

# “Theory of Relativity” Necklace

As seen in the Rings & Things Wholesale Catalog 2009-10



Created by: Mollie Valente

## Suggested Materials:

<u>Qty.</u>	<u>Stock #</u>	<u>Name</u>
1	58-051-1 *	23mm round Legacy pendant watch, white
1	52-133-02-16 *	3mm 16" single-strand leather choker, black
2	41-151-99-35-8 *	Center-crimp tubes with loop, copper plate
28	37-178-3 *	10mm round jump rings, silver plate
1/4" x1"	64-980-24 *	24-gauge sheet, copper
1	44-498-0 *	19mm round disk, raw brass
10"	47-402-SP *	14-gauge round wire, copper
8"	47-400-SP *	18-gauge round wire, copper
3"	47-408-SP *	20-gauge round wire, copper
2	44-454-0 **	12x8mm heart lock charms, raw brass
2	44-455-0 **	17x7mm key charms, raw brass
1	49-515	10x11x5mm 3-D rabbit charm, sterling silver
7	21-300-121	10mm heishi gemstone beads, jet
1	20-465-L	Tibetan-style oval gemstone bead, Chinese turquoise
1	21-001-025-04	16mm large-hole gemstone rondelle, mixed stone
1	21-000-153-79	8x12mm puffed oval gemstone bead, crazy lace agate
9	21-001-007-01	6mm round large hole gemstone beads, amazonite
2	05-301-06-150	6mm Swarovski® crystal bicones, crystal/golden shadow
12	26-804	3x4mm faceted rectangle beads, brass
3	24-106-6	6mm round filigree beads, antiqued brass
8	26-814-03	3mm round metal beads, copper
4	26-814-02	2mm round metal beads, copper
1	26-813-106	12mm collared puffed coin bead with grooved pattern, copper
1	26-813-107	12mm collared puffed coin bead with circles on stripes pattern, copper
1	26-813-101	12mm collared puffed coin bead with dot pattern, copper
2	25-001-021	Porcelain double-lace adjusters, black
3	49-954-05-AS	5mm TierraCast™ Bali-style flower spacer beads, antiqued silver
1	49-947-70-7	9x13mm TierraCast Hammertone oval link, antiqued copper
6	49-947-44-7	13mm TierraCast Hammertone round links, antiqued copper
10	37-145-7	6mm round jump rings, antiqued copper
4	37-136-9	5mm round jump rings, gunmetal
3	37-136-7	5mm round jump rings, antiqued copper
5	37-422-7	2" (51mm) standard head pins, antiqued copper
1	39-243-7	7x12x4mm lobster clasp, antiqued copper



80% actual size

**Tools:** chain-nose pliers, round-nose pliers, flat-nose pliers, flush cutters, scissors, two-hole metal punch (#69-235), cotton swabs, chasing hammer

## Create Handmade Metal Parts

### Stamped metal tags

1. Use the techniques and tools for metal stamping on the next page to create the stamped metal charms with the 19mm round brass disk and a 1/4" x 1" piece of 24-gauge copper sheet.

### Flat bar links

1. Cut three 1 3/4" pieces of 14-gauge copper wire.
2. Hammer one end of each wire flat, punch a small hole, and add beads as pictured and repeat hammering and hole punching on the second side.
3. Carefully patina visible copper with a cotton swab.

### Eye-end links

1. Cut four 1 3/4" pieces of 18-gauge copper wire.
2. On each wire, make a simple loop and hammer it flat, add beads as pictured, and make a second simple loop.
3. Carefully patina visible copper.

### Swirl charm

1. Bend a swirl and loop on a 2" piece of 14-gauge of copper.
2. Hammer it flat and texture with the ball-end of a chasing hammer.
3. Patina.

### Single jet charm

1. Hammer a 2" piece of 20-gauge wire to slightly flatten.
2. Place jet bead in center and fold sides upwards matching up wire.
3. Slide a brass cube bead on to wires.
4. Bend a swirl and a loop and hammer flat.
5. Carefully patina.

## Antiquing

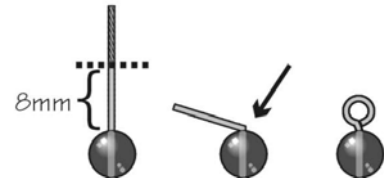
1. Antique the starred parts (\*) using an oxidizing solution such as liver of sulfur (#86-354) or WinOx (#86-343). Follow the directions provided with the oxidizing agent.  
Patina the watch body very carefully! The back of the watch is stainless steel and will not patina.  
Carefully patina the magnetic clasp of the leather choker and the center-crimp loops.
2. Antique the starred parts (\*\*) using Jax Green Patina (available from Dick Blick Art Materials® (dickblick.com)). Follow the directions provided with the oxidizing agent.

