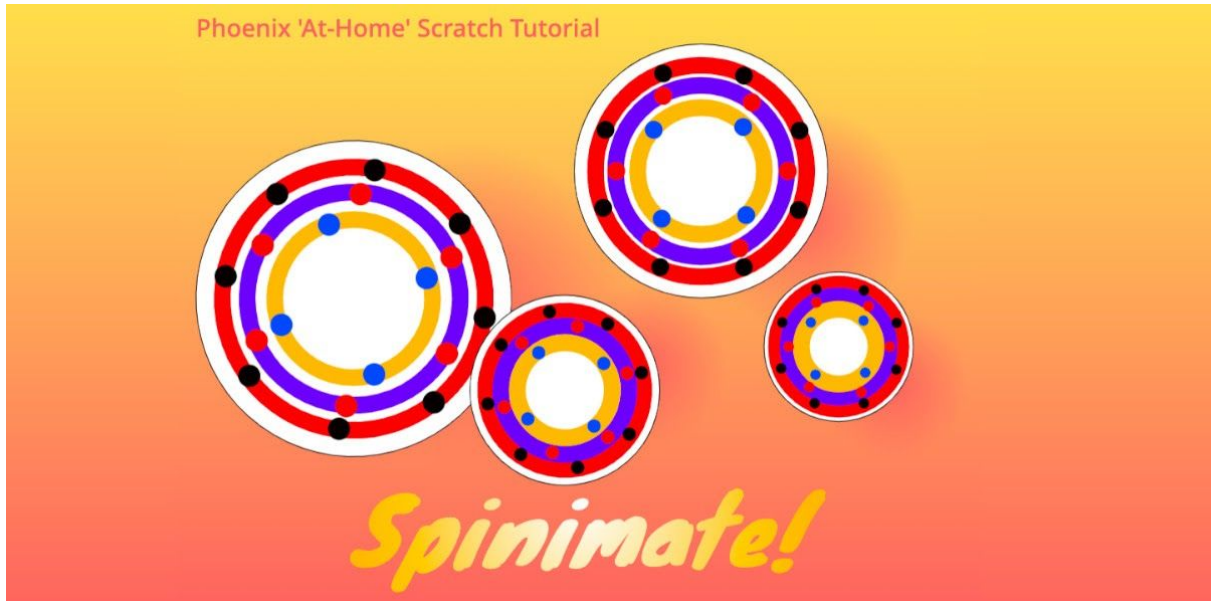# Phoenix

Spinimate!

This is a version of the spinning animation workshop we have previously held at Phoenix. You might remember drawing on a template and watching it move using a record player.

In this workshop we will use a Scratch project to play the animations from home.

This style of animation was first developed in the early 1800s and was called a Phénakisticope. It works by rotating a disc, which has different pictures around its edge. These pictures are the different frames of the animation. As the disc spins, the frames of the animation pass the same point, and our eyes begin to see the individual frames as a single moving image.

With a traditional phénakisticope a second disc with windows is placed above the spinning one. This stops the animation from becoming a big blur.

To get around this with our Scratch version, we spin the disc in steps. We have to decide how many steps are needed based on the frames in our animation, but it does allow us to have a steady and smooth animation.

You can see an example from 1833 included in the Scratch project.

You will need:

Access to the [Scratch](#) website, from a computer or laptop.
(It should also work from an ipad or tablet)

-Paper and something to draw with.
-Something to draw around, like a plate or bowl.

If you want to save your project at the end, make sure you have created a Scratch account and are logged in.

Below is the finished project. Open it up and start remixing:

https://scratch.mit.edu/projects/433074118/

You can follow the steps below, or see them demonstrated in a video, [here](#).

Step 1

See how the example animations work first.

Click the green flag to start the sketch.

