CLOTH MASK SEWING TUTORIAL

This mask is a modified version of the "Olson Mask" developed by UnityPoint Health hospital in Iowa (https://www.unitypoint.org/cedarrapids/sewing-surgical-masks.aspx). The design has been simplified to 4 pieces (rather than 6) and adjusted for overhead-style elastic banding. This design includes a pocket for replaceable filter, metal nose bridge, and over-head elastic banding (top band is one-size, lower band is tied by user).

Last updated 4/6/20 3:00PM by Joyce Lin

DXF DOWNLOAD FILE FOR LASERCUTTING OLSON-TXRX PATTERN:
https://drive.google.com/file/d/1-ZBqoKMBMAdlJkV3wb2n4k00hNzpARSk/view?usp=sharing
FILTER (can also be lasercut): https://drive.google.com/open?id=1XFmD1EspryATi0I3iJhUhZiSKdZo6_Ta
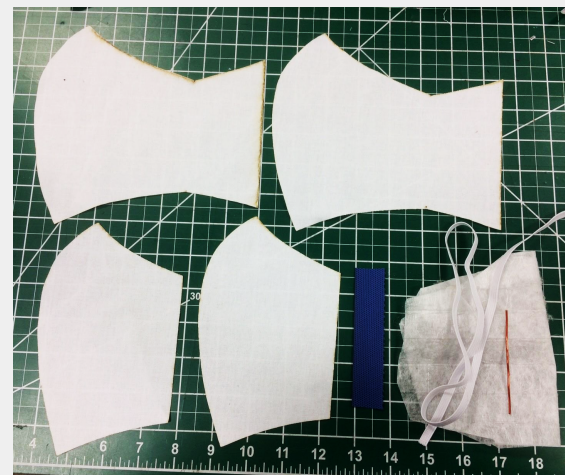
List of materials needed:
- 2 X FACE PIECES
- 2 X MOUTH PIECES
- 1 X 32" elastic banding or cord *(<--see last page)*

(If you can't find elastic, I have heard that some people are using non-elastic ties. If all you can find are hair ties, refer to the original Olson mask pattern)

- 1 X 3"-length 22 or 20-gauge copper wire
- 1 X HEPA filter (We use MERV rating 12 or 14)

