



Homemade Face Masks

*Illustrated booklet on making, wearing and cleaning
homemade face masks*



Hello!

This booklet provides recommendations on the use of **homemade or “do-it-yourself” (DIY) face masks** as well as practical information on how to **make** your own mask, how to **wear it** and also how to **clean it** for reuse.

We emphasize that **the use of homemade face masks is recommended by health authorities. The entire population should wear them**, even if they are not part of an at-risk group or have no symptoms of the disease.

Let’s do this together!

#MasksForAll
#FightingForHealth
#HomemadeFaceMask
#DesignUfpr



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THE IMPORTANCE OF MASKS

The use of homemade face masks **does not replace social distancing**, which should still be the number one priority. Even with a mask, it is recommended for all people to **continue to follow hygiene practices and to maintain a distance of at least one meter (3 feet)** from one another.

Medical grade (surgical and N95) face masks should be worn primarily by health professionals and those from other essential services.

By making your own mask you will be helping others and prevent a shortage of medical face masks.



Asymptomatic individuals (who have no symptoms of the disease) **can also transmit** the virus. That is why it is important to **wear a mask** whenever you **leave your home** or are in **contact** with other **people**.

Wearing homemade face masks **does not provide 100% protection**, but **helps prevent** droplet transmission and contamination.

When you wear your face mask, air should enter only through the fabric, not through the sides, top or bottom.

Each family member must have their own masks.



HOW DO I MAKE MY HOMEMADE FACE MASK?

What materials can I use?

The biggest challenge in choosing a material for a face mask is to find a fabric thick and tightly woven enough to filter out the virus particles, but still breathable enough for you to wear it.

In making masks, it is recommended to use a tightly woven, **non-stretch, all cotton** fabric.

T-shirt fabrics with at least **90% cotton** in their composition (check the tag) are also a great option.

Masks made of these materials are washable and reusable.



When making masks with nonwoven fabrics, fabric weight should be 20-40gsm. Use a minimum of two, preferably three layers of fabric.

Masks made of nonwoven fabric **are disposable** and **can be used only once**.



If you don't have any of the recommended materials, choose another thick, tightly woven fabric. A simple test with light can help you decide if the fabric is a good alternative. Hold your fabric up against bright light. If it lets too much light through and the fibers almost become visible, it is not a good option.

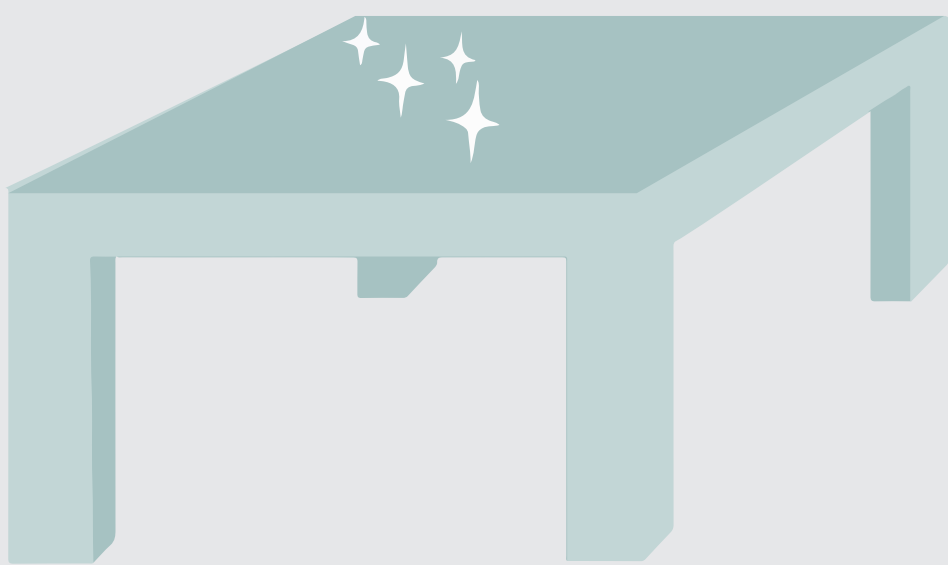
How can I make my face mask?

There are several ways to make your own face mask. Here we will show you **three** of them (and provide links to references): **one** no-sew option and **two** sewn ones.

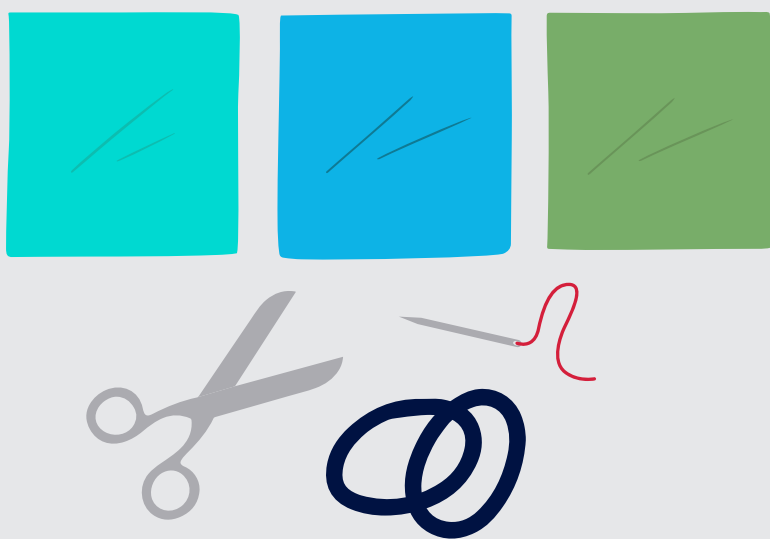
First of all, remember to maintain hygiene and prepare your workspace:



1 Wash your hands thoroughly with soap and water.



2 Clean the surfaces of where you will make the mask, as well as all the materials you will use (scissors, needles, the sewing machine, etc.), with alcohol (70%) or soap and water.

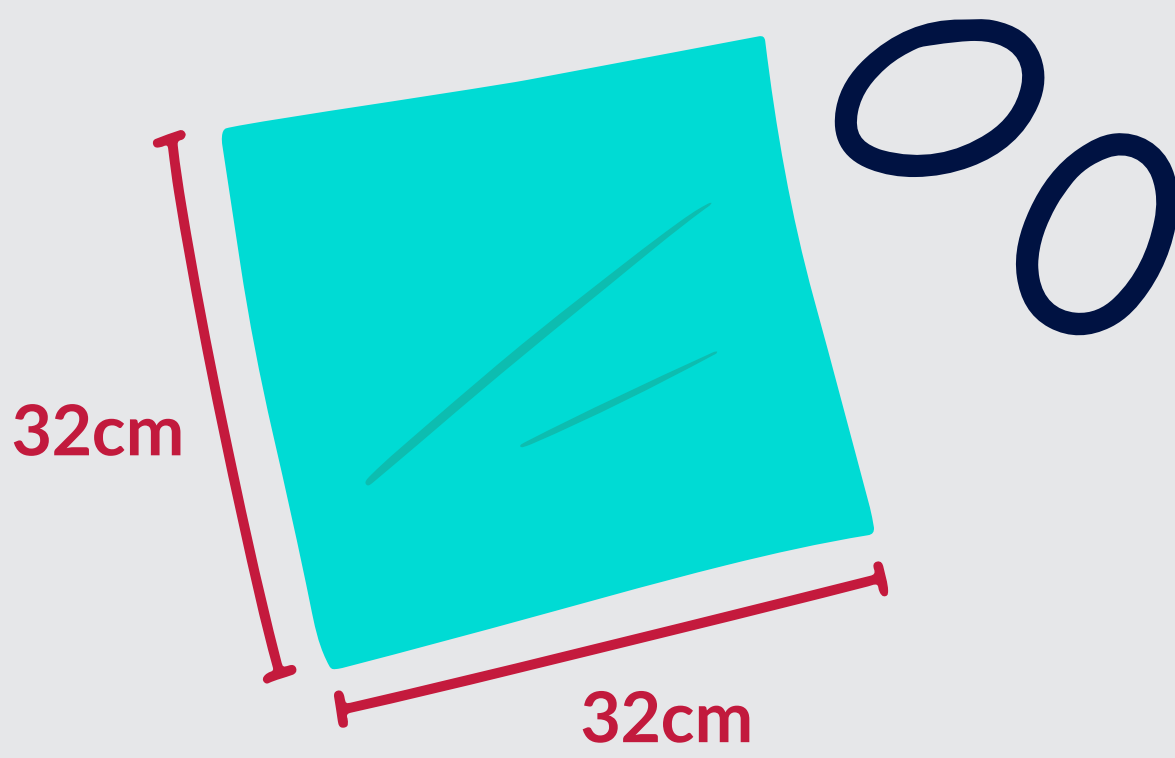


3 Have all materials and tools for making the mask at hand.

Tips!

- *Prioritize the use of materials you already have at home;*
- *Masks should have at least **two layers** of fabric in order to ensure effectiveness;*
- *Adapt mask shape to different face sizes;*
- *Determine which side of the mask will be the front and which side will touch your face. You can make markings to remember, or use different prints.*

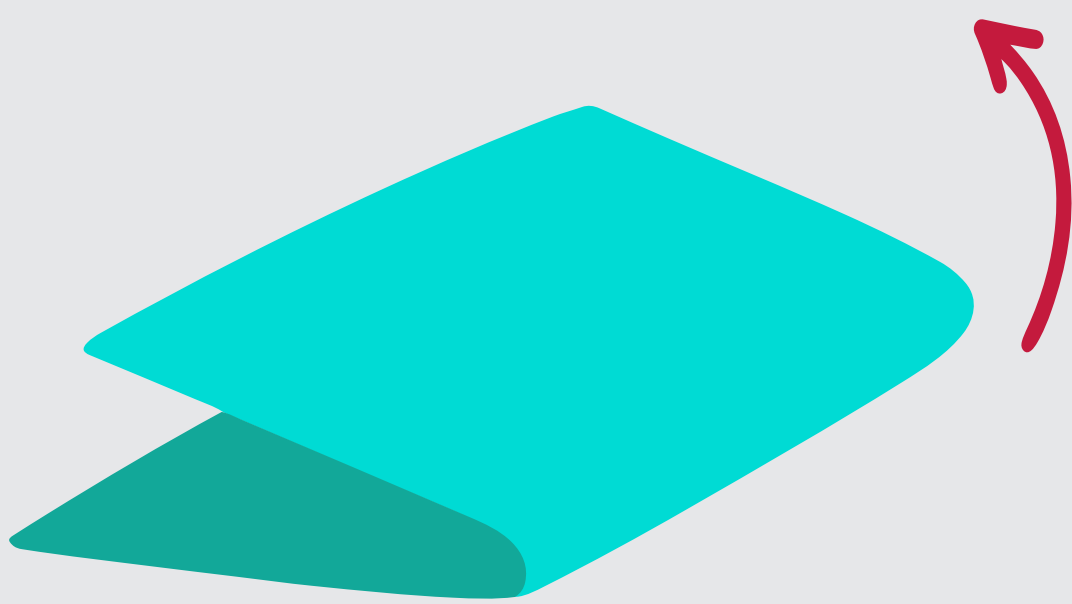
1 No-sew cloth face mask



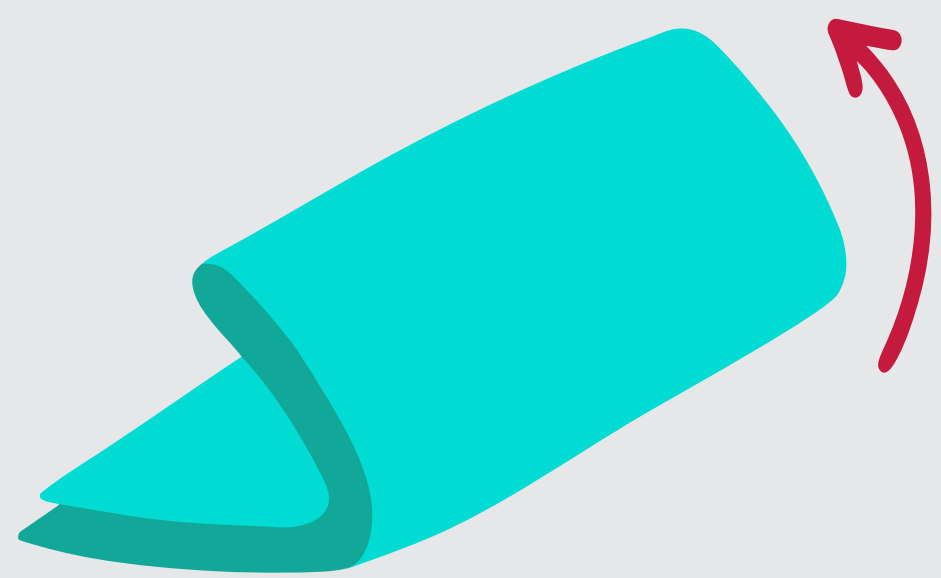
You will need:

One 32x32cm (13"x13") piece of fabric (this is the necessary size for the fabric to comfortably cover your mouth and nose when folded); and two rubber bands.

