2/26/2024 Sam Student Materials List

Student Materials List

Instead of a set kit, I bring materials for us to use and tally up what you are spending along the way.

This includes:

22k sheet for bezel strips, gemstones, and everything else mentioned in the list below. Students are welcome to bring their own materials and stones they want to work with and can get a sense of what is needed from the material list. Generally students spend $100-$400.

22k Gold Sheet 26-30 gauge

I use different thicknesses depending on the project and how much a piece will wear.

For settings that will be made into rings or bracelets, that take more wear and tear, something thicker like 26 or 28 gauge is nice.

I find 28 or 29 gauge nice for pendants and earrings.

I use 30 gauge for earrings as well, but you might want to start out a little thicker so you have more wiggle room when cleaning up the settings. With the thinness of 30 gauge you have to be very careful you are not removing much material when sanding them clean.

Using these thinner gauges allows us to get those tight corners when making settings for geometric shaped stones or something pointy like a long tear drop shape or kite shape.

I buy larger sheets and cut my own bezel strips. This way I can group some gems into similar heights and work off a strip for multiple stones. This also allows me to get just the right height of bezel I need.

18k Gold Sheet 28-30 gauge

This is if you want to do a piece in all gold. I mainly use 28 gauge sheet to cut strips for interior bezels or seats for faceted stones and the bases to my settings. This will give the settings strength and structure.

I like to use 18k palladium white gold for the bases of many settings so the color of the transparent stones doesn't change color. Sometimes yellow gold looks good behind stones.

Silver Sheet 28 gauge and 24 gauge

If you want to make a two-toned gold and silver setting or an all silver setting these are the thicknesses I use most. I will often do settings with 22k gold bezels and make the seat for faceted stones and the bases in silver. You can get a gold look by keeping the material cost minimal this way. I also like the color of the silver behind the stones.

I like 28 gauge to make the interior seats for faceted stones and will use this for smaller sized stones on the back plate.

I like 24 gauge for the back plate of larger stones so they have a little more structural integrity.

Continuum

This is an alloy Stuller carries that has sterling silver ratios but uses palladium instead of copper. I like this for the bases of my mixed metal settings. It seems no matter how tight you set a stone, water can still get behind there and tarnish the back plate. You could also use Argentium or any other type of tarnish resistant silver alloy; this is just what I have decided to use.

Sterilium

This is another tarnish resistant sterling alloy that Stuller offers.

Solder

What you need will depend on whether you want to make all gold settings or two toned gold and silver settings.

Gold

18k scrap -I use this rolled down very thin to fuse the seam of the 22k bezel. Because the melting point of 18k is lower than 22k it will melt into the setting and that initial seam will never open up when soldering other steps in the fabrication process.

Hard solder- I really only use this to do a seam in ring shanks.

Medium solder- This is what I use for soldering the bezels, interior seats and back plate together. I also use this again when soldering on ring shanks and jump rings on to the settings. This will be what I use to solder settings to one another in more complex designs.

Easy solder- This gets used when soldering on posts or the last seam in a wire bail. I reserve this for late steps in the fabrication process.

I’ve found that I like the way DH Fell 18k gold cadmium free solder flows.

Silver

Hard solder- For the initial seam of bezels or ring shanks.

Medium Hard solder- This is my go to solder when putting the bezel down to the back plate. Hoover & Strong has it and it is the only thing I order from them anymore.

Medium solder- This will be for the last stages of fabrication like attaching ring shanks or posts to the back of settings.

Wire

What you use will depend on what you want to do with your settings to finish a piece. Here are some common sizes I use. These could be 18k or silver depending on what you make your settings out of. Generally, if I am making a setting with gold and silver, I will put a silver band for a ring for example.

18 gauge- This is a nice size for some simple wire bails for pendants.

20 gauge- This can also be a nice size for wire bails for pendants, jump rings to solder onto settings for pendants or earrings, ear wires or posts for earrings.

22 gauge- This can be a nice size for jump rings when making pendants or earrings.

Ring Shanks

14 gauge- I like this size to fabricate ring shanks with.

2mm x 1.5mm flat wire- Common size I use for ring shanks

3mm x 1.5mm flat wire- Another size I use for ring shanks

I also order the flat ring blanks from Stuller that are seamless and speed up the process.

Tubing

I use tubing to do tube settings for smaller stones. I do this with diamonds, sapphires and rubies because I like to set the stones into the tubing while it is long and it gives you something to hold on to. I then cut the tube setting to the height I want depending on the design or height of the setting I am separating with them. The tube set stones are then soldered into the piece with the stones already in place. Diamonds, sapphires and rubies will take the heat of the torch. Naturally colored diamonds like browns and champagne will work like this, but any color that is done by irradiation will burn out and lose their color. Teals, greens and black diamonds do not always keep their color after applying heat with the torch.

You can do tube settings in 18k gold or silver.

2.0mm stones will take a heavy walled tubing with 2.5mm outside diameter. 2.5mm stones will take a heavy walled tubing with 3mm outside diameter. 3.0mm stones will take a heavy walled tubing with 3.5mm outside diameter.

And so on…

If you want to try tube setting and get quick and efficient, you can practice with a piece of silver tubing and some inexpensive CZs.

If I'm going for 2.0mm stones, sometimes I end up with a range of sizes from 1.9mm to 2.1mm. These are fine for the same tubing, but if they get larger than that, the tubing wall starts to get too thin when burring further and the stone will not set as well.