

Single-tiled object Tutorial: Canisters

Read this before starting this tutorial!

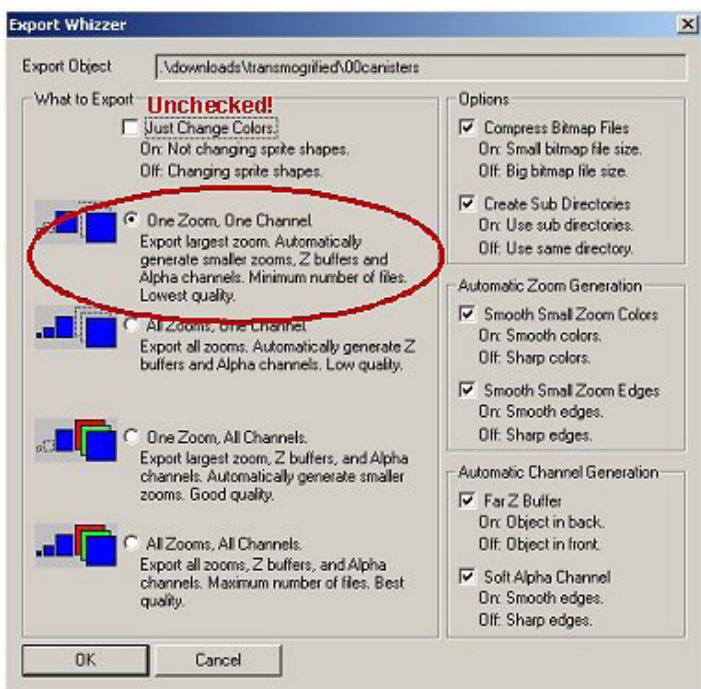
This tutorial was created by me for Lorrilee of Simfully Yours (who has shared exclusive rights to this finished design & may use this on any site she is a part of). With her suggestion I decided to share it with you but there are some exceptions to the finished product.

This tutorial is done using PaintShop Pro 7, but can be done with versions 5 and 6. If you are new to PSP, please familiarize yourself with it a little.

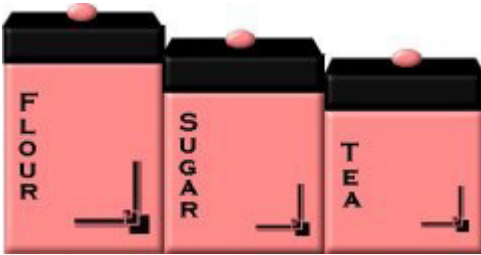
After helping Lorilee of Simfully Yours “simmize” a set of canisters she drew in PSP, I thought it would be a good idea to share the information. The basics for doing this simple one-tiled object can be used on a variety of other objects that you draw from scratch as well. You just have to adjust it to what you are doing.

This tutorial WILL NOT cover how to make z buffers! I am sorry, but I cannot give z buffer tutorials. For informaton on z buffers I suggest visiting [7DS](#)

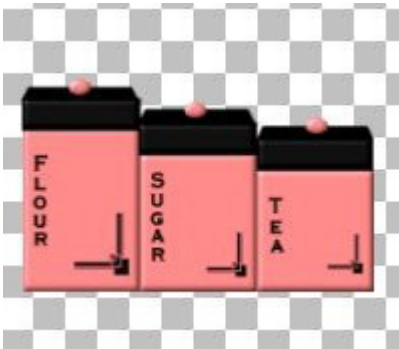
Since we are doing a set of canisters, I chose a food processor to clone because I am not crazy about decorative items that don't have a purpose, yes I am weird, lol!




Begin: Open tmog and select the food procesor, hit the clone button and export using these settings: Just Change Colors unchecked and One Zoom, One Channel checked. We export this way so that we let tmog create the a and z buffers. They aren't always perfect this way and I have more information at the end of the tutorial about this proecess.



Next: Open your paint program and get the image you are going to simmize, in this case it is the canisters.jpg that Lorilee sent me. You don't want an image too large or too small, just a nice workable size to begin with. You also want the image on a transparent background. If it is not, then you must select the background of the image, invert, copy and past as new image.