https://www.homedepot.com/p/Honeywell-20-in-x-30-in-x-1-in-Elite-Allergen-Pleated-FPR-10-Air-Filter-91001-012030/203145851
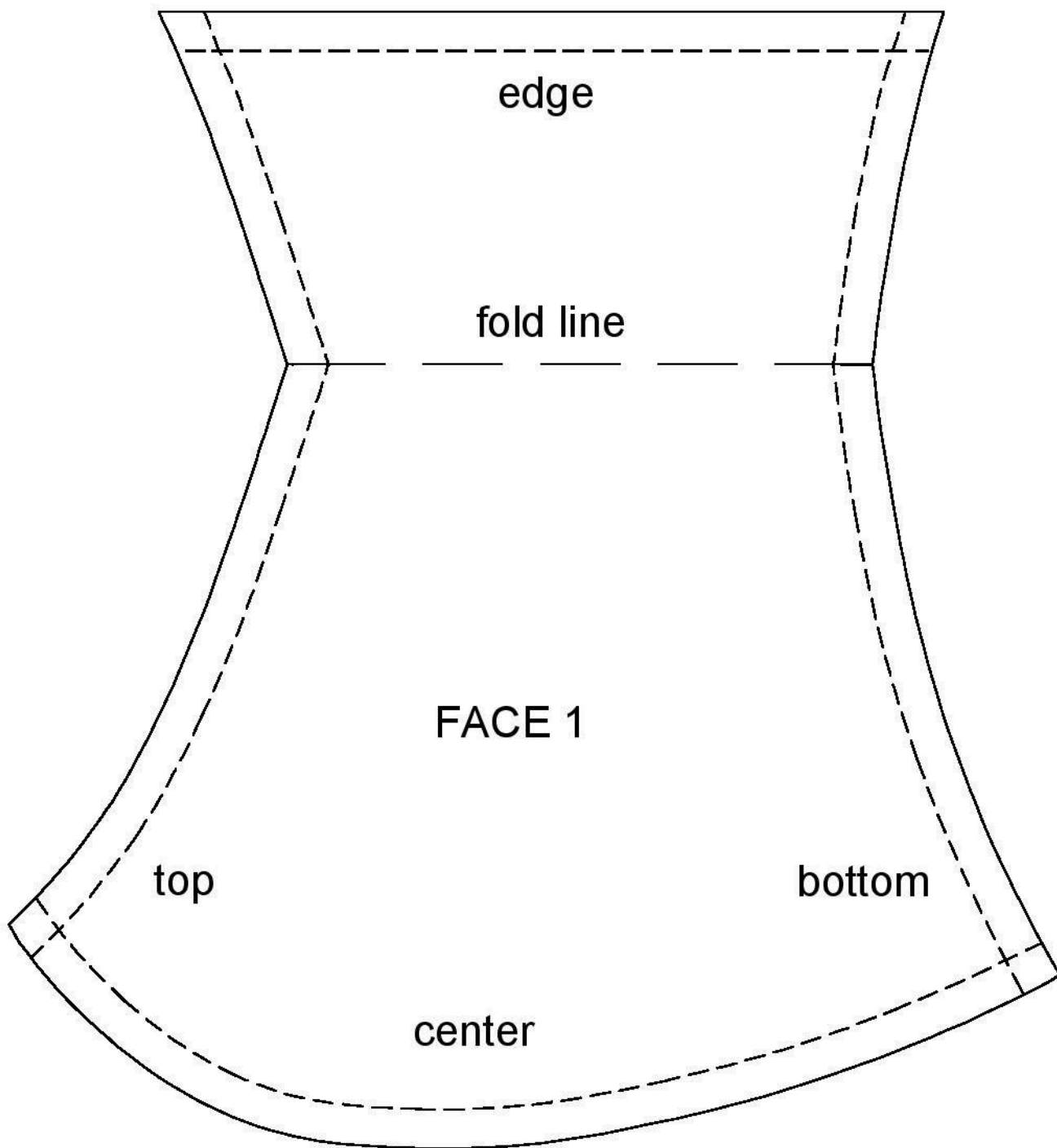
