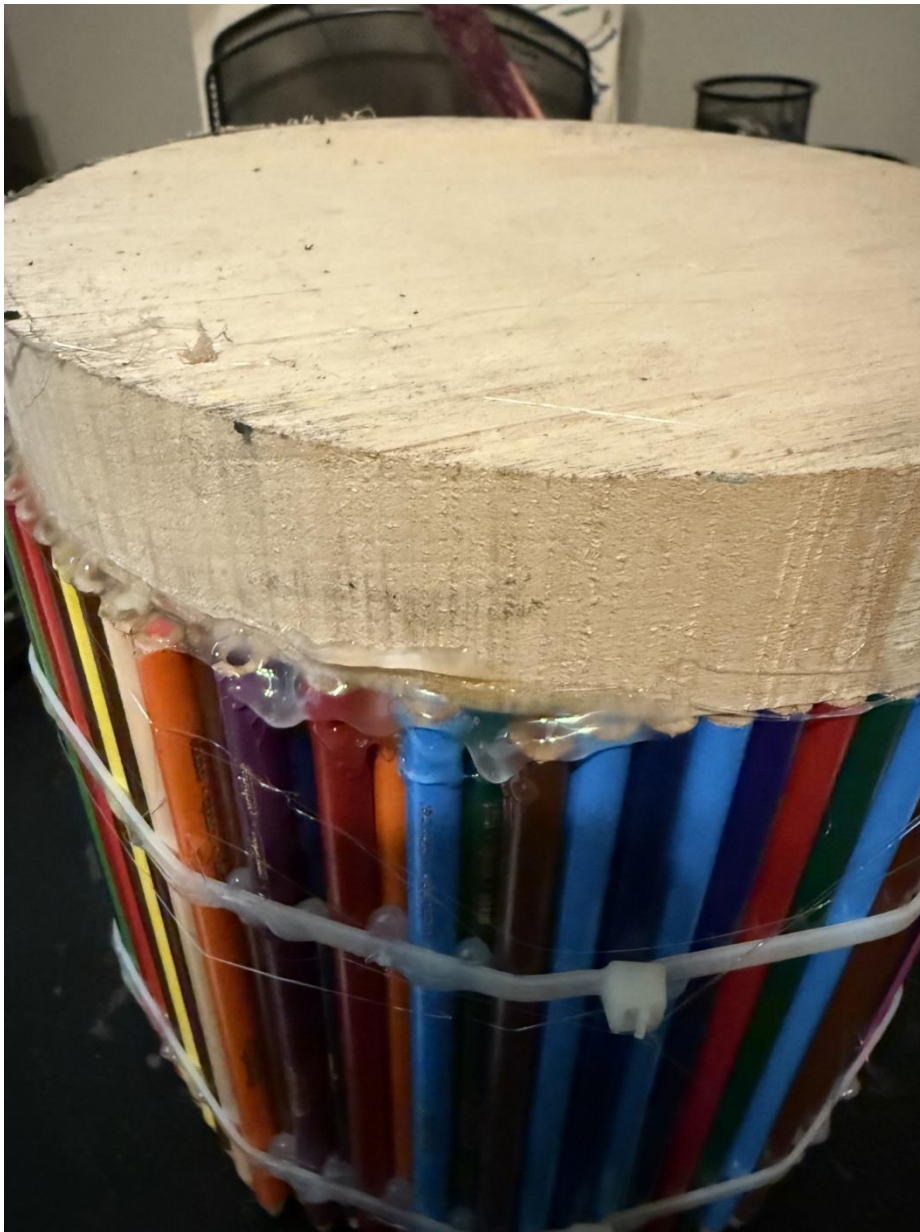


Wrap pencils with tie wraps. Tighten tie wraps to leave no gaps between pencils. Pencils are arranged as closely as possible into a circle.

Place pencil bundle on waste block that has been cut to roughly the circumference of the bundle. The waste block will be glued to the bottom of the pencil bundle and is used to mount the bundle on lathe.



Tie wraps and waste block are hot glued to the pencil bundle.



