Kaleidoscope Kreator™ Tutorial Series

Adding a Border to a Kaleidoscope (Paint Shop Pro)

Adding a border to the outer (or inner) edge of a kaleidoscope can help give it a "finished" look. It is especially important if you want to add a different photo to the center of a kaleidoscope to help set it off from the kaleidoscope itself (similar to using a mat for a photo on a scrapbook page.)

Adding a border is best done *after* changing the background color (see *Changing the Background Color*) and creating a center hole (see *Creating or Enlarging a Center Hole*), but *before* adding a photo to the center (see *Adding a Center Photo*).

For this tutorial, we'll start with the following kaleidoscope:

As you can see, the background color has been changed from white to indigo and the center hole has been enlarged with an octagon shape (and set to the same background color.)

1. Open the file that contains your kaleidoscope using either the **`File>Open`** menu command or the **`File Browser`**. (If you have already changed the background color or enlarged the center hole, your kaleidoscope may already be open.)

2. Select the Magic Wand Tool from the Toolbox (Fig. 1a) and set the parameters in the Options toolbar (Fig. 1b) to the following values:

   Match Mode = RGB Value
   Tolerance = 5
   Contiguous is checked
   Anti-aliased is checked

Fig. 1a – Tools toolbar

Fig. 1b – Options toolbar

The **Match Mode** determines what PSP looks at to figure out the selection. RGB Value selects pixels that match the red, green, and blue value of the color that you click on in the image.

The **Tolerance** can be set to a value from 0-255; a low value selects colors very similar to the one you click on. Since we only want to select the white background, we set the value at 5.

Contiguous selects only area which are connected; i.e. if there are any white areas in the kaleidoscope itself, they will *not* be selected (unless they are on the very edge.)

Anti-alias will keep curves and diagonal lines looking smooth.

3. Now we want to create a selection around the parts of the kaleidoscope where we want a border. Therefore, if you want a border around the outer edge of the kaleidoscope, then click in the background area around the outside of the kaleidoscope to select it. (Remember that you may need to hold the Shift key down while clicking to add additional areas to the selection. See *Changing the Background Color – Part 2*.)

   If you want a border around the center "hole", then click anywhere in the center to select it.

   If you want a border around both the outside and center, click on the background area first, then hold down the Shift key as you click on the center area. Fig. 2 shows the result of selecting both the background and center area.

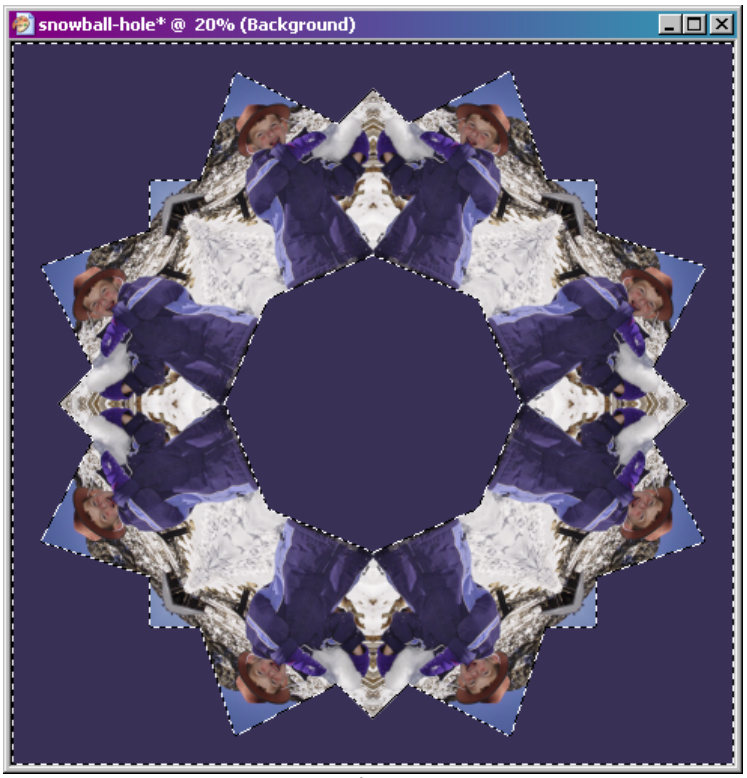


Fig. 2

4. As you can see in Fig. 2, the “marching ants” (i.e., the dashed line) surround the inside and outside edges of the kaleidoscope as well as the outside of the image itself (like a square frame). *If you do not want a border around the outside square, you will need to invert the selection using the* **`Selections>Invert`** *menu command*. Doing so means that the kaleidoscope itself is now selected, not the background/center. The marching ants are now only around the outer and inner edges of the kaleidoscope itself (Fig. 3).