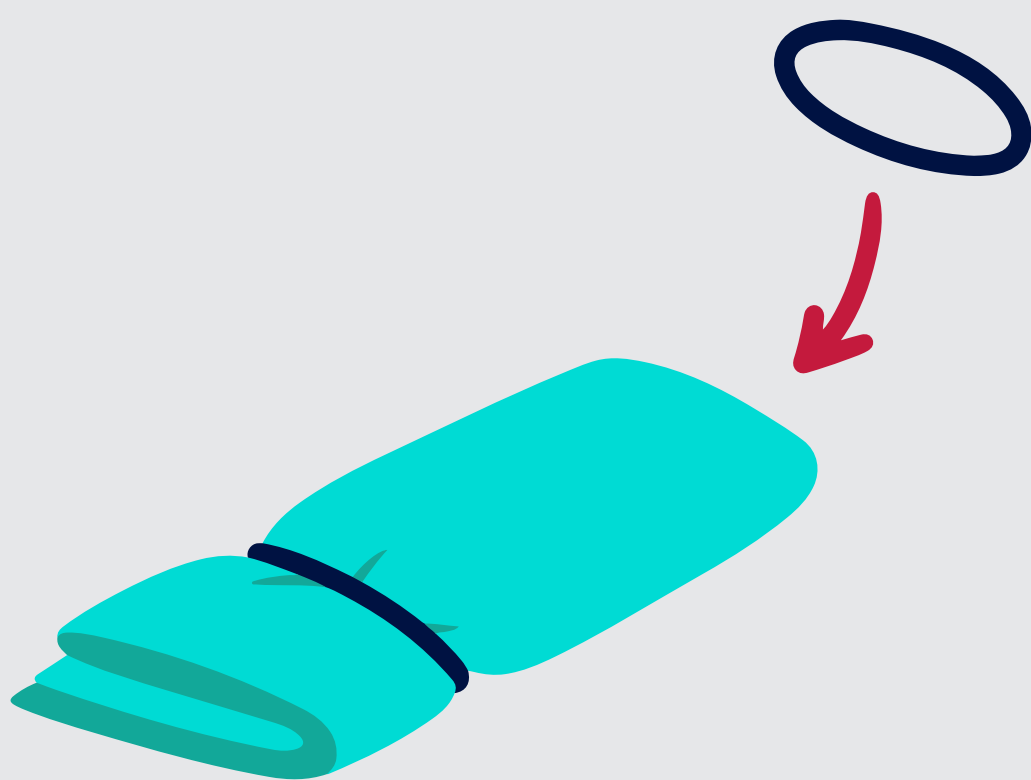
Step by step



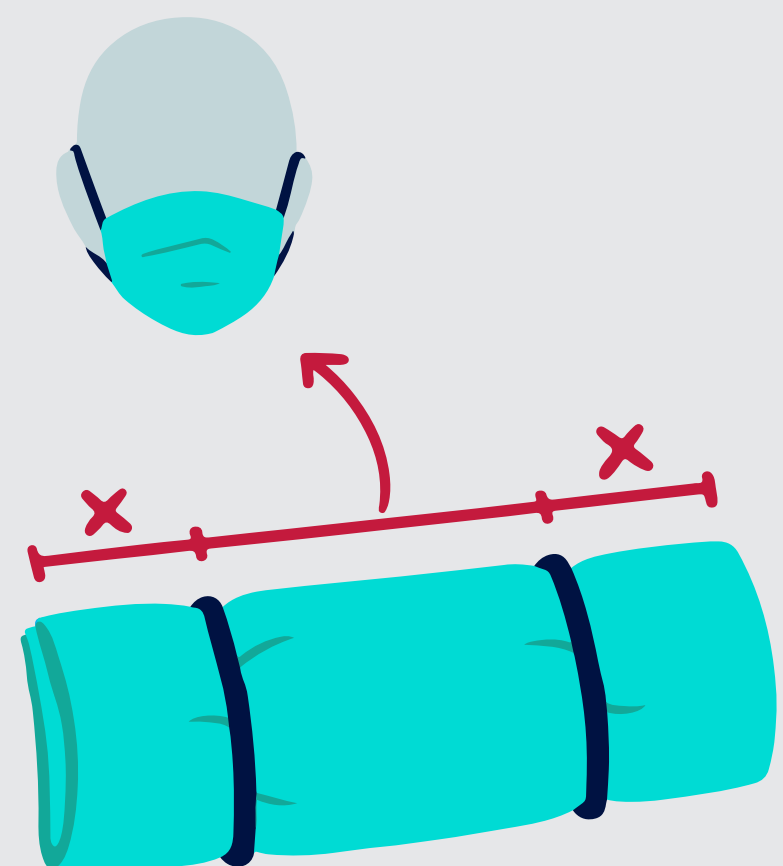
1 Lay your fabric out, then fold it in half.



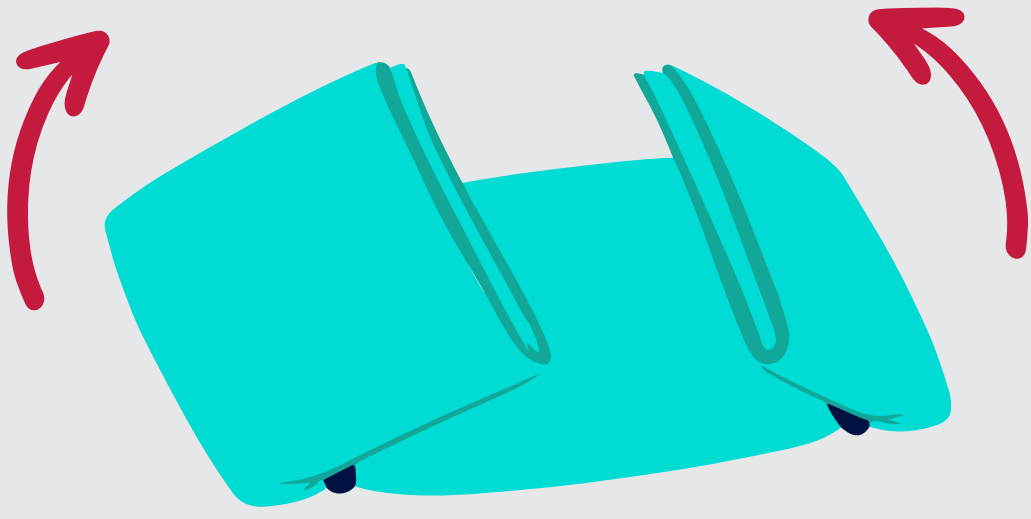
2 Fold the fabric in half again.



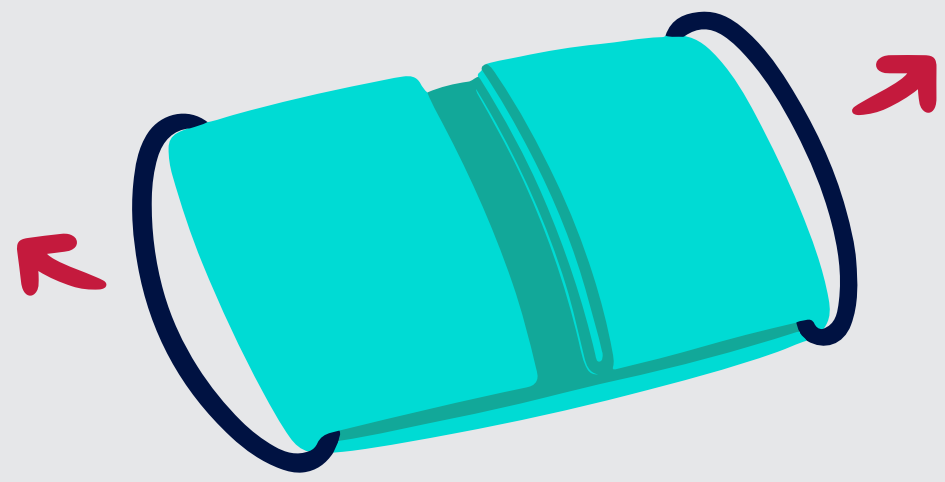
3 Slip one rubber band over one end of the folded fabric. Repeat with the other rubber band on the other side.



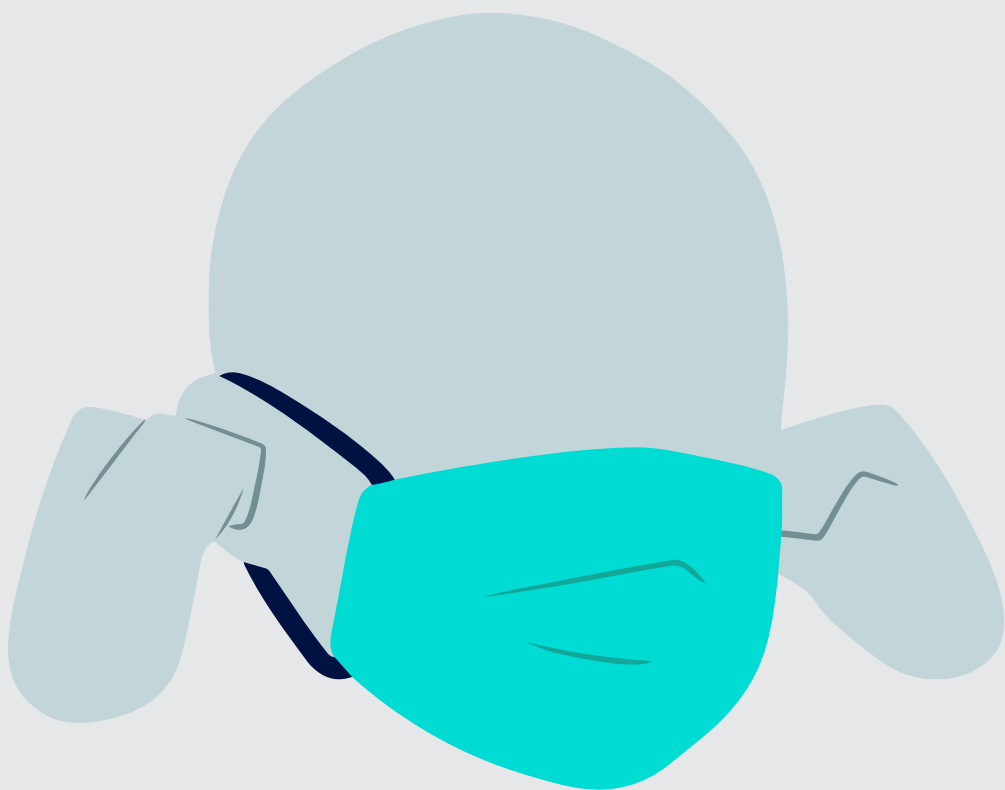
4 Adjust the rubber bands. They should be at the same distance from the edges, leaving enough space to cover your nose and mouth comfortably in a snug fit without any gaps.



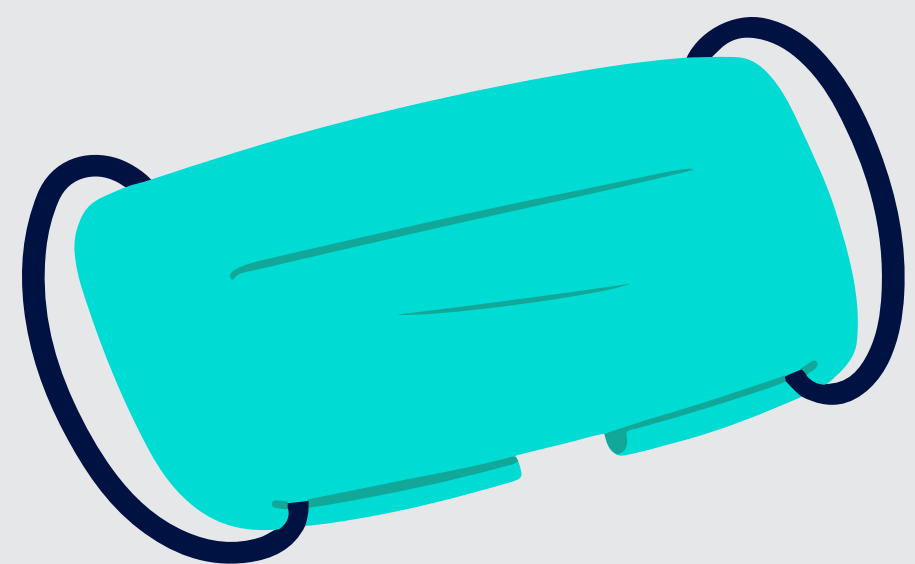
5 Fold the ends of the fabric to the middle over the rubber bands.



6 Adjust the rubber bands on each side so that they are tucked into the fold of the fabric. Your mask is done.



7 Place the mask onto your face, with the folds facing in. Loop the rubber bands behind your ears. Make sure your nose and mouth are snugly covered.



