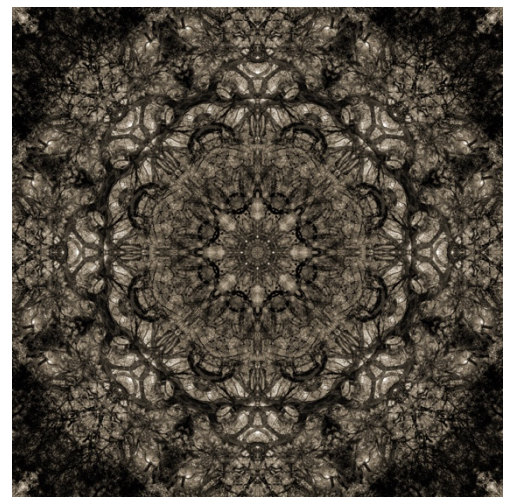# Kaleidoscope Photography
Instructor: Ms. Yurkovich   Class: Photo I

A Few Tips To Get Started: A kaleidoscope is a toy that holds a lot of wonder for young children. It consists of small pieces of colored of glass and long mirrors that create the illusion of an infinitely repeating pattern. Using the process described below you can easily turn your own photographs into stunning kaleidoscope art pieces, but there are a few tips for selecting your photographs that will help. Try and use photos graphs that are busy, house patterns, and use bright contrasting colors or are high contrast black and white images. Avoid overly simple photos with lots of empty space and similar colors. For this assignment you will need to have taken at least 3 photos: one of them should use bright contrasting colors, one should be in black and white, and the last photo is one of your choosing.

1) *Open Your Image:*
Open your file in Photoshop by double clicking on the Photoshop icon and then going to *File* and then to *Open*. Find the file you wish to use and click *Open*.

2) *Crop Away Unwanted Areas:*
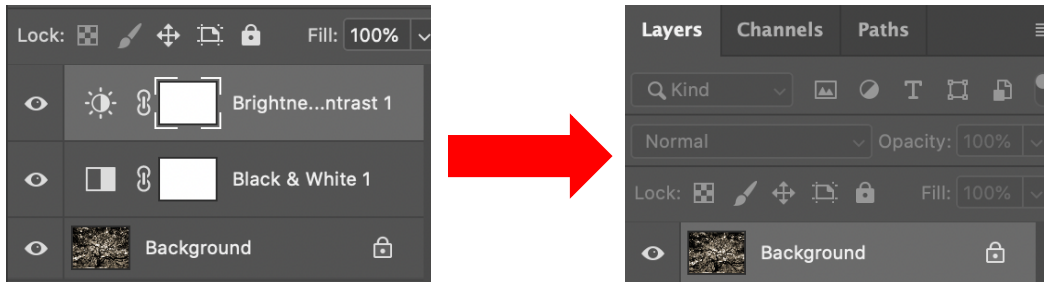Crop away any unwanted areas before you begin by clicking on the crop tool

 or click *C* on your keyboard. Drag the white handles in the corners to trim away any excess areas or large empty spaces in your photo. Press *Return* or *Enter* on your keyboard to finalize your crop.
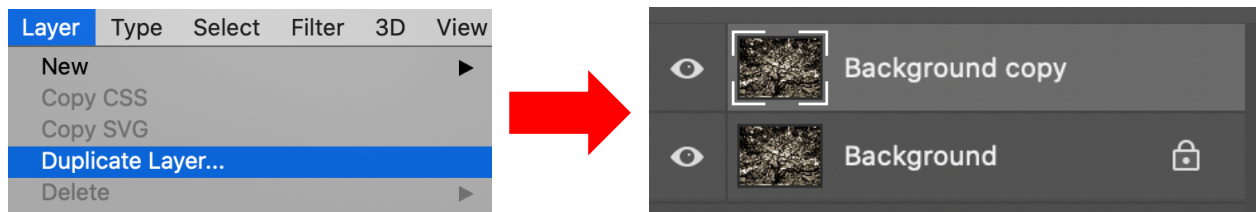
3) *Flatten Your Image:*