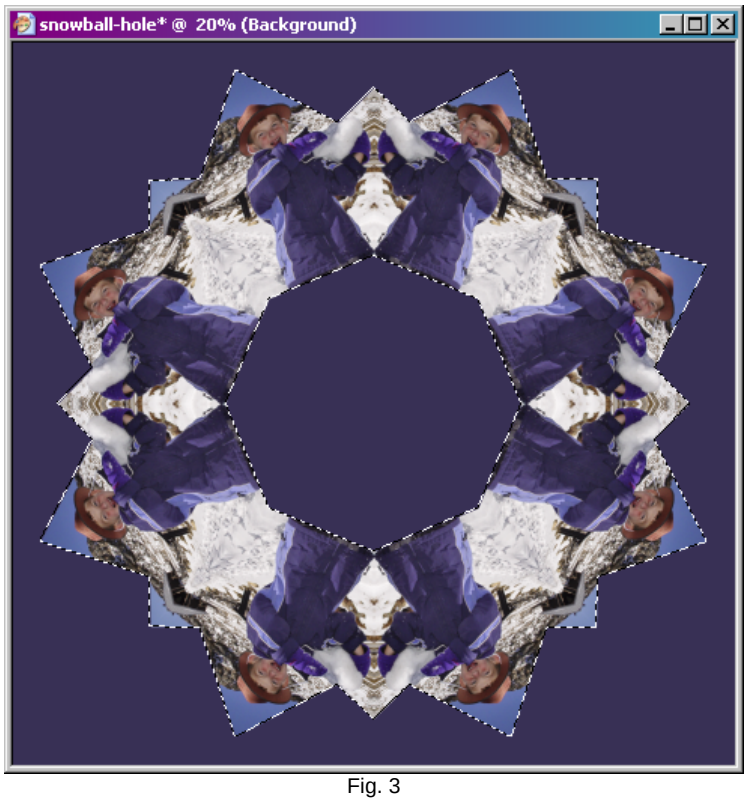


Fig. 3

5. We are finally ready to create the border! Choose **`Selections>Modify>Select Selections Border…`** (Fig. 4) and set the parameters to the following values:

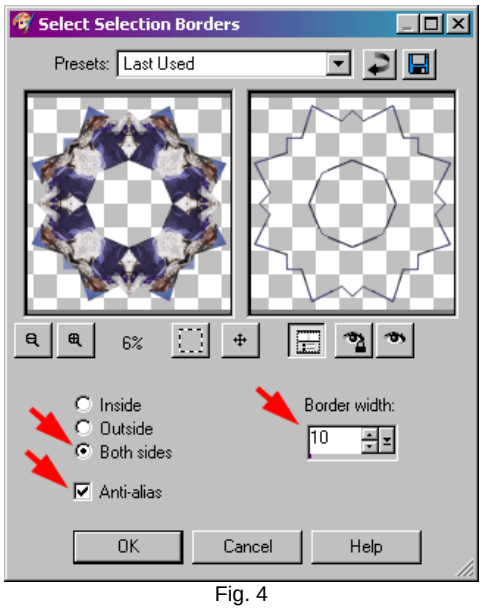


Fig. 4

Both sides – Choosing “Both sides” will create a border that is centered over the “seam” between the kaleidoscope and the background color.

Anti-alias – keeps diagonal lines and curves looking smooth.

Border width – The actual value here will depend on how large your kaleidoscope is. The value here (10) is what we chose for a 6” kaleidoscope at 300dpi resolution. If your kaleidoscope is larger, you may want to choose a larger number. Conversely, if your kaleidoscope is smaller, then you may want to choose a smaller number.

The selection now looks like Fig. 5. (The “double line” is what creates the boundary of the border.)