## Assembly

1. Cut the necklace leather to desired length and place in center-crimp tubes on each end and flatten with chain-nose pliers.
2. Add a crystal bicone and round filigree bead to head pins and make wrapped loops.
3. Add bead and other charms to jump rings,
4. Use jump rings to assemble necklace, as pictured in a somewhat random manner.
5. Use a jump ring and lobster clasp to attach the watch to the necklace.

### To make nice loops on head or eye pins:

1. String selected beads on the head or eye pin.
2. Keep about 8mm (1/3") of wire. Cut off any extra.
3. Use round-nose pliers to grasp the wire just above the bead, at the arrow, and bend sharply away from you.
4. Now use small round-nose pliers to grasp the tip of the wire, and bend it smoothly around the pliers down close to the beads.



### To make nice wire-wrapped beaded head and eye pins:

(For best results, use both chain-nose and round-nose pliers.)

1. Use chain-nose pliers to grasp the wire just above the top of the bead.
2. Use your fingers to bend the wire sharply over the top of the pliers, at a 90° angle. You should have 2-3mm of straight wire between the bead and the bend (less for fine-gauge wire, more for heavy wire or more wraps).
3. Use round-nose pliers to grasp a spot just above the bend, and use your fingers to smoothly bend the wire all the way around the tip of the pliers. (For different sizes of loops, bend the wire around thinner or thicker portions of the pliers' tip.)
4. Now use pliers to grasp the wire firmly across the loop. Use your fingers or chain-nose pliers to carefully wrap the wire around the stem. For best control, experts recommend you break this step into a series of half wraps.
5. Trim excess with flush cutters.



## Techniques for Creating a Stamped Metal Charm

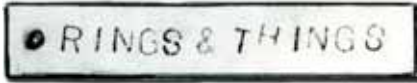
### Tools and supplies:

Nylon/steel block, metal snips, chasing hammer, utility hammer, rubber mallet or nylon hammer, 2-hole metal punch, letter stamps, brass brush, 0000 steel wool, metal file, masking tape, ink pad, ruler, oxidizing agent or patina solution



This technique works well for sterling silver, solid copper, and solid brass sheet or “dog tags.” Each metal will have its own unique characteristics, and if possible it is best to practice on a scrap of metal prior to making your actual project.

1. Use your letter stamps with an ink pad and a piece of paper to pre-layout your script. Plan your letter layout and spacing for your metal tag.



2. Using metal snips, indelible marker and a ruler, cut a piece of 24-gauge sheet metal to the desired size and shape.



3. File the corners and any rough edges and punch hole(s) into tag and flatten.



4. Label one side of your steel block as “rubber” and one side as “steel.” The rubber side is used for flattening with a leather or rubber mallet. The steel side is used for hammering or stamping.
5. On the “steel” side of your steel block, tape your metal tag in place with masking tape. This will hold your tag securely while you stamp, and can act as a guide for letter placement.
6. If your letter stamps do not have a directional mark, place a dot with Wite-out® to indicate the top side of each letter. This will aid in keeping all of your letters directionally correct. Use your stamped paper guide to plan the position of the first letter on your tag.
7. Line up the first stamp. In a standing position, hold the stamp perpendicular to the metal tag. With a utility hammer, strike the stamp firmly just once, straight down with one hard hammer blow. Repeat for each letter until your word or phrase is complete.



8. If desired, add texture to your piece, such as hammering. Remember the antique patina will enhance any indentations on the metal.



9. After you have stamped and textured your tag, finish the edges by using the peening edge of a chasing hammer to lightly dapple all around the edges of the tag. File any rough points.
10. Dip tag and findings (split/jump rings, head/eye pins, etc.) into the oxidizing agent or patina solution. Once desired patina has been achieved, rinse in cool water and dry. Use 0000 steel wool and brass brush to clean your piece.



11. Assemble into finished jewelry piece.

**Tip:** Have fun, and don't expect perfection; little oddities will give your tag charm and uniqueness. For additional decoration try adding design stamps, or metal forms you create yourself using 14-gauge stainless steel wire (available at hardware stores).