I strongly recommend you edit your photo using adjustment layers before you begin. It will make for a better photo. However, it is not required. If you have edited your photo by using adjustment layers (i.e. levels, hue & saturation, vibrance, etc.) you will need to flatten your image before you begin. Go to *Layer* and *Flatten Image.* You will notice that all of the adjustment layers in your Layers palette have merged into one final layer.
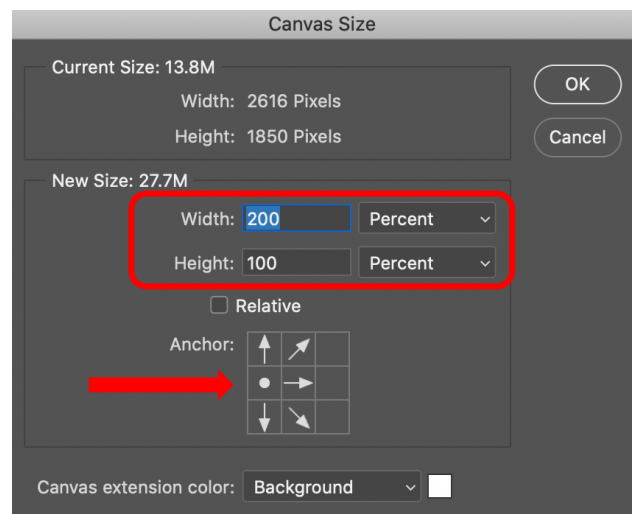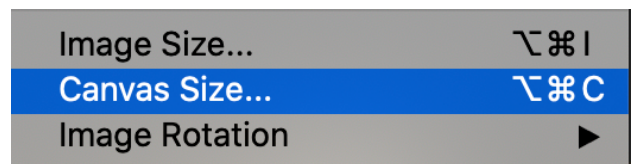

4) *Duplicate Your Background:*

Go to *Layer* on the menu bar and click on *Duplicate Layer.* When a window pops up asking to rename the layer as *Background Copy*, click *Okay.*
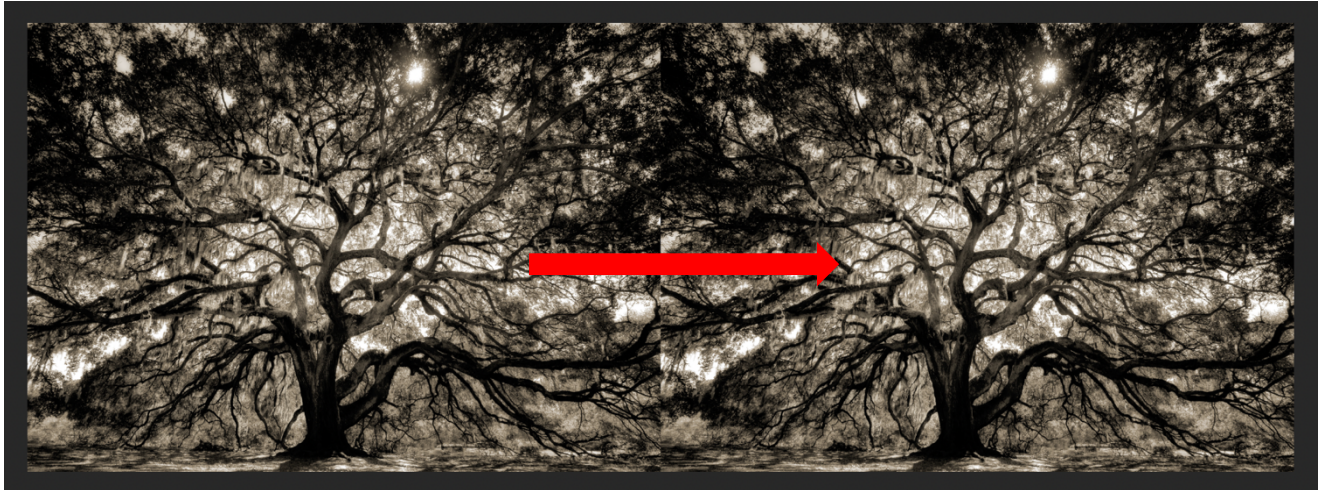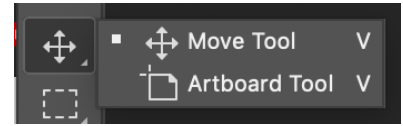

5) *Double Your Canvas Size:*

Go to *Image* on the menu bar and click on *Canvas Size.* Change the drop down menu from *Pixels* to *Percent.* Then change the *Width* value to *200 percent* and leave the *Height* at *100 percent.* In the box below that says *Anchor*, click the *middle square in the left column.* Then click *Okay.*