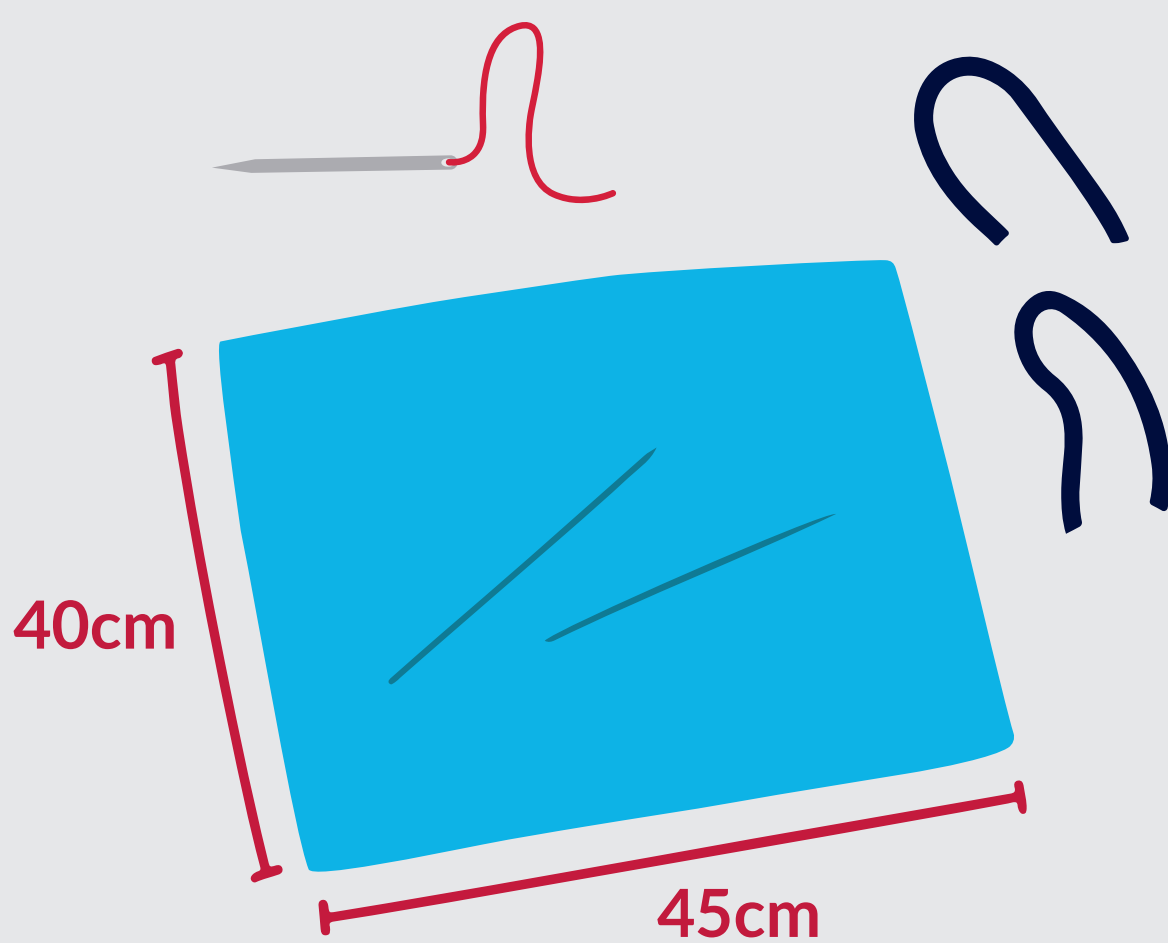
Done! Your mask is ready for use!

 **Find out more!**

Making a No-Sew Cloth Face Mask. Source: Brazil's Ministry of Health.

Available at: <https://bit.ly/3aeeMv7>

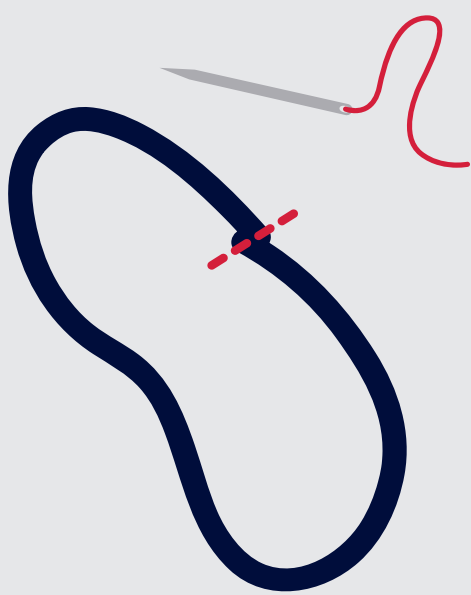
2 Sewn cloth face mask



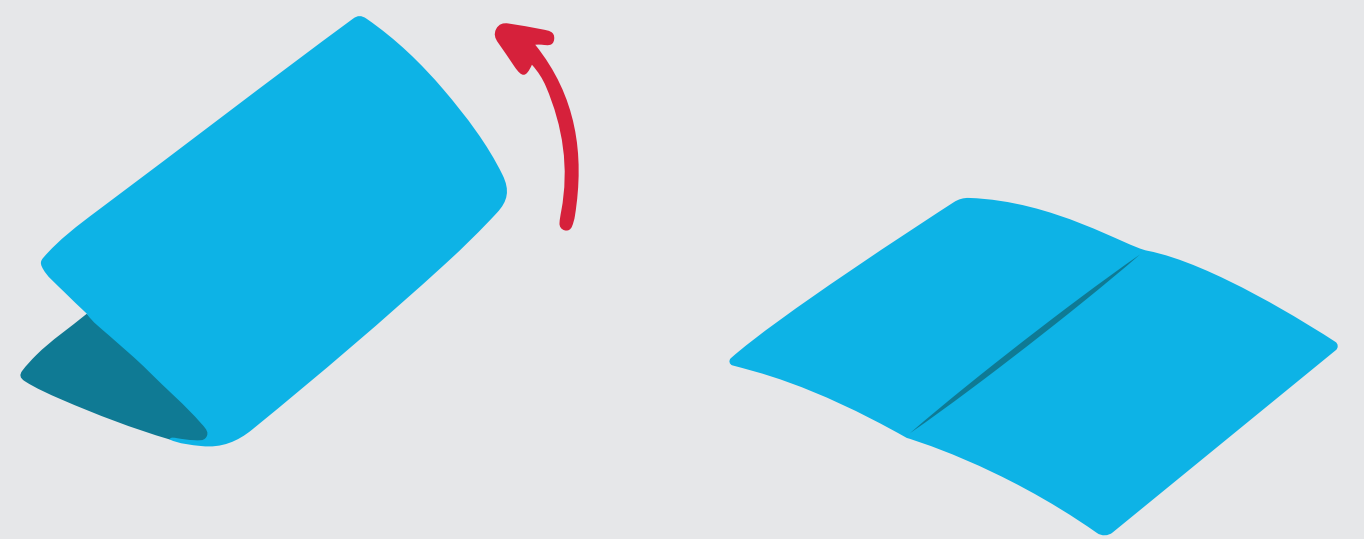
You will need:

One 45x40cm (18"x16") piece of fabric; two 20cm (8") elastic strings; a needle with thread. This mask can be sewn by hand or machine.

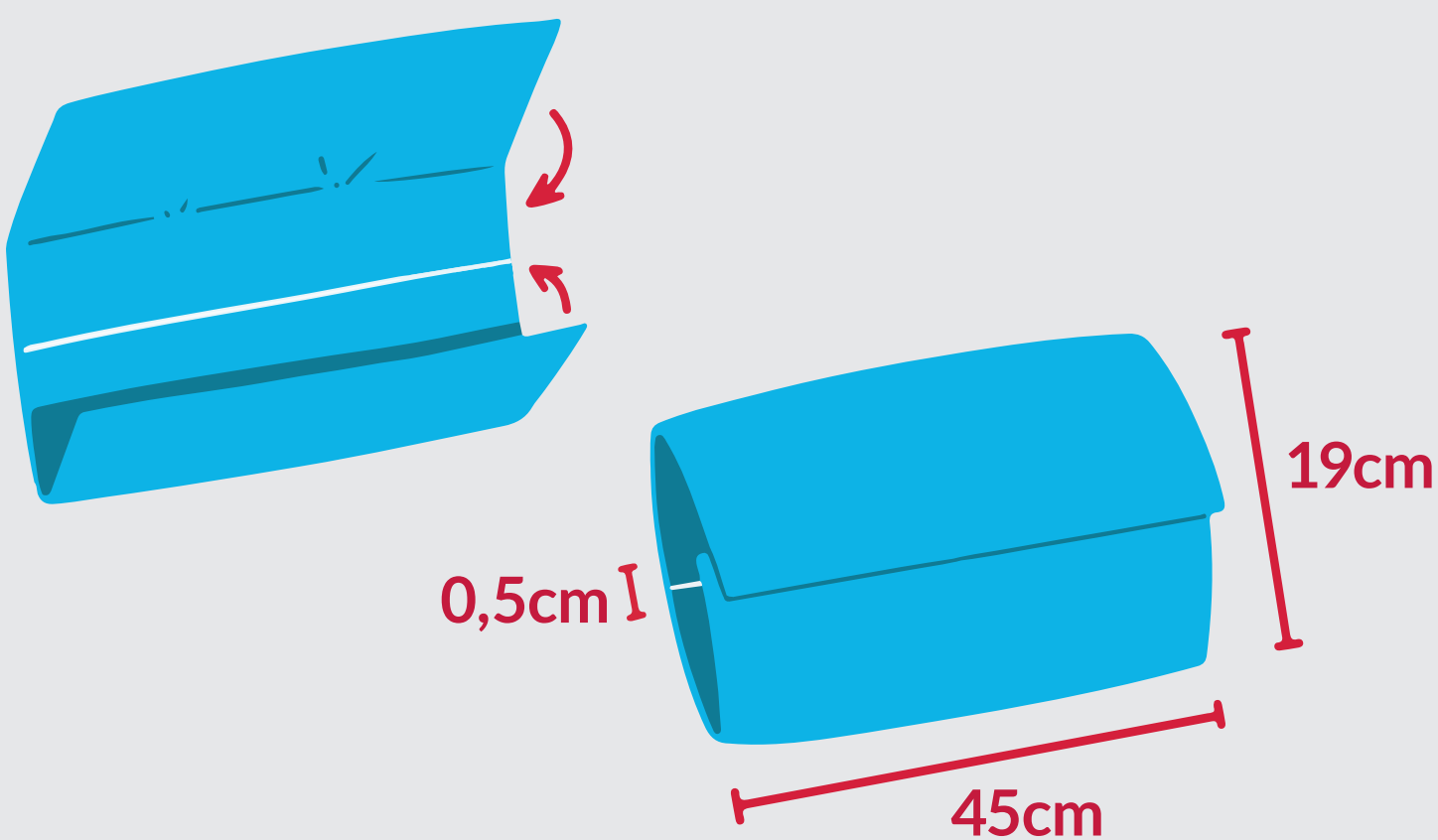
Step by step



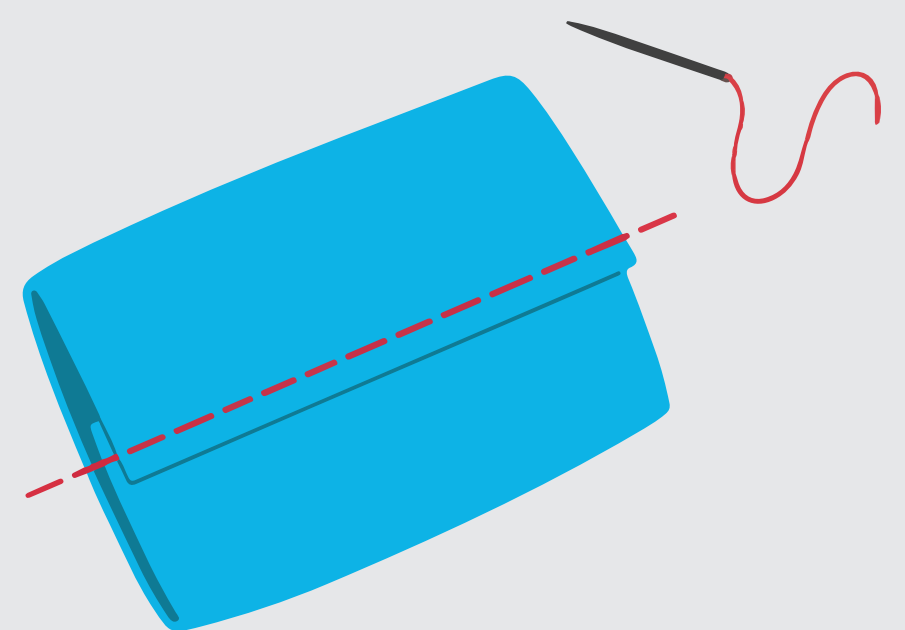
1 Sew each elastic string into a loop. Set the material aside.



