

Stress ball

Introduction

What will you make

Use Scratch to create a stress ball app that you can click to squash!

You will:

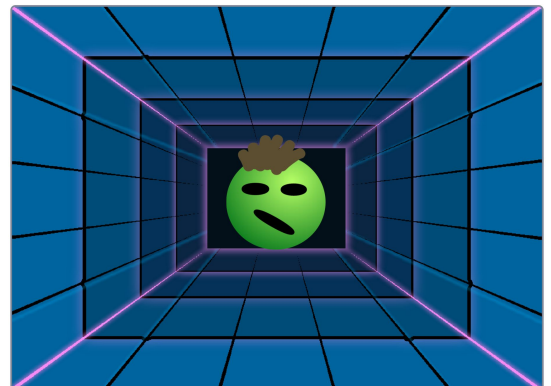
- Turn a ball sprite into stress ball by adding details to Paint editor
- Add **Looks** and **Sound** code blocks to squash your stress ball when you click on it
- Add a backdrop to the Stage to make your app more colourful

In Scratch, characters and objects are called **sprites**, and they appear on the **Stage**.



How will you open the project

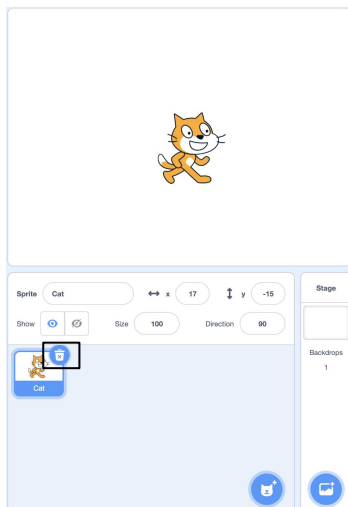
- **Online:** Open the **starter project** here - rpf.io/pp-scr-sb-1. Scratch will open in another browser tab.
- **Offline:** Download the Stress ball starter project here - rpf.io/p/en/stress-ball-go and open it using the offline editor.



1. Draw a face

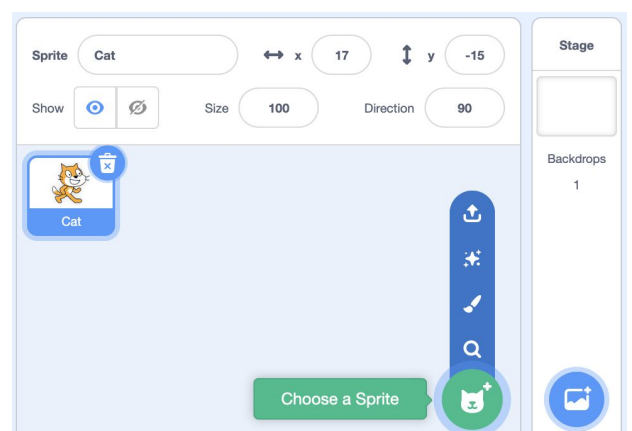
Step 1:

Click on the **dustbin icon** to delete the existing cat sprite.



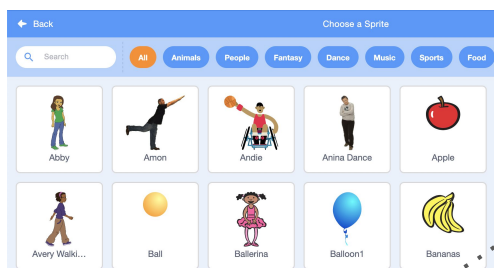
Step 2:

Go to the **Sprite pane** to add a sprite.



Step 3:

Select the **Ball** sprite from the sprite library.