You can use these controls to adjust the animation while the sketch is playing:
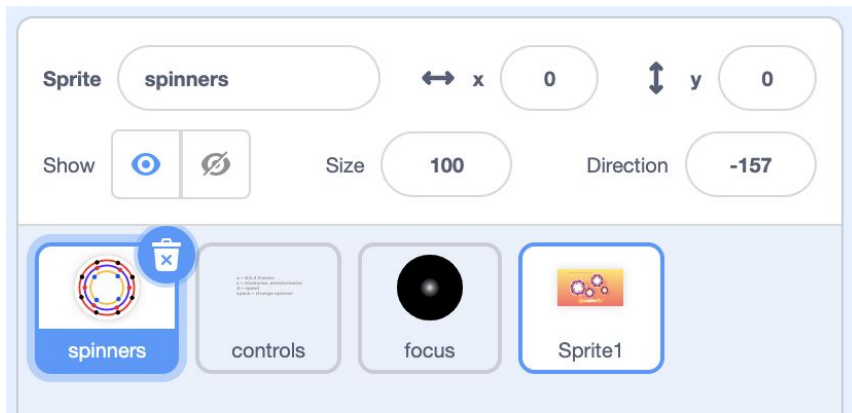a = change between 8, 6 and 4 frame animation
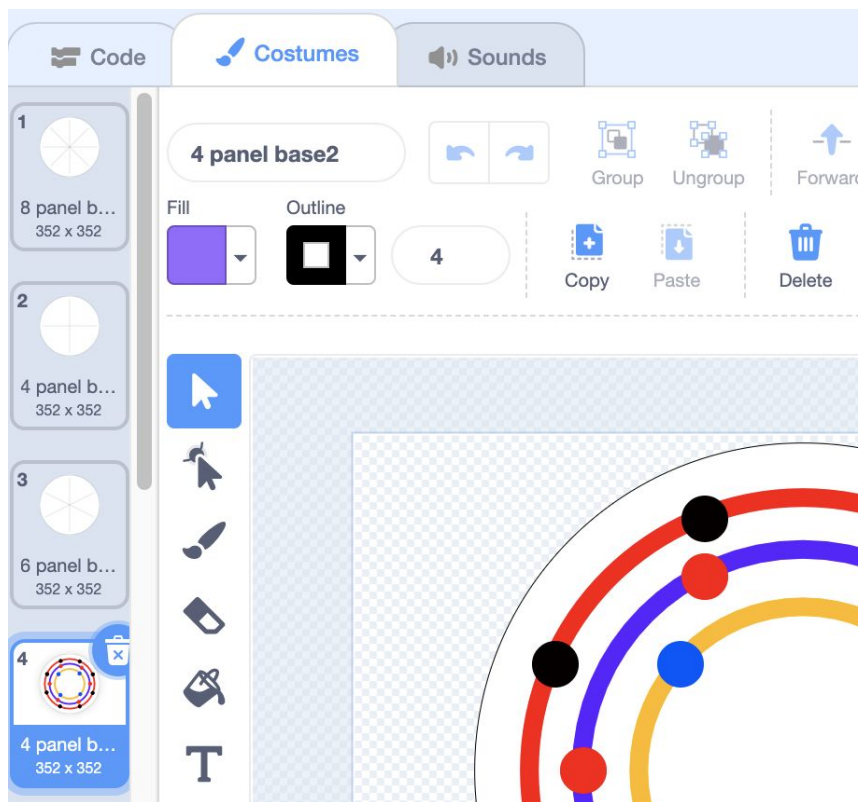s = clockwise/anticlockwise
d = speed
space = change spinner

Step 2

Now click to see inside the project.

Select the 'spinners' sprite in the Sprite section:

Then choose the costume tab:

Step 3

The project works by spinning a sprite around. It is setup to spin for a 4, 6 or 8 panel drawing.

You can copy and modify the templates already in the costume tab, using the Scratch drawing tools.

Or you can follow the steps below to upload your own, hand drawn animation.
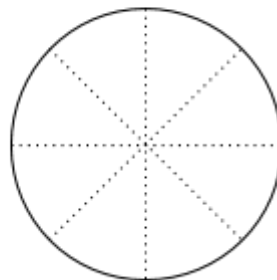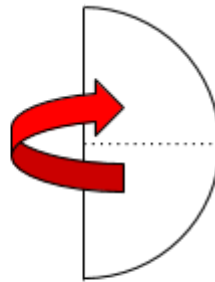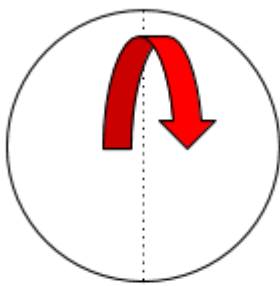
Step 4

You can print out this template or create your own. We'll demonstrate an 8 panel animation, but you can also try using four or six panels.

To make your own, trace around something circular, like a plate.

Then fold it in half.

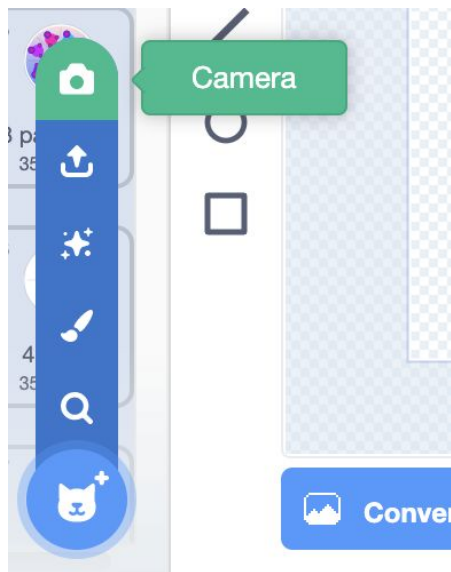Now fold it in half again.

And once more.

Now you can draw your animation. It's best to experiment with a few different ideas.

When you are happy with your drawing you can add it as a costume to the spinner sprite.

Step 5

Click on the Choose a Costume option and then choose, Camera

Now hold your drawing in front of the camera and click take photo.

Once the photo has been taken you can use the drawing tools to select your animation and move it. It is best to centre it in the middle of the stage.

Step 6

Now click the Green Flag and test out your animation!

If your spinner isn't visible at first, press the space bar until the spinner changes to your design.

You might also need to press A, S and D to adjust the spinner so that it is playing how you want.

Step 7

So now we've walked through the basics of Spinimate project. How can you customise it and develop your own version?

These prompts require exploring the Scratch code blocks:
- Can design an animation using the Scratch sprite library?
- Can you modify the sounds?
- Can you make an animation that spins for 10 frames, or more?

Remember to share your project to the Phoenix Scratch studio!

We hope you enjoyed this animation activity and can't wait to see what you create.

Phoenix.org.uk

@PhoenixLeic