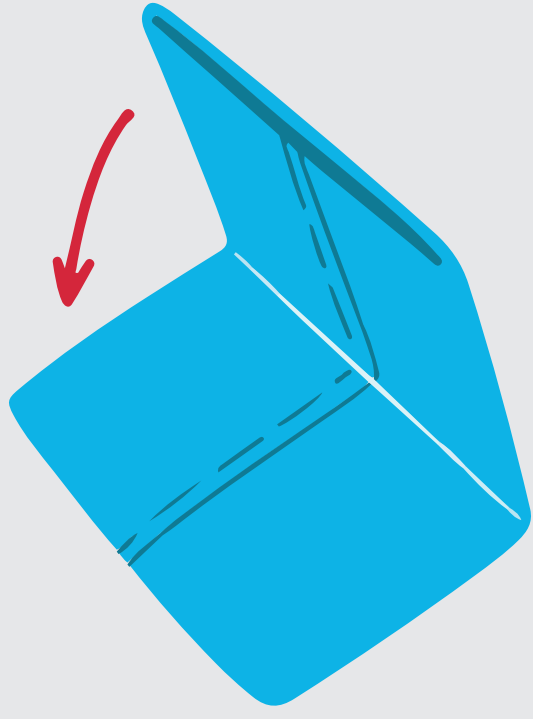
2 Lay the fabric out with the longer edge facing you and fold it in half. Make a crease to mark the fold.



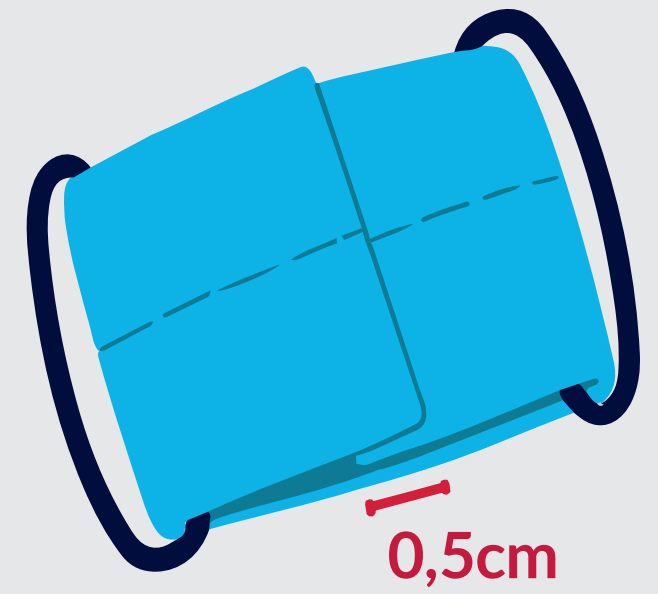
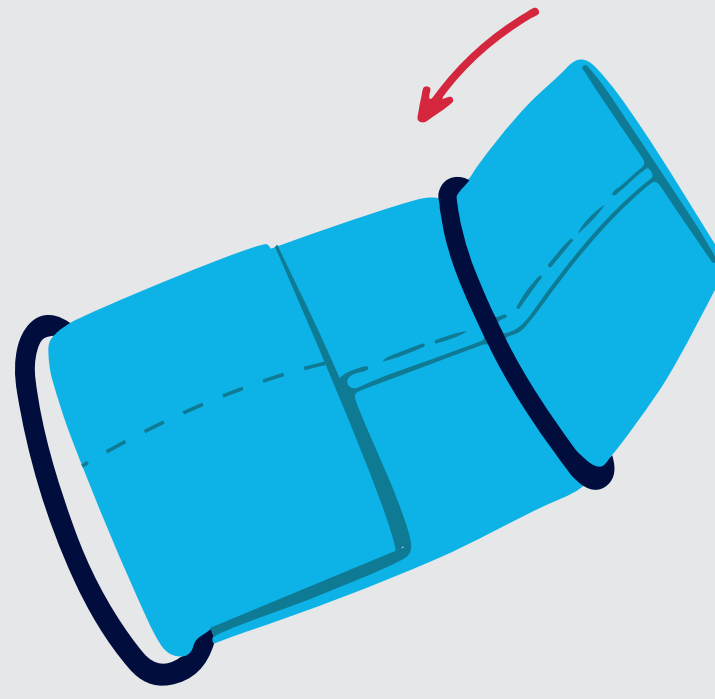
3 Spread the fabric again and now fold each end 0,5cm (0.2") over the crease made in step 2. You will now have a 45x19cm (18"x7.5") rectangle.



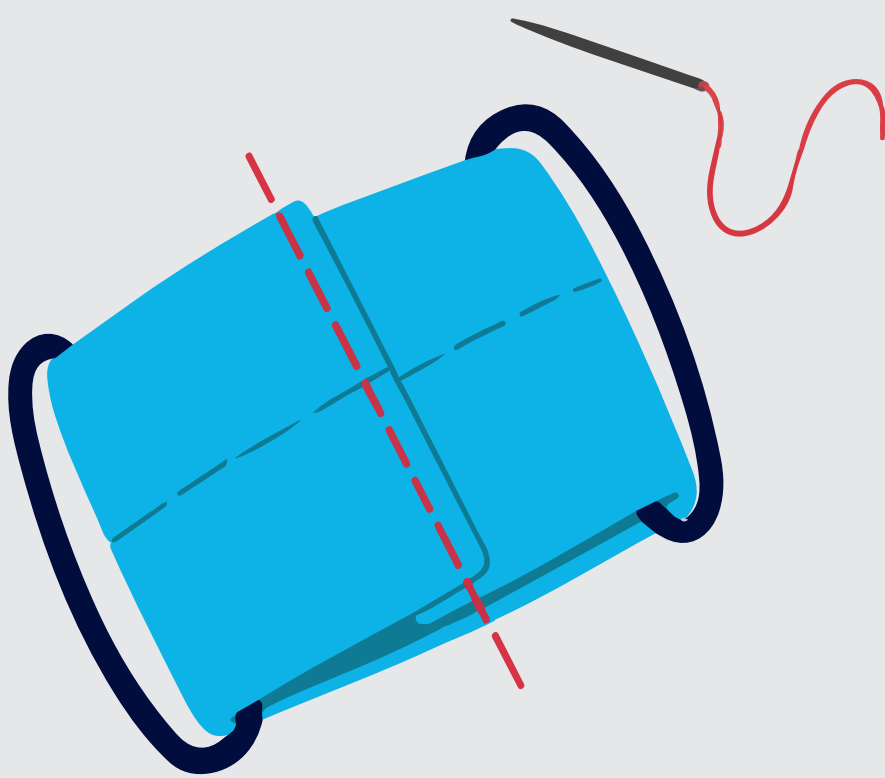
4 Follow the crease line from step 2 and sew all the layers together.



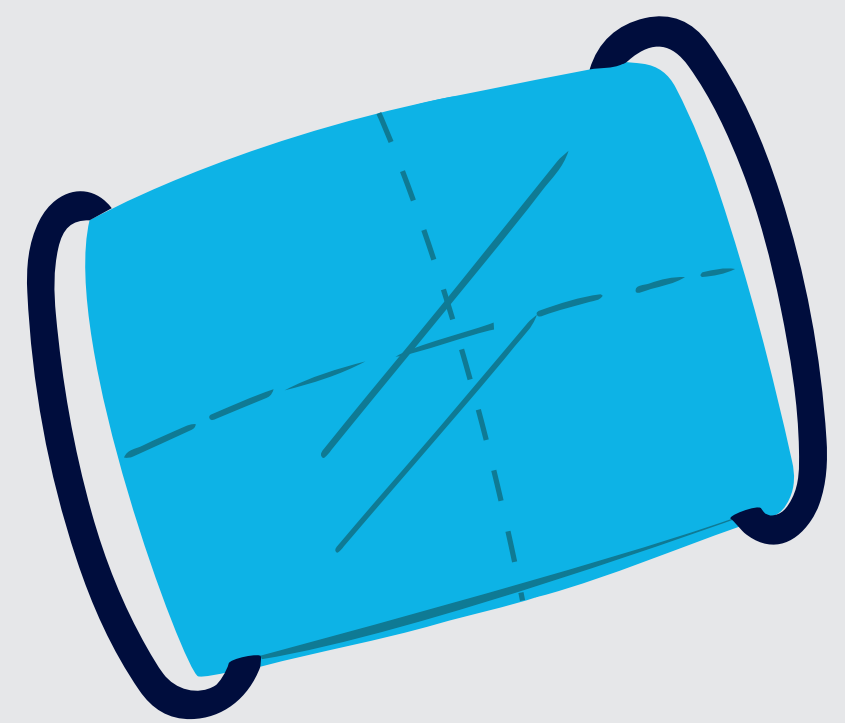
- 5** Fold the fabric in half to make a new crease. Spread the fabric.



- 6** Slip the elastic loops and fold the ends of the fabric over them, once again 0,5cm (0.2”) over the crease made in step 5. Do the same on both sides.



- 7** Follow the crease line from step 5 and sew all the layers together.



Done! Your mask is ready for use!



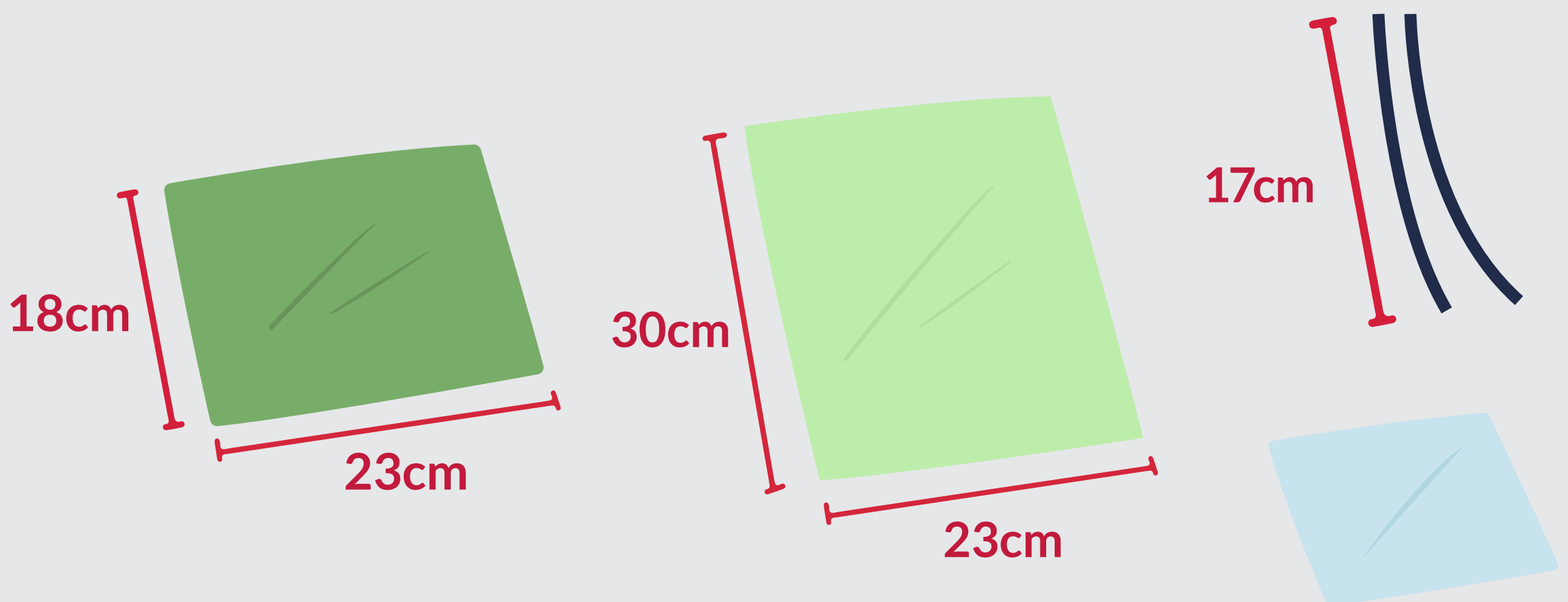
If the seam irritates your skin or “rubs you the wrong way” you can wear the mask inside out.

 **Find out more!**

Making a Sewn Cloth Face Mask. Source: Federal University of Paraná (UFPR). Available at: <https://bit.ly/2VeFfVg>

3 Face mask with pocket for a filter

You will need:



Outer layer: one 23x18cm (9"x7") piece of fabric.