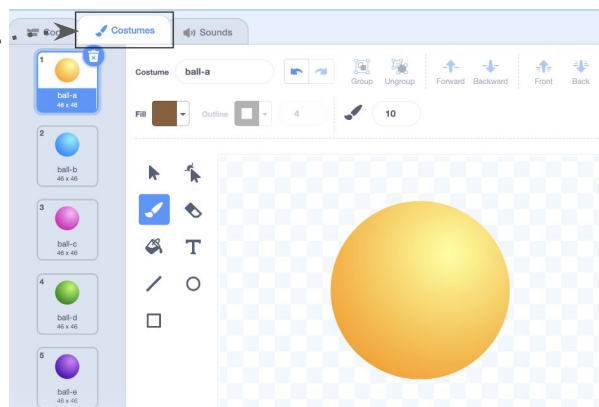


In Scratch, the picture used for a sprite is called a **costume**.
In this step, you will add a face to the **Ball** sprite to make it more interesting.

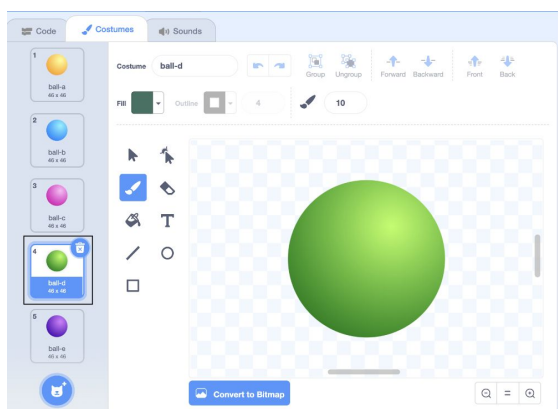


Step 4:

Click on the **Costumes** tab. The Paint Editor will open. Select any ball of your choice.

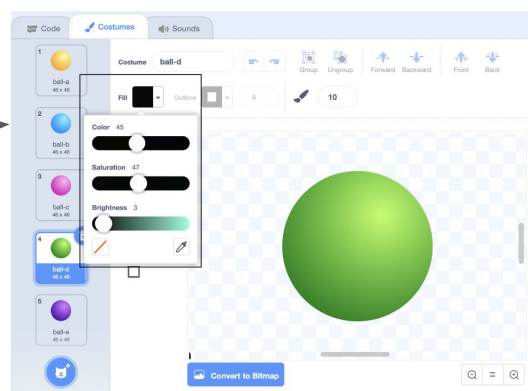


The **Ball** sprite on the Stage will switch to the costume that you have chosen.



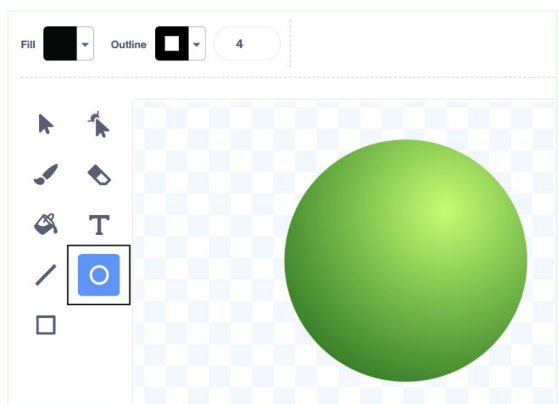
Step 5:

Click on the **Fill** colour chooser and drag the **Brightness** to 0 to change the **Fill** colour to black.



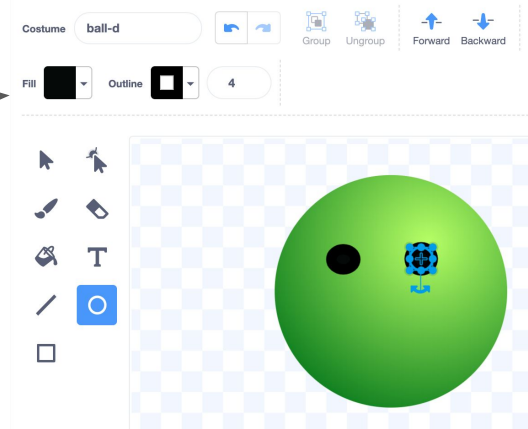
Step 6:

Click on the **Circle** tool.



Step 7:

Draw two eyes.