There should be a blank section of canvas to the right of your photo.
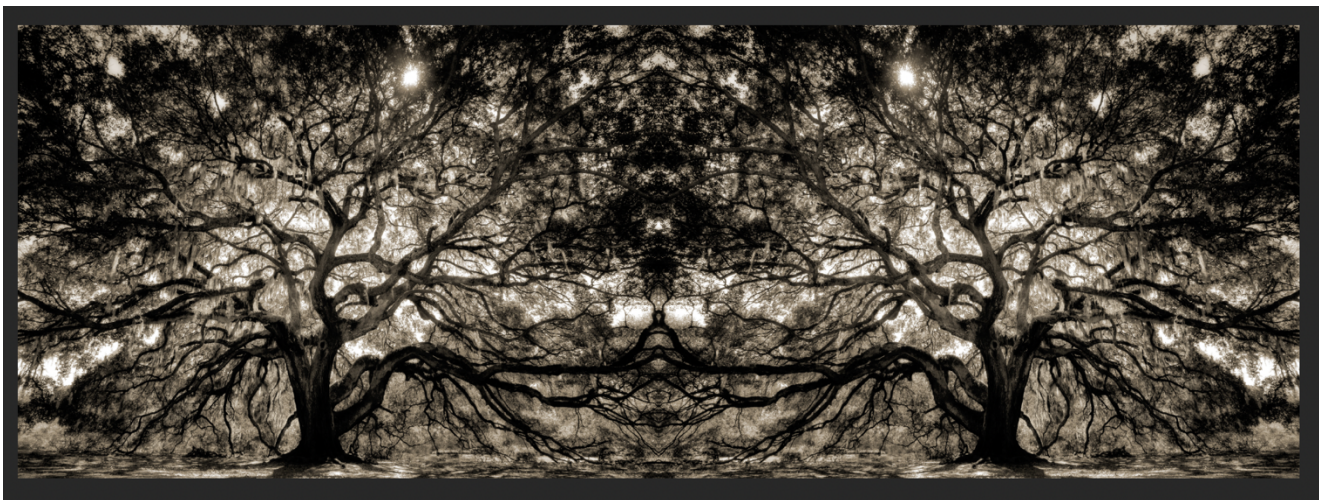
6) *Drag the Photo on "Background Copy" to the Blank Canvas to the Right:*
Make sure that your **Background Copy** layer is highlighted. (If it is highlighted then that means it is selected.) Click on the **Move Tool** or click *V* on your keyboard. Hold down the **Shift** key on the keyboard and *drag the image on the left to the righthand side of the canvas until it fills up all the empty space.*
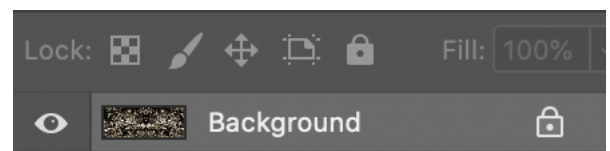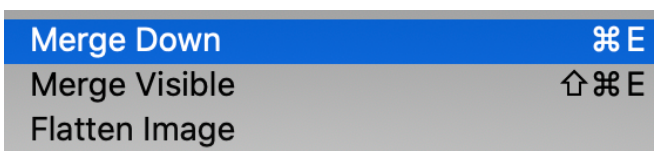

7) *Flip the "Background Copy" Horizontally:*
From the top menu click on **Edit** then choose **Transform** and then **Flip Horizontally.**
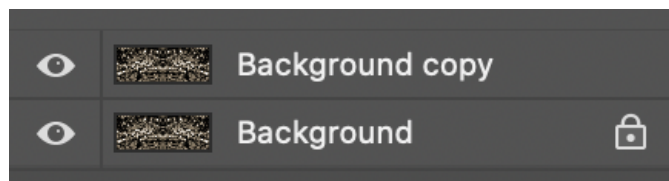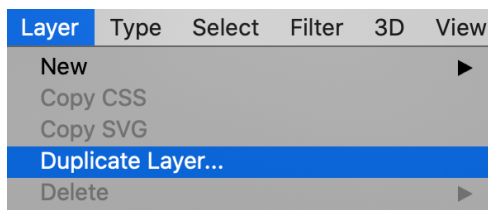