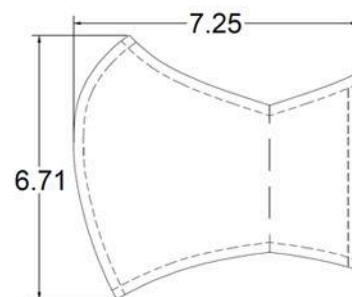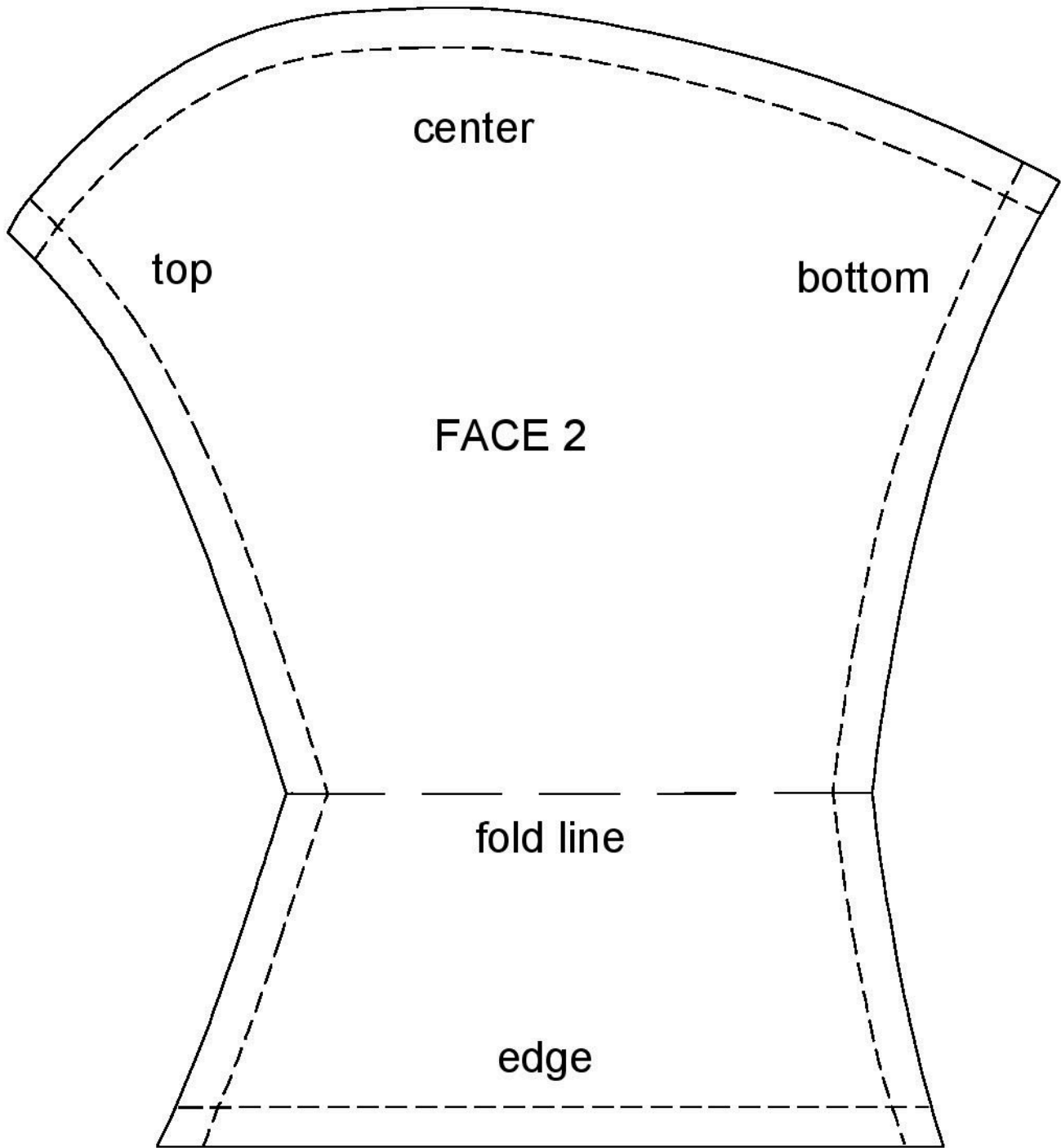- 1 X 1x4" rectangle of non-fraying fabric (like felt or ribbon)