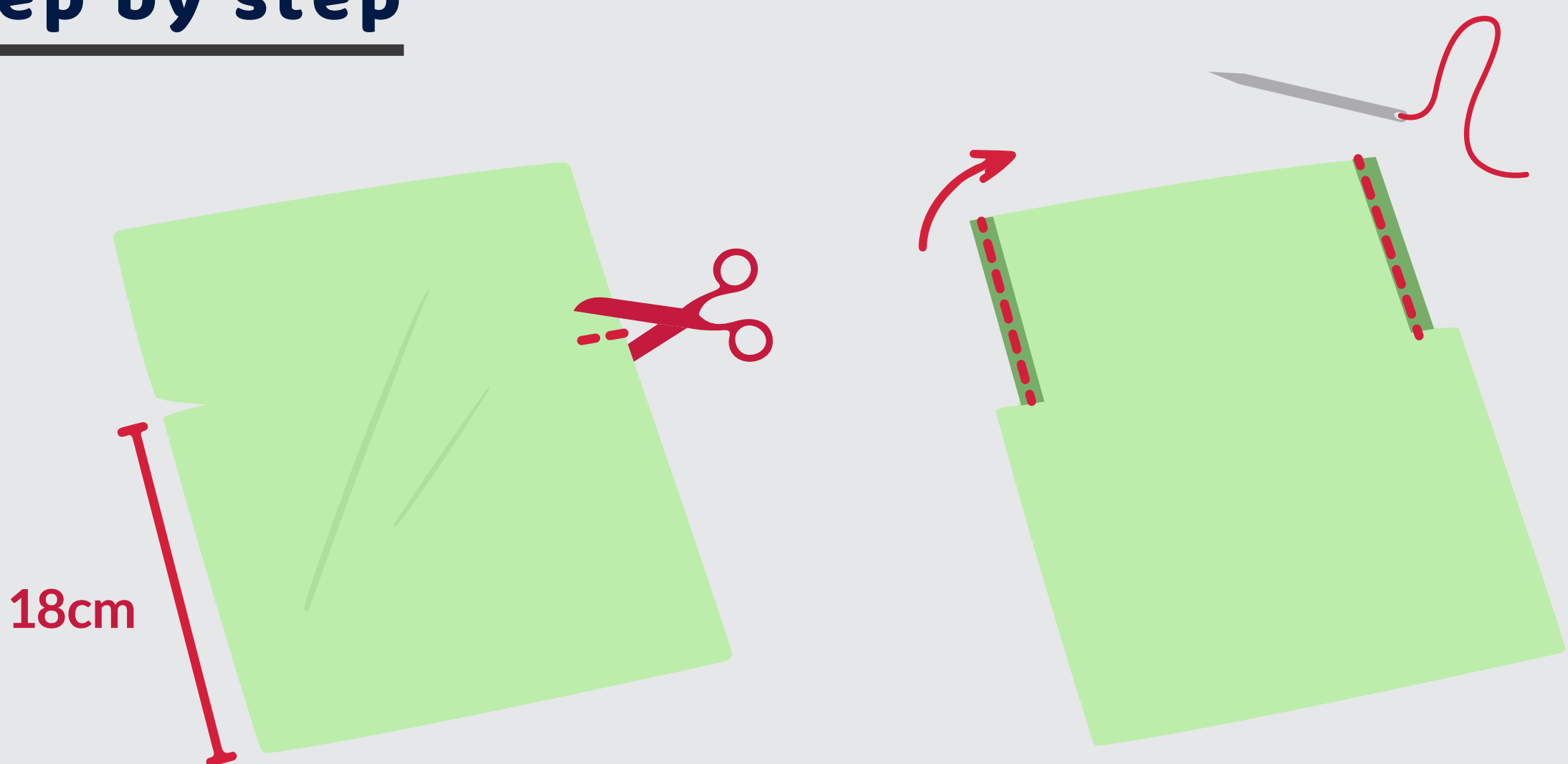
Inner layer: one 23x30cm (9"x12") piece of fabric.

Two 17cm (7")
elastic strings.

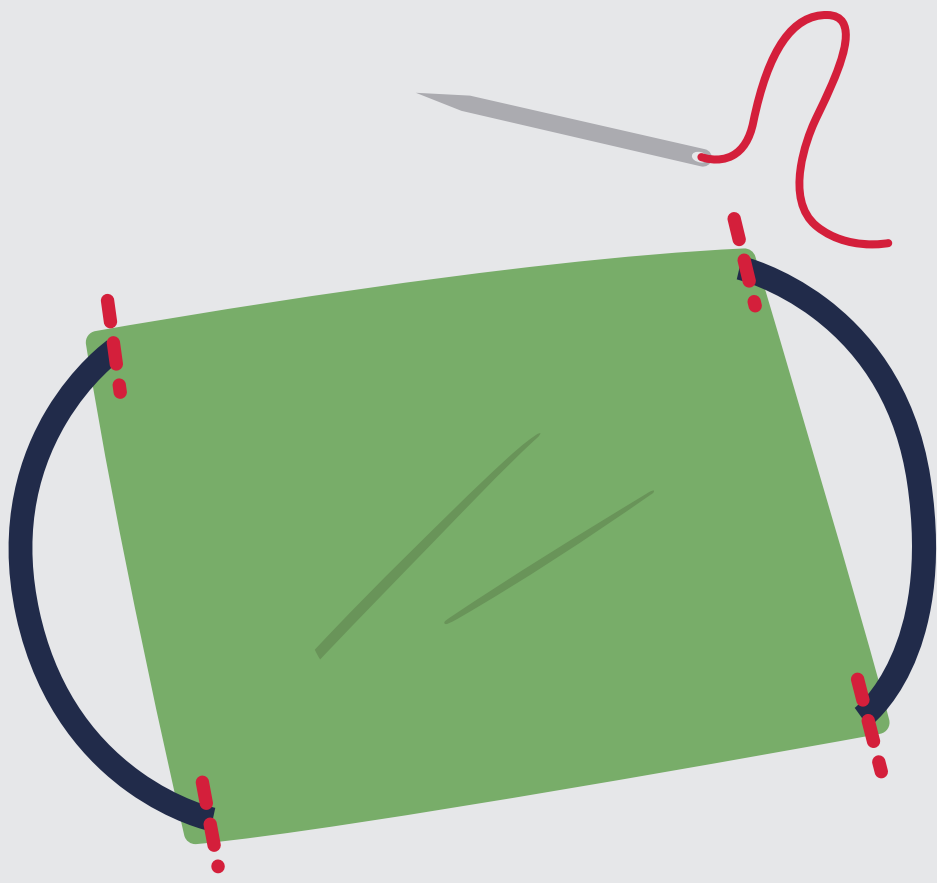
Filter: high absorbent polypropylene cellulose cloth, often sold in rolls, for example as a **reusable** kitchen wipe (check the label for the composition, since not all wipes are adequate).

A needle with thread. This mask can be sewn by hand or machine.

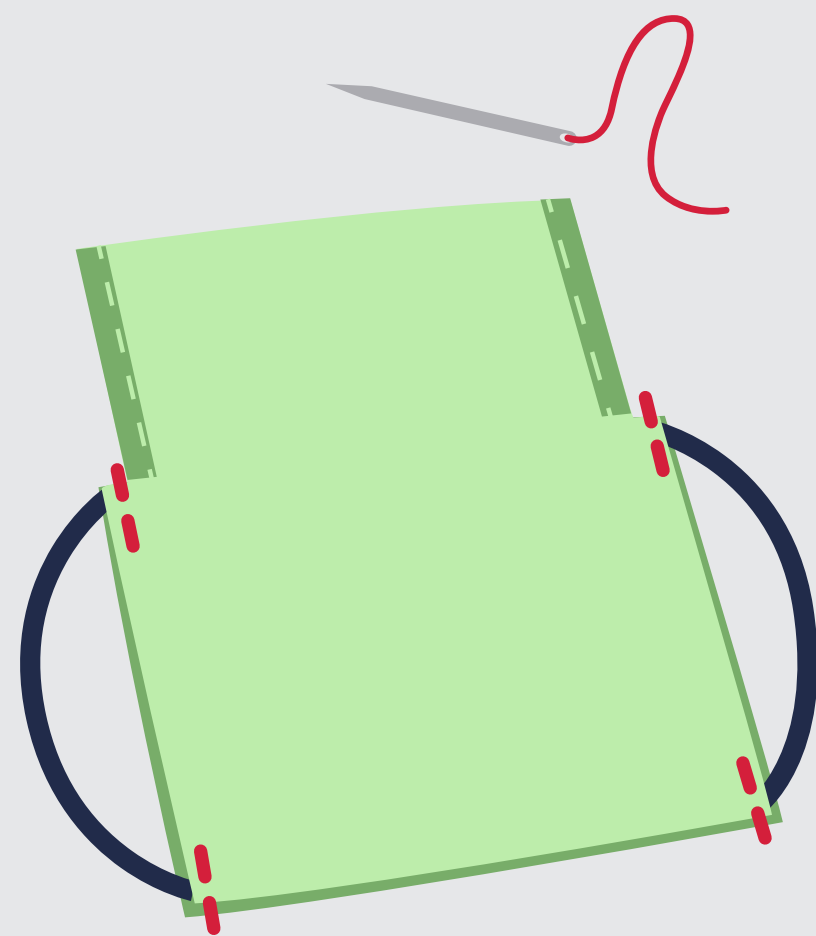
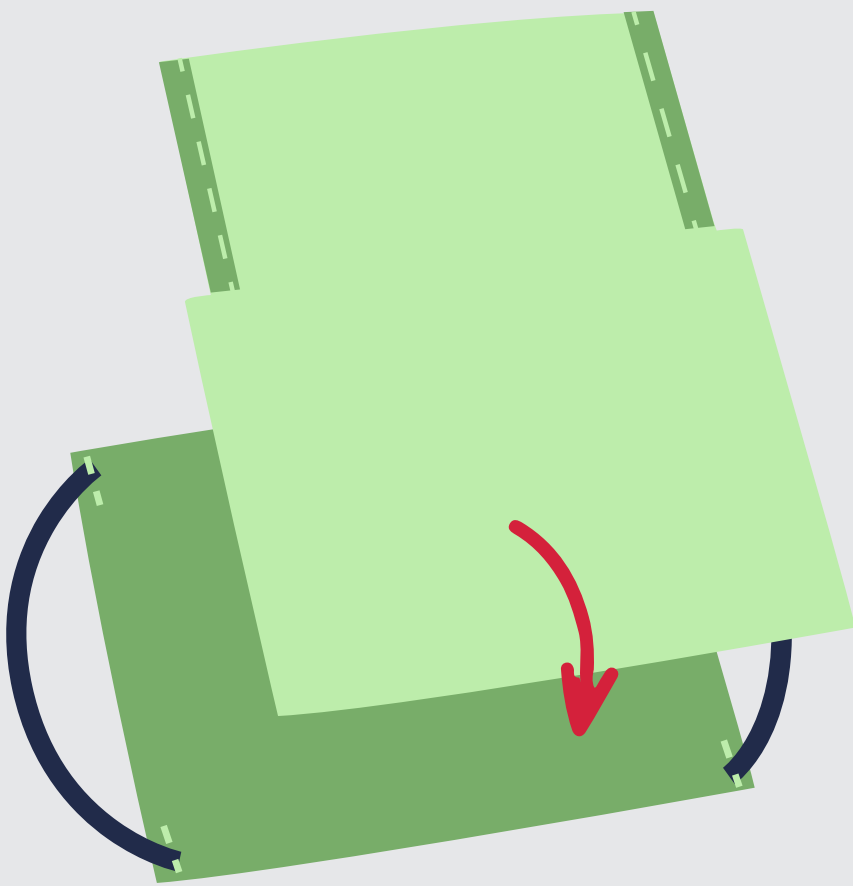
Step by step



