

1	Sterling Silver Sheet - 6"x 2", 18 gauge	Any – Please choose traditional .925 sterling silver
1	Sterling Silver Flat wire – 6mm x 1mm (18 gauge) <i>Notes: this will be the thickness of your ring + 2mm, you may choose to use anything between 4mm and 7mm, students with smaller torches may be prudent to keep their ring on the smaller side.</i>	Any – Please choose traditional .925 sterling silver
<10dwt	Sterling silver hard sheet solder	Any
<10dwt	Sterling silver medium sheet solder	Any
optional	Sterling silver easy sheet solder <i>Notes: this is not needed for the project and will potentially cause a problem if you use it instead of the hard/medium combination</i>	Any
1 or 2 pack	Moore's discs and snap on mandrel	Recommend Rio Grande 337-227 and 337-226 Mandrel – 333-128
1	Notebook and Pen <i>Notes: we will use these for design sketches and notes</i>	Any
1	Flux <i>Notes: I use the self pickling flux with a combination of denatured alcohol and boric acid for a firescale preventative. Students may wish to use traditional flux as an alternative. I suggest using the combination I have suggested as soldering will be easier and cleaner using this method. You will need a glass jar or beaker for the firescale preventative solution.</i>	Any – recommend Batterns from Stuller 54-40000 (D or E) Rio Grande
1-2 sheets	Wet/Dry Silicone Carbide Sandpaper 320 grit	Any, hardware store
1-2 sheets	Wet/Dry Silicone Carbide Sandpaper 800 grit	Any, hardware store

1-2 sheets	Wet/Dry Silicone Carbide Sandpaper 2500 grit	Any, hardware store
1	Green Alligator Tape	Rio Grande 201-329/4 (sold in pack of 4)
1	Full Size Flat File <i>Notes: I have several files and prefer a very gritty file for this project.</i>	00, 0, or 1 Rio Grande (114-935) or any other supplier
1*	Inside Ring Bur <i>Notes: This is an optional tool but I think if you use it for this project you will find it very useful for further application. Fine cut is preferred. The heavy cut is very aggressive and will take some getting used to. Either diameter is fine.</i>	Stuller 20-29000, other suppliers may offer this. Or Rio Grande: 332-556
1	Half Round File, large size	0 or 1 cut. This is a secondary option for filing the inside of your ring if you choose not to purchase the "Inside Ring Bur"
1	Round Setting Bur 1.9mm	Rio Grande (344-516) Any supplier or brand is fine
1	Round Setting Bur 2.0 mm	Rio Grande (344-517) Any supplier or brand is fine
1	Round Setting Bur 2.1 mm	Rio Grande (344-518) Any supplier or brand is fine
1	Round Setting Bur 2.2 mm	Rio Grande (344-519) Any supplier or brand is fine
1+	Drill Bit 1.5 mm	Rio Grande
1	Hart Bur 1.5 mm	Rio Grande (344-407)
1	Hart Bur 1.3 mm	Rio Grande (344-405)
1	1 small piece of hard wood or plastic <i>Notes: This is for stone setting. We will use it to push in the stone. A hard wood like Oak or Walnut is best (not pine). You can also use the sawed of end of an old toothbrush or a piece of plastic for hydraulic die forming. Approximate size 1"x1".</i>	
1*	Fabuluster Polishing Compound <i>Notes: With the method I will teach you, you will only need one type of polish and this is the best one for the job. If you do not want to polish your ring you</i>	Rio Grande (331-015), Stuller has a smaller tube (47-3120)

	<i>will not need this. We will be polishing on the flex shaft so you do not need a polishing machine. I recommend polishing just for a try because this method of finishing will provide you with a finish that you may have struggled to achieve before!</i>	
1*	Polishing buff for outside of ring	Rio Grande (331-015) or any cotton muslin flex shaft size buff is fine, not felt.
1*	Polishing buff for inside of ring	Rio Grande (338-497)
1	Burnisher <i>Notes: There are many types of burnishers. I have found over the years that the straighter and smaller ones are best for these size stones. If you already have one you like you may use that. This is just a list of different options I found that look the best to me. If you can get the Stuller ones those are the ones I personally use and recommend.</i>	Rio Grande (113-929) (113-028) (111-781) Stuller (18-0517) (18-0518)
1	Optivisor <i>Notes: Magnification is an absolute necessity for the stone setting portion of this project. Must be worn on the head so your hands are free to use the flex shaft to cut the seat. Strong Reading glasses or other wearable magnification, if you prefer, are alternate options.</i>	<i>Recommend at least a 2.5x magnification (lens #5)</i> Rio Grande (113-208)
1	Soldering pad	Rio Grande (502-063) <i>Any heat reflective pad similar to Solderite is fine. Please do not use a heat sinking pad.</i>
1*	Lazy Susan with pumice <i>Notes: This is optional but will be helpful for this larger project.</i>	Rio Grande (502-046)
1	Soldering pick	Rio Grande (503-021)

