## Kaleidoscope Kreator" Tutorial Series

## Creating a Background or Patterned Paper (Paint Shop Pro)

We will be using the Layers feature to create patterned paper. Think of layers in a digital image like a pile of paper on your desk. You can move each piece of paper around separately or with other papers; you can change the order of the papers; you can cover one piece of paper with another either partially or completely; and if you cut a hole in a piece of paper, you can see through it to the paper below it.

A single layer is similar to a single piece of paper. Layers provide you ultimate flexibility when arranging multiple images or elements on a larger "canvas". In Paint Shop Pro, layers are controlled through the Layers palette. Each "bar" in the layers palette corresponds to a separate layer. For example, the image below is composed of three separate layers: the mat, the photo and the text.



Side view of layer stack

The basic process for creating a patterned paper is to "tile" square kaleidoscopes together on one page. With each kaleidoscope "tile" on its own layer, it is easy to arrange them into a pattern.

1. Open the kaleidoscope that you want to use for the tile. Using a square kaleidoscope is the most common so that there isn't any white space between the tiles. But you may want to experiment using one of the other shapes to see if you get any interesting effects. We'll only be using square-shaped kaleidoscopes for this tutorial (Fig. 1).

2. Reduce the size of the kaleidoscope to somewhere between 1-4 inches. In deciding what size to start with, think about how big you want the final tiled pattern to be. Then think about how many "tiles" you want to fill up that pattern. The more tiles, the smaller the pattern will be - and the smaller the starting kaleidoscope size. For the purposes of this tutorial, we'll reduce the size of this kaleidoscope to 2 ". Use the Image>Resize... menu command to reduce the size of the kaleidoscope (Fig. 2).

3. Set the Grid size to equal the kaleidoscope size that you chose: View>Change Grid, Guide and Snap Properties... (Fig. 3). Set the Current image settings as follows:

Horizontal grids: [the same size as your kaleidoscope]
Vertical grids: [the same size as your kaleidoscope]
Units: Inches

When you click OK, you may not notice anything in your image - especially if you don't have the Grid turned on. View>Grid to turn on the grid. The grid should only be visible around the outer edge of the kaleidoscope at this point.


Fig. 3
4. Promote the Background layer to a normal layer by double-clicking on the layer in the Layers palette. This will bring up the Layer Properties dialog box (Fig. 4). Click OK to accept. This "unlocks" the Background layer and allows for more flexibility as we work through the tutorial.

5. Use Image>Resize>Canvas Size... to set the Canvas Size to whatever you want the final background size to be:

- Fill in the Width and Height that you want.
- Click in the upper left corner of the Placement grid as shown (Fig. 5a).

For this tutorial, we'll make the canvas size $8.5 \times 11$ " (Fig.5b).
Don't worry about the checkerboard pattern that appears when you increase the canvas size! That simply means that the background is transparent. We will be covering it with tiled kaleidoscopes, so not to worry.


Fig. 5b
6. The stage is now set to start tiling. First we'll create a row. Repeat the following until the first row is filled:
a. Ctrl-C to copy the kaleidoscope; then Ctrl-L to paste it to a new layer.
b. With the Move Tool (Fig. 6a), click and drag to the next square in the grid (Fig. 6b).


Fig. 6a


Fig. 6b

When you get to the last "partial" block, simply position the kaleidoscope so that it is "hanging off" the edge. (You won't see the part that's hanging off.) The completed first row should look something like Fig. 6c.

Important: Merge all of the layers together with Layers>Merge>Merge Visible before continuing with the next step.

7. Now we will fill in the rest of the rows. Repeat the following until all of the rows are filled:
a. Ctrl-C to copy the existing row; Ctrl-L to paste to a new layer.
b. With the Move tool, click and drag to the next row in the grid (Fig. 7a).

Again, the last row will partially "hang off" the bottom. That's OK. Your goal is simply to fill up the canvas and line up the kaleidoscopes.

Once the canvas is full, merge all of the layers together with Layers>Merge>Merge Visible.



Fig. 7b

Congratulations! You now have a background or patterned paper! Don't forget to save your work!
Feel free to experiment with making the kaleidoscopes different sizes. You may also want to try rotating the patterned image and cropping back to a rectangle for a different look.