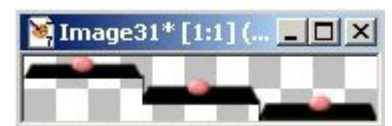


Next: We must now distort this image. The canisters look great as they are with a nice width and height but once you skew this image to simmize it, the width becomes much wider and doesn't look as nice. So we must take our deform tool:  and make our canisters just a little bit thinner.



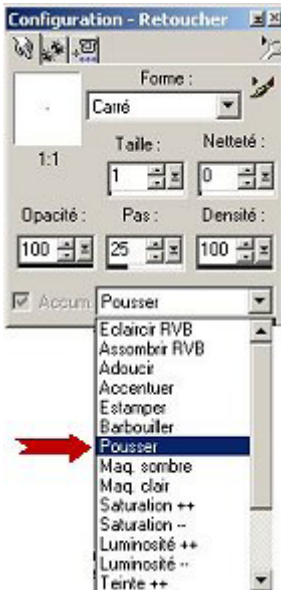
Next: Now I resize my canvas (if you haven't already a lot of room to work with around your image). I need lots of room so I go to Image/ Resize Canvas, like this:

Next: Ok, the canvas is good, now I want to cut the very tops off the canisters. The reason I do this is because Lorilee has a cute little top on it with a pink handle, but once I simmize that top will not work. So I must cut it off and later created a new one. So using my selection tool set at rectangle and anti-alias UNCHECKED, I select the very tops of each canister, copy and paste as a new image and set that aside. I set this aside because I want to use those little pink handles later. So this is what the image looks like that you set aside for later use:

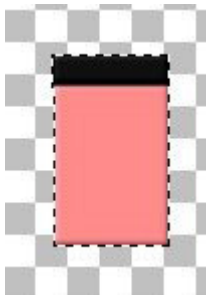


Next: Now we must start simmizing the canister set. So using my selection tool again, I select the very first canister to the left, which is the tallest. I draw a square around that canister and copy and paste as new image. Now that I have that piece of canister I reside the canvas so I have room to work with. This is what you should have now as a new image (setting the canisters image aside and just working with the piece we just copied):

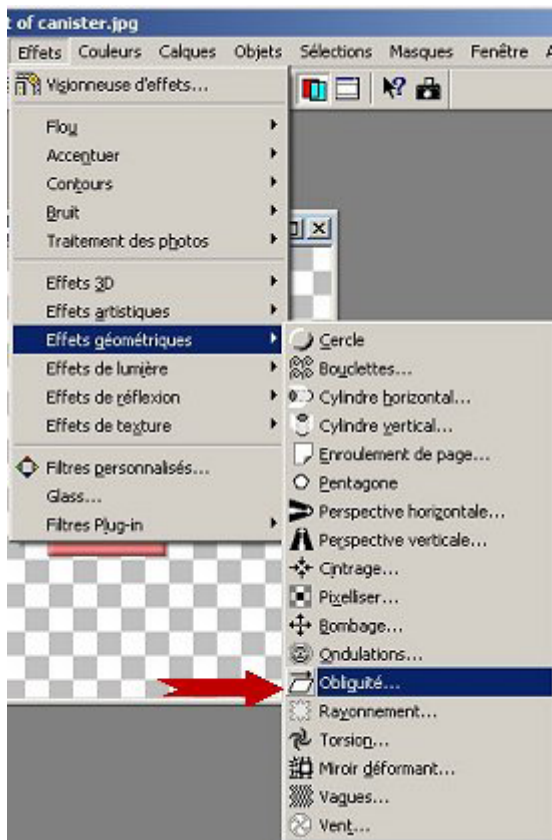




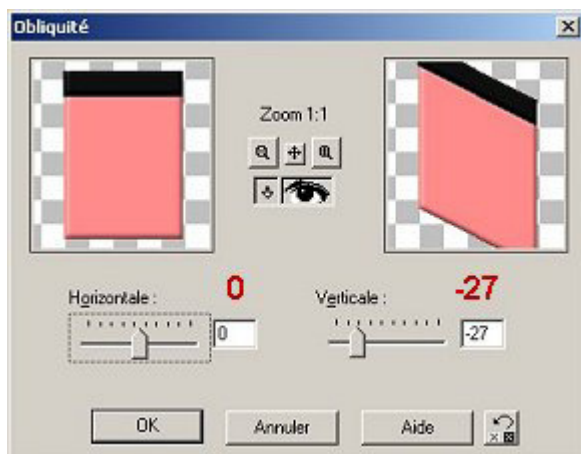
Next: Working on the piece of canister we have now, use your finger tool, drop down option set at Push (7th option down) and settings at size 1.



