

Fused Plastic Hanging Ornamental Lanterns

A How To Guide



Lanterns hanging in New York's Chinatown during Lunar New Year - designed and made with Hester Street Collaborative and students at Sun Yat-Sen Middle School

You'll Need:

- **Plastic Bags:** At least 4. The amount will depend on how large you want to make your lantern and how thick the bags are. You'll need more bags if the plastic is thin.
- **Scissors:** Cut off handles on the bags, cut at the seams. You can also cut strips of different colored bags to design your lanterns
- **Iron:** Make sure your iron is completely dry. No steam.
- **Paper:** Parchment/Baking paper works best, but you can also use printer paper or even newsprint. Just be sure it's not waxy.
- **Galvanized Wire:** This should be strong, but bendable by hand.

Optional:

- **Acrylic Paint and Brushes**
- **Markers**
- **Rubber Stamps and Ink**
- **Battery/Solar Powered Fairy Lights**

Choose your plastic

Most regular shop bags work. Just remember that thinner bags will need more layers. You might want to choose specific colors of plastic or use white and paint on it later!

Note: Don't use compostable bags - they're good for the environment, but terrible for our project!



Cut!

Use your scissors to cut off the bag handles and to cut the bags on the side seams so the plastic lays flat.

Note: Keep your handles to use as patches in case you burn any holes in your plastic.



Lay flat

Find a hard flat surface like a table or the floor and lay down your paper. After cutting your plastic bags, lay one flat on top of your paper and another bag on top of the first. Decide if you want the design of the bag on the outside (visible) or if you want to show the back/plain side. You will need to put at least 2 layers of plastic together. You can always add more layers if the plastic isn't thick enough.

Note: Be sure there is nothing plastic beneath where you'll be ironing, as it can be ruined.

Lay out enough paper to cover beneath the parts of the bag where you'll be ironing.





Above: Bag laid flat on top of parchment paper. Lay another bag flat on top of this one before ironing.



Left: Decide which side of the bag do you want to show.

Cover and Prepare your iron

Begin with your iron on a dry medium heat. Be sure there is no water inside. Every iron is a bit different, so you might find that medium is too low and doesn't melt the plastic together. If your iron gets too hot, however, you'll burn holes through the plastic. It can be a bit finicky at first, but don't get discouraged.

Note: Be sure to cover the area you're ironing with paper between the plastic and the iron. You will ruin your iron otherwise!