		Stuller (54-18050-H)
1	Soldering tweezers	Rio Grande (115-018) or any steel tweezers you like
1	Torch <i>Notes: You will NOT be able to do this project with a handheld torch. If you use a Smith Little Torch please have the largest tip. I think they make a 7 size now but I have done this project with a 6 which I drilled out a little bit. A good torch is the best investment you can make as a jeweler. Personally I love the Mecco Midget, it is very flexible and have a variety of tips for flame size. It also works great for larger projects like this one with no tip on the end.</i>	Oxy Propane, acetylene air, or oxy acetylene Personally I own three torches: Mecoo Midget – Oxy Propane Smith Torch – Acetylene Air Smith Little Torch – Oxy Acetylene
1	Flex Shaft with foot pedal and stand <i>Notes: A complete flex shaft set up is essential for a serious or even an intermediate jeweler. You can do this project with a Dremel but I STRONGLY recommend against that as the fine control you will need for stone setting will be seriously compromised and you will experience much difficulty.</i>	Rio Grande – (economy) 117-095 + 118-100 Rio Grande/Otto Frei/Stuller – Freedom SR (117-540) with 17,000 RPMS, these are sold in most jewelry supply catalogs. Please do not purchase a low rpm or stone setting flex shaft as the project requires a variety of speeds for finishing and setting. <i>For the handpiece you should have a standard “chuck” handpiece, you may wish to add a quick change handpiece but the quick change will not be appropriate for the finishing portion of the project as the high rpm’s will damage the tool.</i>
1	Stone setting set up <i>Notes: I use an engraving ball which is expensive but it will last a lifetime. There are two sizes and I recommend the larger one. I have listed many different options you can choose from starting at less than \$20. The main thing is that you use something which will hold your piece so your hands are free to do the work. A mini vice which clips onto your bench is just fine for this project. For the serious pursuit of jewelry, I recommend a more professional tool such</i>	Rio Grande – 113-170, or 113-404 Harbor Freight – mini vice with clamp to attach to your bench Stuller – 58-2430

	<i>as the engraving ball. We will not need dop or jet set for this project as the vice should hold your piece just fine.</i>	
1	Ring Mandrel	Rio Grande 112-232 or similar
1*	Hammer with weighted Nylon Ends Notes: A rawhide hammer or Nylon hammer is OK if that is what you have.	Rio Grande 112-432
1	Small Hammer or Chasing Hammer	Recommend Rio Grande – 112-087 Also a tiny hammer from the hardware store is OK
1	Pliers, flat nose <i>Notes on Pliers: We will need some kind of pliers for this project (recommend two pairs). We will also be using pliers to aid in simple forming for the shape of the ring so if you have a design in mind that you will need different shape pliers for please purchase the optional options below.</i>	Rio Grande 111-912
1	Pliers, half round	Rio Grande – 111-068
1*	Pliers, chain nose	Rio Grande – 111-068
1*	Pliers, Parallel	Rio Grande – 111-117
1	Toothpick with a tiny bit of beeswax on the end <i>Notes: This is to hold our stones for setting. The beeswax is sticky and you probably have some already for sawing. A toothpick is what I use but any tiny little stick is fine. Fun tack is also another option. Just using tweezers or your finger is kind of OK but the toothpick with beeswax is really the ideal “diamond magnet”.</i>	Beeswax can be purchased at craft stores or in any catalog. Toothpicks – grocery store
1	Pack of 10 leather finger guards. <i>Notes: DO NOT buy the small size unless you are an infant. Please purchase Medium or Large. We will use the leather from the used finger guards after</i>	Rio Grande – Medium (201-391) Large (201-392)

	<i>sanding in our vices and for laying our piece on the bench for stones setting.</i>	
1	Safety Glasses	Any supplier or the hardware store. You need safety glasses unless you want tiny shards of silicone carbide sandpaper in your eyes. I use large frame reading glasses as my safety glasses.
1	Dust mask – <i>Notes: Please do not use a bandana, it is not proper protection. A surgical mask is OK but is not technically the proper protection either.</i>	Any supplier or hardware store.
1	Benchpin, double sided sloped and flat <i>Notes: A benchpin is the focal point of your bench. If you are not using one or are somewhat unsure if it is a necessity I will explain how to properly and formally use a bench pin (the standard kind I recommend here). You will need a clamp or benchpin holder to attach it to your bench. Please have a benchpin or your project will be compromised, and so will your body.</i>	Rio Grande 110 - 076
1	Calipers – <i>Notes: I prefer analog to digital but if you are a digital person that is ok. I have listed various analog options. If you don't know how to use analog calipers but would like to learn I will be giving a brief overview.</i>	Rio Grande – (best) 116-168 Rio Grande – any of the other options are fine.
1	Saw Frame	Rio Grande – 110-041 Any saw frame you like is fine
1	Saw Blades 1/0	Rio Grande - 110-307
1	Ring Holder	Rio Grande 113-105
1*	Center Punch (we really only need to use this once, and a 1mm ball bur can be used instead)	Rio Grande -
1	Ball Bur 1mm	Rio Grande – 344-402

20	<p>Lab Grown Corundum Faceted 2mm stones</p> <p><i>Notes: There are lots of different stones you may be attracted to but for this project, whether it is your first time flush setting or not, you are required to purchase what I am teaching with so I can show you my method properly. In order to do this properly I have listed the burs that will correspond exactly with these stones. If you buy other stones and they are not properly calibrated you will not be able to set them. Please use these stones.</i></p>	<p>Rio Grande – Any LAB GROWN CORUNDUM from pages 728-729 in the catalog – they offer Garnet, Alexandrite, Ruby, Pink Tourmaline, and Topaz. We will use some for practice and some for the final project. If you desire to set more than 1 stone in your ring please plan to practice with 10 stones and provide yourself with additional stones if needed.</p>
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* Indicates an optional, but recommended item. If you plan to polish please purchase all of the optional polishing items and have some dawn or simple green and toothbrush if you do not have an ultrasonic.

** An ultrasonic is a good tool to have here but if you do not have one or do not wish to purchase one please have some dawn or simple green and a glass jar or beaker for cleaning and soaking your ring overnight after pickling it.