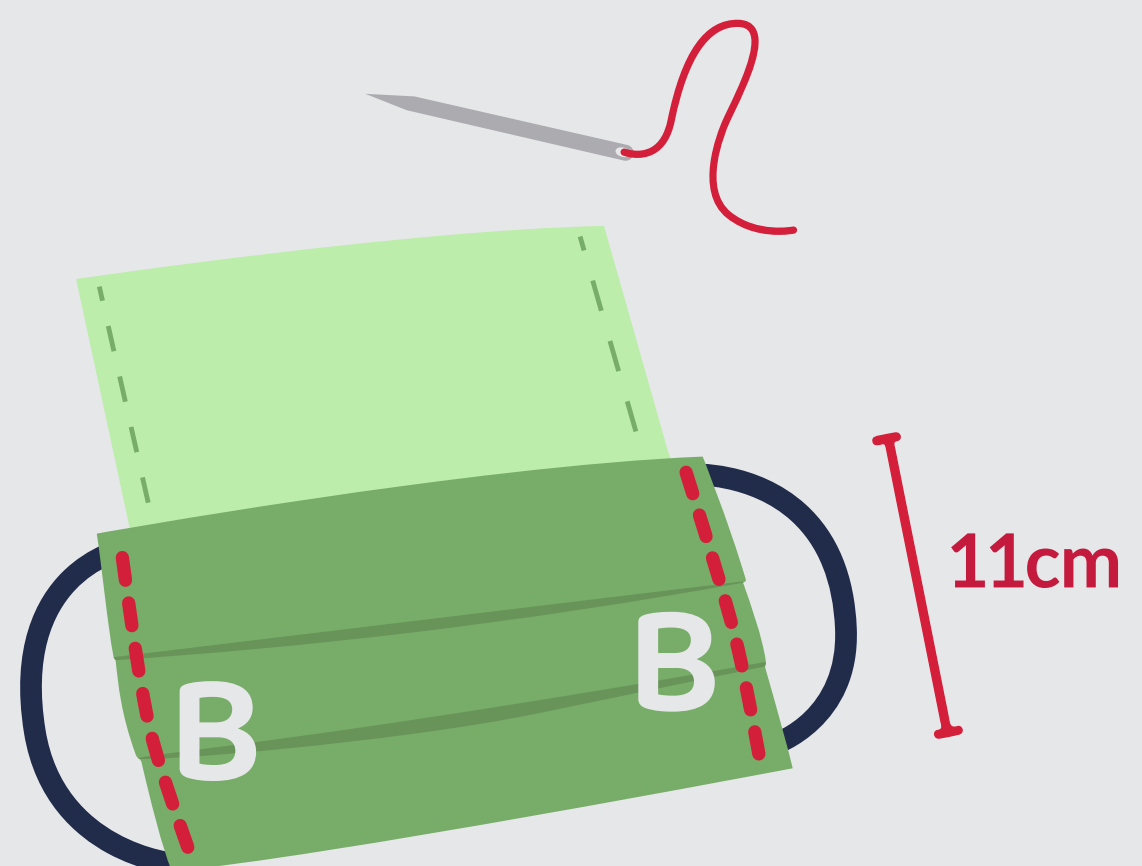
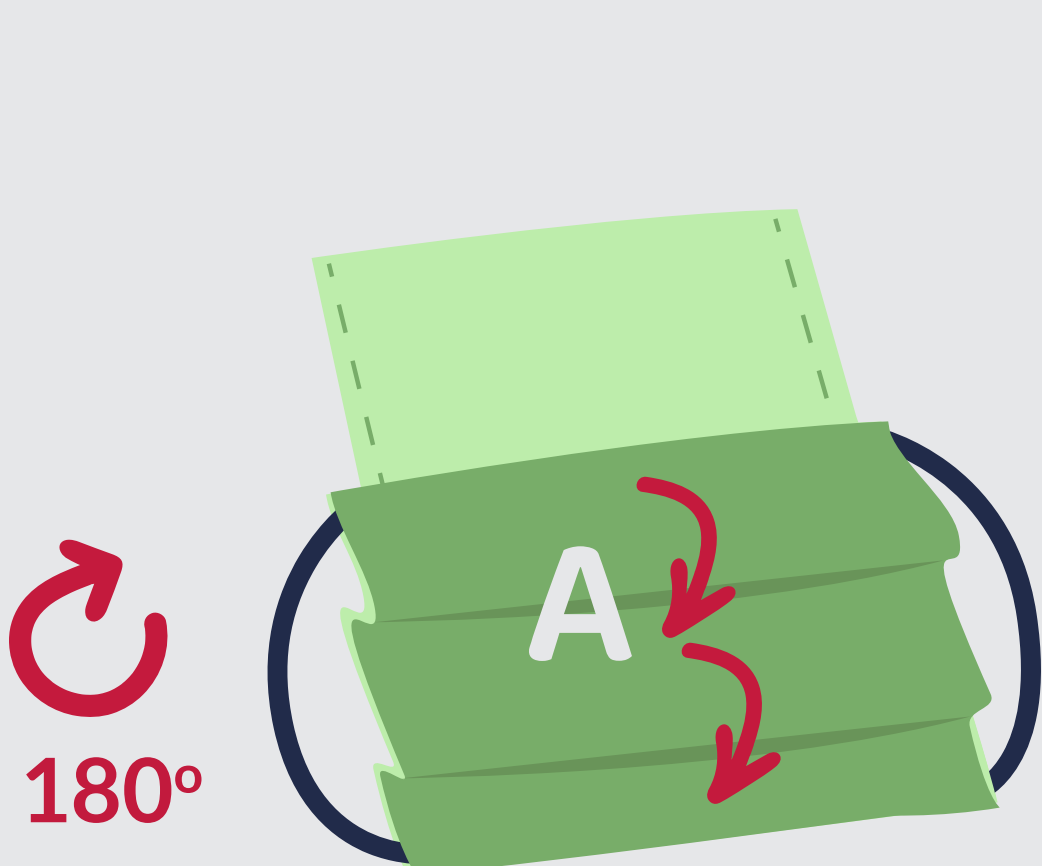
- 1 Lay the fabric of the inner layer out and measure 18cm (7") alongside the longer edge. Make two 1cm (0.4") cuts on the sides. Fold the shorter flaps in, sew and set aside.



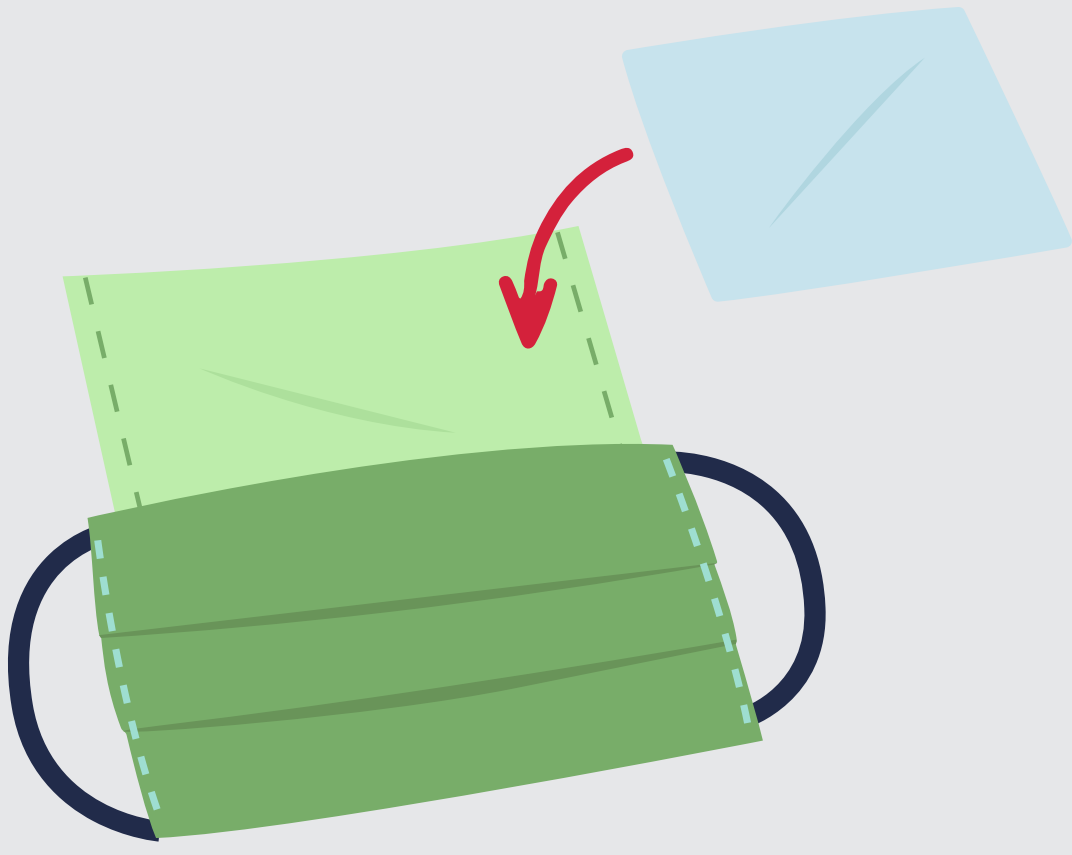
- 2** Lay the fabric of the outer layer out, sew one end of the elastic string to the top corner of the fabric and the other end to the bottom corner. Repeat the process on both sides (left and right).



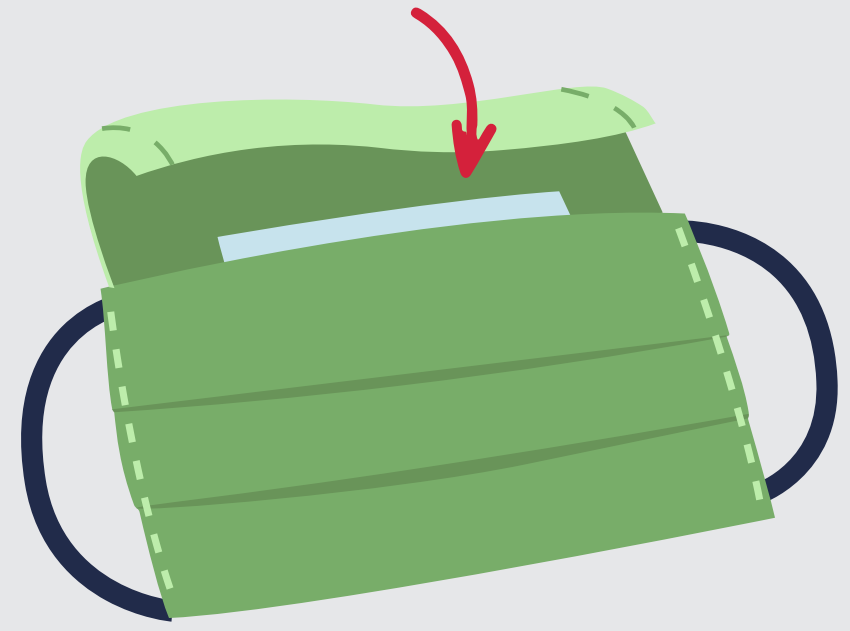
- 3** Place the inner layer over the outer layer. Align the bottom edges and sew the four corners together (where the elastic strings are).



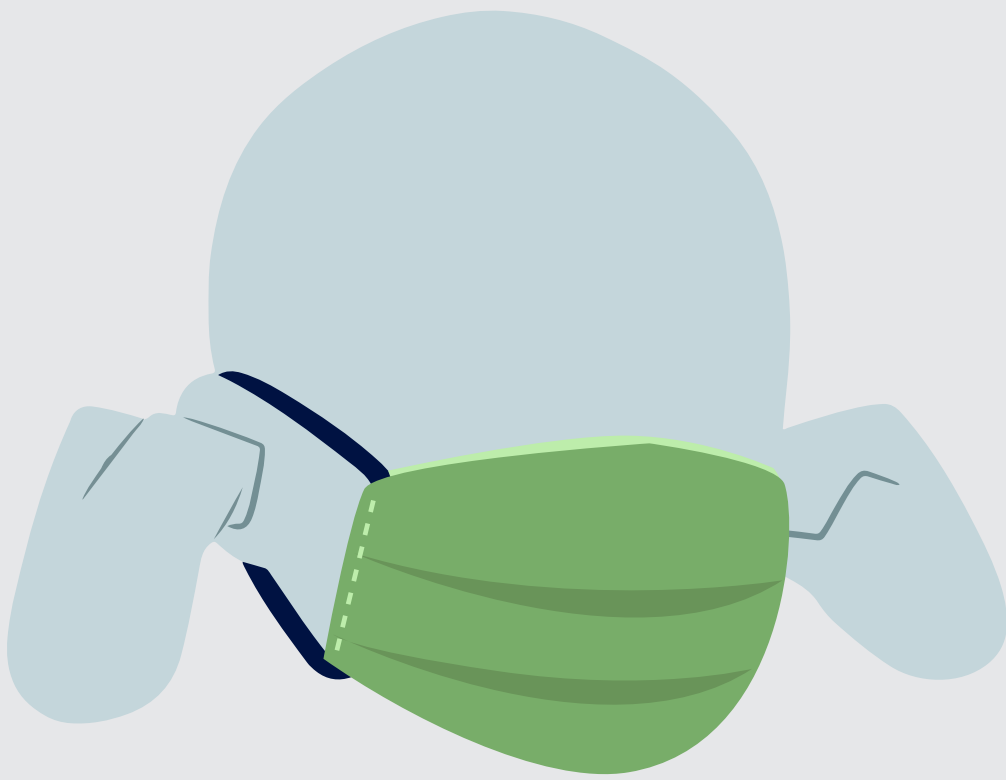
- 4** Turn the mask to the other side, with the outer layer up. Make two folds in the fabric (**A**) and sew the sides to secure them (**B**), like a pleat. Once you are done, the outer layer should have 11cm (about 4") from top to bottom.



