

Homemade Mask Tutorial

“Cloth Face Covering”



Finished mask - outer side



Finished mask - inner side

Features:

- Pleated design
- Front side and Back Side
- Pipe cleaner for a good seal on the top edge
- Pocket for filter
- Fabric ties to fit variety of head size and hair styles

Must haves:

- Sewing machine, thread
- Scissors, ruler, pen
- Fabric - can use old t-shirt, bedsheets

Nice to haves:

- Seam ripper
- Bias tape
- Iron and ironing board
- Serger

Level of Difficulty: High-school “Home-Ec” sewing level!

Terms of Use:

This visual PDF sewing tutorial has been created by Uyen “Winn” Khuong and provided to you free of charge **for personal use only**. NOTE that it only requires a “Home-Ec” level of knowing how to sew using a sewing machine. You do not have to be perfect and in fact, you need not reach perfection on this because I sure didn’t.

You do need to know how to do a lockstitch. Super easy. You will begin and end every straight stitch with a lockstitch. <https://www.thesprucecrafts.com/back-stitch-and-lockstitch-2977504>

If you have a serger, great. If you don’t know what a serger is, don’t worry. It’s basically used to keep the ends of fabric from fraying. I just use a zig zag stitch followed - in some cases - by a straight stitch. Most of the stitching here is done with a straight stitch.

If you are a novice to sewing, I would make one mask first to get acquainted and see how easy it is. Then I would make a batch and save time and do them all in a production.

This is an original tutorial that is largely (and gratefully) based on the pattern approved by Great Falls Clinic in Montana. However, it has been slightly altered with feedback from nurses to incorporate a front and a back side. This is to visually cue the wearer to not accidentally put the outer side back on the user’s face, possibly exposing the wearer.

If you would like to view the video provided by Great Falls Clinic that will show you how to make this, you can do so here:

<https://www.gfclinic.com/approved-pattern-info-for-homemade-masks/>

Please note that due to having a front and back side, the beginning 3.5 minutes in the video will not match this tutorial since we are working with two pieces of fabric instead of one. The variation and a couple of additional steps are necessary because we have two different sides in my tutorial.

Lastly, these cloth masks (also referred to as cloth face coverings) will NOT protect you from getting the coronavirus. They are to protect others from you, in case you have coronavirus but are asymptomatic. It helps to stop the spread of the contagion. The CDC recommends all to wear face masks in public settings. You should wear a mask *and* strive to maintain a six feet physical distance. You must still practice excellent personal hygiene with frequent handwashing for 20 seconds in warm water, covering with your coughs and sneezes, and avoid touching your face, eyes, nose. To learn more, check out the CDC website here:

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

Be well,

Winn

Step 1 - Cutting fabric

Find fabric that you can use, preferably 100% cotton. Like the midwestern-ish mom that I am, I happen to have some laying around, but if you don't have any, use cotton sheets, old tee shirts. Cut them in these dimensions for each mask:

Outer and inner sides: 8 inch x 7.5 inch

Fabric ties: 36 inch x 1.5 inch strips OR use bias tape

TIPS:

- For the outer side, use a pattern that is NOT stripes because it'll be less noticeable if you don't sew straight. 😊
- For the inner side - that's the side that lies on your face - use a soft fabric like flannel if you were a lumberjack at one point or live in Maine. 🌲

My ruler was conveniently 1.5 inches wide, so no need to measure when making my fabric strips! (If you have bias tape, use that and skip this step.)



You should have all yours cut out.



Step 2 - Iron/press to get prepared



I don't have an ironing board, and if you don't either, just improvise. But you will need to press the fabric strips for sewing later.

Lay flat with "wrong" side of fabric up, fold over until they meet in the middle. Iron so they lay flat.



Finished step →
See? Totally not perfect, but it's okay.

Step 3 - Sewing the outer and inner fabric sides together

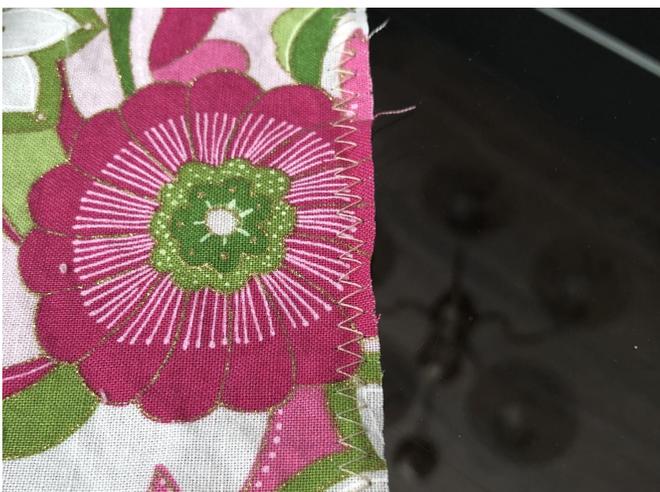


← Lay the fabric with the “right” sides facing each other like reuniting two people long quarantined apart! 😂