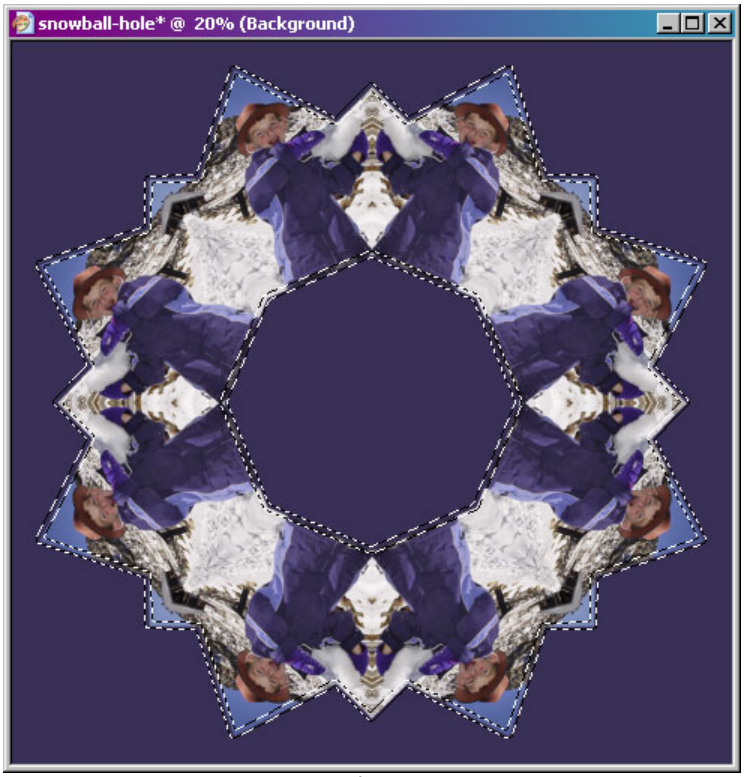


Fig. 5

6. Now choose the color that you want for the border. Double-click in the foreground color square in the Materials Palette (Fig. 6a) to open the Materials Properties dialog box (Fig. 6b).

Fig. 6a – The Materials Palette. The red arrow points to the foreground color square.

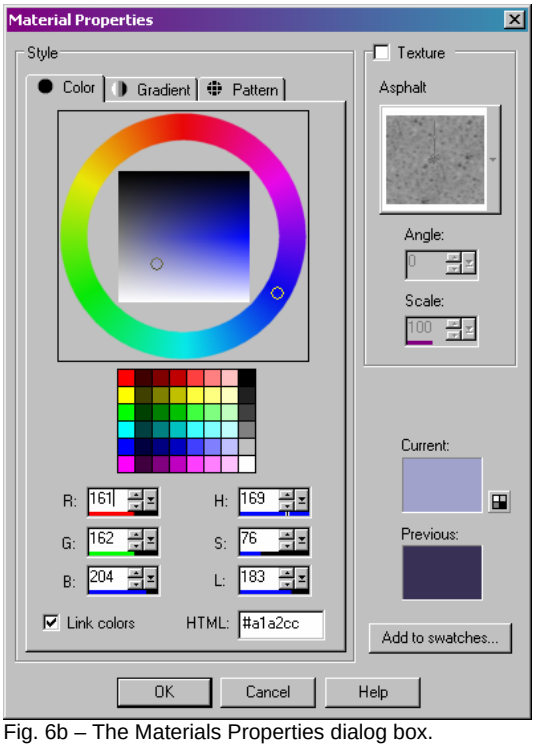


Fig. 6b – The Materials Properties dialog box.

With the Materials Properties dialog box open, you can click anywhere in the kaleidoscope image to select a color. You can also select a color from within the Materials Properties dialog box itself. (We decided to choose a color from the light part of the jacket in the kaleidoscope.) Once you have selected a color, click **OK** in the Materials Properties dialog.

7. Now choose the **Flood Fill Tool** (Fig. 7a). Set the Match Mode in the Options toolbar to "None" (Fig. 7b).

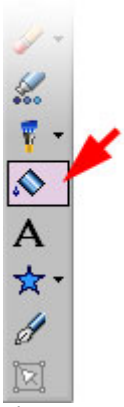


Fig. 7a

Fig. 7b

Now click anywhere inside of the selection (Fig. 8a). You can click on either the outer border or the inner border. Both of them will fill with the color you have chosen once you click inside the selection (Fig. 8b). (**Hint:** Remember that you can make the marching ants invisible with **`Selections>Hide Marquee`**. This does not delete the selection, it only hides it. Choosing **`Selections>Hide Marquee`** again will bring back the marching ants.)