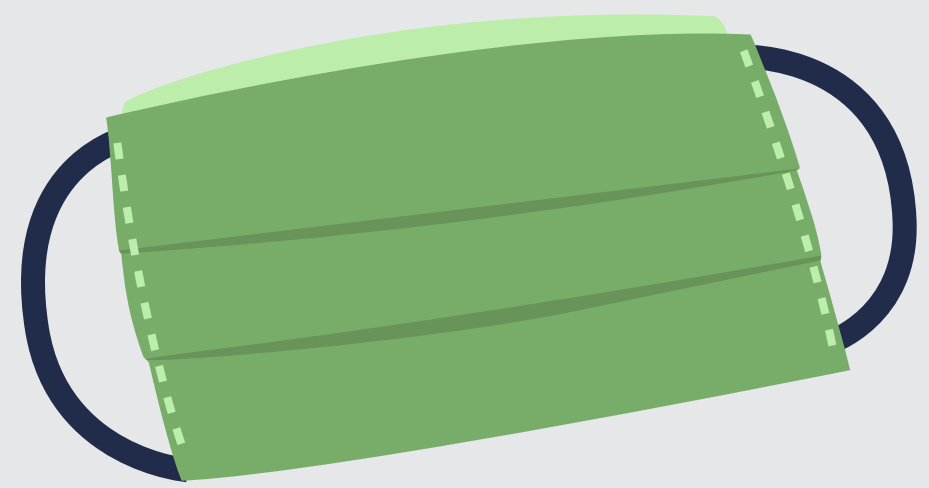
- 5** Place the filter in the space between the inner and outer layers.



- 6** Fold the remaining part of the fabric of the inner layer in, fitting it in between the filter and the outer layer.



- 7** Place the mask onto your face and make eventual adjustments to your face if necessary.



Done! Your mask is ready for use!

! Caution!

The filter must be changed after each use of the mask.

Find out more!

Making a Cloth Face Mask with Pocket for an Additional Filter. Source: Federal University of Santa Catarina (UFSC). Available at: <https://bit.ly/3exmPGC>

The background is a solid teal color with a repeating pattern of stylized, light-colored line art faces. Each face is wearing a dark-colored face mask. The faces are arranged in a grid-like pattern, with some having short hair and others having longer, wavy hair.

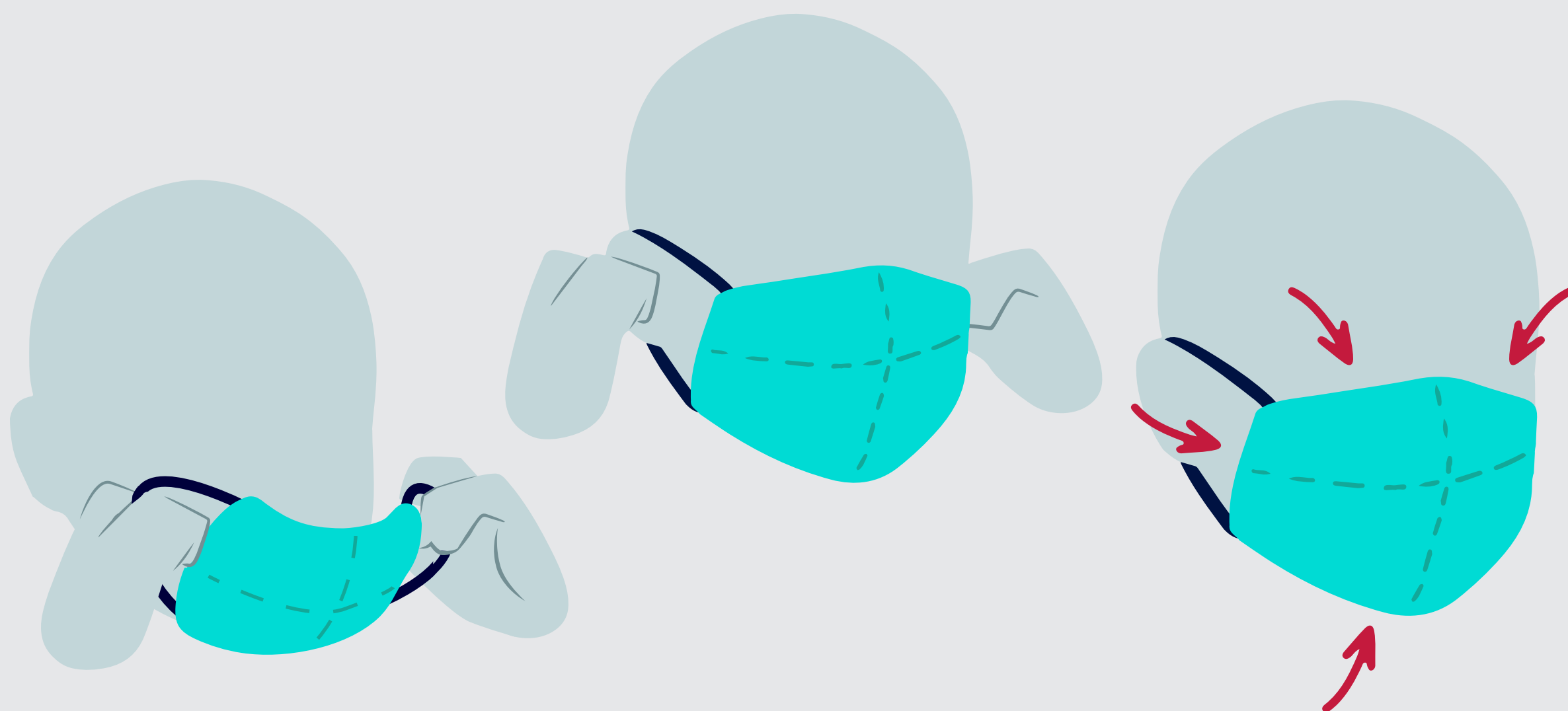
**HOW SHOULD I WEAR
MY HOMEMADE
FACE MASK?**

How should I wear my homemade mask?

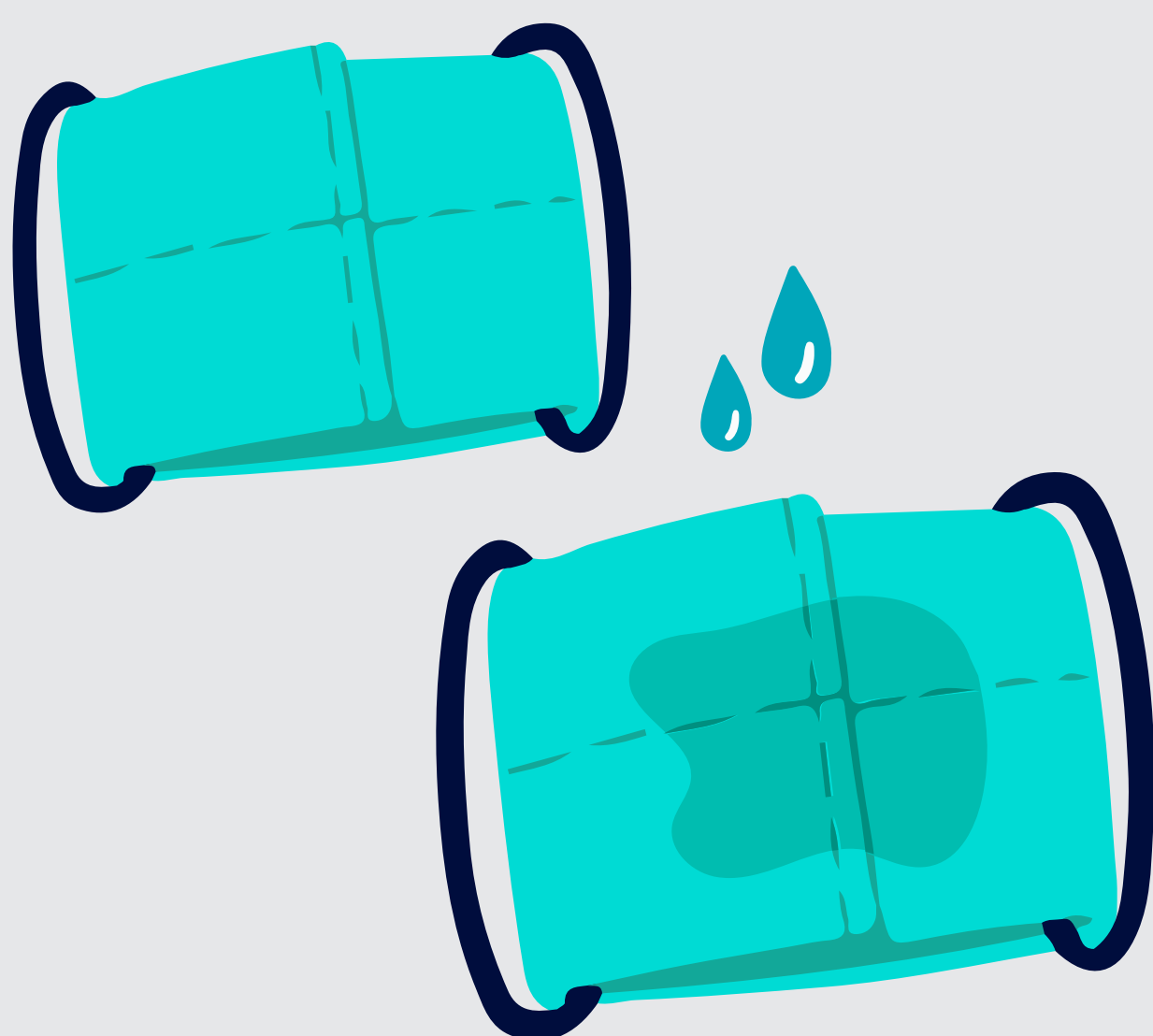
Learn how to wear your homemade face mask properly and enhance your safety.



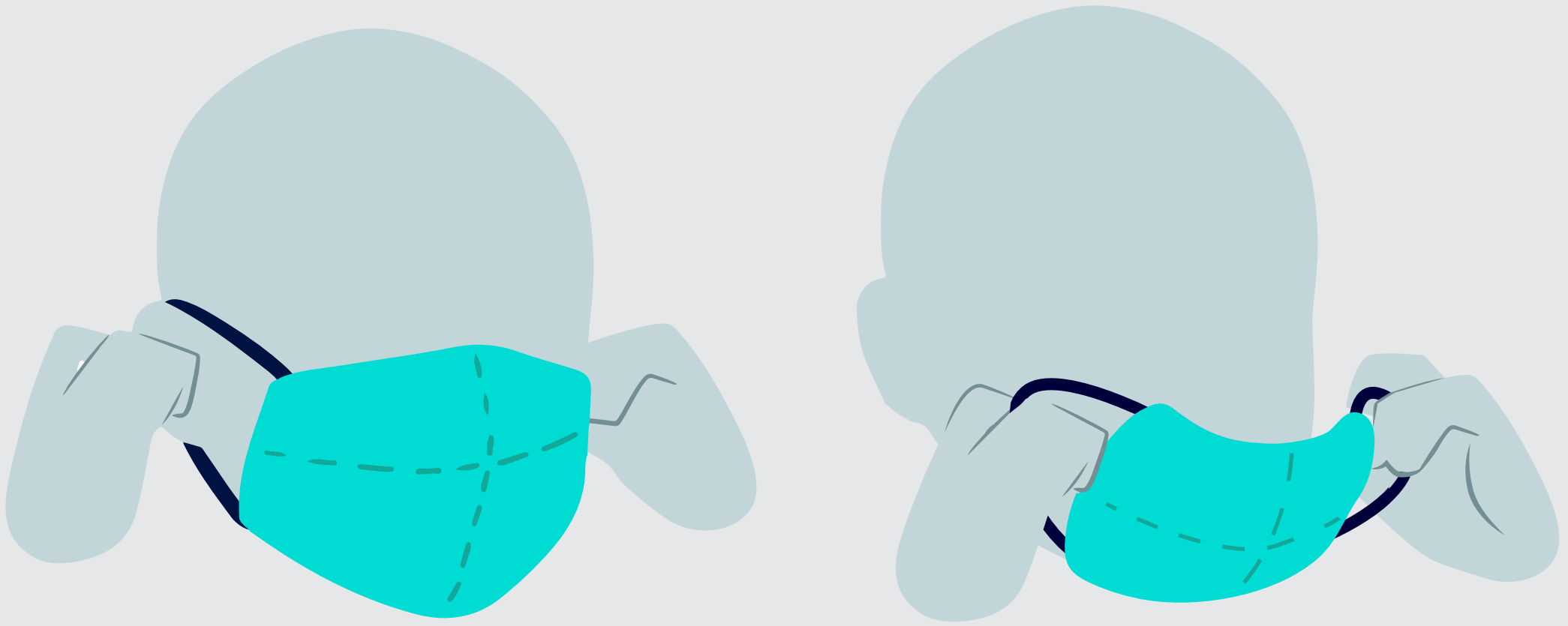
- 1** Before putting on your mask, wash your hands thoroughly with soap and water.