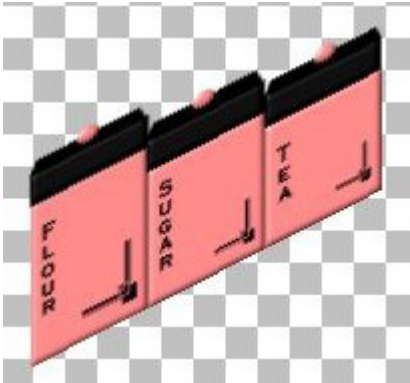
Next: First select your canvas and then Selections/invert so marching ants are around your canister piece. Gently and carefully push the pink over the black, kind of like erasing. You could also use the paintbrush tool with the same color pink as the canister. Either way works. So now your canister piece should look like this:



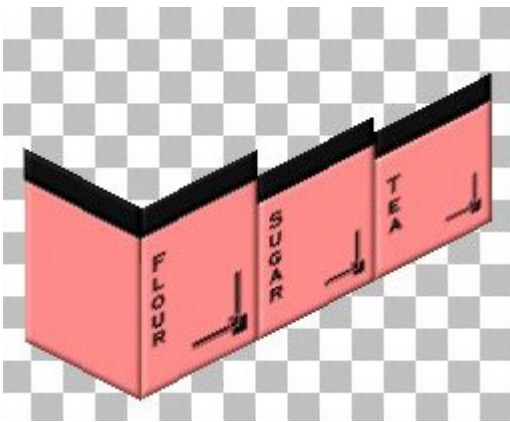
Next: Now deselect the canister. It is time to skew this piece. So go to Effects/Effects Geometric/Skew, like this:



Next: We have to set the settings, so set the horizontal to 0 and the vertical to -27, like this:

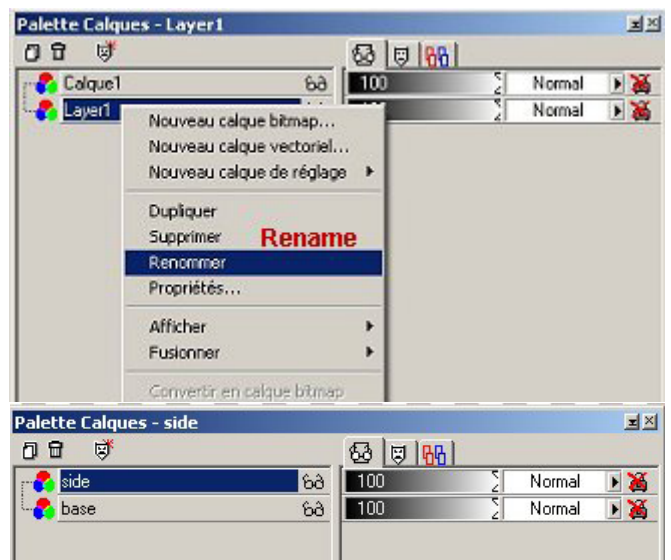


Next: Go back to your main canister image and skew that like you just did this side piece **except** use Vertical 27 this time. So now your main canister image should look like this: (also you can see how the image has widened after skewed)

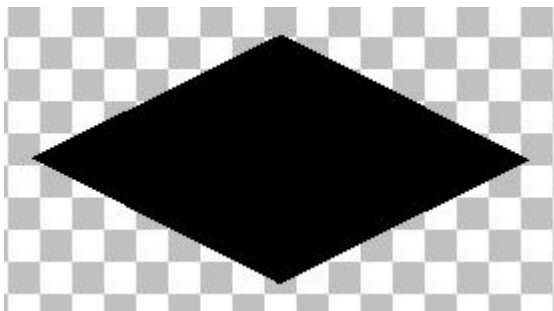
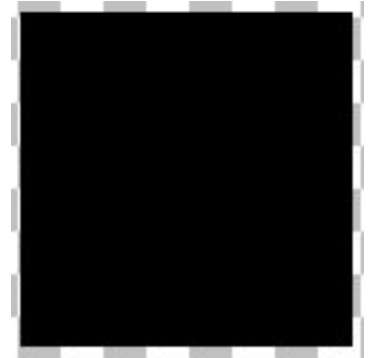


