### Beyond Basic STAINED GLASS MAKING

**Techniques and Tools to Expand Your Abilities** 



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# Ornate Hanging Lampshade



This handsome hanging lampshade is sure to be the focal point in any room it graces. The grapes-and-leaves design—consisting of hand-cut glass and colorful glass nuggets—makes the piece perfect for a kitchen, dining room, or bar area. A lamp-holding jig simplifies the assembly of this heavy piece. The addition of reinforcing wire on inside seams and around the lamp's edge make the piece sturdy. A store-bought lamp fixture was installed to the finished shade's tinned top.

**36.** Put on the cap and shake the bottle firmly for about 30 seconds. You don't have to shake it for a long time, just make sure the nuggets are all rattling around against each other.

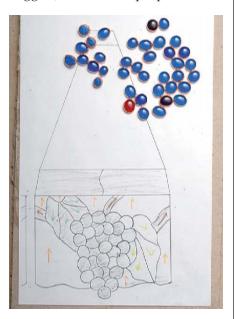




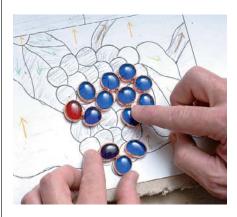
After shaking, the foil should be well flattened all around each nugget. For this project, 104 nuggets were foiled and tumbled. It's a good idea to foil a few extra nuggets so you have some choices when you try to match the pattern.



To create the grape cluster for the skirt of the lampshade you'll use 24 blue foiled nuggets plus a red one and a purple one for variety. On the finished shade, two grape clusters are blue (with a couple contrasting nuggets) and two are purple.



**37.** Arrange the nuggets on the pattern so they fit within the confines of the cluster's outline.

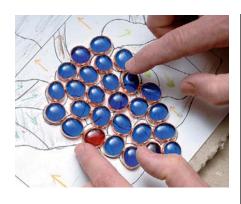


**38.** You won't be able to match the pattern exactly. Position the nuggets along the edge of the cluster's outline so that they match the contour as closely as possible.

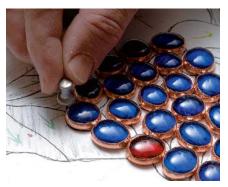


**39.** It might take a bit of fiddling and nugget-turning until you get the cluster in a shape you like. Try to keep the gaps between the nuggets small so you won't need to fill them with a large amount of solder.





**40.** When you're satisfied with the arrangement, use pushpins around the perimeter of the cluster to hold all the nuggets in place.



**41.** The pins should press the nuggets against each other fairly tightly.

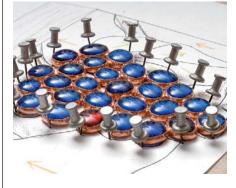


**42.** A nugget or two will probably pop up because of the pressure.

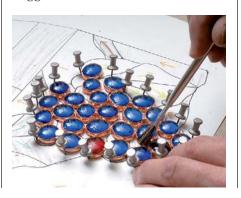


**43.** If one does, you might need to remove a pin or two and reposition some nuggets so they all lay flat when pinned.





**44.** Flux the areas where the nuggets touch each other.



**45.** Solder each spot where the nuggets touch.





**46.** Work carefully, making certain that the molten solder isn't just falling between the glass.













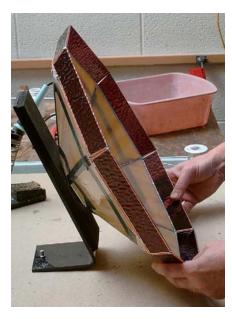
The shade with all the interior seams tack soldered.



**93.** The Lamp Wedgie will help you solder the inside of the lamp completely. Holes in the bottom of the brace allow you to fasten it to the work surface with pushpins.



**94.** Lean the shade against the brace, as shown.



**95.** Solder the inside seams, turning the shade as you go.





### 6

## **Stained Glass Box with Hinged Lid**



T his sparkling stained glass box includes tinned legs, a chain that holds the lid open, and an inside bottom of mirrored glass. Thin brass tubes cut, bent, and soldered into place form sturdy and smoothly functional hinges. A lip on the lid makes opening the box easy. The glass that makes up the lid's design was cut by hand and includes a single glass jewel. Once you know the basics of box and hinge construction, you can make glass boxes of any size, for almost any purpose.

**74.** Snap the tube in two. It should break cleanly where you scored it.





**75.** Mark, score, and break off a second piece of larger tube the exact same length.



**76.** Next, insert a length of the smaller tube inside one of the cut pieces of larger tube.





**77.** Push it through so it sticks out the other end, about 1/2 inch.



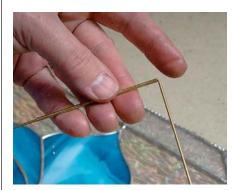
**78.** Hold this <sup>1</sup>/<sub>2</sub>-inch length between your fingers; with your other hand, use needle-nose pliers to grip the long end of the smaller tube just beyond the edge of the larger tube.



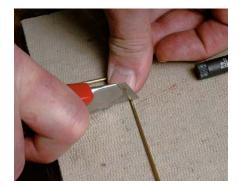
**79.** Turn the wrist of the hand that's holding the pliers to bend the smaller tube.



**80.** Stop when you've made a 45-degree angle (if you bend it further, there's a good chance it will snap).



**81.** Mark, score, and break off the smaller tube so that <sup>3</sup>/<sub>4</sub> inch extends beyond the bend, as shown. Notice that <sup>1</sup>/<sub>2</sub> inch of small tube still extends straight out of the other end of the large tube.





**82.** Make a second hinge the same way you made the first.



**83.** These tube arrangements will form the lid's two hinges. You will solder the larger tubes to the back edge of the lid near the corners.



**84.** Lay one large tube alongside the lid edge so it stops <sup>3</sup>/<sub>16</sub> inch from the lid's end and then flux the tube.



**85.** Tack solder the tube to the lid at each end, keeping the solder a few millimeters away from the very ends of the tube—you don't want to solder the large and small tubes together.



**86.** Solder the seam between the two tacked spots.







**87.** After you've soldered the tube, make sure the smaller tube still turns within it.



- How to master more advanced stained glass making techniques
- Expert advice on how to use new tools and new ways of using basic tools
  - Step-by-step instructions to help you improve your skills

#### Creative techniques to go beyond the fundamentals