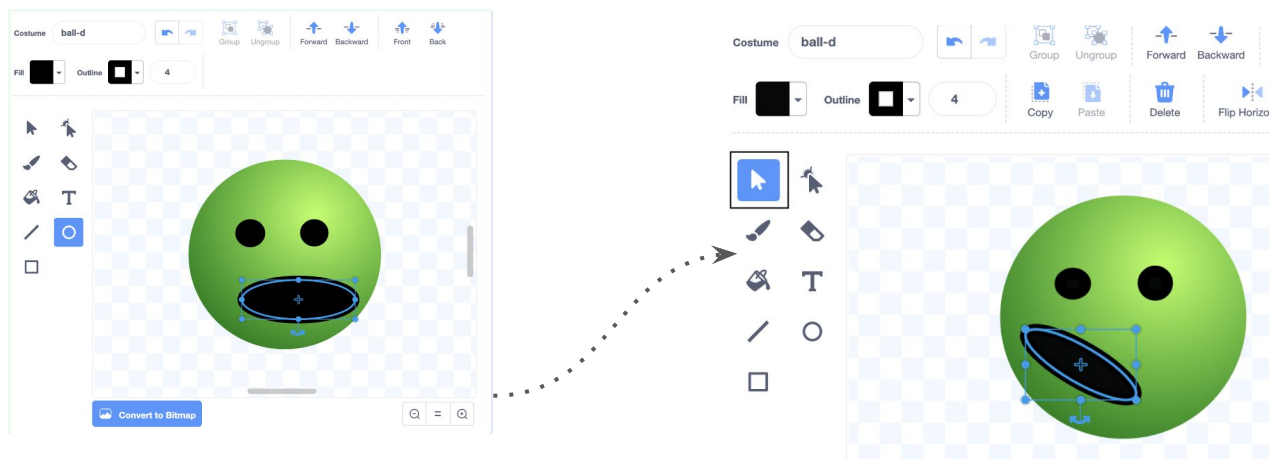
If you are using a mouse or trackpad, hold down the left button and drag until the circle is the size and shape that you want, then release the button.

If you make a mistake, you can click on the **Undo** arrow.

Step 8:

Use the **Circle** tool to draw a mouth.

Tip: To move the features that you have drawn, click on the **Select** (arrow) tool, then click on the features and drag them into position.



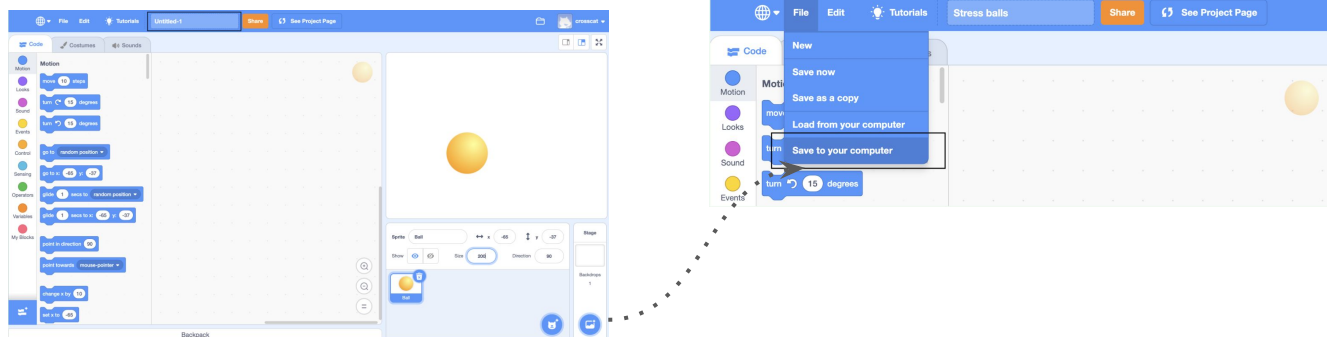
2. Squash it

- Click on the **Code** tab.
- Now, you are in the **Code area**.

If you are signed in to your Scratch account, type the title of your project into the project title box at the top of the screen.

Step 1:

Next, click on File, and then on Save now to save your project.