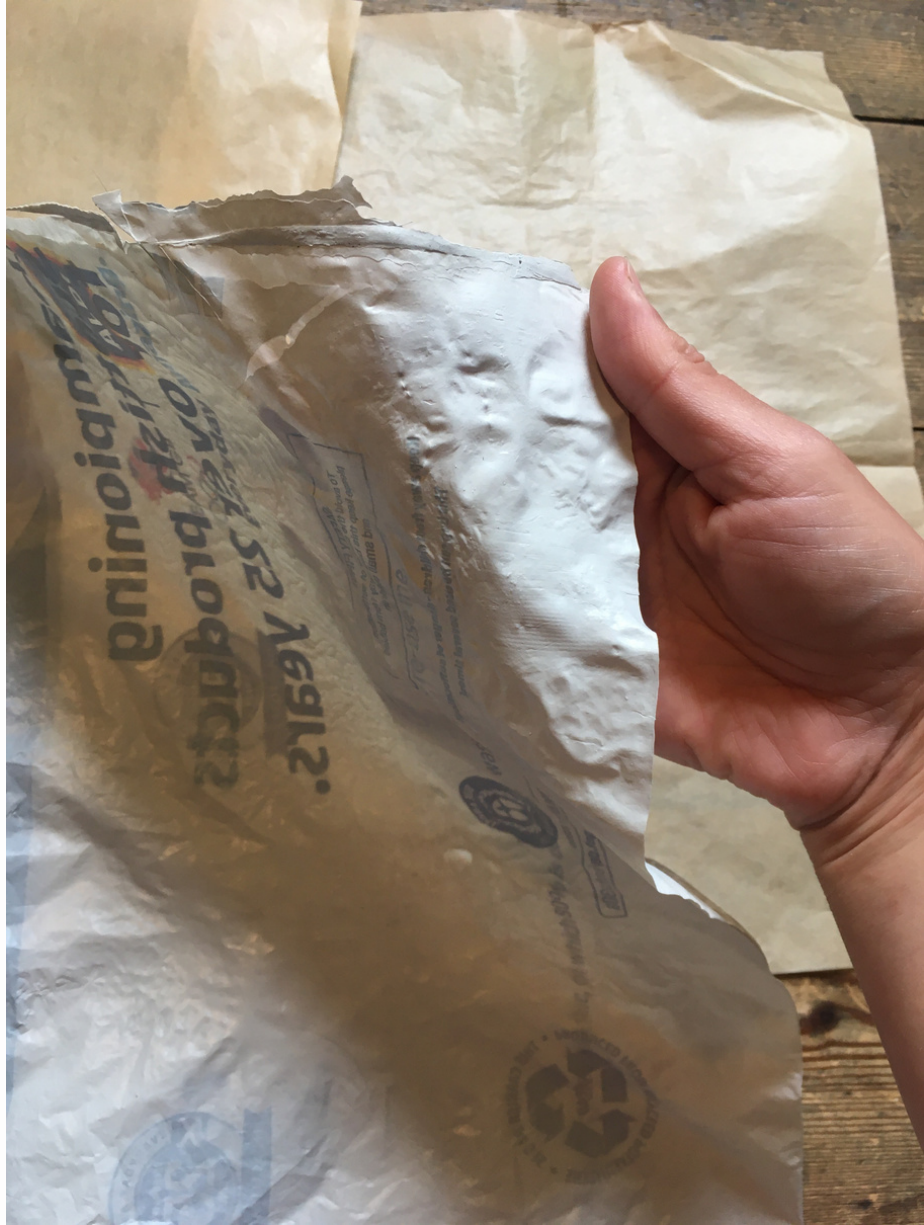


Area to be ironed is covered with paper above and below the plastic.



Keep moving your iron in a circular motion around the plastic. This will help keep holes from burning into your bag.

The plastic sheets will start to wrinkle and stick together as you do this. Lift the paper occasionally to check and see if you need to increase or decrease iron temperature.



Your bags should fuse together and form a flexible strong material. If you find it's too thin or tears easily, you can add more layers.

You might want to add strips of colored plastic bags along the way to make patterned fabric.

Note: If the paper is sticking to the hot plastic, just give it a moment to cool down and it should peel off easily.



If your layers are not fused, you can repeat the ironing step as much as needed until the plastic melts together.



If you wind up with a hole in your plastic because the iron was a bit too hot, use other pieces of plastic, like the bag handles, as a patch. Simply cover the area and repeat the ironing process. You can also use other strips of plastic to create designs on your plastic.



Once you've completed your first piece of fused plastic fabric, you'll need to add more plastic to make a larger sheet. The size of the sheet you create depends on the size of the lantern you'd like to make. I made a large sheet about 3 feet x 3 feet (90cm x 90cm).

Lay out your new plastic bags as you did the first and overlap them about 2 inches (5cm) on top and bottom of your first bag. Repeat the ironing process until the bags have formed a single sheet. Continue this process, adding bags on all sides forming a square.