Now you have a rectangle. You will sew together one short side, closing it. Sew only one of the **7.5 inch sides** together using the zigzag stitch. ↓



Step 4 - Preventing the edges of the other short side - the one still open - from fraying by zigzag/serge stitch.



If you have a serger, use it here. If you don't, just use a zigzag stitch. You can also go over the zigzag stitch additionally with a straight stitch (I did that initially), but you don't really need to, since this will be inside the mask and won't be seen either. Chances of fraying are slim to none. Lastly, if you want to be super professional, you can use the overlock stitch on your machine, too.

Step 5 - Making a hole where you will eventually insert a filter

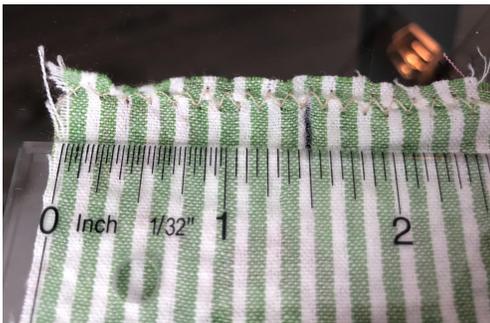
Let's start with what this looks like when you're done with this step. You're making this below. You are attaching the fabric of the remaining open side together - leaving a hole/opening in the middle.

(My nails are horrible, no thanks to gel nails without a manicure for 5 weeks !) 🙄



This uses the short side that is NOT attached. This is the end that you just serged/zigzagged to keep from fraying, that is open and not sewn together yet.

Measure 1.5" in from each end and mark.



Then rotate 90 degrees and mark/eyeball 1/4 of an inch from the edge of your zigzag stitch.



Sew to close the two ends leaving a gap in the middle.



Step 6 - Sewing the inner fabric edge down.

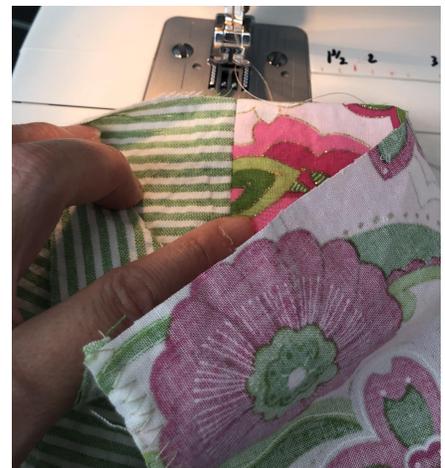
Again, we start with what this looks like when you're done with this step. In this step, you are sewing one side - the inner side of the fabric down so that it doesn't flip when you insert and retrieve the filter.



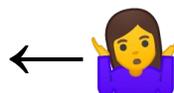
First, pretend you are Moses parting the seas  when you open sewn pieces right down the middle and flop the edges apart. You can press with an iron. My fabric stayed opened after I pressed it with the warmth of my hands (might be the hot flashes!)  so I did not need to press it open with an iron.



And because the underside of the sewing is always messier than the top side, I like to sew it with the right side facing up so that meant sewing it in like a tunnel. Sew about $\frac{1}{8}$ " from the center edge all the way down the side.



NOTE: If you are at all confused, go to the 5:30 mark of this video:
<https://www.gfclinic.com/approved-pattern-info-for-homemade-masks/>



Step 7 - Making a gap for the pipe cleaner.

This is the finished look below. You are just sewing two lines of straight stitch that are parallel to each other at the top of the mask. It's the space that you will insert the pipe cleaner.



First, turn your fabric tunnel right-side-out. →



The pipe cleaner channel is $\frac{5}{8}$ " in height. I totally just eyeball it with my index or middle finger to scoot the outer fabric up by $\frac{5}{8}$ ".



Again, because the underside is always messier, you are going to sew with the outer fabric facing up. Sew a straight stitch $\frac{1}{8}$ " all the way down the edge.



Finished first line ↓



The other straight stitch is also $\frac{1}{8}$ " from the bottom edge of the channel - about where my finger is pointing. But, we need to flip this over, outer side facing up, so we will be "sewing blind."

