Art Glass Windows

Grade level 3+, but with amendments can be used with younger children

Goal of the lesson plan: Students will understand how Frank Lloyd Wright used nature-inspired geometric shapes to design the art glass windows for the Martin House.

Frank Lloyd Wright tried to incorporate nature in many different ways when designing buildings, even in his window designs, which he called light screens. The Martin House has hundreds of windows, many of them that are art glass. Some of these patterns are geometric abstractions of things we might find in nature, such as trees, vines, and flowers. With a little creativity, we can find nature in geometric shapes and make our own designs!

Look at the Martin House window patterns below.
- Can you find the organic shape in the window?
- What geometric shapes did Frank Lloyd Wright use to recreate the organic shapes?

Martin House Tree of Life pattern  Martin House Casement window  Martin House Wisteria pattern
Now you can make your own window! Using clear vinyl clings (Grafix clings work great) and sharpies, use geometric shapes like circles, squares, rectangles, and triangles to make your design.

1. Choose something in nature that you want to design with shapes. Think of things in nature, like trees, flowers, a sunset, or even raindrops!
2. Use graph paper and a ruler to create your design with a pencil. Graph paper will help you keep your lines straight. If you don’t have graph paper, regular paper will work too.
3. Once your design is complete, place the clear vinyl cling over your design, and secure in place with some tape.
4. Use sharpies to trace your design, and color in your shapes!

Note to parents: There are other options for materials if you do not have the clings. You can use regular white paper, and cut shapes out of tissue paper. You can even use paper and crayons or colored pencils. The important part is the use of geometric shapes to create the design. These options work great for younger children.

First, choose your subject in nature you want to copy. Below are some examples. Look carefully for the shapes!

![Corn](image1.png) ![Cherry Blossoms](image2.png) ![Rose](image3.png)

Second, think of how you can make the organic shapes in your subject change into geometric shapes. Sketch them on graph paper. When it is ready, lay your cling on top of the graph paper. Use your sharpies to copy the image.
When you are done, stick your cling on a window. Below are some beautiful examples of a finished project!

Note to parents: Using sharpies will give it more of an “art glass” look. Using washable markers will make it messy, as they do not dry as well.

Extra challenge?

Discover windows designed by Louis Comfort Tiffany online. How are his windows different than windows designed by Frank Lloyd Wright?

For an extra art challenge, purchase plexiglass acrylic sheets.

Vocabulary:

Light screens                  Geometric                  Design
Organic                       Abstraction                 Architecture

Materials needed:

Clear Vinyl Cling (can be done without)  Ruler
Graph Paper                    Pencils
Sharpies
Scissors