Shape your lantern

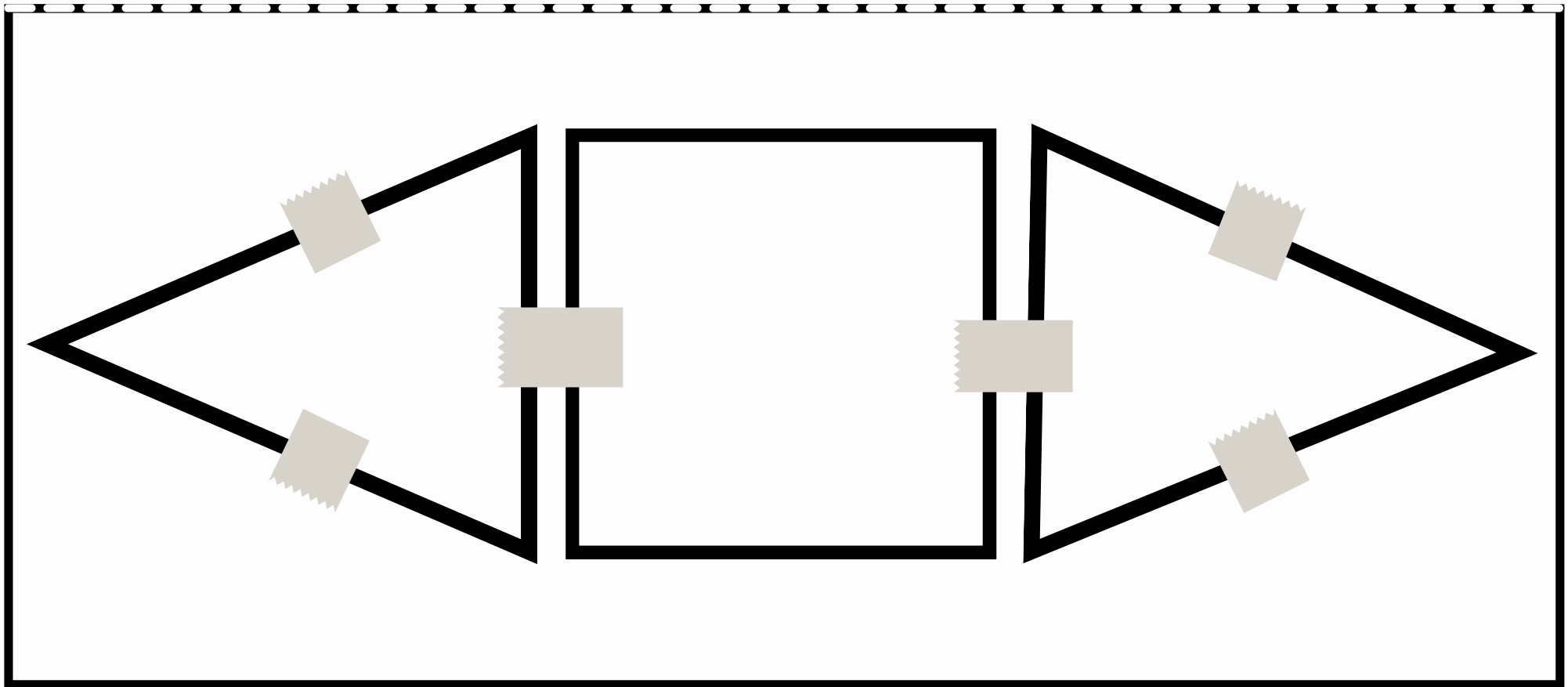
Triangles and squares form the base of this lantern. You can get creative and join shapes together and connect them in different ways, but the basic shape here will be an open pyramid.

Bend your wire into two evenly sized triangles. These can be as big as you want your lantern to be. Mine were about 8 inches (20cm) tall. Bend your wire into a square the same size as the base of your triangle. Mine was about 6 inches (15cm).



Lay out your wire

Lay your wire flat on top of your plastic sheet. Use a bit of masking tape to hold it in place. Your wire should fit on the sheet triangle, square, triangle, with enough plastic left over to cover the shape. Leave a bit of room, approximately a 1/2 inch (1.5cm) between the base of the triangles and the sides of the square.



Prepare to iron

Cut your plastic fabric to the size needed to fold over the full triangle and square wire shapes, then begin the ironing process.

Note: You can lay out several wire patterns along your plastic fabric leaving enough room to cut between them and fold the edges over, or you can make two separate squares of plastic fabric and lay one on top of the other, folding and ironing to make the shape.



Note: Leave a tiny bit of wire visible at the top and bottom ends of your fabric. We'll connect it there to hang it up.