edge

fold line

FACE 1

top   bottom

center

1" x 1"
test
square

7.25

6.71

Nose

Chin

center

top

bottom

FACE 2

fold line

edge

1" x 1"
test
square

Nose

Chin

center

top

bottom

MOUTH 1

edge

edge

top

MOUTH 2

bottom

center

1" x 1"
test
square

6.71

4.12
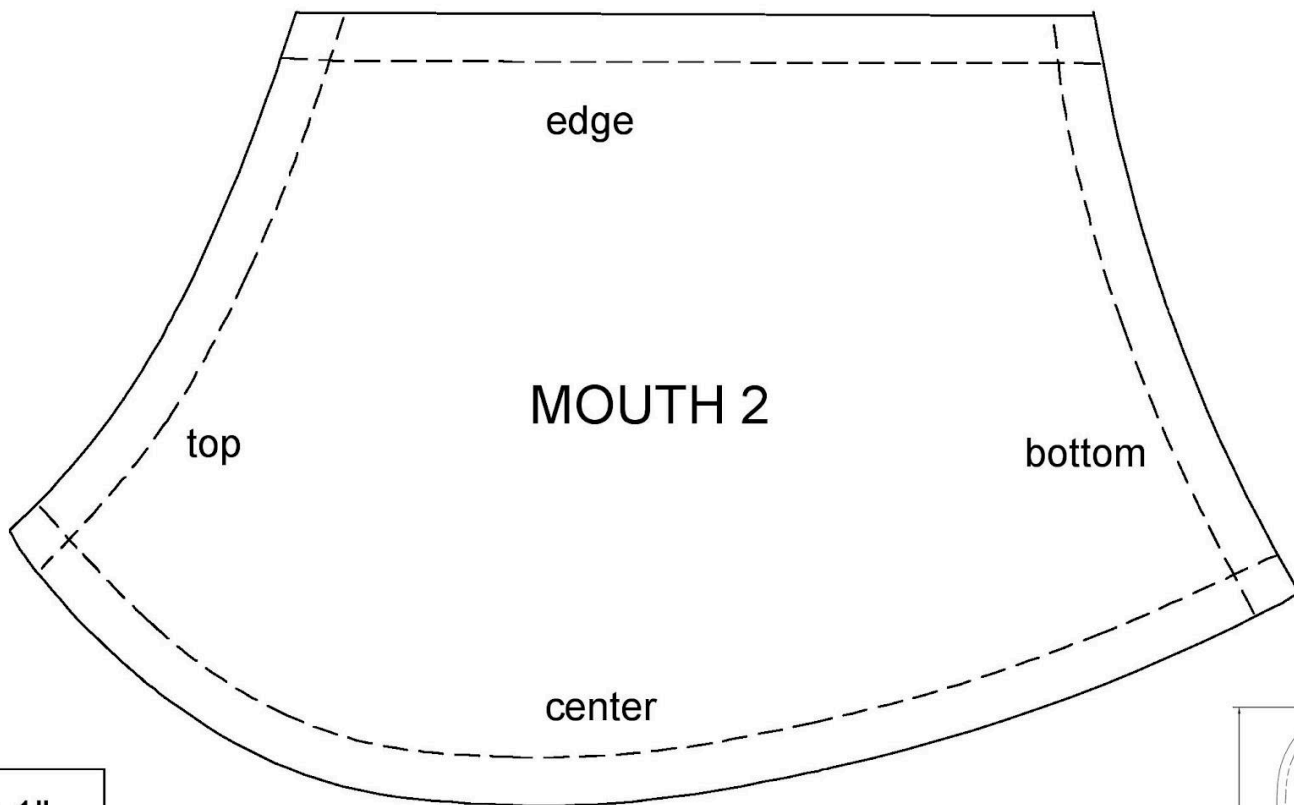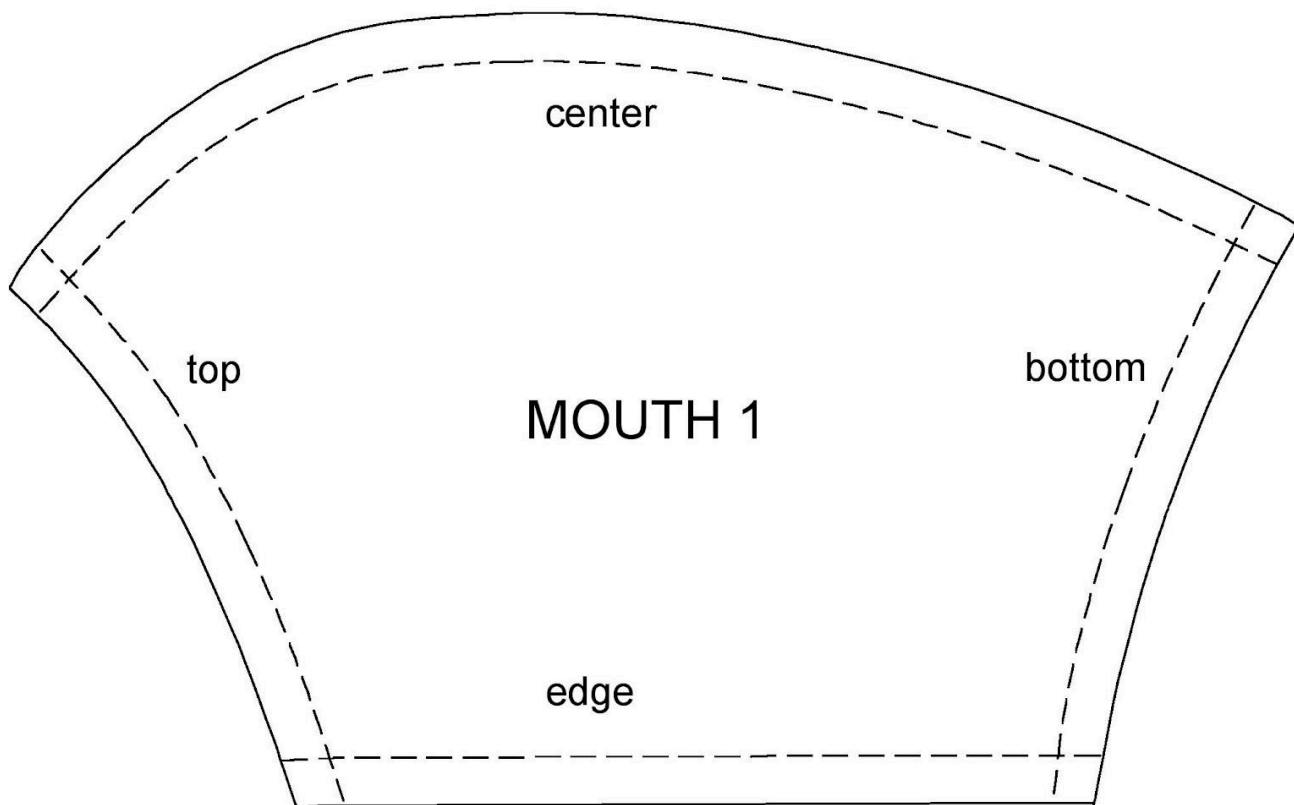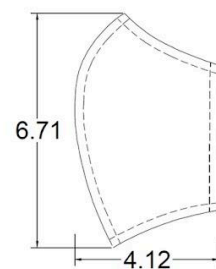
Nose