Next: Go back to your side piece you just made and copy that and then **paste as a new layer** onto your now skewed main canister image. Once it is pasted, move it around and line it up on the left side of the canisters to create a side for the canisters, like this:

Next: Before we go any further, we must get our layers box in order. Go to your layers box and rename the bottom layer BASE and the newest pasted layer SIDE. To rename layers, just right click on the layer and click Rename.

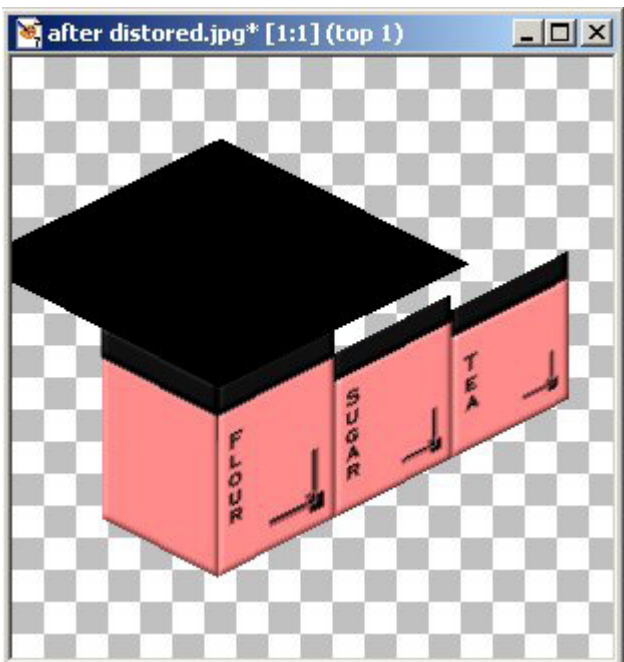


Next: Now we are going to make the tops. Create a new image, 300 x 300, transparent background. Using your selection tool, just draw a blank square, any size will do just don't make it too big or too small. Now floodfill that square with black (since that is the color of the canister tops) like this:



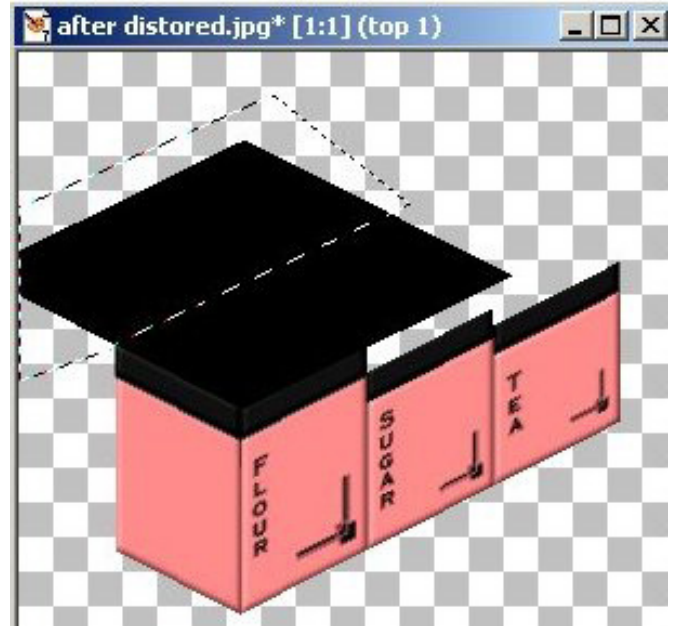
Next: Now deselect the black square and go skew it. But this time we skew it like a rug, first skew horizontal 45 , vertical 0. Then go back and skew it horizontal 0, vertical -27. Your black square should now look like this:

Next: Copy the skewed black image and past as a new layer on the canister set image. Before doing anything else, go to your layer palette and rename that Layer1.