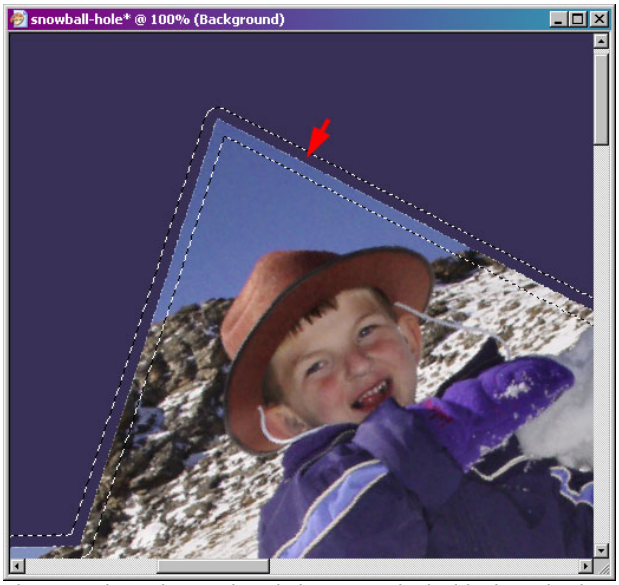


Fig. 8a – The red arrow is pointing to a point inside the selection.

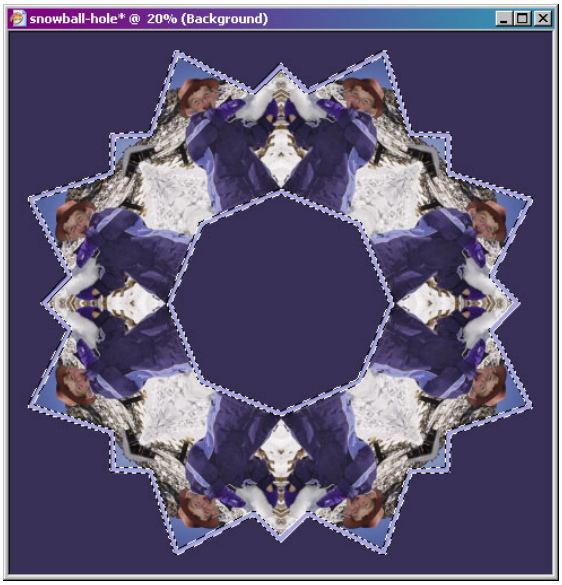
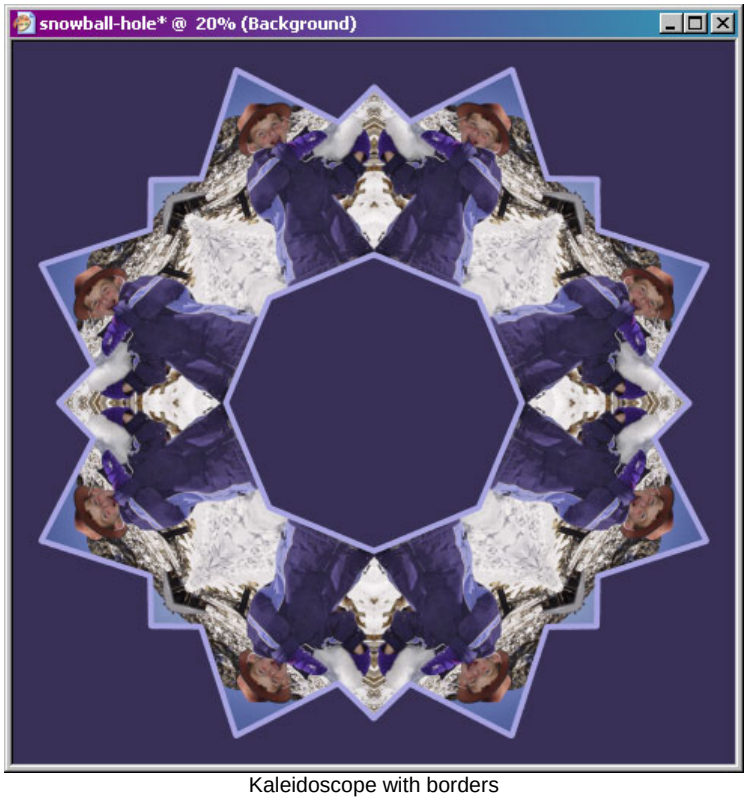


Fig. 8b – The border selection filled with the foreground color.

8. If you don't like the color of the border, choose another color (as in Step 6) and click with the **Flood Fill Tool** inside the selection again.

9. When you have found a color that you like, press **`Ctrl-D`** on your keyboard to deselect. Then **`Save`** (or **`Save As…`**) your kaleidoscope to a file.



Kaleidoscope with borders

Notes:

- Remember, the border will be applied wherever the marching ants are located.
- If you want different colors for the outside and inside borders, select just the outside first and apply the selection border. Then select the inside and apply the selection border in a different color.
- If the border looks a little "jagged" on your computer monitor, try viewing at 25% or 50% (or even 100%). Other enlargement values tend to make straight lines look jagged. This is a limitation of the way computer monitors display images and is not an indication of how the image will look when it is printed.