Chin

8.50

FILTER

1" x 1"
test
square

5.75

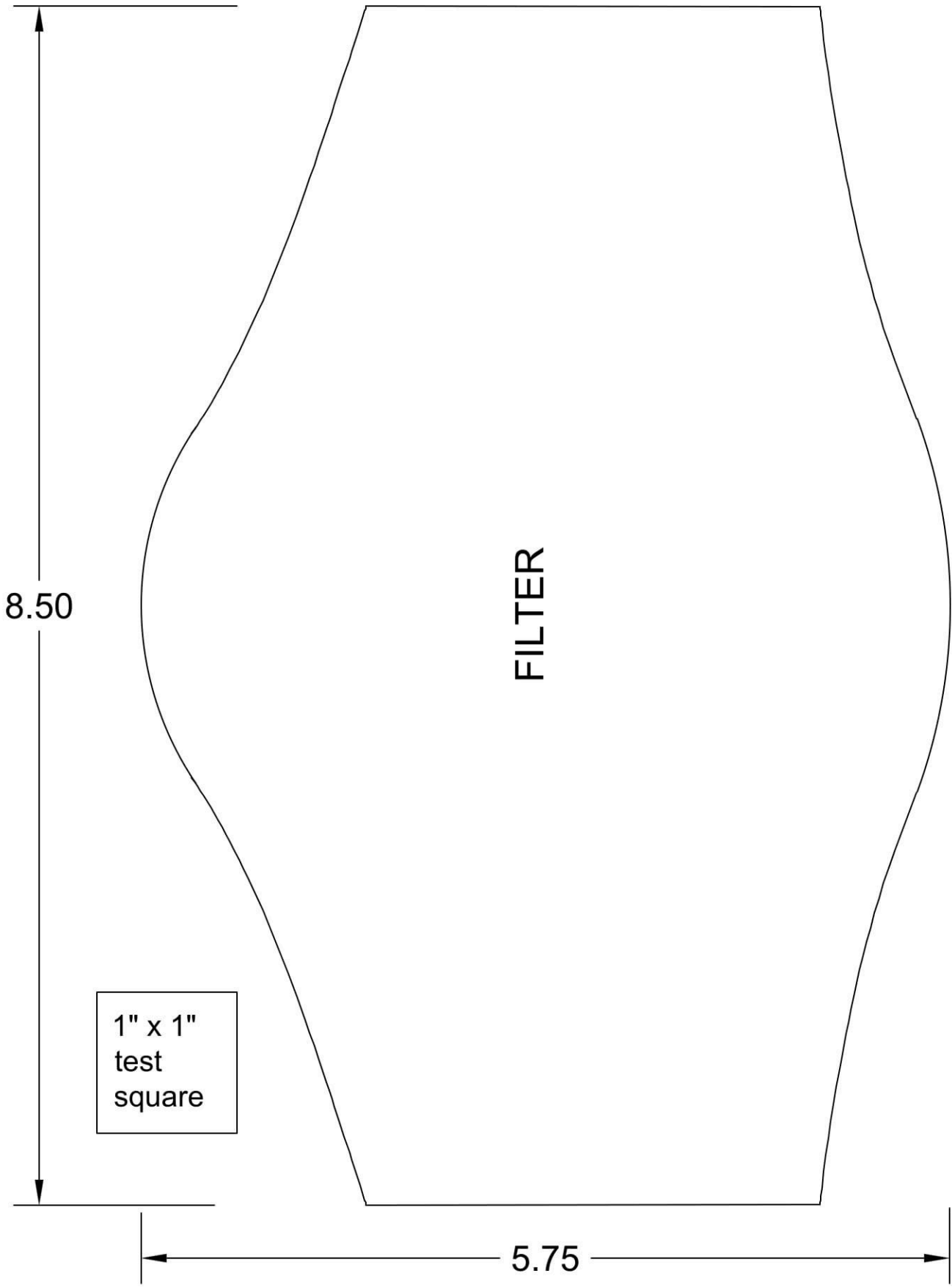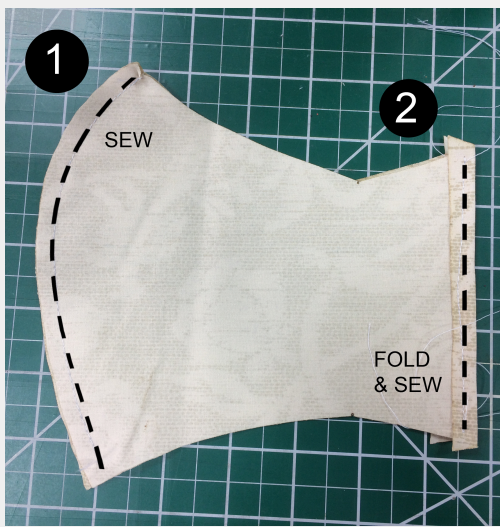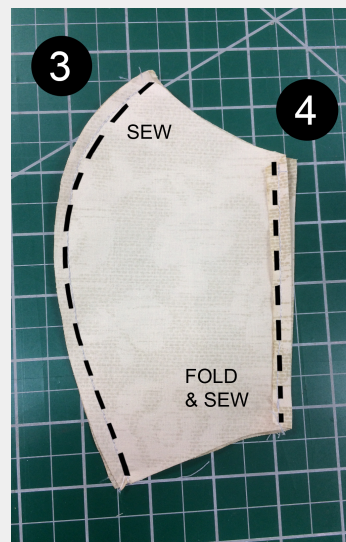**1** Sew both **FACES** together along the **center line**.