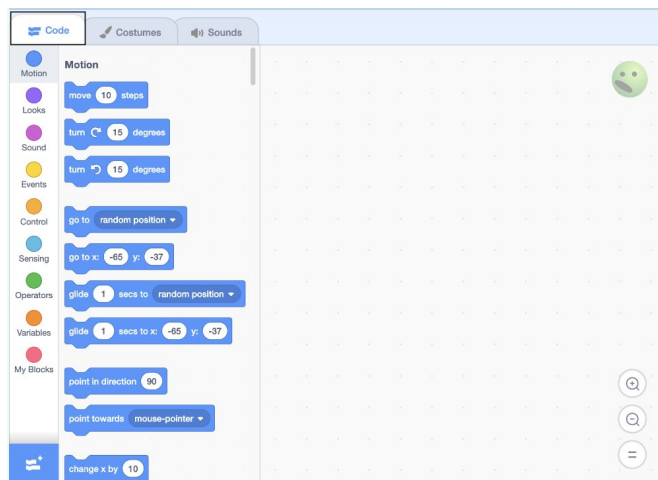


Tip: Give your projects helpful names so that you can easily find them when you have lots of projects.

Step 2:

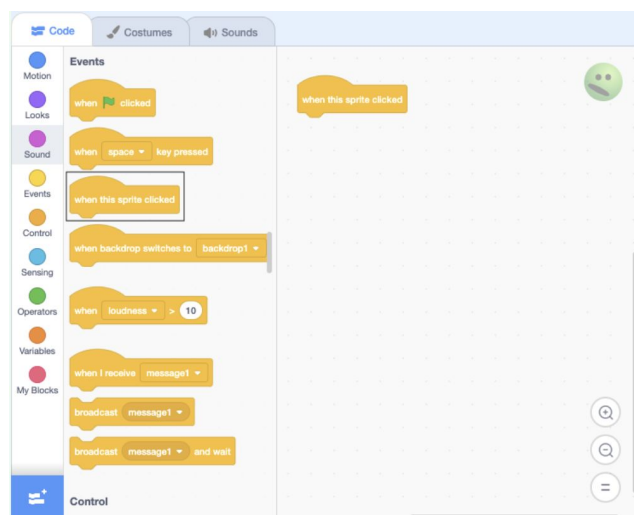
If you are not online or you do not have a Scratch account, you can click on **Save to your computer** to save a copy of your project.

Now, you can add code to make the stress ball look like it is being squashed when you click or tap on it.



Step 3:

From the **Events** blocks menu, drag a **when this sprite clicked** block into the Code area on the right-hand side:

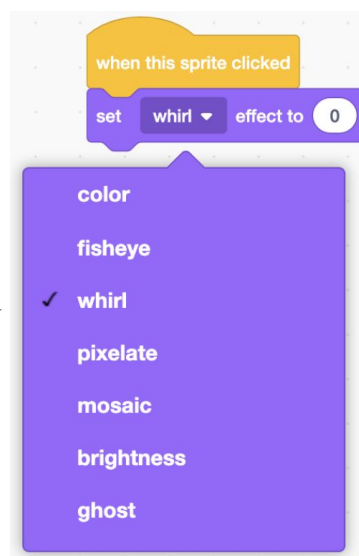


Step 4:

From the **Looks** blocks menu, drag a **set color effect to** block underneath the **when this sprite clicked** block and make sure that they connect together:



Notice that the colour of each block tells you where you can find it.



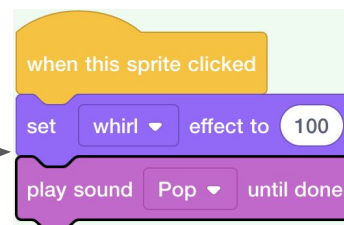
Step 5:

Click on **color** and change it to **whirl**:



Step 7:

Add a **play sound Pop until done** block:



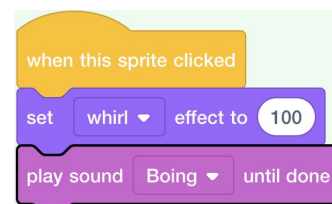
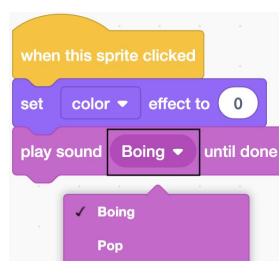
Step 6:

Change the value from **0** to **100**:



Step 8:

Click on **Pop** and change it to **Boing**:



This will create lots of whirl!

