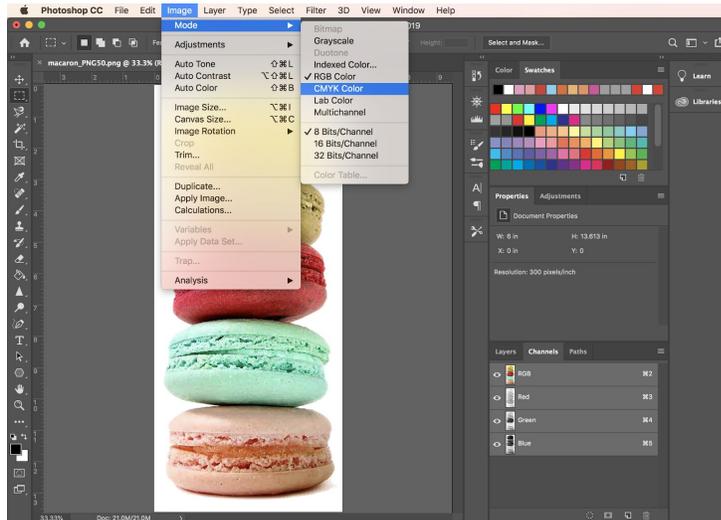


Advanced Photoshop Techniques

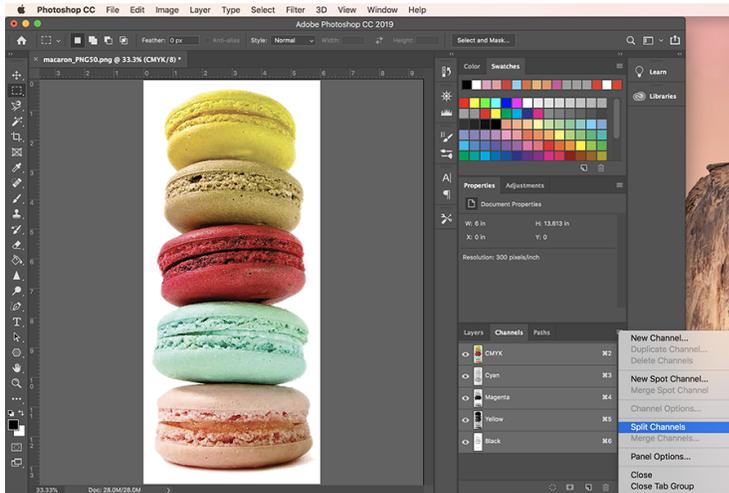
CMYK Color Separation



1. The first step is to convert your image from RGB to CMYK.

Image > Mode > **CMYK Color**

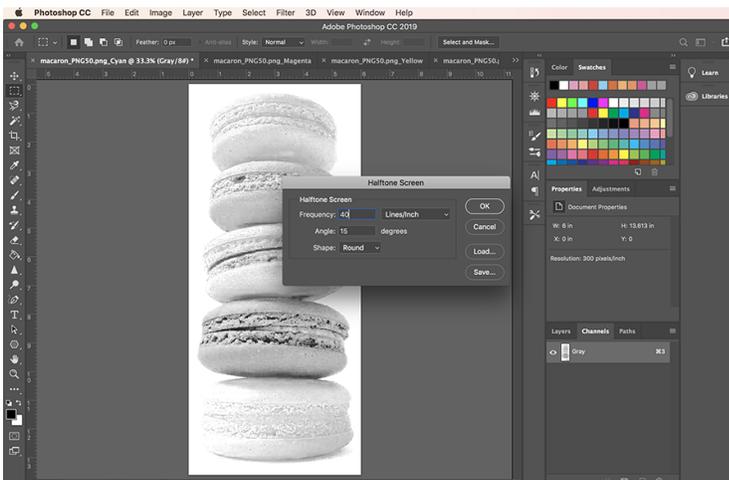
2. Next navigate to the Channels pallet and from the drop down menu (the four horizontal lines) choose **Split Channels**.



This will create four new separate documents, one for each channel: Cyan, Magenta, Yellow, and Black.

These new documents will allow you to individually create halftones for each channel.

+ For **each** Channel Document follow the steps below:



1. Bitmap the image:
Image > Mode > **Bitmap**
From the dialog box change your frequency to the desired detail.

We suggest going no higher than 25 lpi for apparel and no higher than 40 lpi for paper.
The frequency that you choose will remain the same for each channel bitmapped.