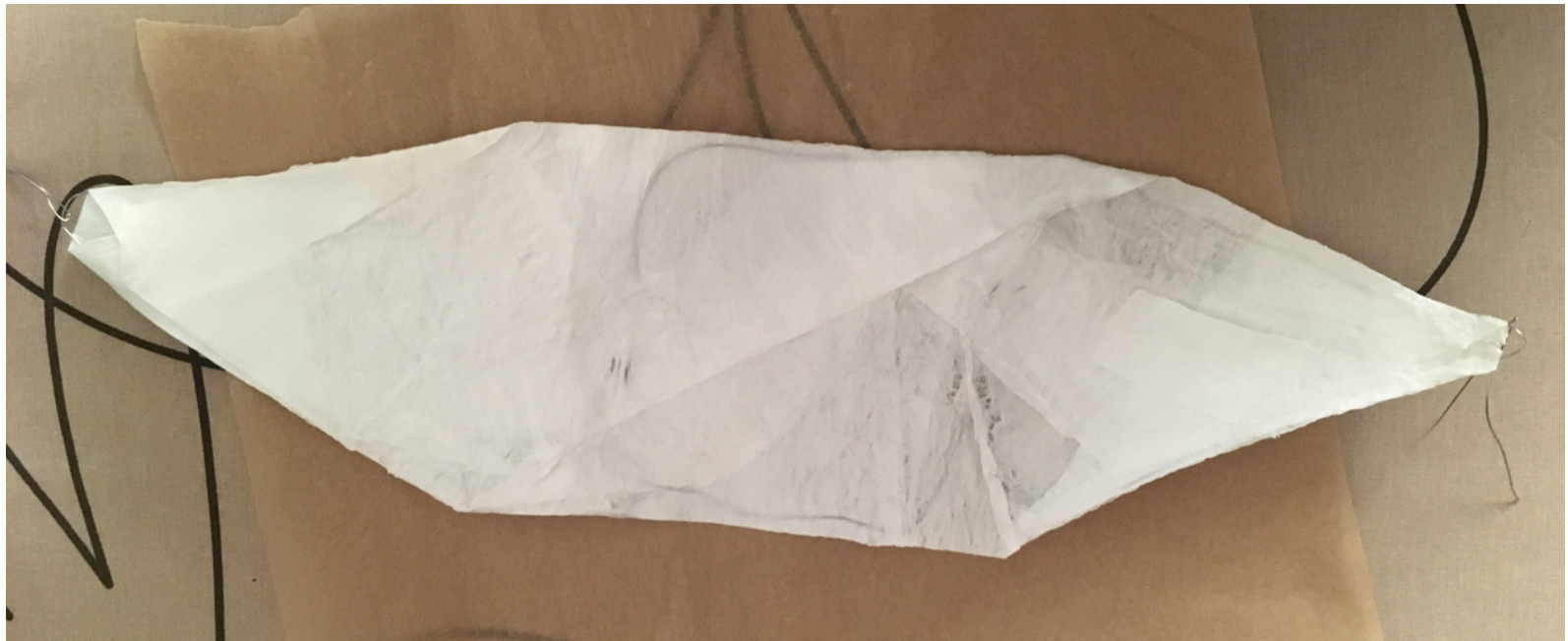


Connecting a bit of extra wire to loop together both ends and hang it.