Step 9:

Now, add a **clear graphic effects** block to the bottom of your code so that the ball always returns to its original state after it has been squashed:

The code will look like this.



Step 10: Click on **Looks**, then click on the **clear graphic effects** block in the Blocks menu to remove the whirl effect.

Click on your sprite to try it out. Try it again. Then, try it again!

Laughing and being **artistic** are good ways to get rid of stress.

3. Shrink it

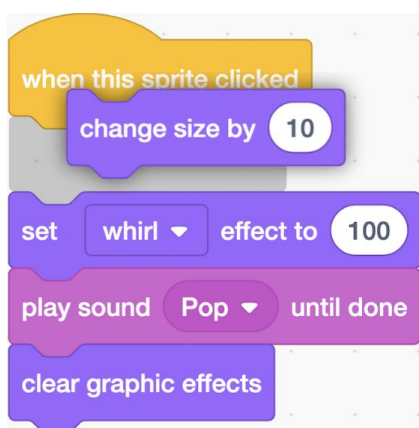
Now, you will make the **Ball** sprite shrink as well as squash when you click on it.



Step 1:

Drag a **change size by** block under your **when this sprite clicked** block. A space will open up for the block and it will fit into place.

Your code should look like this:



Step 2:

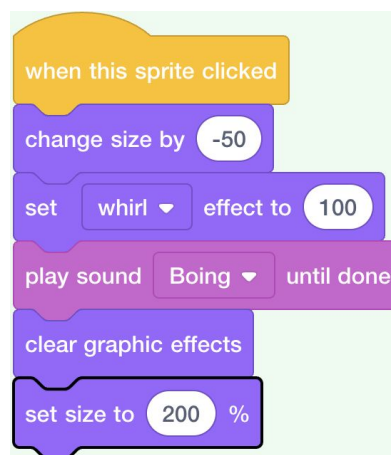
The **Ball** sprite needs to get smaller when you click on it, so change the number in the **change size by** block from **10** to **-50**. Choosing a negative number will make the **Ball** sprite shrink:



Click on your stress ball to see if it is working correctly.

Step 3:

Now, add a **set size to** block to the bottom of your code and set the size of the **Ball** sprite back to **200** (percent):



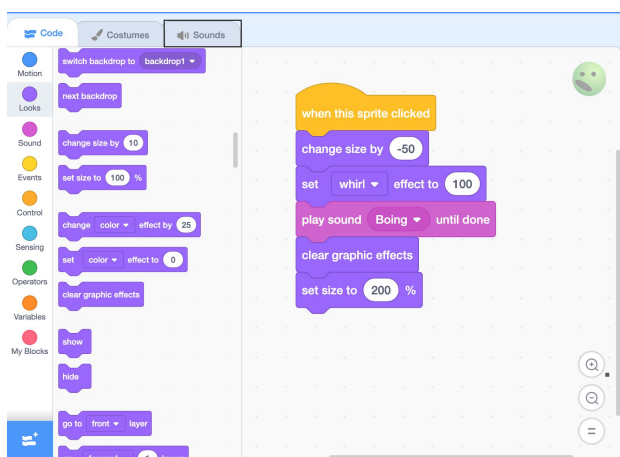
Tip: You can delete a block by dragging it towards the Blocks menu on the left-hand side.

4. Choose your own sound effect

Now, you will add a better sound effect to your stress ball.

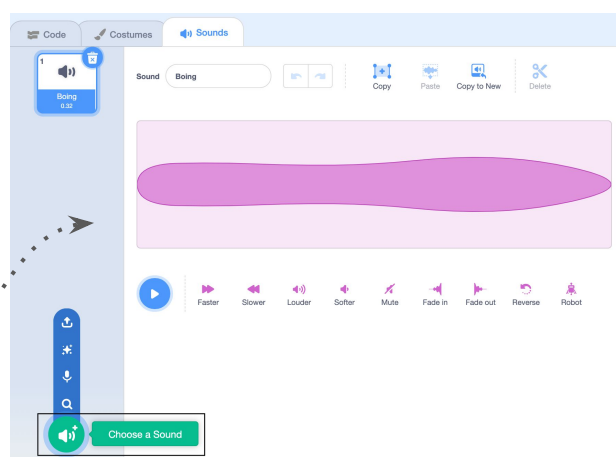
Step 1:

Click on the **Sounds** tab.