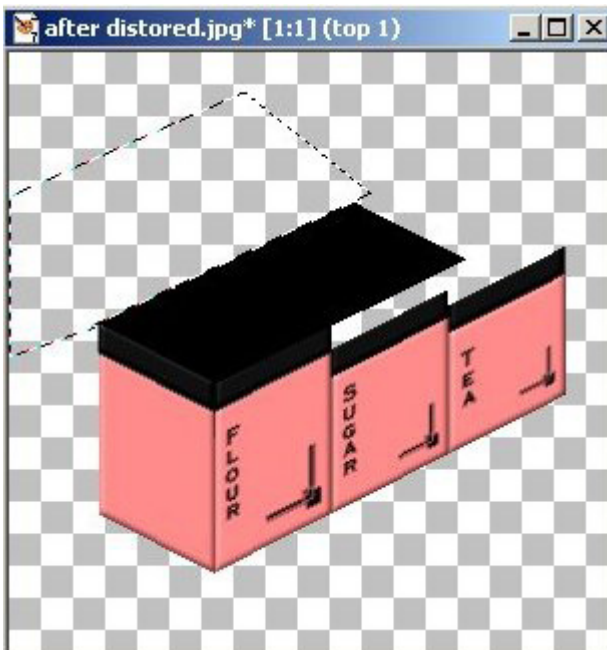


Next: Move the black piece into place by lining up the front left corner. As you can see, it is way too big:

Next: Let's get rid of the excess black top, grab your lasoo tool and in the options box, select Point to Point, make sure anti-alias is unchecked! Using your own judgment, start with the back left corner of the canister where the top black meets the canister side black and draw a straight diagonal line. Left click to stop the line, then going back away from the canister draw around the excess black piece, left click to stop the line and then right click closes the loop. Like this:

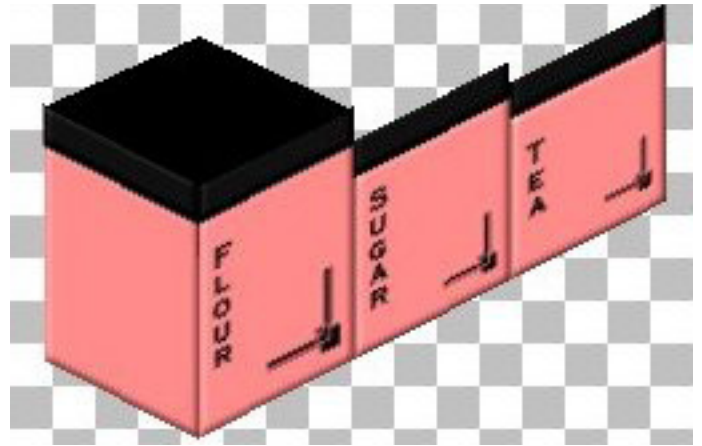


Note: If you are unfamiliar with the Lasso Tool using the option Point to Point, please practice on another image first. Just remember, left click stops the line, right click closes the loop. If you make mistakes, just undo or hit ctrl D to unselect and start over.



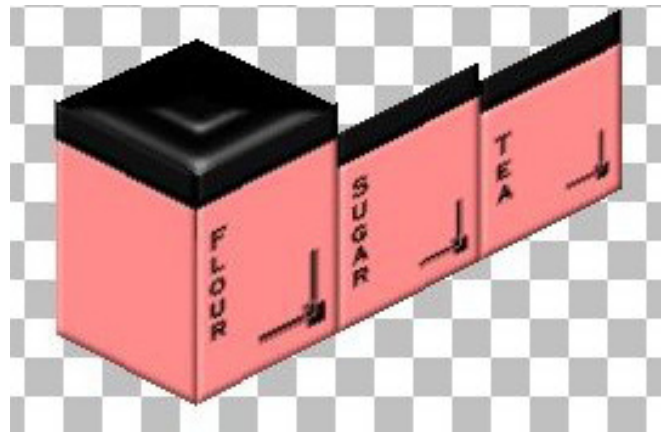
Next: Now hit delete to get rid of that black piece that we have selected. Like this:

Next: Now the back piece is gone, so deselect your image. Using the Lasso Tool again with same settings, do the same thing for the extra side piece. Starting at the front right corner of that canister, draw as straight a diagonal line as you can to back piece, then going around the excess black off to the right and deleting it. Like this:



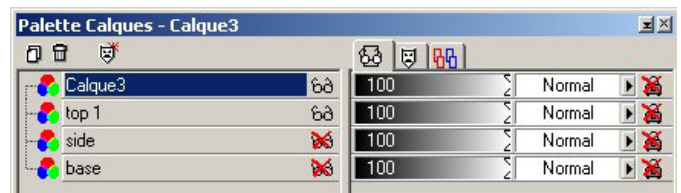
Note: If you are not happy with the top, just undo and start over. I did mine twice before I was happy with it.

