



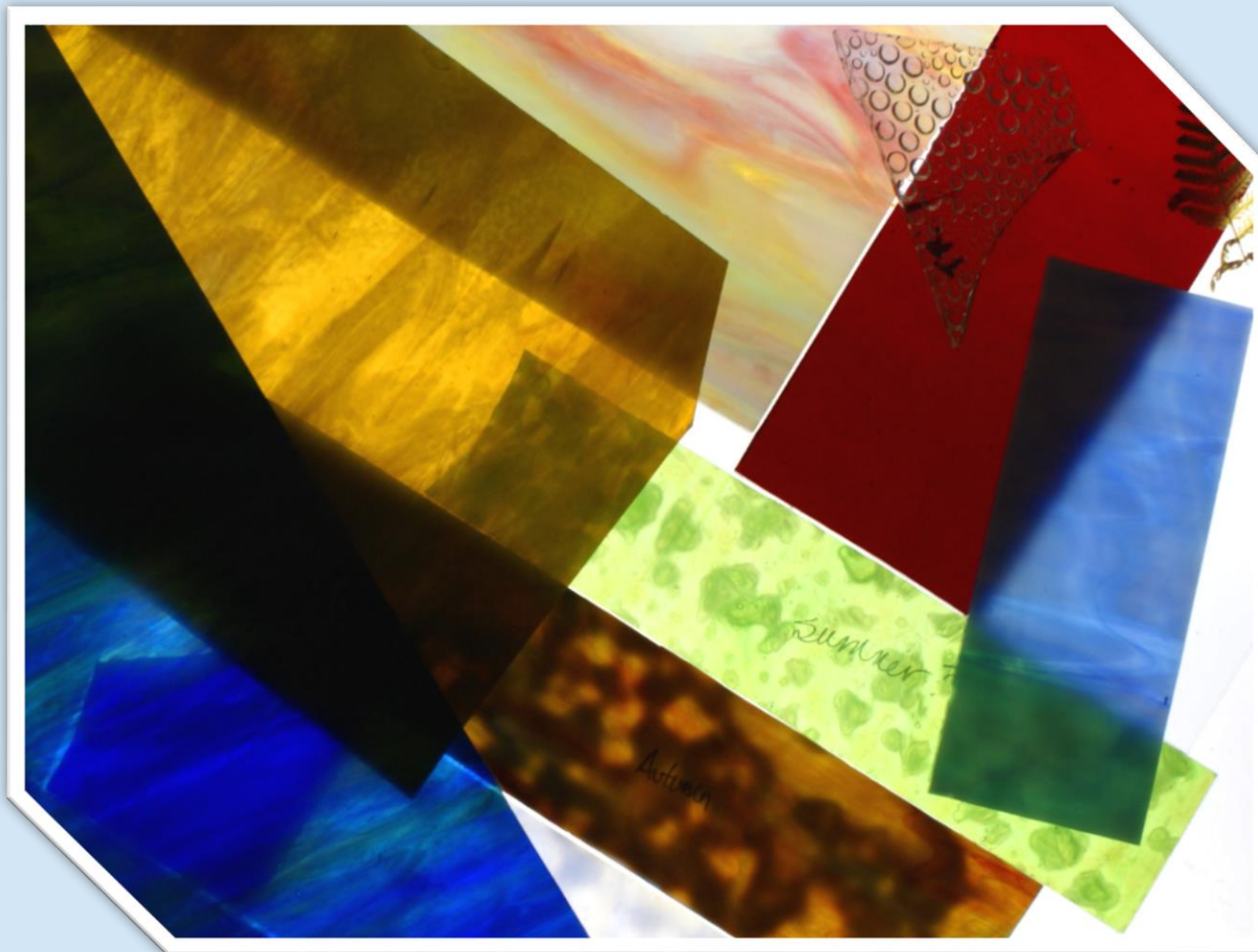
# Diane Gilliam

## Stained Glass Art

# Creative Process

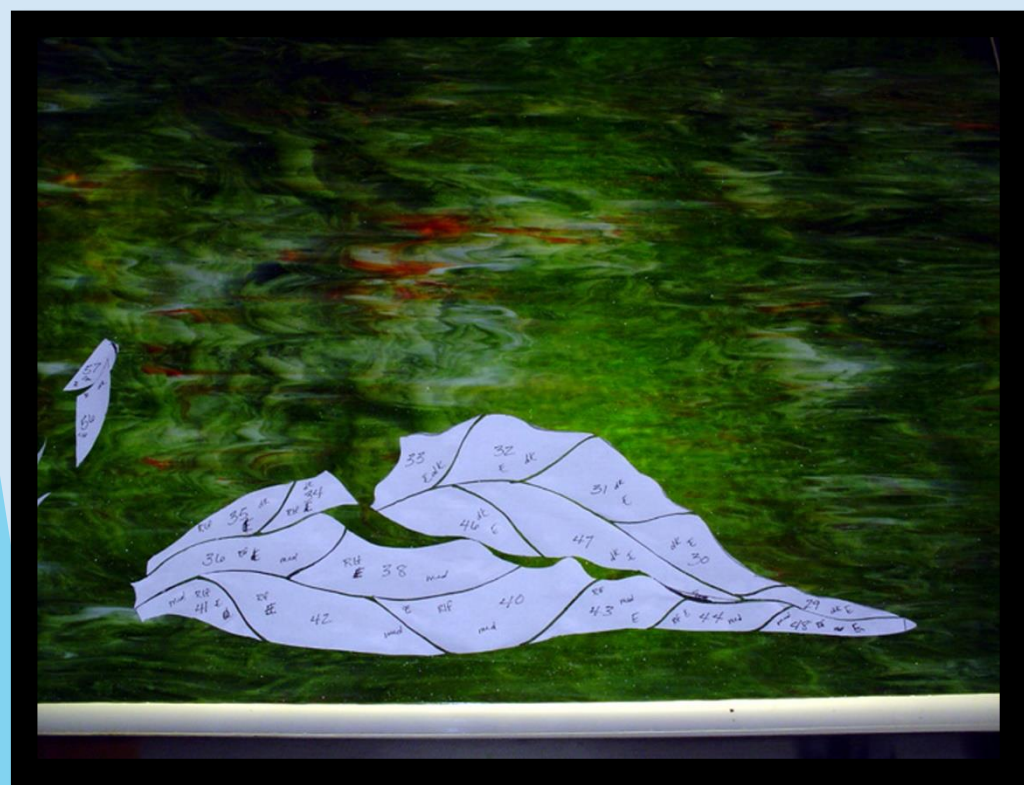
- ▶ For Diane, there are two different ways that the creative process begins. Sometimes she has an idea for a design and then looks for glass with the right colors, textures, and patterns for the design. Other times she puts pieces of glass on her light table to see what designs they suggest to her.

What creative ideas do these pieces of glass suggest to you?



# Paper Pattern

- ▶ Either way, once she has the design and glasses in mind, she creates a paper pattern called a "cartoon." She actually makes three copies. One copy is attached to her work bench, and another copy is cut into pieces to use as the template for cutting the glass.





# Thinking Ahead

If she is making a flat piece like a window, the pattern in the glass will line up easily. If she is making a 3-D piece like a lampshade, she needs to pay careful attention to cutting pieces so that the patterns in the glass will line up in the final product.



# Cutting the Glass

Gilliam follows her pattern pieces to cut her shapes. She uses an oil-fed, carbide wheel glass cutter to score lines on the glass. She then snaps them apart along the score line with pliers or her hands.





# Grinding the Edges

Next she grinds the edges of the cut to perfect the edges and remove any sharp protrusions, using a diamond grinding wheel. The heat caused by the friction of grinding would cause the glass to break, so her grinder has a water feed to cool the glass.



As the pieces are completed, she places them on her work table, over the pattern. Once all the pieces are cut and checked to make sure they fit, she wraps the edges with adhesive-backed copper foil tape. The foil tape must be burnished to make sure the edges are completely smooth and shiny