8) *Merge the Layers:*
From the top menu click on **Layer** and then **Merge Down.** Now you will only have one layer listed on the Layer palette and it will be the **Background** layer.
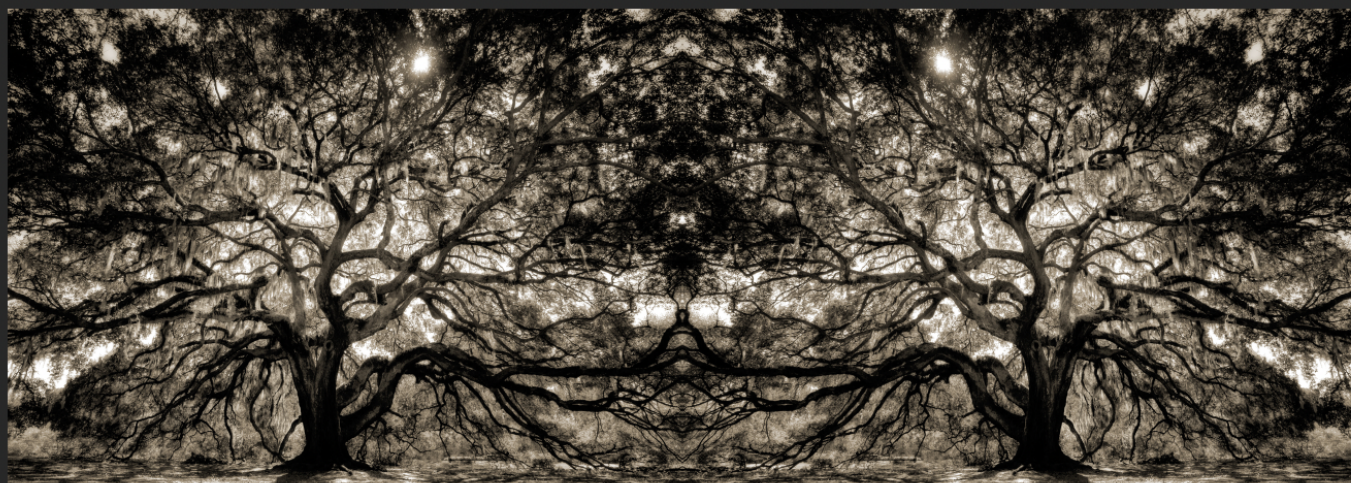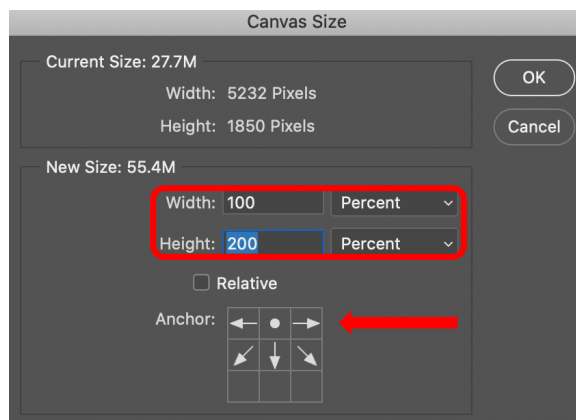
9) *Duplicate the Layer:*

Go to *Layer* on the menu bar and click on *Duplicate Layer.* When a window pops up asking to rename the layer as *Background Copy*, click *Okay.*
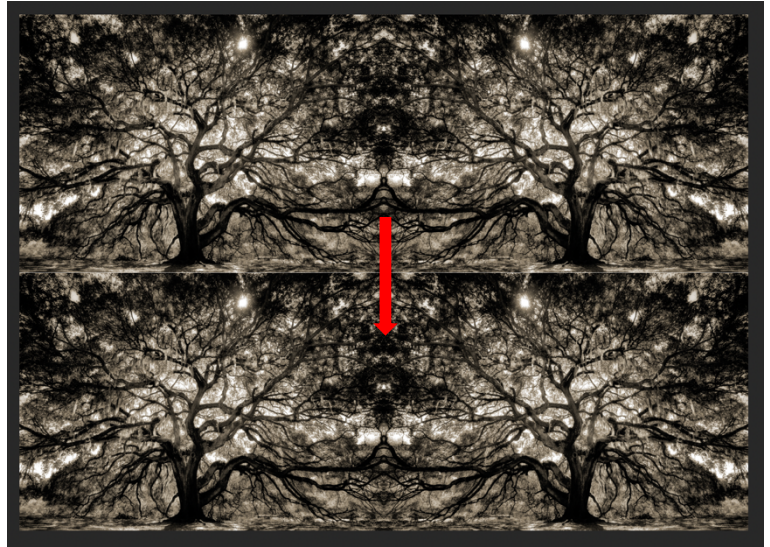

10)   *Double the Canvas Height:*

Go to *Image* on the menu bar and click on *Canvas Size.* Change the drop down menu from *Pixels* to *Percent.* Then change the *Width* value to *100 percent* and leave the *Height* at *200 percent.* In the box below that says *Anchor,* click the *middle square in the top row.* Then click *Okay.*
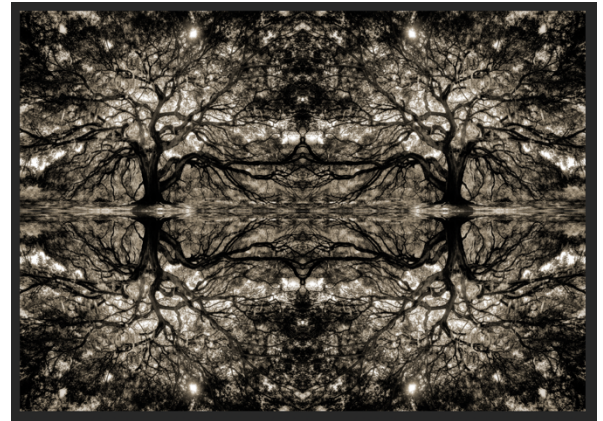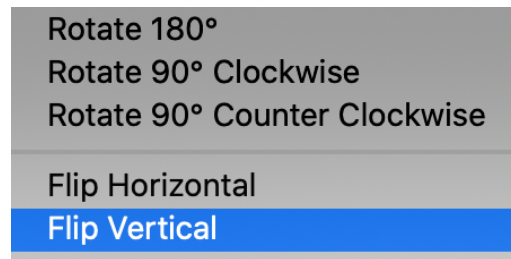

There should be a blank section of canvas beneath your photo.