2. Change the angle. Each color separation requires a specific angle to create that iconic rosette pattern, here are the corresponding angles to each color:

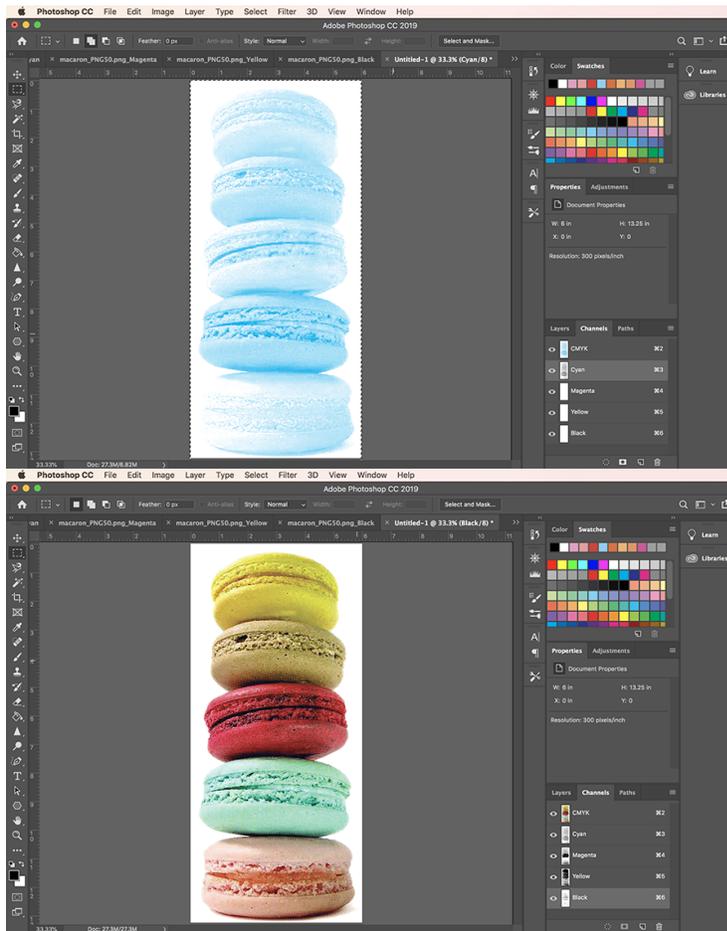
CYAN: 15°

MAGENTA: 75°

YELLOW: 0°

BLACK: 45°

3. Click OK and your image is now in halftone! Repeat these steps for each of your color separations.



+ To preview your newly created CMYK separations as they are intended to be printed, follow the steps below:

1. File > **New...** to create a new document. Make sure the new document is very close to the dimensions of your original image and in CMYK Color Mode.

2. Select one of your Bitmapped images using the Marquee tool or Command+a to select all.

3. Copy and paste the selection into that new document into the corresponding color channel.

4. Repeat steps 2-3 until each of the colors are in their correct channel in that document. Turn on the CMYK

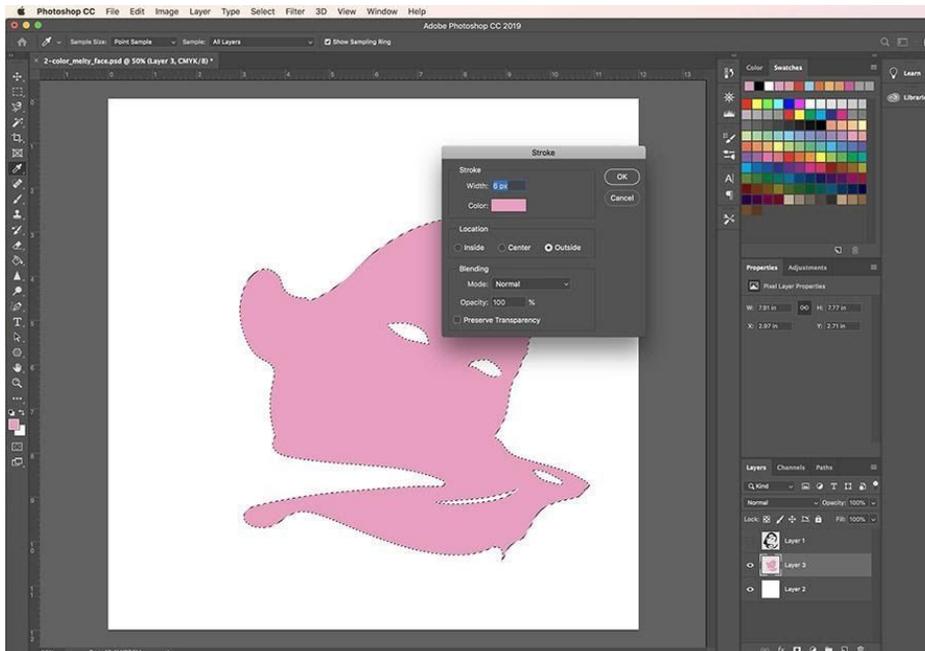
master channel to view all your channels together and watch as your color separations become realized!