Next: Now I want to give a little definition to the top if I can. So I go to Effects/3D/Inner Bevel and fool around in there. Make sure the Top1 layer is selected in your layer palette. Fool around with settings and effects till you are happy. I ended up using two different settings twice, first making a lip on the top and then making a button in the middle, like this:

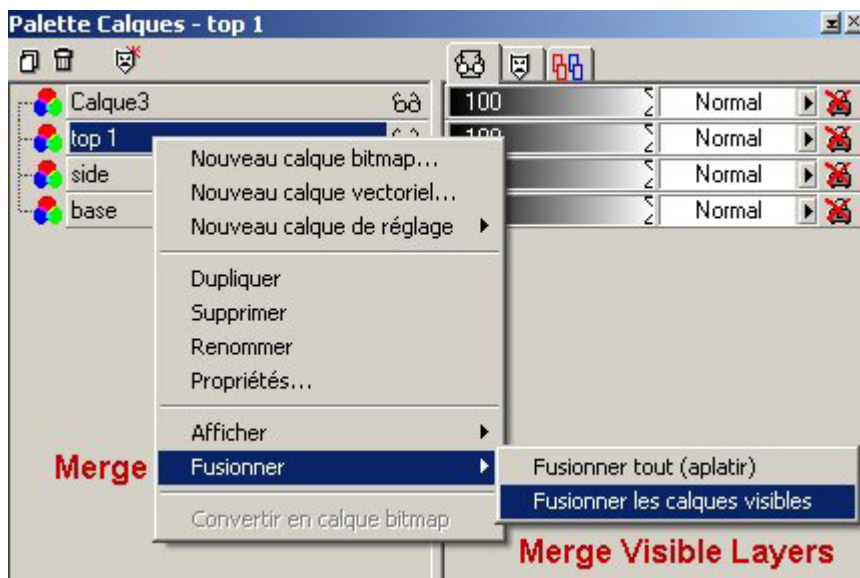
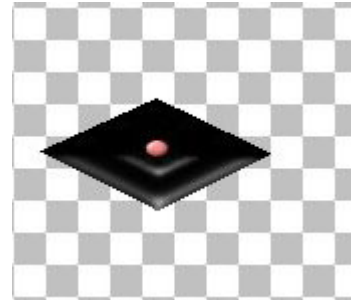


Next: Ok, I am happy with my top, I now go and grab the image of the tops that I cut off in the beginning. I want that pink handle. So using my Lasso Tool, settings Freehand this time, I draw around the pink handle. I don't have to be perfect since the top is black. I copy the handle and paste as a new layer onto the canisters set.

Next: Before doing anything else, go to the layer palette and hide the base layer and the side layer by clicking on the glasses beside each layer. That produces a red x in the layer palette and they disappear off my main image. Like this:



Next: With only the black top showing and the pink handle, I go to my image and move my pink handle to a good position onto the black top, like this:



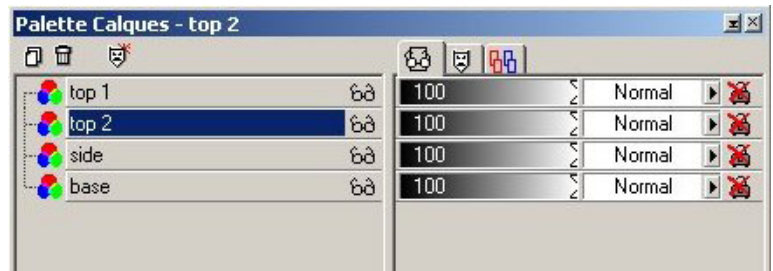
Next: Now go back to the layer palette, the base and side layers still hidden and right click on my top1 layer. I then choose, merge/visible so that the top1 layer and the new pink handle layer become 1 layer, like this:

Next: Now right click on that newly merged layer and rename it Top1. After it is renamed, unhide the two bottom layers by clicking on the red x's in the palette.