11)   *Drag the Photo on "Background Copy" Down to Fill the Blank Canvas Space Below:*
Make sure that your *Background Copy* layer is highlighted. (If it is highlighted then that means it is selected.) Click on the *Move Tool* or click *V* on your keyboard. Hold down the *Shift* key on the keyboard and *drag the image to the bottom of the canvas until it fills up all the empty space.*
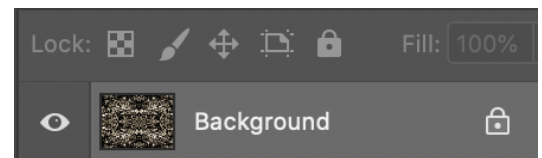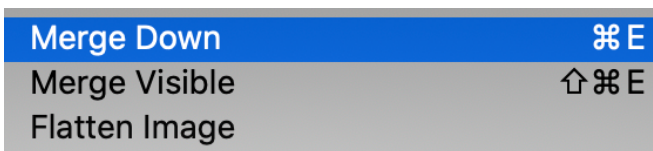

12)   *Vertically Flip the Bottom Image:*
From the top menu click on *Edit* then choose *Transform* and then *Flip Vertically.*

Rotate 180°
Rotate 90° Clockwise
Rotate 90° Counter Clockwise
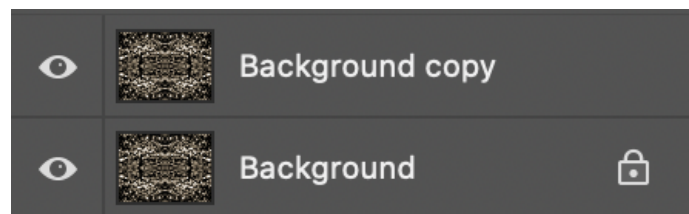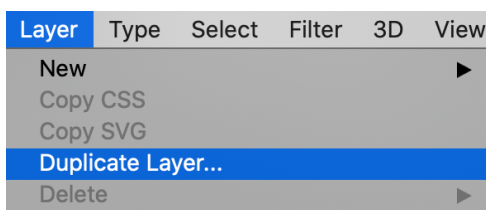
Flip Horizontal
Flip Vertical

13)   *Merge the Layers:*
From the top menu click on *Layer* and then *Merge Down.* Now you will only have one layer listed on the Layer palette and it will be the *Background* layer.
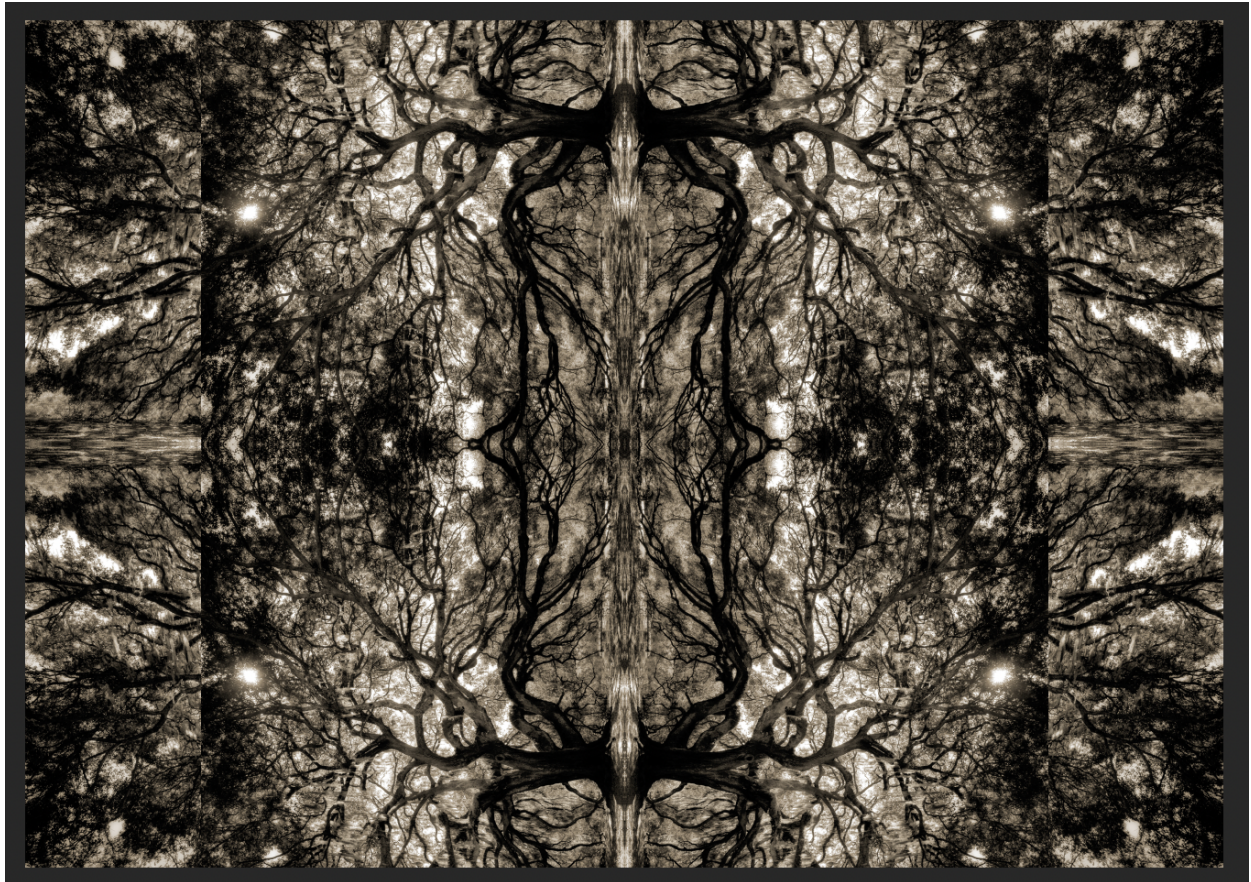
Merge Down	⌘E
Merge Visible	⇧⌘E
Flatten Image	