2 On each side, fold the **edge** over ¼" and sew down. Do this for both sides.

3 Sew both **MOUTHS** together along the **center line**.

4 On each side, fold the **edge** over ¼" and sew down. Do this for both sides.

5 Open both **MOUTH** & **FACE** pieces and lay them over each other with the **raw edges pointed out**.

There are **laser cut dots** on the 'V' of the **FACE** that indicate where to fold both ends inward, overlapping on top of the **MOUTH**.

Pin this set-up in place and sew the **top and bottom perimeter.**

Side pocket

Center pocket

Side pocket

Flip inside out using one of the openings between the **MOUTH** and **FACE**…
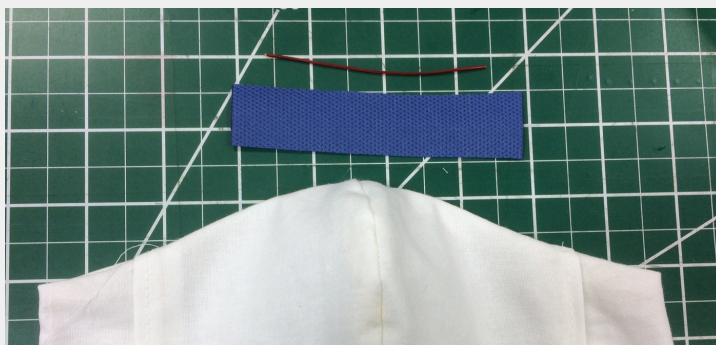
The pockets are done!

6 On the **32" elastic band**, mark **7"** from both ends. *(If you have a large head, a 33-34" band may be more comfortable.)*