Finish Ironing

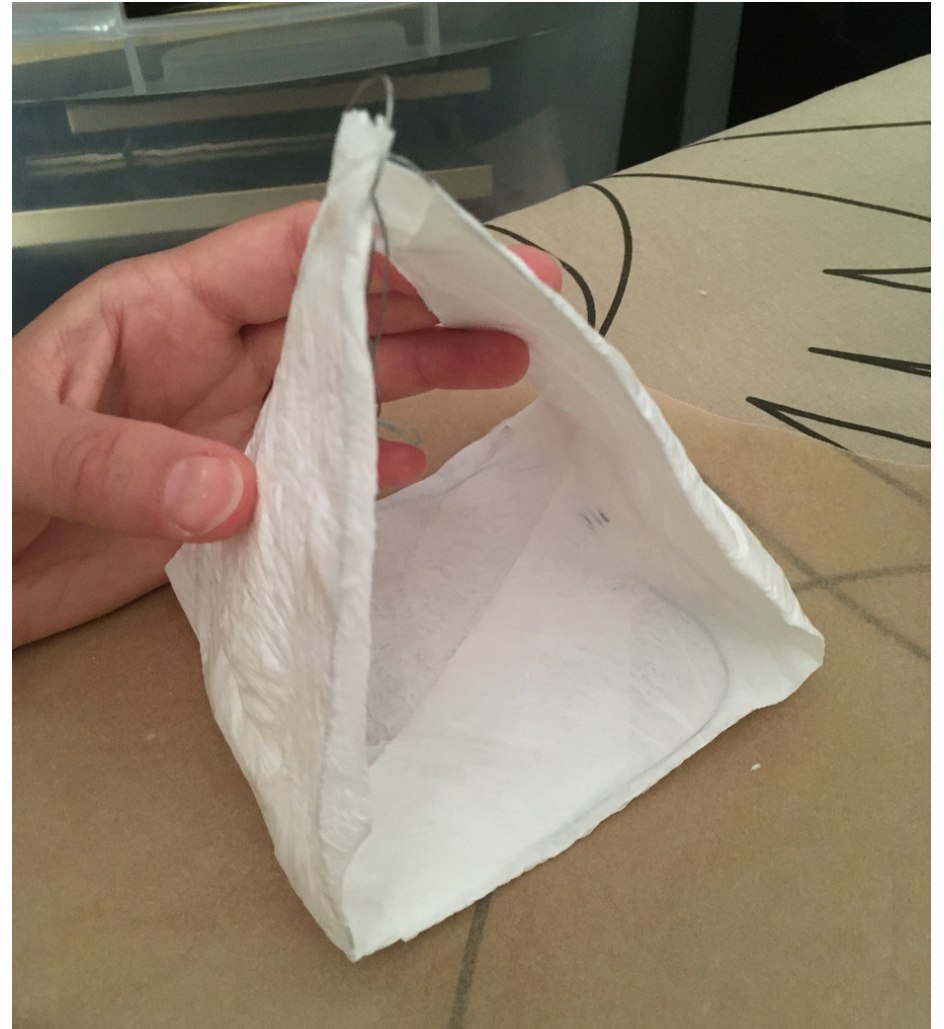
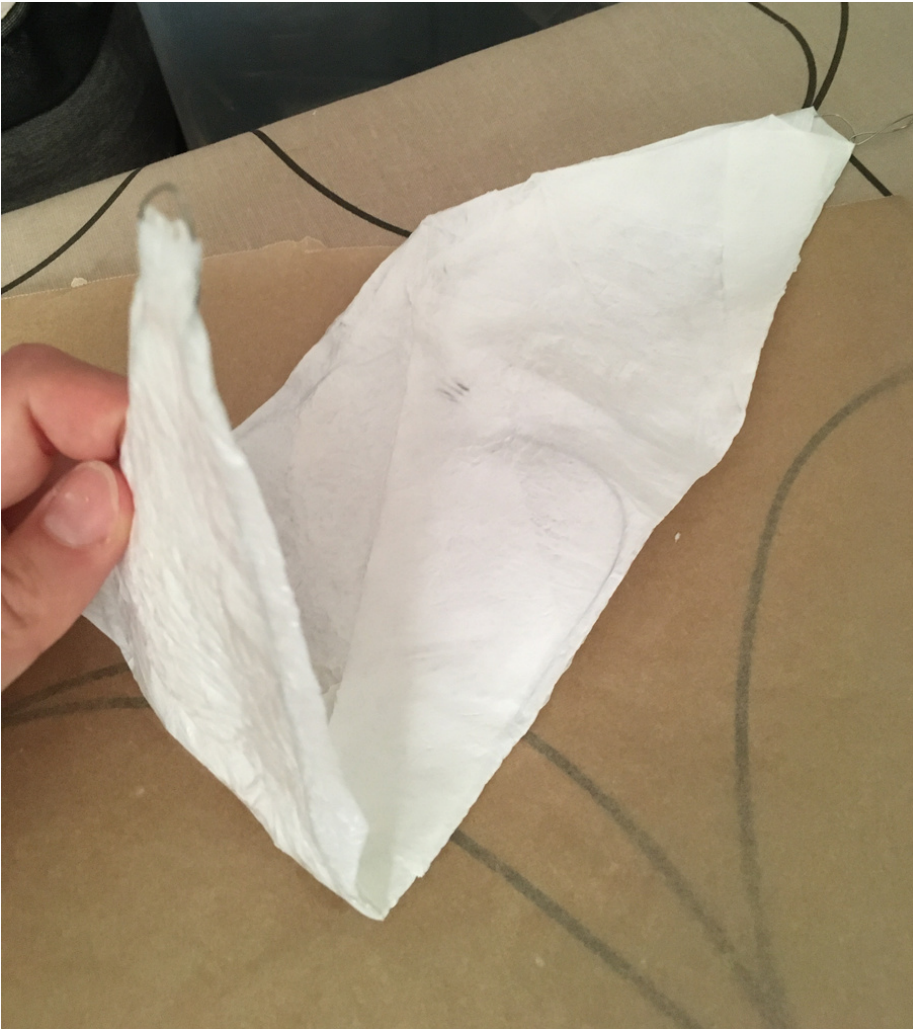
If making an open pyramid shaped lantern, the flat shape will look like this when you've finished folding and ironing. Remember both ends have a bit of wire sticking out so you can connect them.

