## Tessellation <br> in Windows Paint

For this assignment, you use a construction box to make a puzzle-piece type of shape. Then copies of the shape are snuggly fit together to create a design. You may do yours with a specific focal point or without a focal point. Examples are below.

with a specific focal point

without a focal point

## Setting up the document and making the first image

1) You may set up your document in either horizontal or vertical view for this assignment, your choice. Just make sure it is either 9 inches by 7 inches, or 7 inches by 9 inches - whichever.
2) Make the rulers show so you can make the box the correct size.
3) In the center of your document, draw a white square with a gray outline that is 2 inches by 2 inches. You can press the SHIFT key while you drag the cursor to make it to keep the edges even all around. An example is shown at right.


Making the shape for the first image - random but controlled (not spilling over the edges)
4) Chose a Brush tool to make the outline of the shape. Use one of the smaller sizes. Make it black or a dark color (remember it's the outline). Draw a jagged squiggly line on the left side of the square. Start it at the top left corner and make it's way down to the bottom left corner. Do not let the line hang past the top or bottom of the box (else your shapes won't fit together right later). The line should end at the bottom left corner. You can try to make it look like something like the side of a face or object, or you can be random. (Your line does not have to be exactly like the one
 show here.)
5) Carefully do a Transparent Selection around JUST the dark squiggly line to copy it. Then copy and paste ONLY the dark squiggly line. (If you caught some of the gray line with it, that's OK.) Click and drag the new copy to the right side of the gray square as shown below.

drawn line
the copy-paste one over here
6) SAVE YOUR WORK in your student folder as Tessellation your name
7) Draw a shortt squiggly "bump" over the top side of the square, beginning at the top left corner and ending at the top right corner. It can be a hat, hair, fin, etc, or just be random. Do not let it go past the sides of the box. Do not let it go below the top line. If you do, your shapes won't fit together right later. (Your line does not have to be exactly like the one below.)

8) Carefully Transparent Select around JUST the top dark line that you drew, to copy it. Then copy and paste it into the bottom of the square as shown at right. (If you caught some of the gray, that's OK.) Click and drag the new copy to the bottom of the gray square as shown.

The dark line in the bottom should not cross over any other dark lines. If it does cross over any other dark ones, Undo/erase both the top and bottom dark squiggly lines. Then go back to Step


Note that this line does not cross over any other black lines. 4 and draw a line that will fit.
9) Save your work....
10) Erase any traces of the gray box, leaving the dark lined shape.


Make the shape into something (a cartoon, a fish, etc.)
11) Use your imagination, brush tools of various sizes, and maybe some splashes of color to turn your shape into something creative (and school appropriate)... an animal, a face, etc. Make some implied texture for visual interest.

Decide how your finished work will look by deciding if you want to use color now or later:

- If you add color now, your whole composition will have color and no main focal point (which is perfectly o.k. for a tessellation).


Color now or wait until the end?

- If you wait and color just one image later, you will make a definite focal point which is also o.k.

12) Save your work....

## Put the tessellation images together snug like puzzle pieces

13) Use Transparent Selection to copy and paste your shape. Then drag the copy to fit snugly against the first shape like a puzzle piece. Make sure there is no 'empty space' between the shapes. Keep the pieces snug like a puzzle.
14) Keep doing that until you have filled the whole document with the tessellation. If some of the image gets cut off at the edge of the document,
 that's OK. Just fill the whole document.

Tip: Zooming out of the document might come in handy.
15) Save your work....
16) If you didn't add color in Step 8:

Choose one of the images to be a focal point. Make sure it's slightly off-center, not right in the middle of your document, and not right at an edge. Fill it with some colors to emphasize it. Make it stand out from the rest of the design. (An example is below. You don't have to make your focal point in the exact same place as this one, as long as it's a bit off-center.)


## 17) Save your work.

Name: $\qquad$

## Computer Art - Tessellation Checklist \& Questions

How well you've done on the items below impacts your grade. Check off each item after you've checked it with your work. (You may use a Y or N to denote Yes or No.)
$\qquad$ Workmanship is neat and clean; Composition looks well put together; There are no awkward "sloppy" white spaces, stray lines, etc.
$\qquad$ Document is 7 inches by 9 inches, either horizontal or vertical.
$\qquad$ The original image was drawn in a way that it can be copied, pasted and fit together like puzzle pieces.
$\qquad$ The image includes at least one implied texture.
$\qquad$ The same image was copied and pasted over and over, fit snuggly together, to make a tessellation.
$\qquad$ Color was used to enhance the design.
The work fills the document in a constructive and purposeful way;
Composition space was used to its full potential

These are to help you reflect on your composition. Write thoughtful answers in the space below each question.

1) Describe the shape used to make the tessellation. Tell if its organic or geometric. Tell how or why you decided to make the shape into whatever you did.
2) Describe how you used color to enhance your work. Include: Did you use color to create emphasis, and why or why not?
3) Describe the different values in your composition.
4) Do the values create strong or subtle contrasts in your artwork? How do those strong or subtle contrasts enhance your design?
5) How was unity created in your composition? Does it have a strong sense of unity, and why or why not?
6) If you could do something different in you tessellation, or improve it somehow, what would you do?