Sew the elastic bands on the outer edges of the mask leaving the **7" ends** hanging as lower straps to be tied around the neck by the user
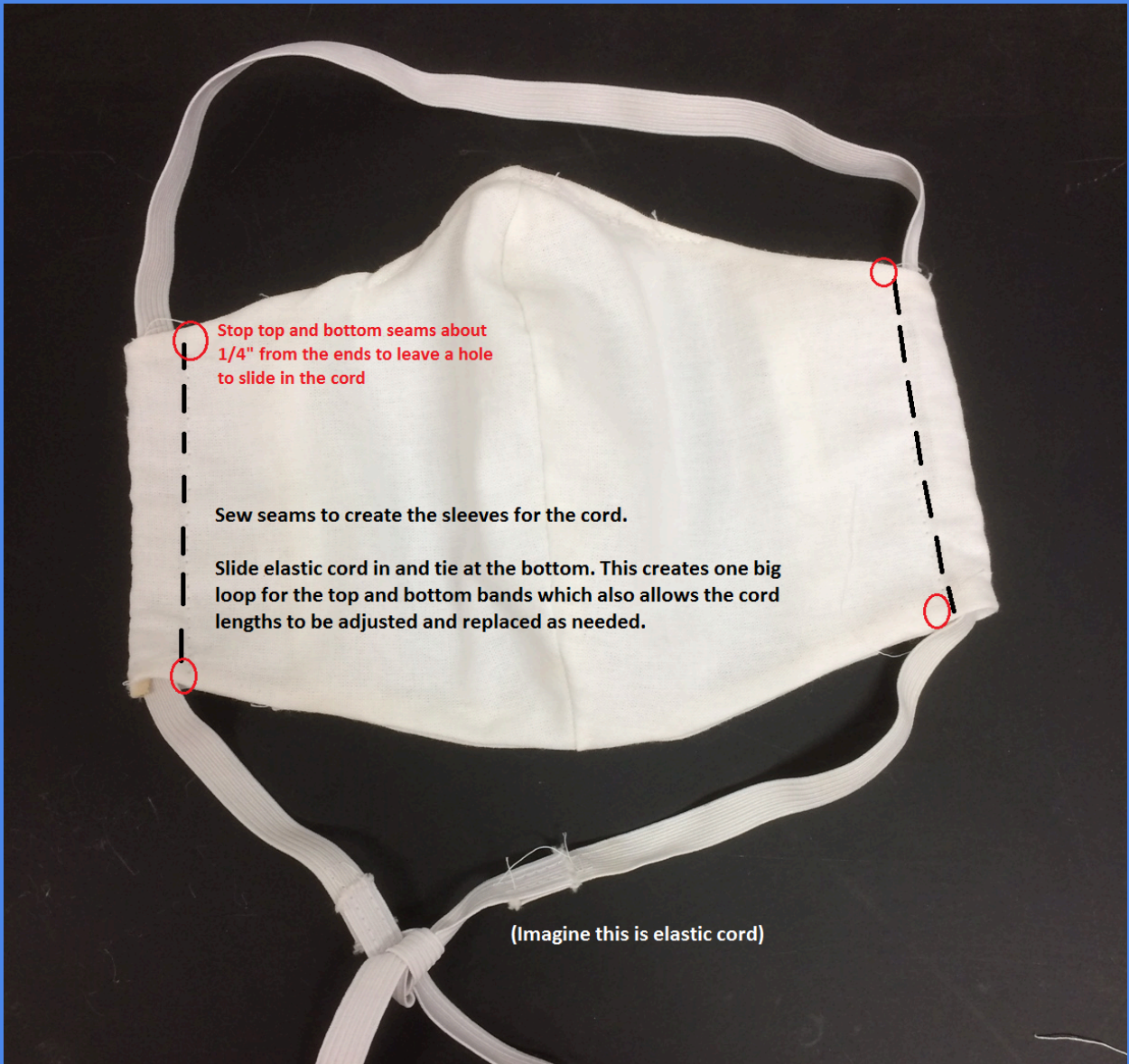
7 You can sew in a 3" length of 20 gauge copper wire for the nose bridge. However, the ends may tear the fabric over time. To avoid this, make a 4"-long external sleeve with a non-fraying fabric like felt, ribbon, or non-woven polypropylene (used below). Slide the wire in. You can remove wire when washing the fabric.

8 Place the HEPA filter inside the pocket.. **And finished!**

Stop top and bottom seams about 1/4" from the ends to leave a hole to slide in the cord

Sew seams to create the sleeves for the cord.

Slide elastic cord in and tie at the bottom. This creates one big loop for the top and bottom bands which also allows the cord lengths to be adjusted and replaced as needed.

(Imagine this is elastic cord)

FACE MASK CARE INSTRUCTIONS:

https://docs.google.com/document/d/1mv_dAk0EmGvnma6u9drf0DPXHj_WYBdrZzcxrYWNL4k/edit?ts=5e83d05a