## supplies:

Description
Sterling round wire, 16 ga. Copper round wire, 16 ga. Swanstrom round-nose pliers Equalling needle file, cut \#3 Swanstrom chain-nose pliers with Delrin ${ }^{\circledR}$ jaws Ring/bracelet gauge ruler Swanstrom heavy-duty cutters Ring mandrel Chasing hammer, 3-oz. Steel bench block, 21/2" x 21/2" Permanent marker

1. Use Swanstrom heavy-duty cutters to cut a 6" piece of sterling wire and a 3 " piece of copper wire.
2. Determine what size ring you want to make using the ring gauge ruler.
3. Wrap the copper wire around the ring mandrel at the chosen size. Use the heavy-duty cutters to cut the wires where they meet. This will be your ring blank.
4. Using the Swanstrom chain-nose pliers with Delrin ${ }^{\circledR}$ jaws, straighten the copper ring blank.
5. Place the 3 " copper ring blank along the middle of the $6 "$ piece of sterling wire. Mark the sterling wire at each end of the copper ring blank with a permanent marker.
6. To create the squiggle design, use the chain-nose pliers to make bends and curves on both ends of the wire, starting about 10 mm away from each mark. (If necessary, use the equalling file to smooth out the ends of the wire while you work.) To add sharper curves, use the Swanstrom roundnose pliers.
7. To add texture, hammer the squiggle part of the wire on a steel bench block or ring mandrel with the flat side of the chasing hammer (this will also harden the sterling wire); use the ball peen side to widen particular areas of the wire and to add more facets and texture.
8. Wrap the wire around the ring mandrel at the chosen ring size. The black marks should overlap.
9. Use the chain-nose pliers to bend the ends where they meet at a $90^{\circ}$ angle; this will cause the ends to lay against the length of the finger.

| Order \# | Qty. |
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| $100-316$ | $6^{\prime \prime}$ |
| $132-316$ | $3 "$ |
| $\mathbf{1 1 1 - 3 0 2}$ | 1 |
| $114-750$ | 1 |
| $111-204$ | 1 |
| $116-022 / 10$ | 1 |
| $111-716$ | 1 |
| $112-366$ | 1 |
| $112-190$ | 1 |
| $112-495$ | 1 |
| - | 1 |

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