

Tools and materials

Soldering Big and Small

- 1ft x 16g silver round wire
- 1ft x 18g silver round wire
- 1ft x 20g silver round wire
- 2 ft 24g silver round wire
- 6 x 2" 24g sheet metal
- Silver Crimp Beads ([Rio Grande](#))
- 3ft x easy solder wire
- 3ft x hard solder wire
- Pre-cut easy chip solder ([Rio Grande](#))

Torch setup (dual-gas torch is needed for course objectives):

- 1 x fireproof torch area - steel baking sheet, tiles, etc. (Amazon)
- 1 x torch - oxy/acetylene or oxy/propane ([Rio Grande](#) or [Rio Grande](#))
- 1 x soldering tweezers ([Rio Grande](#))
- 1 x soldering pick ([Rio Grande](#))
- 1 x cross lock tweezers with wooden handle ([Rio Grande](#))
- 1 x copper tongs - for pickle ([Rio Grande](#))
- 1 x pickle - for non-ferrous metals ([Rio Grande](#))
- 1 x crock pot or tempered glass container with lid ([Amazon](#))
- 1 x tempered glass container or sink - for quenching and rinsing
- 1 x small brush with natural bristles ([Michaels](#))
- 1 x 6"x4" Kaiser Lee soldering board (www.kaiserlee.com)
- Charcoal Block ([Rio Grande](#))
- Ceramic Soldering surface ([Rio Grande](#))
- Solderite board ([Rio Grande](#))

Hand tools:

- 1 x chain nose pliers ([Rio Grande](#))
- 1 x round nose pliers ([Rio Grande](#))
- 1 x snips / flush cutters ([Rio Grande](#))
- 1 x rotary tool - flex shaft, micro motor, etc. ([Rio Grande](#))
- 1 x set of needle files - #2 cut ([Rio Grande](#))
- 1 x variety of round mandrels - ([Harbor Freight](#))

- 1 x millimeter ruler ([Rio Grande](#))
- 1 x dividers ([Rio Grande](#) or [Rio Grande](#))
- 1 x rawhide / plastic mallet ([Rio Grande](#))
- 1 x steel block / steel surface ([Rio Grande](#))
- Jeweler's saw
- Size 3/0 blades ([Rio Grande](#))
- Flat file, #2 Swiss

Other/miscellaneous items

- safety glasses
- fine Sharpie
- rags/towels

Please note that the materials I have listed on the materials form are the materials I plan on using for the demos. Students are not required to have all the materials listed unless they want to practice doing the demos exactly like I do. This materials list is a suggested list only and does not give exact amounts of materials that will be used, but suggested amounts, based upon my educated guess. Furthermore, copper may be substituted in many instances, such as wire and sheet, for practicing.