Repeat the step above and sew with the outer fabric face up on the machine. This is about $\frac{1}{2}$ " from the outer edge. (Don't worry. You won't go past the edge. See next page!)

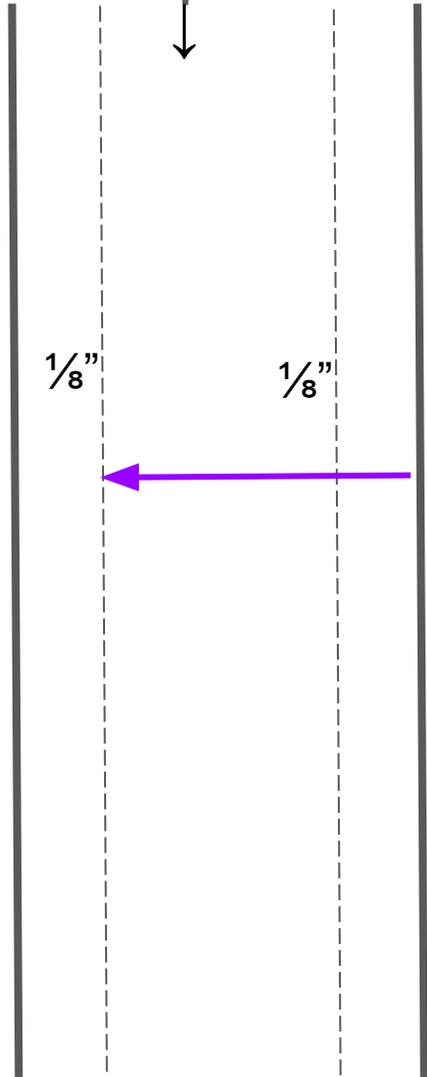


This will work because....

Channel for pipe cleaner!

Fabric Edge

Fabric Edge

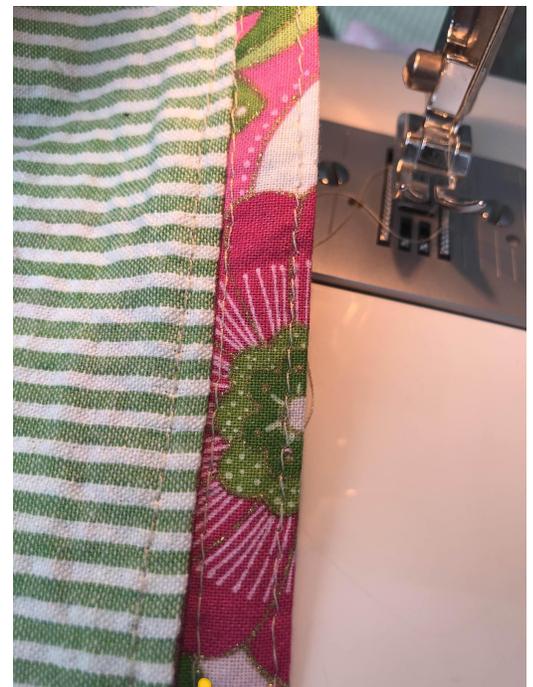


1/8"

1/8"

$$\frac{5}{8} - \frac{1}{8} = \frac{1}{2}$$

5/8" wide



See? You will stay about 1/8" from the edge just fine.

Step 8 - Giving the bottom edge of your mask some structure so it will hold.

Since you scooted the fabric to make the pipe cleaner channel from the bottom of page 8, you now have the inner fabric shown on the bottom front of your mask. We need to provide structure so we will do that with two parallel straight stitch lines.



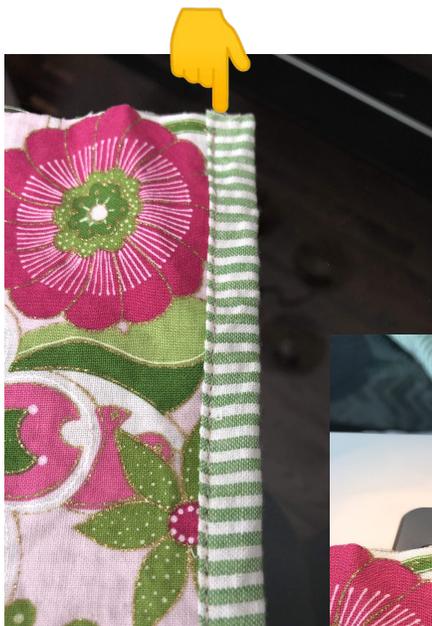
It will look like this when finished,



Flatten with the warmth of your hand like I did (if your fabric cooperates). Or you can press with your iron.