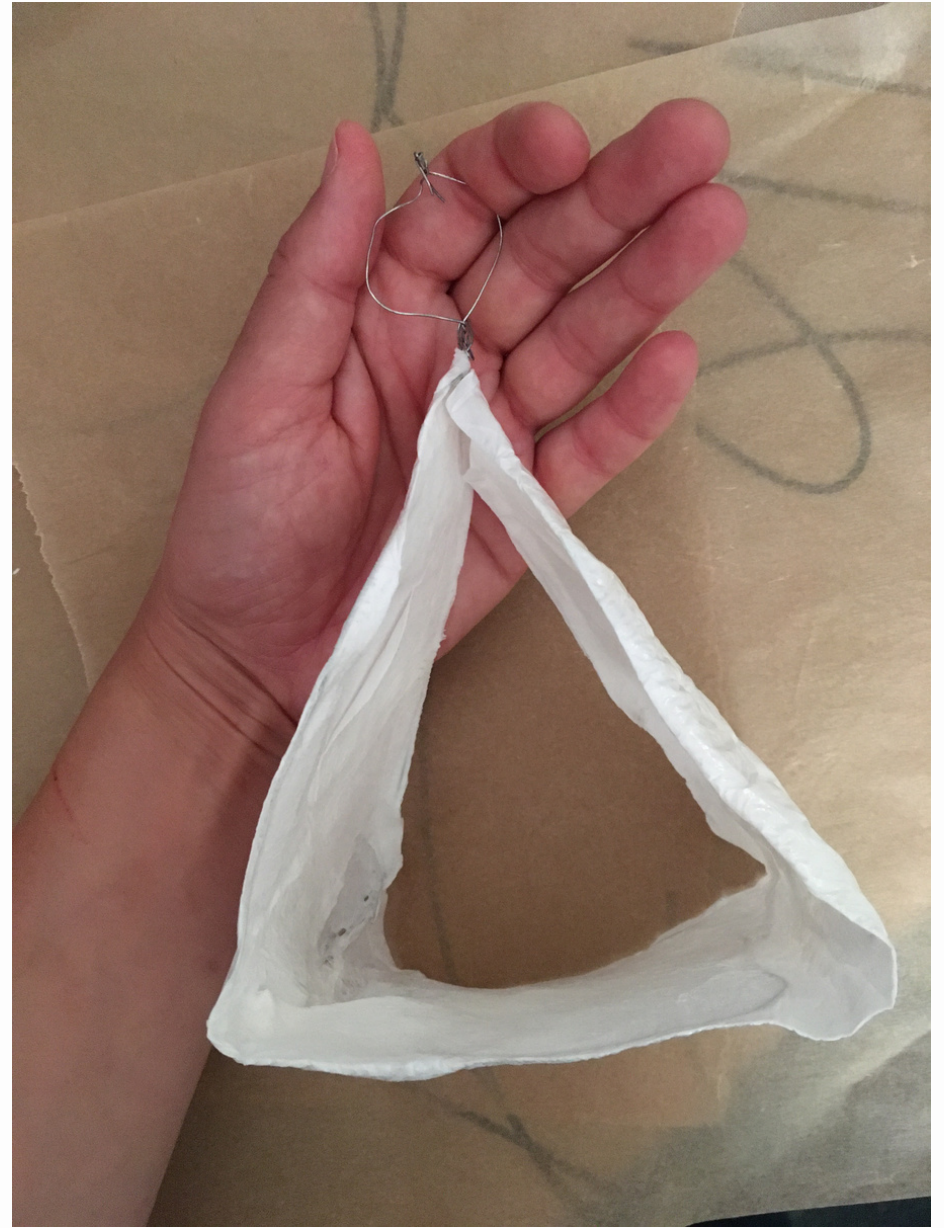
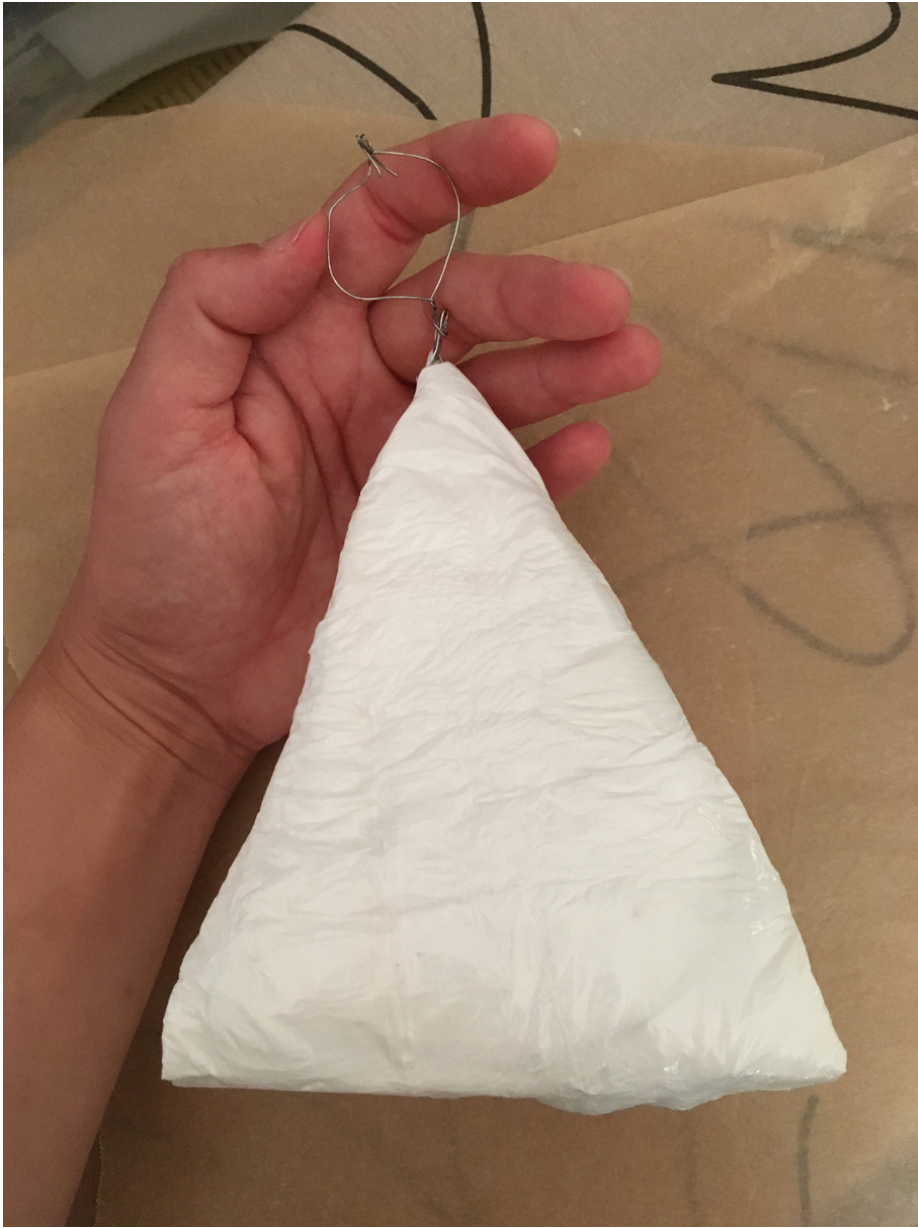
Note: If you want to paint your lantern, it's easiest while flat. Once the plastic has cooled, you can paint, stamp, or draw on it.



Form your lantern

Fold up each triangle to meet at the top and connect them with a piece of wire.





Now you have an open pyramid structure. You can leave it like this or continue to connect more shapes.

I made a second pyramid in the same way and connected them at their bottoms by rotating them and poking the wire through the corners.





Once connected, simply bend in or clip the extra wire.



Because it's plastic, this lantern will withstand rain and sun. Add fairy lights if you want it to glow at night. Make several and string them along in your garden or outside your window.