Lock: 🎨 ✏ ✛ 🔲 🔒   Fill: 100%

👁 Background 🔒

14)   *Duplicate the Layer:*
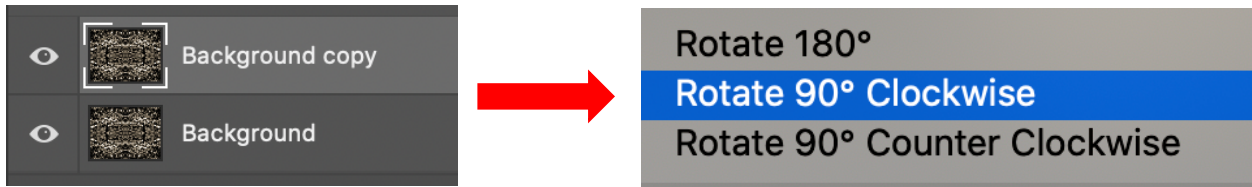Go to *Layer* on the menu bar and click on *Duplicate Layer.* When a window pops up asking to rename the layer as *Background Copy*, click *Okay.*

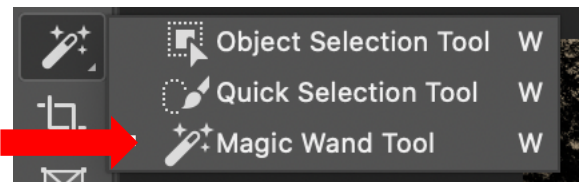| Layer	Type	Select	Filter	3D	View
New					▶
Copy CSS					
Copy SVG					
Duplicate Layer...					
Delete					▶

👁 Background copy

👁 Background 🔒

15)   *Rotate "Background Copy" 90 degrees:*
Click on the layer called ***Background Copy***. From the top menu select ***Edit*** then ***Transform*** and finally click on ***Rotate 90 Clockwise***.
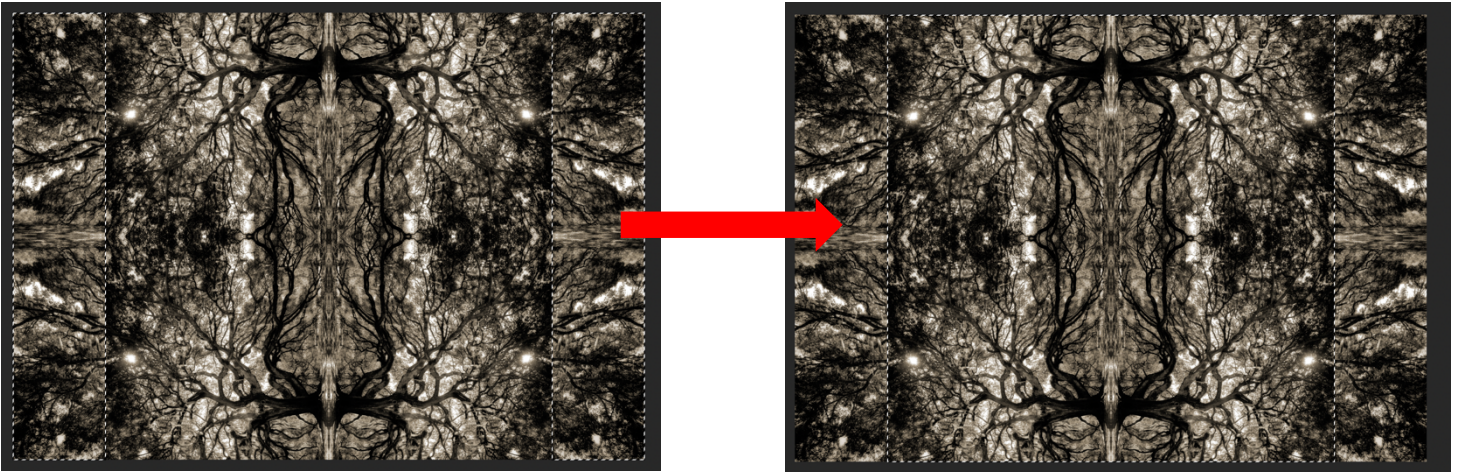