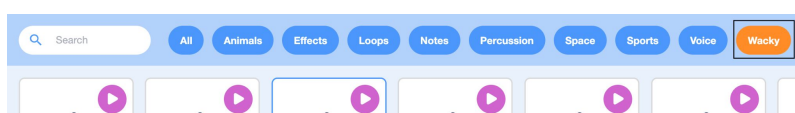
Step 2:

Click on **Choose a Sound**.



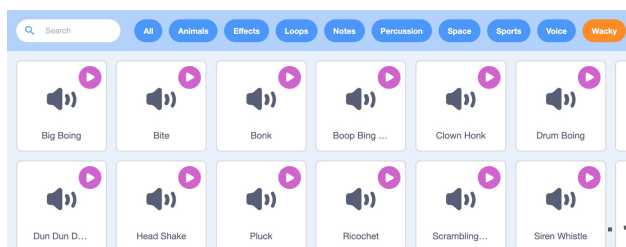
Step 3:

Click on the **Wacky** category.



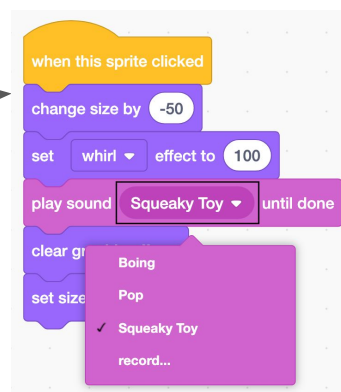
Step 4:

Click on the **Play** button for the **Squeaky Toy** sound to hear it.



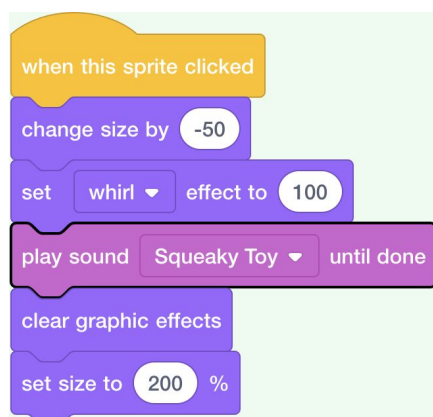
Step 5:

Then, click on **Squeaky Toy** to add the sound to the **Ball** sprite. Now, you can use this sound in your code.



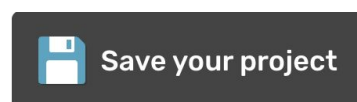
Step 6:

Your code should look like this:



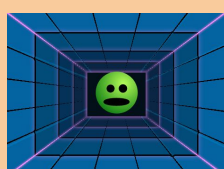
Step 7:

Click on your stress ball again to try out the new sound effect.



5. Insert a backdrop

Now, you will add a colourful backdrop to your project. At the moment, the Stage is white and boring!

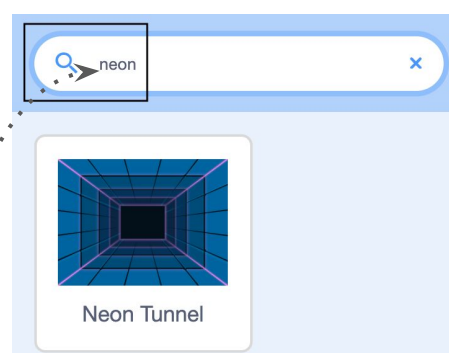
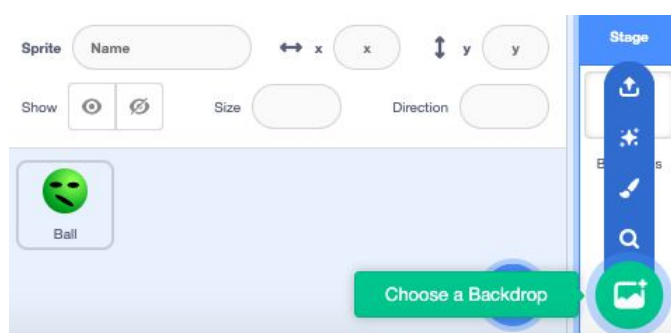


