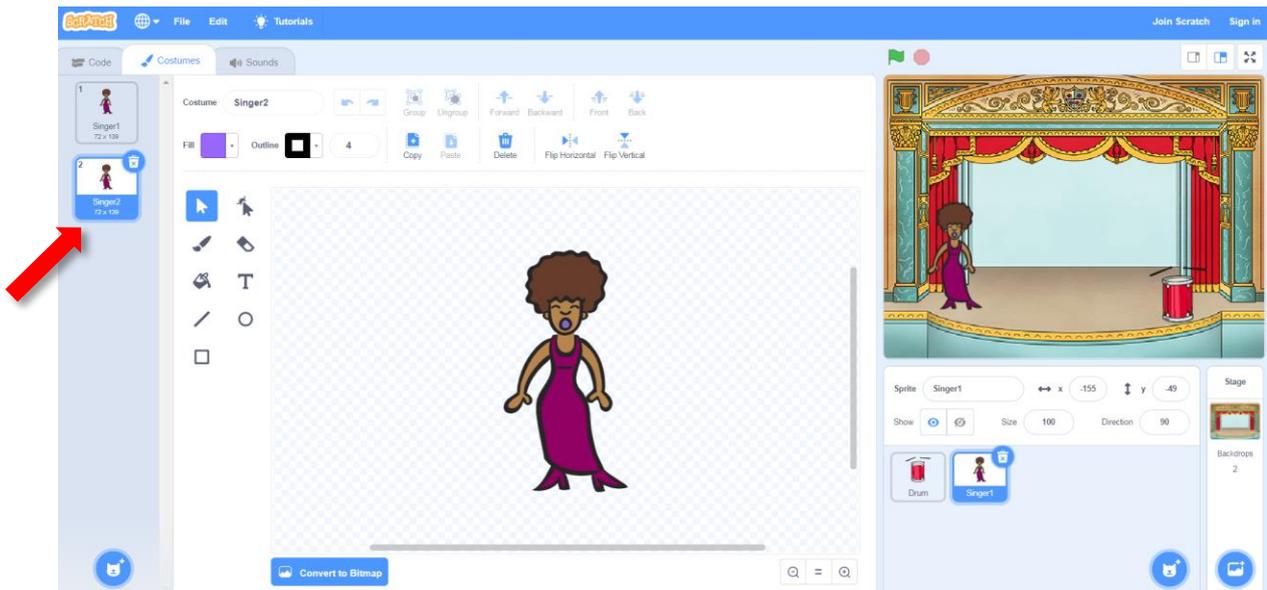
You will then see this screen:



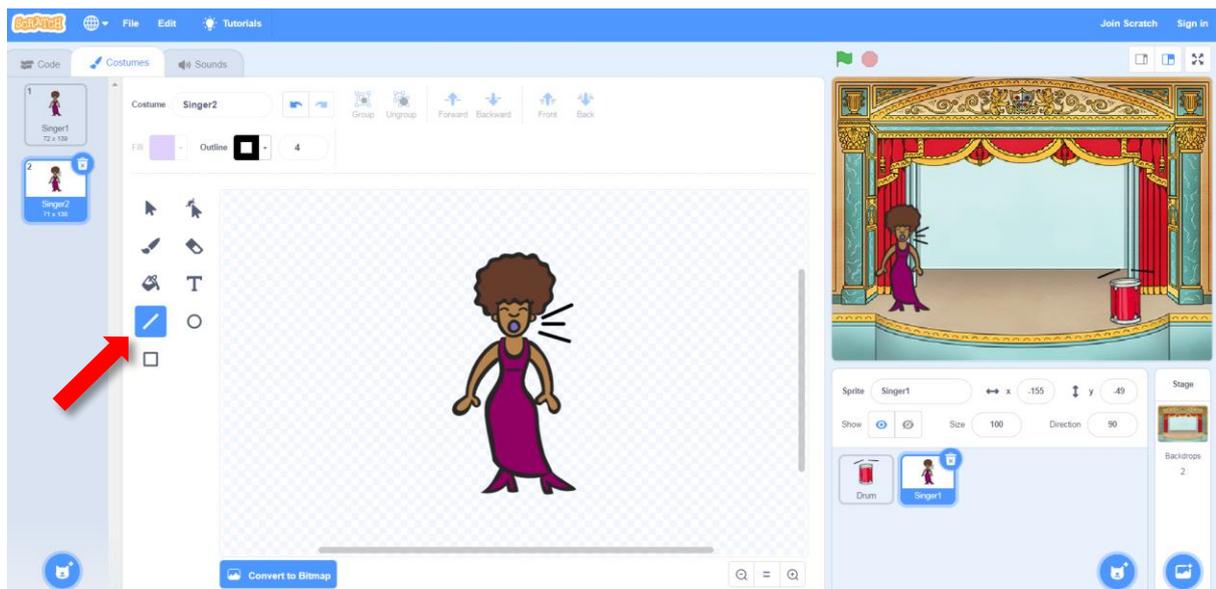
Right click on the “Singer 1” costume and click on **duplicate** to make a copy of it.