Similar to page 10, sew a straight stitch $\frac{1}{2}$ " from the outer edge, and then $\frac{1}{8}$ " from the outer edge. I like to start sewing the inner straight line first because my striped fabric was quite soft and moved. Sewing the inner line allowed it to stay still. Yes, this creates a channel, too, but it won't be filled with anything. It just gives it structure and it looks good!



Second line



First line



Done!

Step 9 - Insert the pipe cleaner

Be sure to measure the pipe cleaner and cut so that it is $\frac{1}{4}$ " shorter from each edge. We don't want the machine needle to hit the pipe cleaner. See this pic below? The pipe cleaner is too long! I had to go back and cut it $\frac{1}{4}$ " shorter from each edge but forgot to take *that* picture.



Slide it through the channel you created!



So, let's check in on where we are right now in the process. Here's the front or outer side of the mask.



Here's the inner or back side of the mask. See the opening for the filter? You did that!



Step 10 - Creating the pleats for the mask

I like making the pleats from the inner or back side. See this side view of the pleats below. Two things to notice:

1. The pleats fold *down* from the top edge.
2. The pleats do not overlap one another.



You can fold down from the top outer fabric to form your first pleat OR



...you can fold *up* from the reverse/back side. This is my preference.



It always helps to press the top pleat so that it stays in position before you do the other two pleats.



Make two more folds to make the other two pleats. No, I did not measure. There's only so much fabric and it's going to come out pretty equal. The pleats/fold expand while wearing so they need not be equal or exact.



Give it a good press on both sides. When done, your pleats flow down cascading one on top another.

Step 11 - Making the fabric ties

You will notice that the ties on the top edge of the mask need to be longer in order to go around your head while the ties on the bottom edge that go around your neck are shorter.



So just skim through the next two pages before you start sewing to get an idea. Once you get it, it goes fast. This is my favorite step of making the mask.

So, if you have bias tape to make the fabric ties, great. If you don't have it, make fabric ties yourself using fabric.

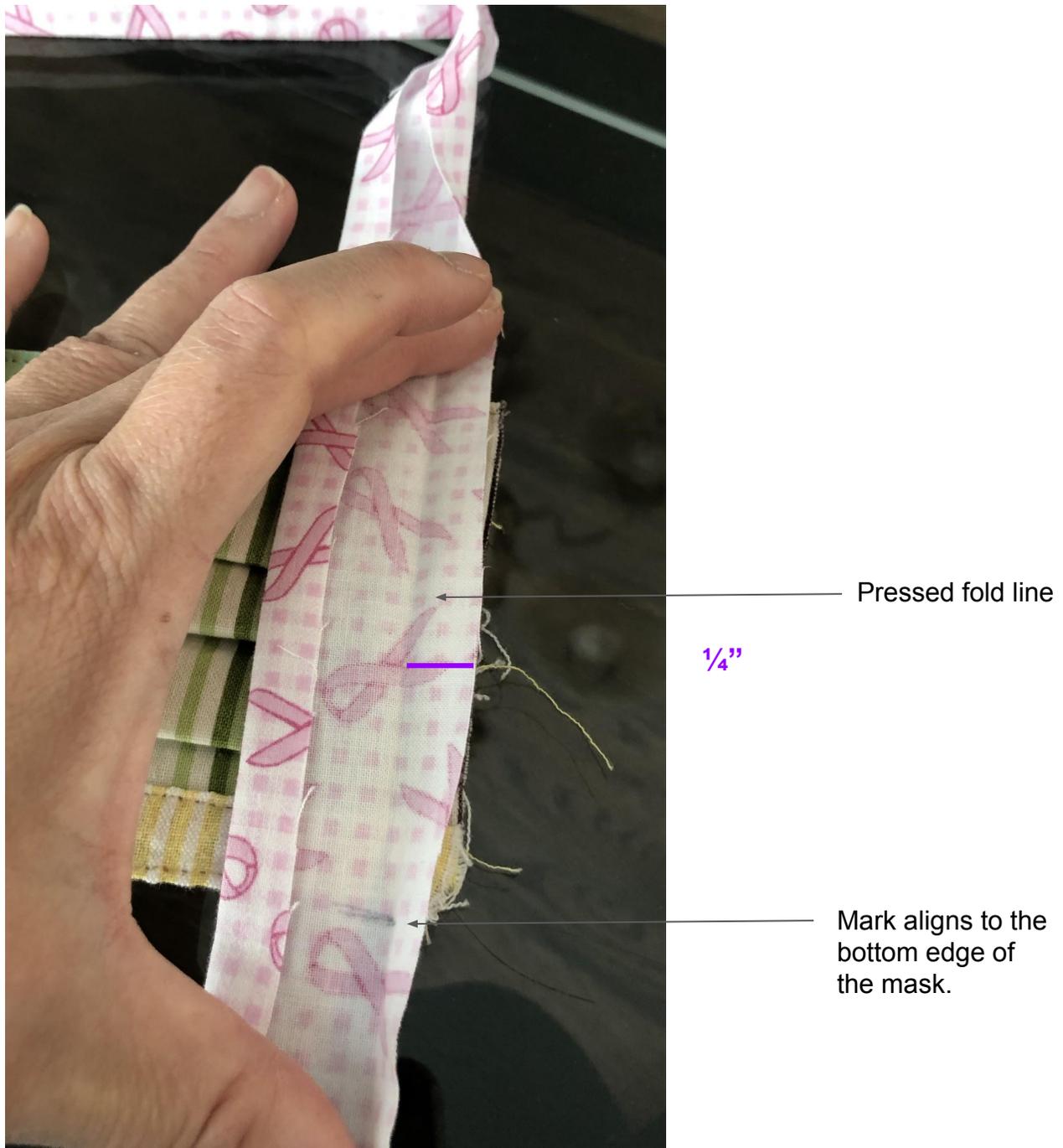
“What is bias tape and why is it biased??” 😂 Please Google if you are really interested.