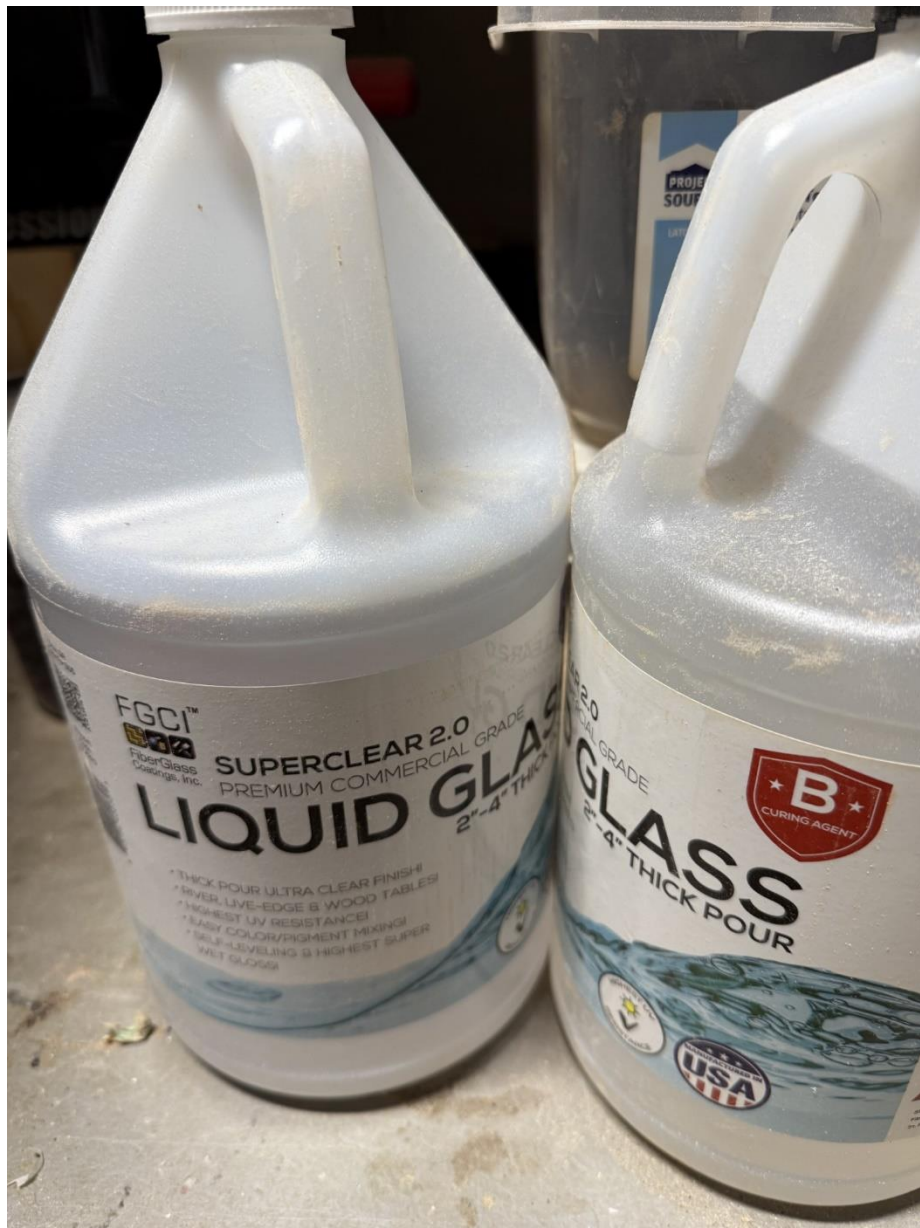
Wrap the pencil bundle in a large zip lock bag. Pencil boxes usually fit in a gallon zip lock bag. Pencil bowls usually fit in a 2.5-gallon zip lock bag. The 2.5 gallon and larger zip lock bags are available on Amazon.

Use 2 inch clear strong cellophane tape to snugly wrap entire bundle. Wrapping tightly eliminates pockets of wasted resin.





Mix enough epoxy resin to fill over the top of the pencils in the bundle. I use FGCI deep pour epoxy available on Amazon. This epoxy is designed to be used for depths up to 4 inches. Technically the depth of the pour to cover the pencils is about eight inches. I have never had a problem with pouring eight inches over the pencils. I believe the reasons that it works are that I use vacuum to pull bubbles which might otherwise be trapped in an eight inch pour and because even though the pour is eight inches deep there is very little resin volume.



Place the bundle in a vacuum chamber. The short section of plastic straw is used to find the center after the epoxy cures,



Pour mixed epoxy over pencil bundle until epoxy covers pencil tips. Cover vacuum chamber.





Pull a low-level vacuum and let stand to pull bubbles from epoxy. Repeatedly pulling and releasing vacuum will speed process.

Once bubbles no longer surface the bundle can be removed from the chamber and set in a cool dry place. The epoxy takes 72 hours to cure/harden.

Once the epoxy has cured the zip lock bag can be pulled off. The epoxy block is mounted on the lathe and rough turned just as if it was a block of wood.



For bowls the rough turned 7 inch deep blank can be cut in half to yield two 3 inch deep bowl blanks.





Turning the pencil blank is essentially the same as turning a wood blank. There are a few things to watch out for:

1. Epoxy dulls tools quickly. You will be resharpening frequently.
2. To reduce tear out, especially on the pencil leads, it is important to keep tools very sharp, Also, use a light touch and a relatively fast lathe speed.
3. As far as sanding goes, the bottom line is to try at all costs to avoid sanding. Unless done very carefully sanding will smudge the pencil lead over the surface and create a muddy mess. If this happens the only fix is to use tools to lightly turn away the mess. If you do need to sand, use a hand held 5" mesh sanding disk so the dust will not collect on the sanding surface. Use very little pressure. Essentially, just allow the disk to drag over the surface. I turn relatively fast for sanding (400 rpm). Counter intuitively, courser grit works better. I generally start with 120-180 and go no higher than 220. Keep the disk moving across the surface to avoid sanding lines.





When finishing pencil/resin pieces I use spray-on finishes. I have tried wipe-on finishes, but they can cause smudging, even if very carefully applied. I have used both spray-on oil-based lacquer and spray-on oil-based polyurethane and they both work well.

This pencil box was finished with lacquer.



This pencil bowl was finished with polyurethane.