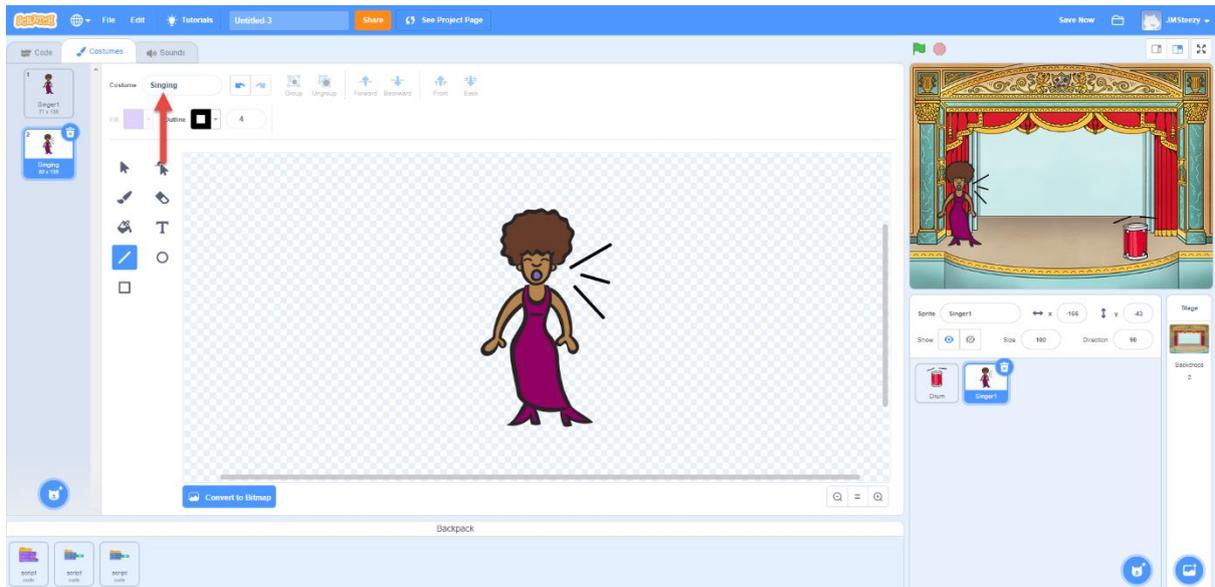
You will then see this screen with a second **costume** for your singer.



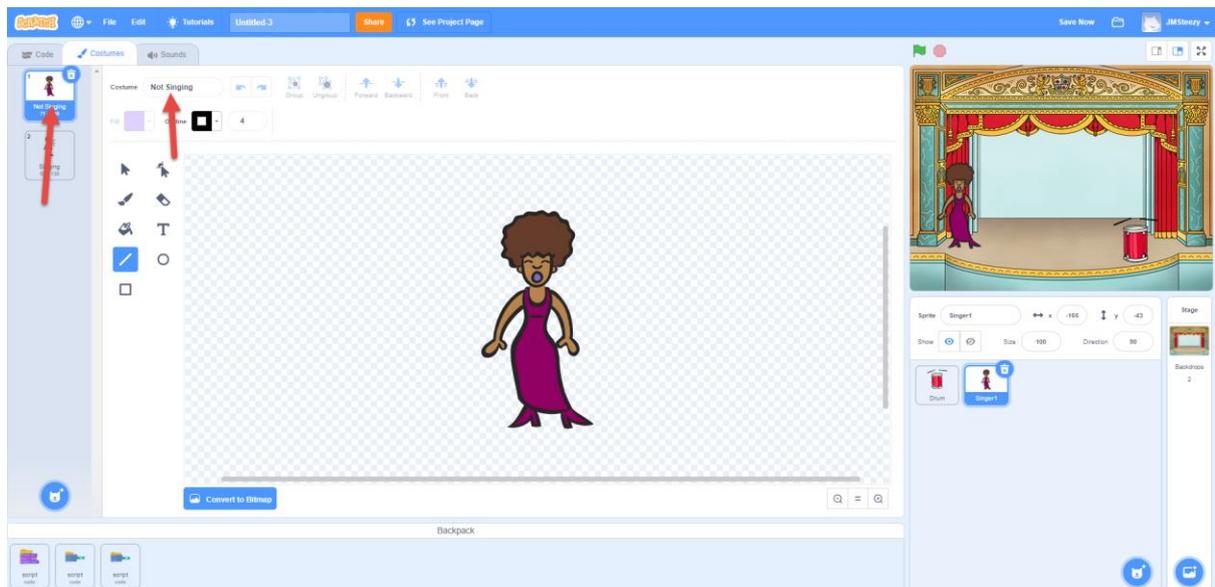
Click on the new **costume** called "Singer 2" and then click on the line tool and draw lines so it looks like your singer is singing.