## Copper Foil Tape





# Soldering

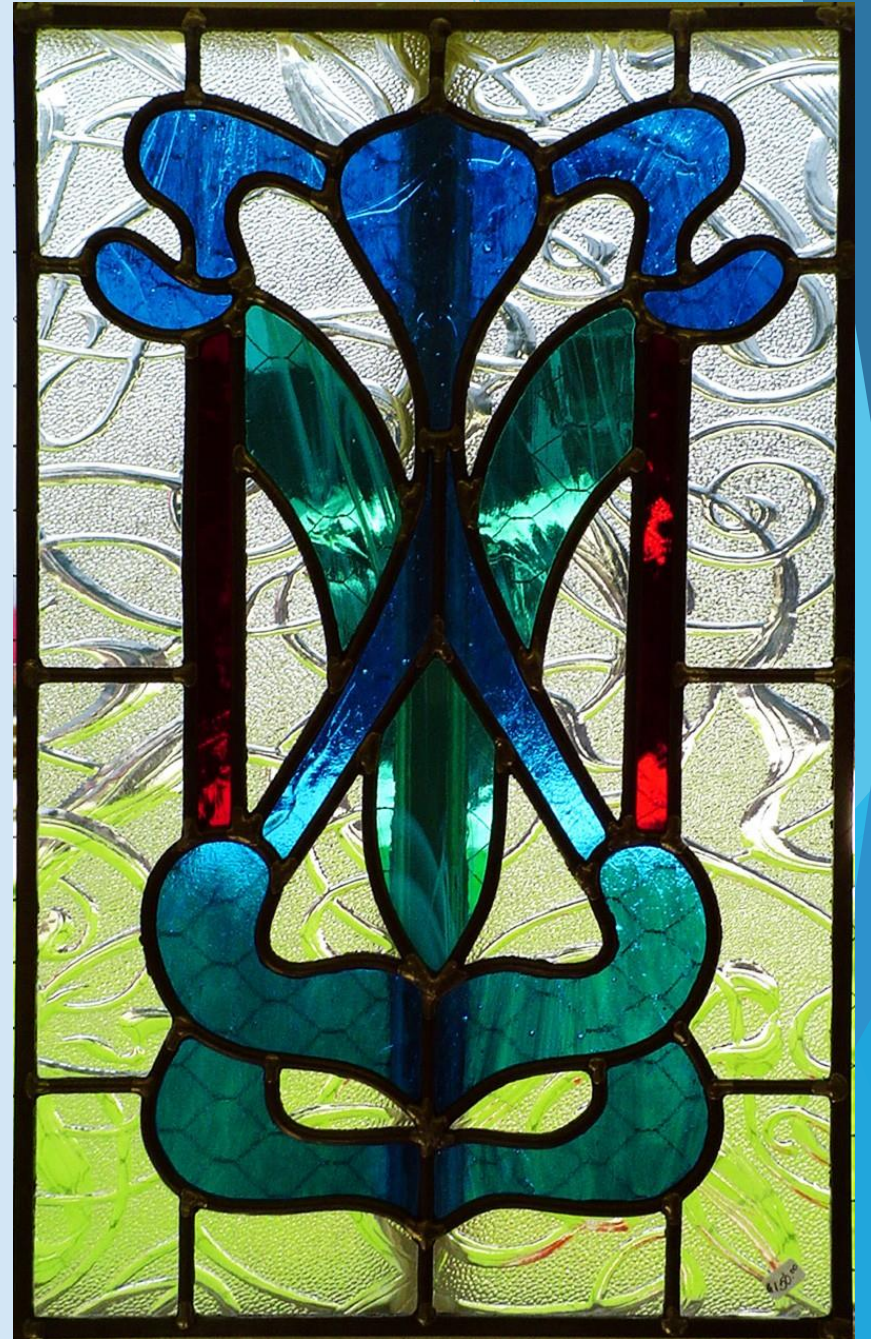
Gilliam is now ready to solder. She brushes flux on the copper edges and joints and pre-heats the glass with a hair dryer if it is cold. The solder she uses must be heated to 700 degrees, and if she did not pre-heat the glass, the thermal shock would break it. She carefully covers all the copper with lead solder.





# Outer Frame

For the outer frame, she uses zinc came, wood, brass, lead or copper. If she is using lead came, she has to make sure the frame is water tight. She puts putty into the channel before pressing it over the glass. The putty is black and gooey, so she uses whiting to remove any excess putty and give the lead a final shine





# Baker's Blue Window

What shapes do you see?

Can you create a paper pattern for this window?





# Garden entrance



Close up





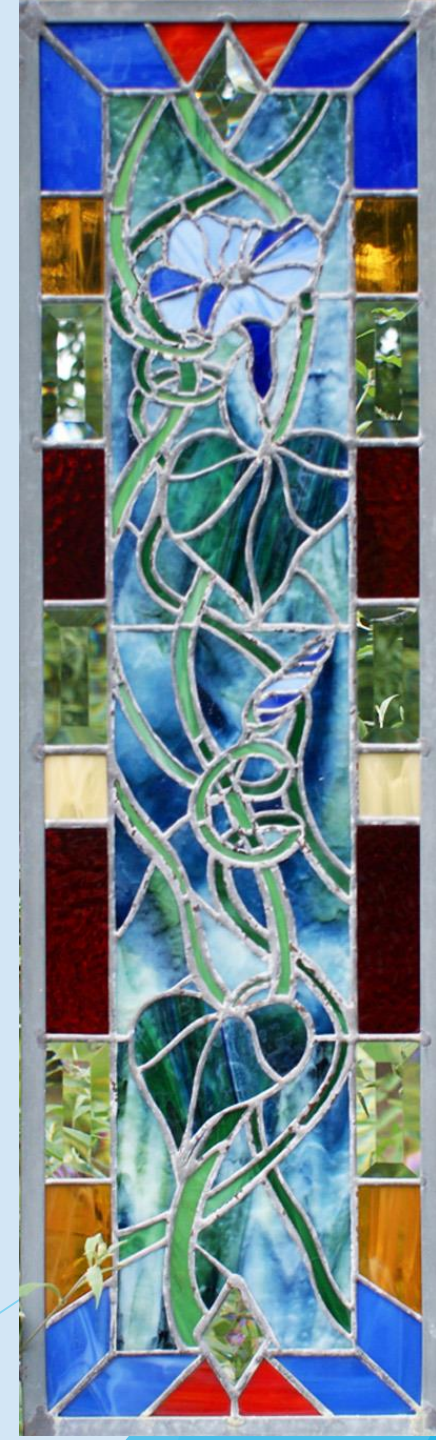
# Stained Glass Lamps



► View from top



# Stained Glass Windows





# Stained Glass Suncatcher with Overlay

- ▶ Diane Gilliam shares her love of stained glass by teaching people to create their own stained glass suncatchers at the Berea Festival of Learnshops.