Step 2:

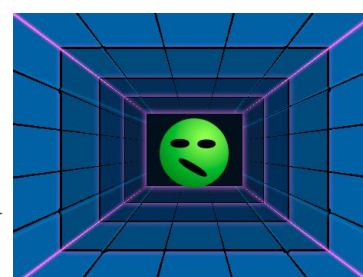
Type in **neon** or scroll down until you see the **Neon Tunnel** backdrop, then click on it. The backdrops are in alphabetical order.

Step 1:

Click on **Choose a Backdrop** to add a backdrop to the **Stage**.



Your Stage should now look similar to this:

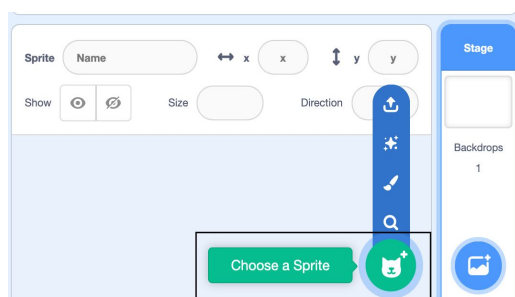


6. Add another stress ball



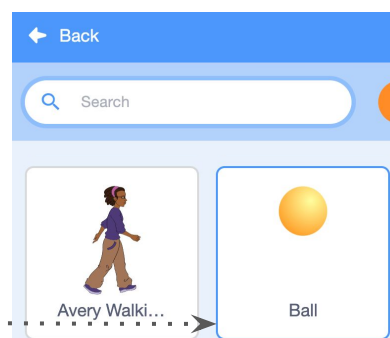
Step 1:

Click on **Choose a Sprite** to open the Sprite Library. If you are using a tablet, tap twice on the **Choose a Sprite** button.



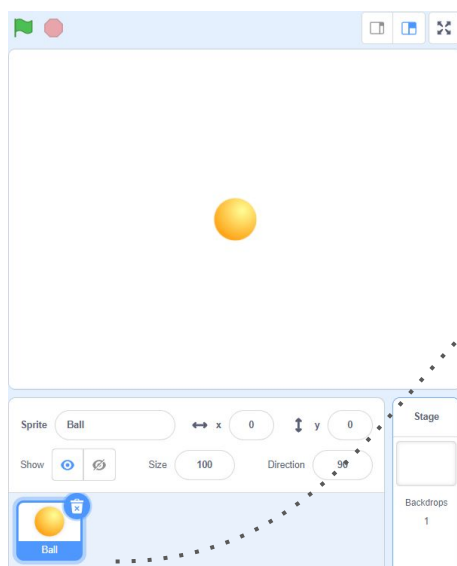
Step 2:

Click on the **Ball** sprite to add it to your project.



Step 3:

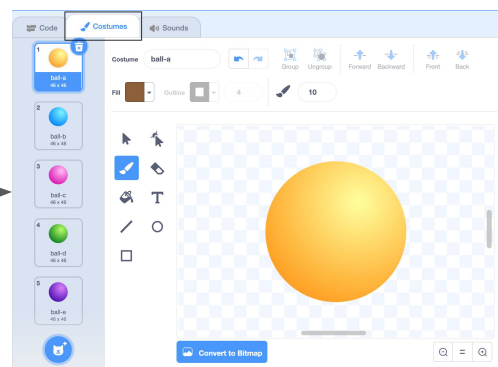
Drag the **Ball** sprite to a good position on the Stage.



The ball is a bit small.