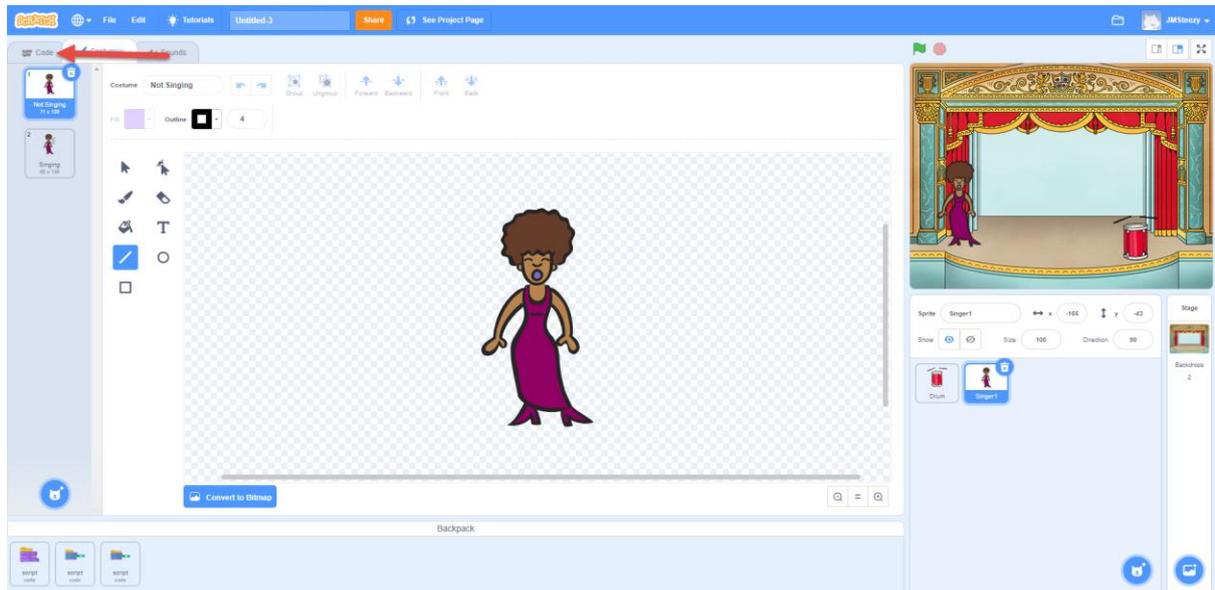
Now we are going to change the names of the **costumes**. Click on the top left where it currently says “Singer 2” and change the name to “singing.”



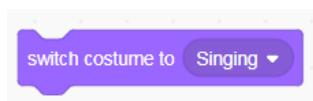
Then click on the “Singer 1” **sprite** and repeat this step, calling it “not singing.”



Step 9: Now that we have two **costumes**, let's add some **code**. To return to the **workspace** click on the **code tab** in the top left.