Next: Still at the layer palette, right click on the top1 layer and duplicate it. After it is duplicated, rename that layer Top2.

Next: Now to to your image and move the duplicate layer of the top you just made to fit over the middle canister. When you have it lined up perfectly on the right corner you will notice that the front left corner is on top of the large canister lid.

Next: To fix the overlaying problem, go to your layers palette again and click on the top2 layer and drag it down under the top1 layer, like this:



Next: Now we will do the same thing for the smallest canister top but this time duplicate the top2 layer, rename it to top3, move it into position and then drag it under the top2 layer. So your layers palette should now read, from top to bottom, top1, top2, top3, side, base.

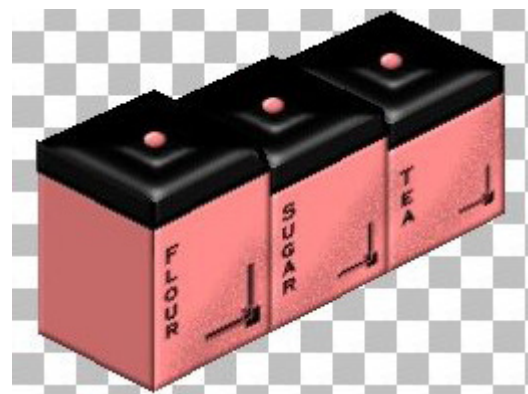
Next: Before we do anything else, hit shift D to copy that whole image as a new image and set aside for later. We will use that to make the back view.

Next: Now we must do some shading to give definition to the canisters themselves. First we will darken the side. So go to the layer palette and select the side layer. Then hit ctrl A then ctrl F, this selects the side with marching ants around it.

Next: Now create a new layer above that one, settings multiple and name it side shade. I chose a light gray color in my color palette and using my flood fill tool, I flood fill inside of those marching ants. Now deselect your image.

Next: Now the front, in the layer palette select the base layer, ctrl A and then ctrl F to get your marching ants. Add a new layer, multiple setting and named base shade.

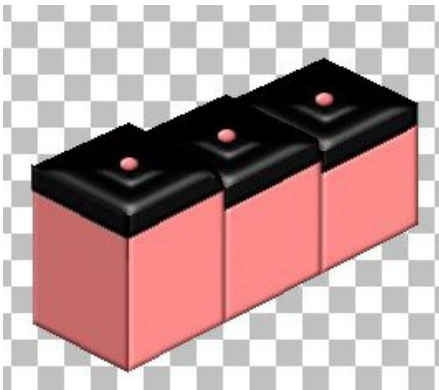
Next: Grab your airbrush tool, settings size 50, hardness 100, opacity 30, step 25 and density around 50. Using the same color as the side, lightly do a diagonal upsweep from the bottom left of the canisters. If not happy with what you did, undo and redo it. Fool around with your settings till you are happy.



This is mine after shading:

Next: If you are happy with your image, go to your layer palette once more and right click on any layer, merge/visible. You want to keep the transparency in the background while having your canisters as one image.

Next: Now we go to the back view of the canister set. Grab the copy that you made earlier before the shading and merging. First we must get rid of the writing and design on the front of the canisters. So make sure your base layer is selected in your layer palette and using the same method as you did earlier to get rid of the design when we made the side, fix up the backs.



Next: Using the same method as the previous page to give shading to the side layer of your canisters, do the side piece. You can do the same thing for the backs also that you did for the fronts, your choice. This is how mine look:

Next: You now need to mirror the back view so that they are in the right position when it comes time to copy and paste onto the sprite. Go to Image/mirror.

Next: Starting with the front of the canisters, now it is time to resize the canisters so that we can use them in the game realistically simwise. With something like this, it is hard to tell a good size. So you must compare it with something similar. So I open the food-processor_large_front_p.bmp sprite and change it to 24 bit colors right away. Now our canisters are going to be a bit larger than the food processor but not too much bigger.