Step 4:

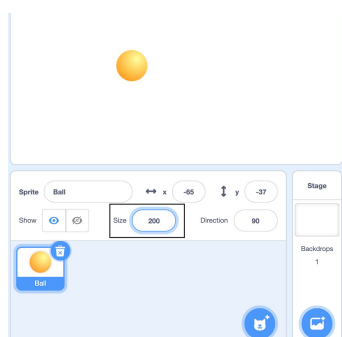
Click on the **Costumes** tab to choose a colour for your new stress ball.



- Use the **Fill**, **Circle** and **Select** tools to draw a face on your new stress ball. If you need a reminder, look back at the **Draw a face** step.
- Click on the **Sounds** tab to add a sound to your new stress ball. If you need a reminder, look back at the **Choose your own sound effect** step.

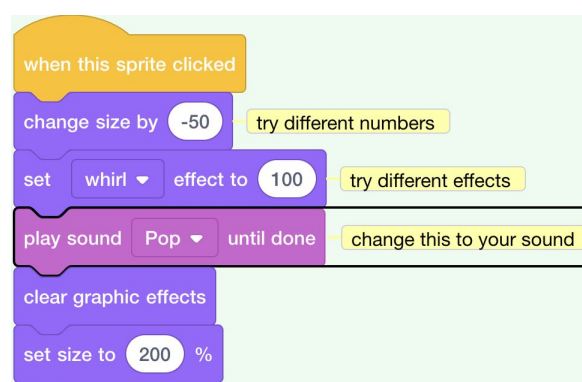
Step 5:

Below the Stage, there are some sprite settings that you can change. The size starts at **100** (percent). To make the sprite bigger, change it to **200** — this is double the size.



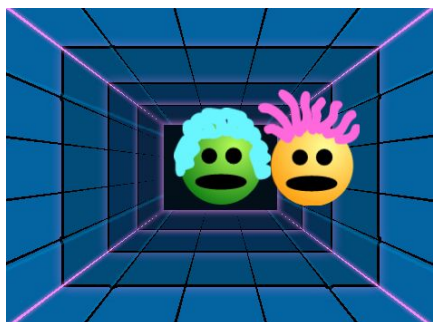
Step 6:

Click on the **Code** tab and add this code to your new stress ball.

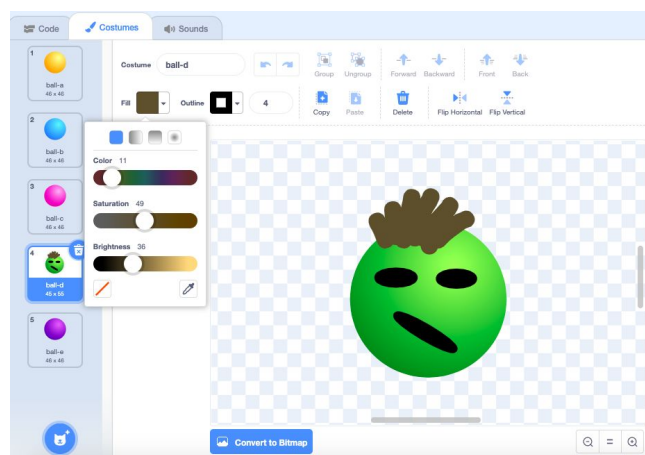


7. Improve your stress ball

Use the **Brush** tool or other tools in the Paint editor to add hair and other features.



You can change the colour using the sliders.



- Try to find a different sound that works well.
- Change the size that your stress ball shrinks and grows to.
- Try the **fisheye** effect instead of **whirl**.

You could also find out what happens if you choose negative numbers.

Use what you have learned to add even more stress toys to your project. You do not have to start from the **Ball** sprite. Add a different sprite to your project and see what happens when you add graphic effects to it.

Tip: Make sure that you Save your project.

To submit your project to our new 'Stress ball — Community' Scratch studio here - rpf.io/pp-scr-sb-2,
Please complete the form using the link - <https://form.raspberrypi.org/f/community-project-submissions>.



This resource is licensed by the [Raspberry Pi Foundation](https://www.raspberrypi.org/) under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International licence. To view a copy of this license, visit, see creativecommons.org/licenses/by-nc-sa/4.0/.