Choose the **Looks Tab** on the left hand side of the screen. Click and drag the



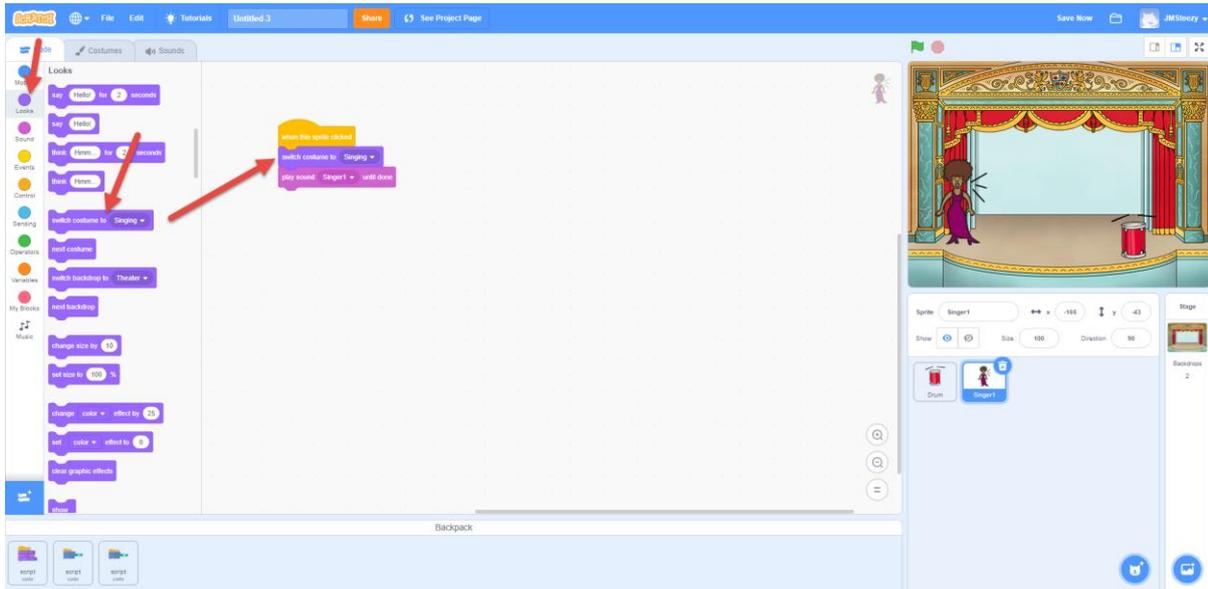
block to under the



block

play sound Singer1 until done

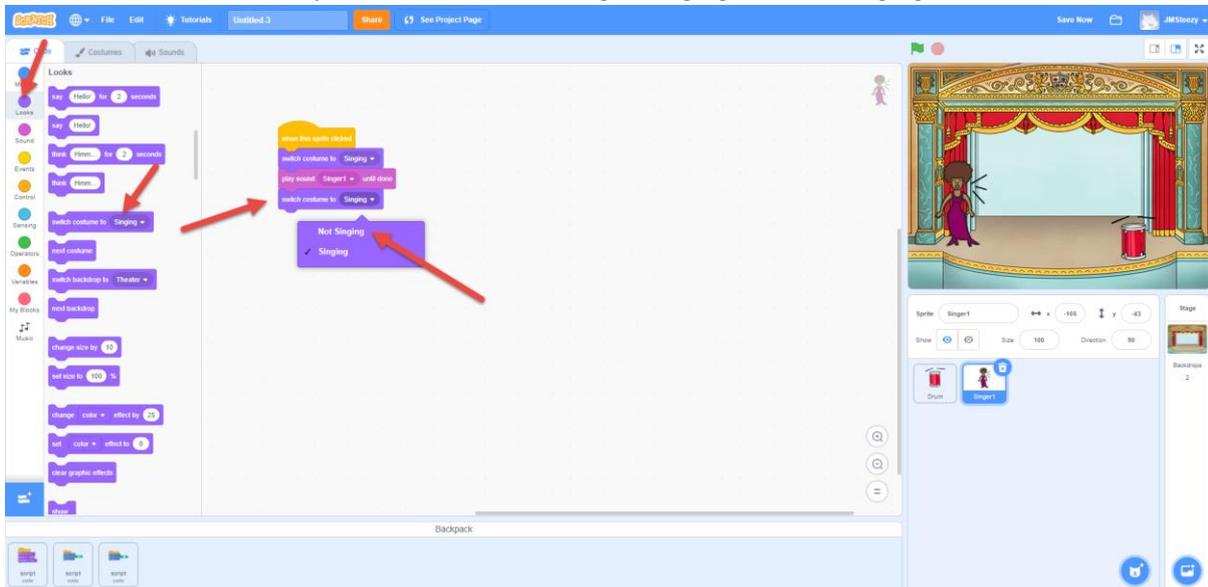
above the block.



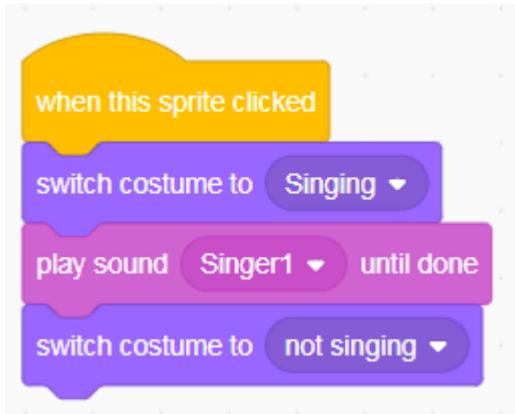
switch costume to Singing

play sound Singer1 until done

Then and click and drag a block to under the block and click on the drop down arrow and change "Singing" to "not singing."