16)   *Crop the Canvas to a Square:*
Click ***W*** on your keyboard and it will highlight the ***Object Selection Tool.*** Click and hold the ***Object Selection Tool*** for a moment and a menu will appear with three choices. Choose the ***Magic Wand Tool***.
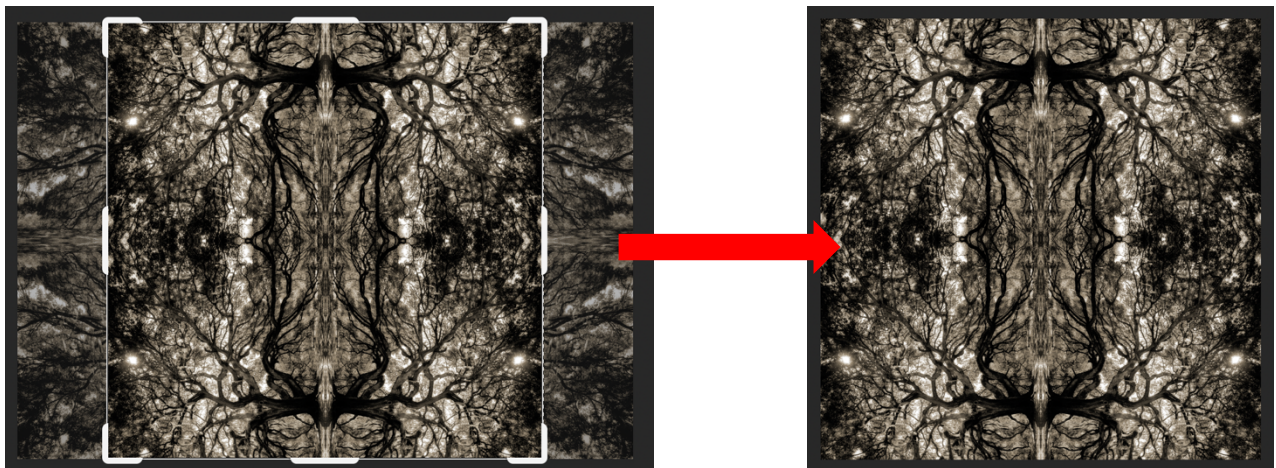
Click on the ***Background Copy*** layer so that it's highlighted. Now click on the empty spaces on either side of that layer. (If your original image is a horizontal image then you will click on the far right side and the far left side of the image. If you original image is a vertical photo then you will click on the upper top and the lower bottom of the image.)
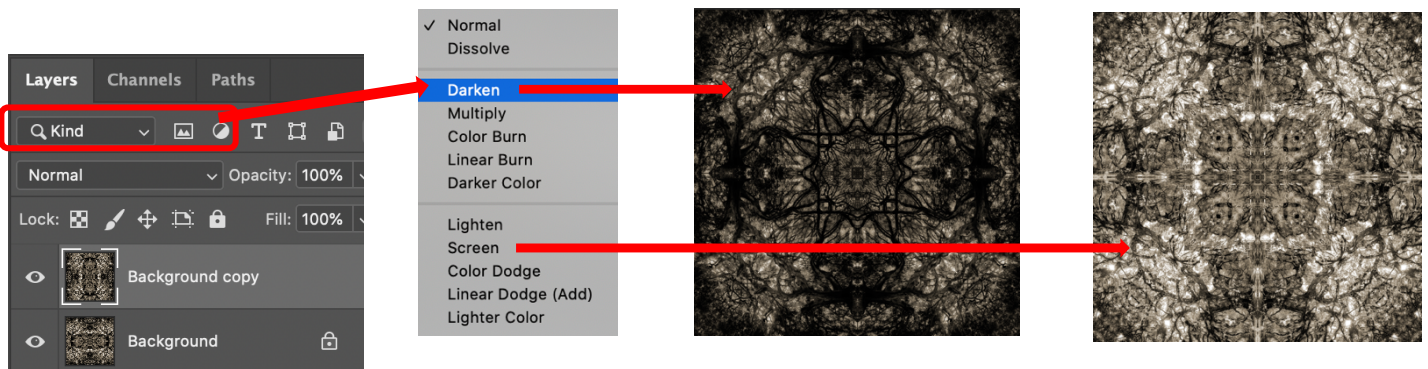
From the top menu click on *Select* and then *Inverse*. A dashed line in the shape of a square will now appear around the center part of your image.