Next: Select the yellow around the food processor and invert. Now copy the food processor and paste as a new image and then look in the right hand corner of PSP and look at the dimensions. It should be about 47 x 47 but that is too small for the canisters. So I am going to fool around with numbers. But before I do this, I select the canvas part of the canister set, invert and then press alt R, that will get rid of the excess canvas so we can resize only the canisters.

Next: I fool around with resizing it, ratio checked and unchecked and I am going to go with 60 x 49. After I resize it I go to Effect/Accent one time. Like this:



Next: Now we must paste the canisters onto the sprite. If the food processor still has marching ants around it, deselect now. Copy your canisters and paste as a new layer onto the food processor. Line up as you want, it doesn't matter that much because we must realign them in tmog anyway. Like this:

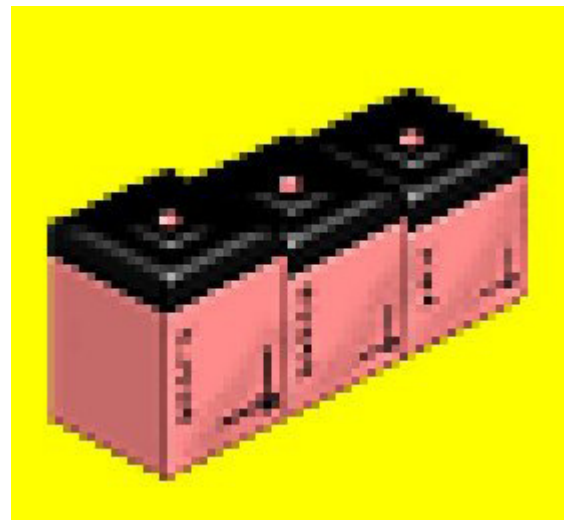


Next: Now go to your layer palette and click on the base layer, grab your color picker tool and pick the yellow off the sprite. Now grab your floodfill tool, with the base layer selected in your layer palette and flood fill the sprite. Now you should only have your canisters there and the food processor is gone. Go to your layer palette and merge. Like this:

Next: Do the exact same thing for your back view but on the back view sprite. Of course you resize the canister the same size as you did the front view.

Next: Now we have to clean up our sprites. Since we resized the canister we will have some stray pixels that will cause yellow to show around edge of the canister in the game if we don't get rid of them. Now zoom in as close as you need to to view the stray and opaque pixels the will cause the dreaded yellow halos.

They look like this:



Next: Using the finger tool, push option set at size 1, carefully and slowly, either push the color pink onto the opaque pixels or the color yellow. It all depends on your own judgement here since you are the only one close enough to see what needs pinked and what needs yellowed. Make sure you go the whole way around the canisters so you have a clean image.

Next: Do this for the back view also. Once the image is all cleaned up and you are satisfied with it, reduce colors to 256 and save.

Next: Now time to open tmog back up and import your canisters/food processor you just made. We now have to fix the position.

Next: Move your x and y arrows till you have the position you desire for each rotation in each zoom, meaning you will move this canister 12 times.

Next: Now go into your game and check if tmog made the buffers to your satisfaction and if the positioning is right.

To fix problems, make sure you take a pic of each zoom/rotation that there is a problem with the canisters! That way you can look at them while you are fixing the problems.

Note: If buffers need fixed you must export your canisters by UNCHECKING Just Change Colors and checking **One Zoom All Channels**. Adjust the areas that need darkened or lightened. They need darkened if they sink into things such as the counter or the wall.

They need lightened if they bleed onto things, like they bleed through the wall (you can see the canisters through the wall). Check your a buffers also to make sure they are completely white and don't have a gray edge around them. If they have a gray edge, you need to whiten that.

Note: If the position is wrong, move the x and y again in tmog, no exporting is required to fix postioning.

Note: If the canisters are too big you must export as you did in the beginning with Just change colors unchecked. Using your original canister images, redo the whole resizing and copying onto sprites process and remember to clean them up again.

Sometimes you can get it on the first try, other times you must redo it. Normally I do not let tmog make my z's, but with something this small it doesn't do too bad of a job. To learn more about z buffers, check out the tutorial at [7 Deadly Sims](#).

This is what my canisters looked like in the game, not too shabby and rather cute.