It should look like the code below:



Click on the Singer, does she now look like she is singing?



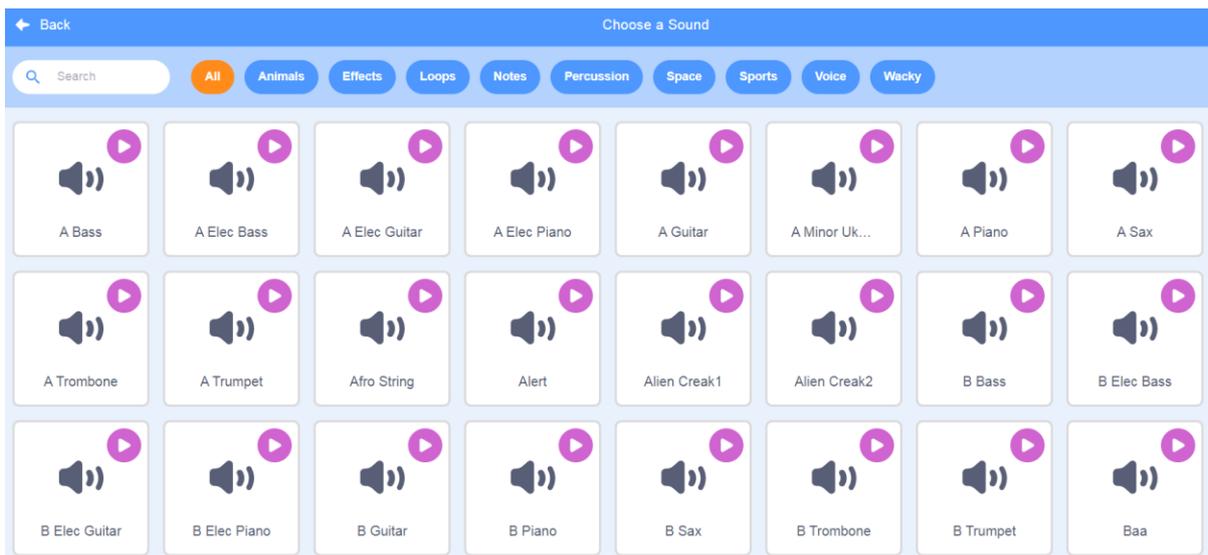
Step 10 Once you are ready for your rock band to perform, you can press the **full screen button** in the top right corner to preform with your rock band in all it's glory!

Extras

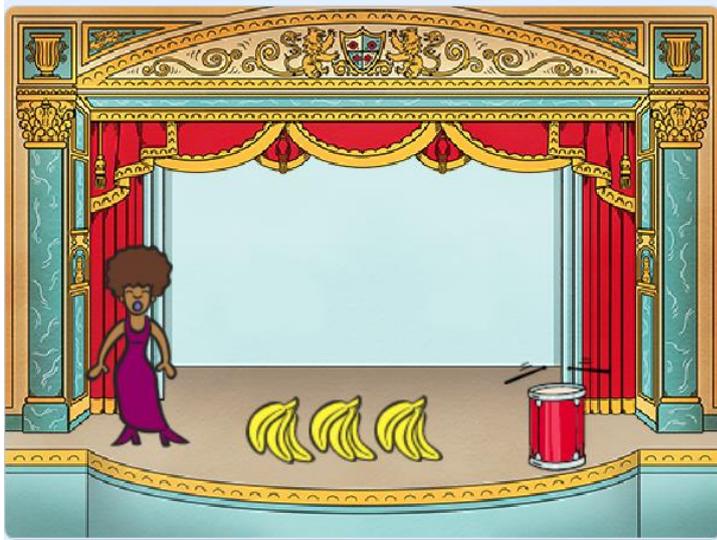
Here are some extra activities you can do to expand on your rock band!

Step 11: Now how about making your drum look like it is being hit? Use the instructions to change the sprite for the singer to help you.

Step 12: Now that you have started your band, how about you add some more instruments? You can create any instrument that you like. Take a look at the available instrument sprites and sound effects to get some ideas, by browsing the '*sprite screen*' and '*sound screen*'



Use your creativity. You can use anything for an instrument. Here I have added a banana piano and some code for it.



when this sprite clicked

- set instrument to (1) Piano
- play note 60 for 0.25 beats