Trapping

A method used in Photoshop or Illustrator of adjusting areas where two distinct, adjacent colors meet so that press misregistration won't cause white spaces. If you knock out graphics or type you may have to create a trap to ensure that you don't have white spaces due to misregistration.



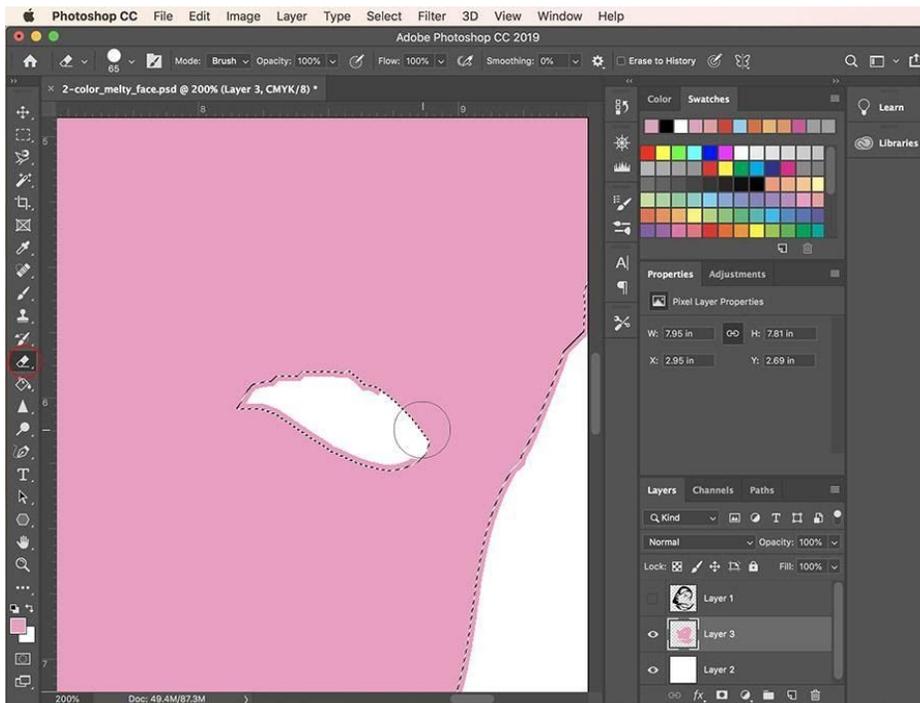
1. Select your first color using the **Magic Wand** tool.