Click on the *Crop Tool* or click *C* on your keyboard. Hit the *Return* or *Enter* key *twice* on your keyboard. This will crop your entire image to a perfect square.

17)   *Change the Layer Blend Mode:*

On the Layers palette click on the word *Normal.* This opens up the *Blending Modes* menu. Try a couple of the different blending modes and look at the changes they make to your photo. Pick the blending mode that you like the most for your image.
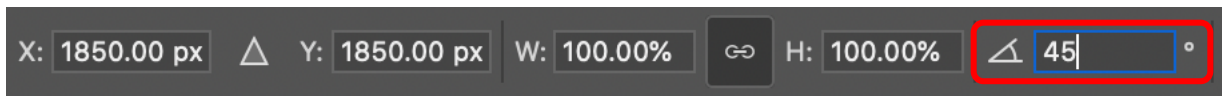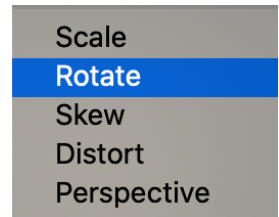
18)   *Merge the Layers:*
From the top menu click on *Layer* and then *Merge Down.* Now you will only have one layer listed on the Layer palette and it will be the *Background* layer.

19)   *Duplicate the Layer:*
Go to *Layer* on the menu bar and click on *Duplicate Layer.* When a window pops up asking to rename the layer as *Background Copy*, click *Okay.*
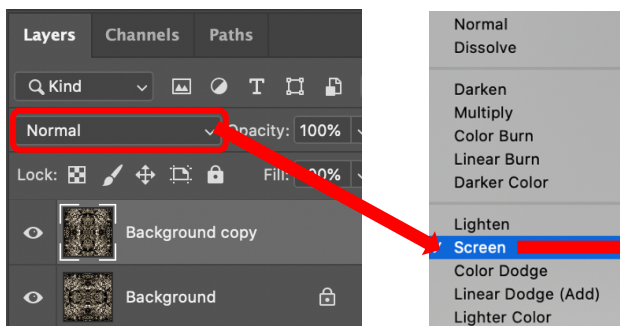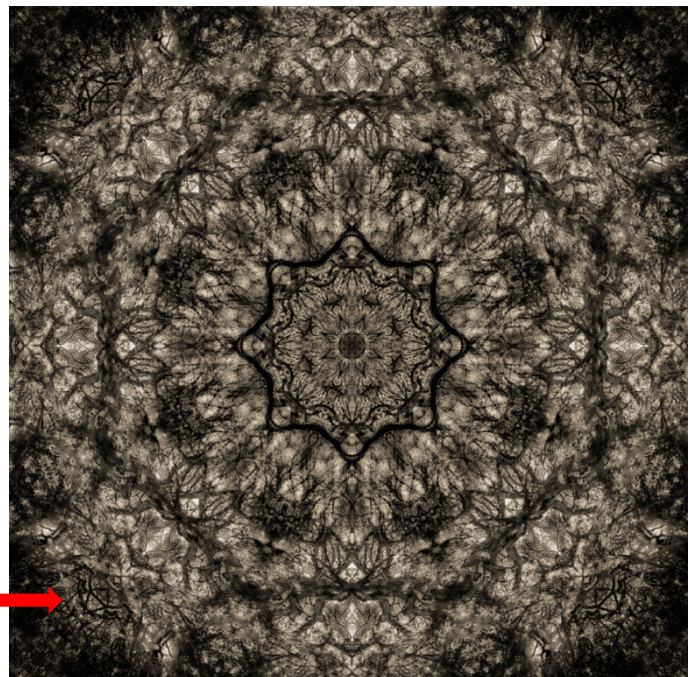
20)   *Rotate the Layer by 45 Degrees:*
Click on the top layer called *Background Copy*. Then go to *Edit* on the top menu, click on *Transform,* and select *Rotate* from the drop down menu. *Change the degree angle to 45 degrees.* Then hit *Return* or *Enter* on your keyboard *TWICE*.

21)   *Change the Layer Blend Mode:*
On the Layers palette click on the word *Normal.* This opens up the *Blending Modes* menu. Try a couple of the different blending modes and look at the changes they make to your photo. Pick the blending mode that you like the most for your image.

22)   *Flatten Your Image & Turn It In!:*
Your image is complete! Go to *Layer* and *Flatten Image.* You will notice that all of the layers in your Layers palette have merged into one final layer called *Background.* Save your work! From the top menu choose *File* and then select *Save As.* Select *Save on Computer.* Rename your file with *Your Name* followed by *Kaleidoscope 1*. From the drop down menu *Format* choose *TIFF* and then click *Save* and then *Okay.* Submit your work for credit.