Open your fabric strip to expose the “wrong” side up. Measure 13” or 14” and make two marks with your pen. I’ve made masks using both and the 14 inches gives you slightly longer ties around your neck, that’s all. The video recommended 12 inches but I felt that it was not long enough.

And there are two marks that is helpful when you are making a batch. It makes it easy to grab any fabric tie and start sewing regardless of which end or side you are working on. Similarly, you can just make one long mark.

First, place the pleated mask faced **top side up** and **outer fabric faced up**.
Next, take the fabric strip you just marked and place it on top of the pleated mask.

Using the mark you just made as your guide, align the mark to the bottom edge of your mask. Then align the pressed fold line $\frac{1}{4}$ " from the edge. Sew the fabric tie to the pleated mask attaching them using a straight stitch starting and ending with lock stitches.



Finished step looks like this. Trim any frayed or uneven edges.



See the purple arrow? That's the direction and action you will do next. You will flip the fabric over.



From this \uparrow to this. \rightarrow



Another view.



Done flippin'!

Use a binder clip to hold or use sewing pins.



Start from the top (long) end and fold the end in and sew a straight line $\frac{1}{8}$ " from the edge to close the fabric tie. When you get to the pleated mask, remove your binder clip or pins before proceeding the rest of the way. At the end of your tie, repeat folding in the end to secure shut with lock stitch.



With one fabric tie done, you will repeat and make the other fabric tie. Here's the watch out: make sure that the lengths match up. That is, short and short; long and long.

Take your other fabric tie and make sure the mark aligns again with the bottom edge of your mask. To sew, place your mask **bottom edge up (this is different because it's the opposite side)** and **outer side facing up**. This time, since the bottom edge is at the top of your sewing surface, the mark is also at the top. I always double check by looking to see if the ties match each other in length (minus the extra fabric folded for the ends.)

Repeat pages 18-20 for this side.



Press fold line

1/4" from edge



You did it!
You made a face mask!

This is what it looks like unexpanded with the outer side shown.

The top has the pipe cleaner which you will use to mold to the contours of your cheeks and nose, forming a good seal.

This is the view showing the pocket for the filter.

Items that can act as filters include:

HEPA-certified vacuum filter

Vacuum bags

Coffee filters

100% cotton

[Blue shop towels](#)



STEP 12 - Filter: Protecting yourself and your mask!

If you don't have anything but fabric or old tees like me, use those. Again, these masks will not protect you from getting coronavirus. They are protecting everyone else *from you* but having additional cotton layers do help.

Cut a strip of cotton about 14" long by 5" wide. You can absolutely go as wide as the width of the mask but it will bunch up on the sides.



Take one end and stuff it into the opening pocket for the filter. Be sure to expand your mask fully and stuff it all the way to the bottom.



Flop the excess fabric over the face of the inner/back side of your mask. This not only adds another layer of cotton as a filter but also works to absorb sweat, makeup, or facial oils, giving your mask a longer life.



Wearing a mask took me some getting used to. My heart rate was up and I was sweating profusely so this cotton layer caught all my melted makeup!



It is recommended that you handwash your mask (and cotton liner) after every wearing. Remove your filter before washing.