2. Navigate to the drop down menu: **Edit > Stroke**.

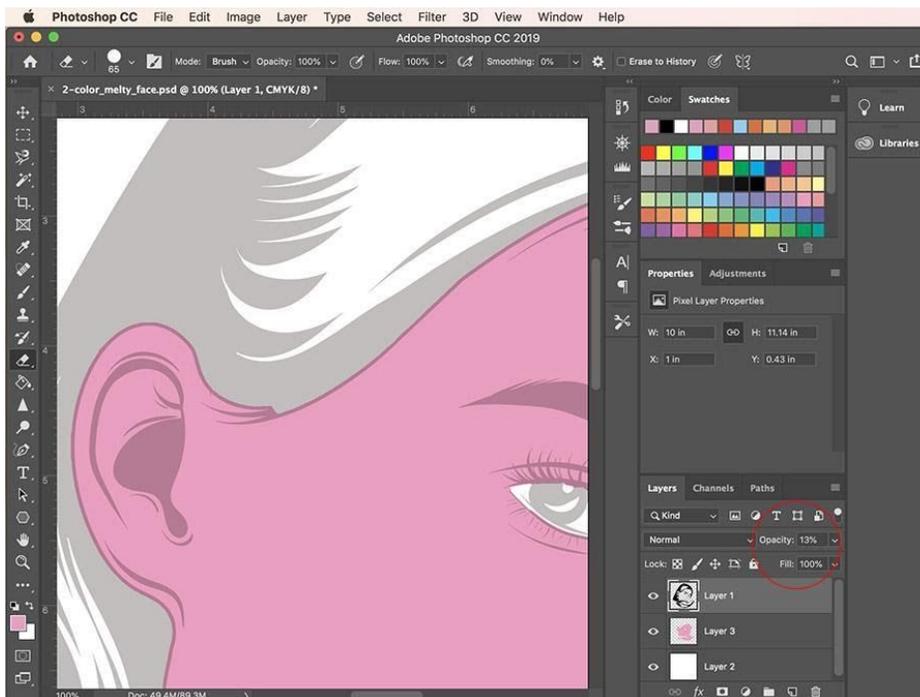
Make the stroke width between **4-6 pixels** and select the location to **Outside**.

Click OK and do not deselect the highlighted area yet!



3. Be sure to check the added stroke to make sure it does not extend out too far in some areas.

Select > **Inverse** to select the outer areas and use the **Eraser** tool to remove unwanted trapping.



4. To review your trapping, turn down the **Opacity** level on your outline or last color to be sure it works for you!

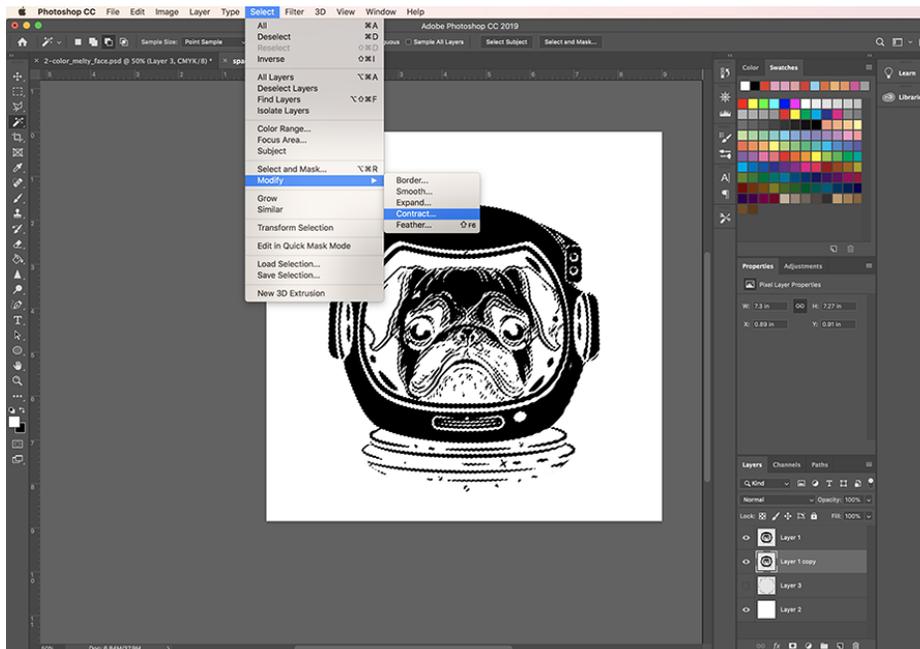
(the darker outline around the face is apart of the first color and highlights the trapping that was just created)

Creating an Underbase!

Underbases are used when printing a light/bright color or glitter onto dark colored apparel, to really make that desired color POP! It's an additional color (screen) so be prepared to add it when necessary. Under bases are white if you're printing a light/bright color, however when printing with glitter, it should closely match the glitter color.



1. Right click or Control+Click the layer you want to add an underbase to, then select **Duplicate** to copy that layer into your open document.



2. In the duplicate layer, use the **Magic Wand** tool to select the image, then navigate to the top drop down menu: Select > Modify > **Contract..**
+ For white underbase: **Contract pixels by 2-3**
For glitter underbase: **Contract pixels by 3-4**



3. At this point your selection has contracted around your image and now you need to delete excess outer area around the image.

Select > **Inverse** >
Press the delete key

You're done! Now you have both your bright, light, or glitter layer and your respective underbase!