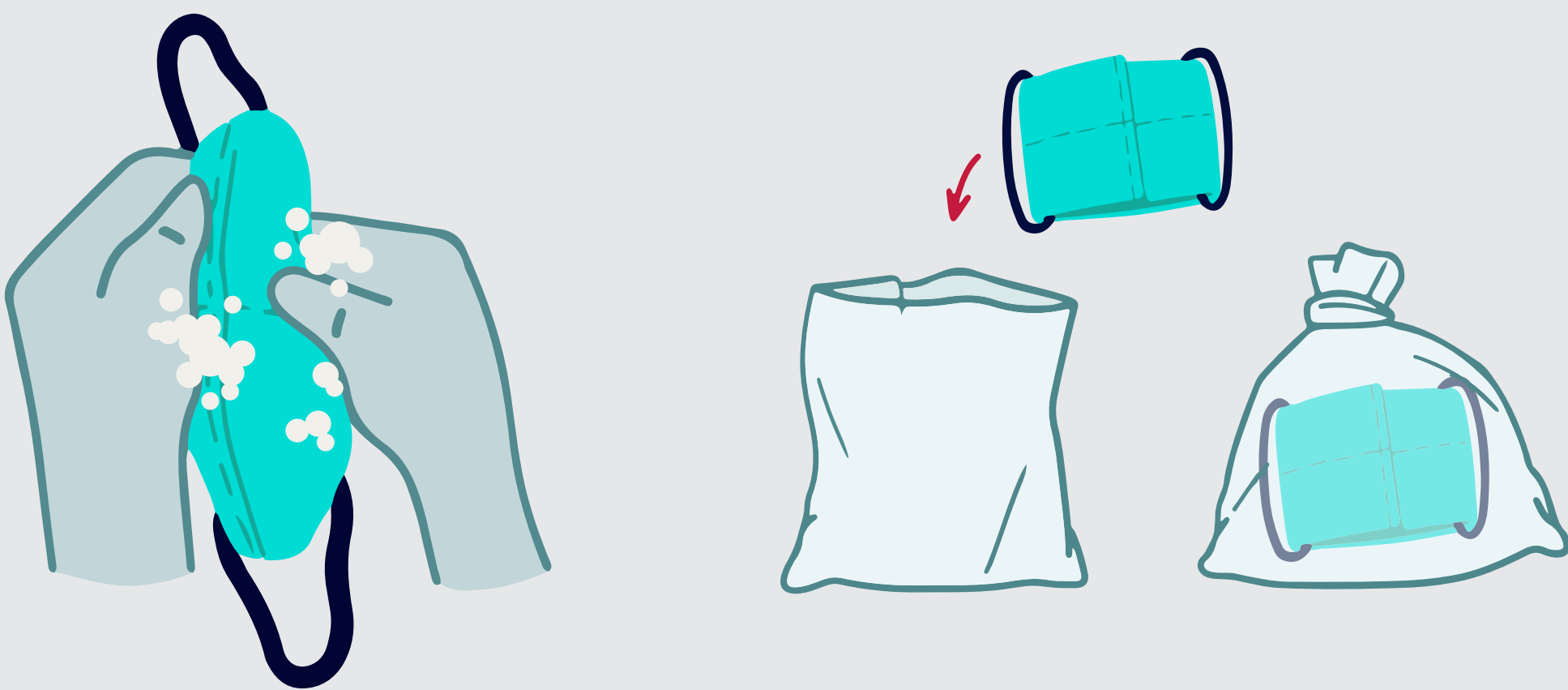
- 2** Place the mask onto your face, handling it by its ear loops. The mask should cover your mouth and nose, and there should be no gaps between its edges and your face.



- 3** Change the mask every 3 hours or whenever it becomes damp.



- 4** To remove your face mask, hold the ear loops from behind your ears. Lift them from your ears without touching the front of the mask.



- 5** Wash the face mask immediately after removing it. If you are away from home and cannot sanitize it immediately, keep it in a plastic bag solely used for this purpose.



- 6** Wash your hands with soap and water after removing your used face mask, or sanitize your hands with alcohol (70%).



Never share your face mask with anyone else.

Do not touch your face. Avoid taking your mask off and putting it back on, since frequent contact with hands and fingers may lead to contamination.

Remember: we are not as used to wearing face masks as health professionals are.

Discard your face mask if it is damaged in any way, such as having holes, tears, rips, or worn places, or if the ear loops become loose.



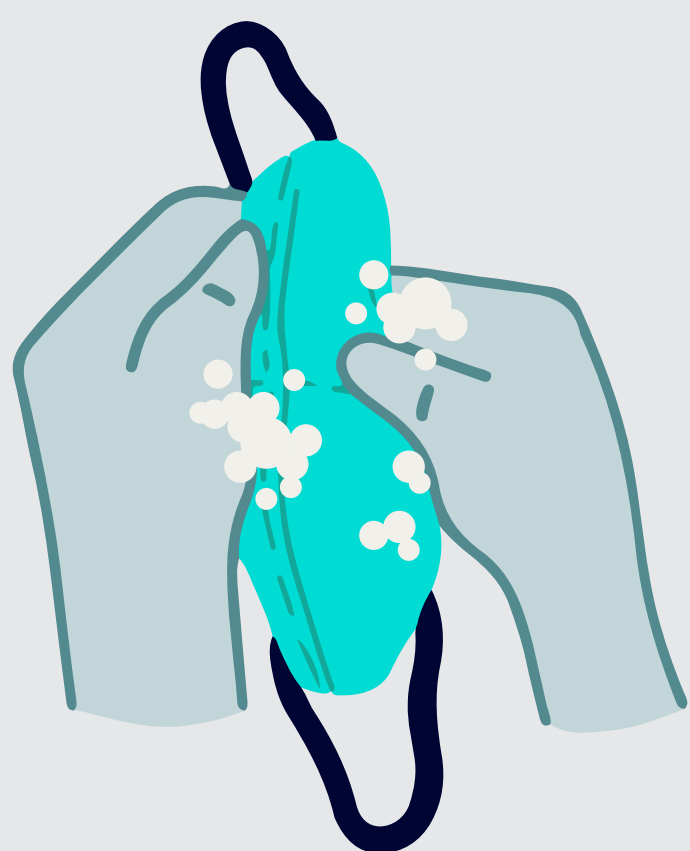
Always have more than one sanitized face mask available and stored in a plastic bag. That way, whenever you are wearing the same mask for an extended period of time or it becomes damp, you will be able to safely change it.

The background is a solid teal color with a repeating pattern of stylized, light-colored line art faces. Each face is wearing a dark-colored face mask. The faces are arranged in a grid-like pattern, with some having short hair and others having longer, wavy hair.

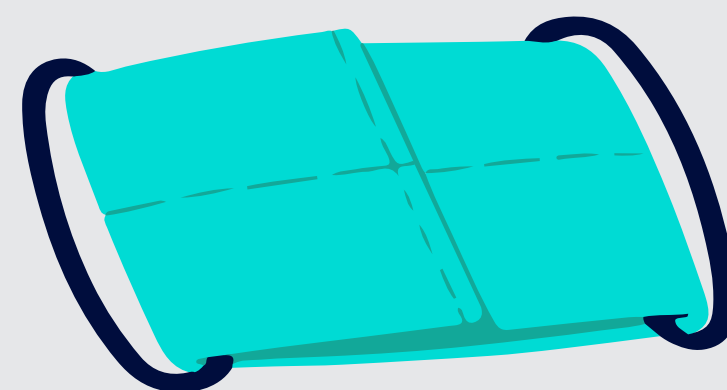
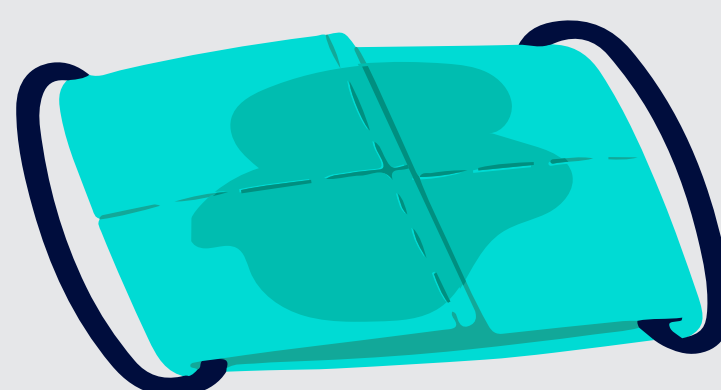
**HOW SHOULD I CLEAN
MY HOMEMADE
FACE MASK?**

How should I clean my homemade mask?

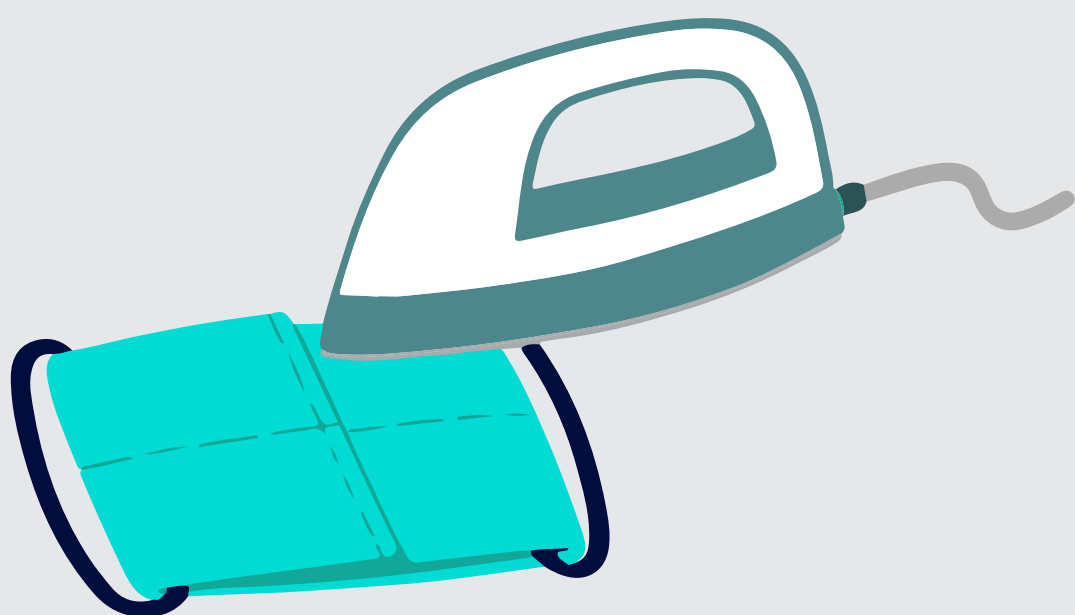
There are different ways of cleaning used masks. We list below the step by step most advised by health experts:



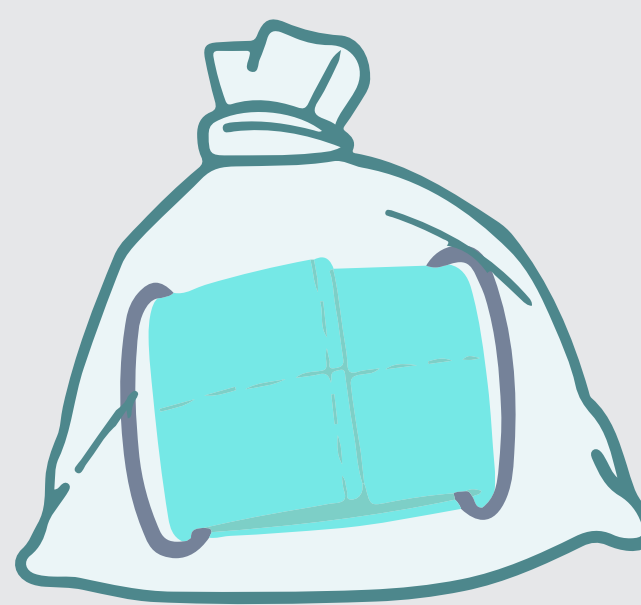
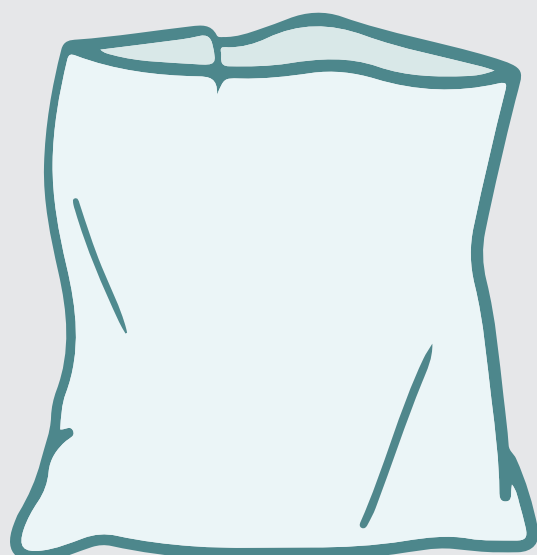
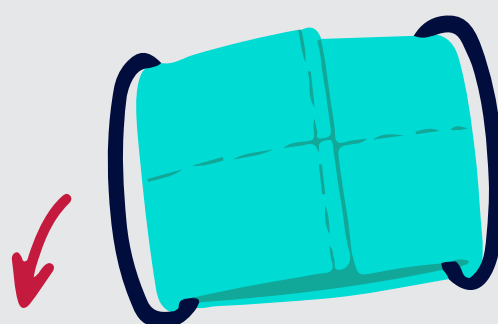
1 Wash it with neutral soap and water, scrubbing it well.



2 Let it dry in sun or in shade. Masks need to be **completely** dry before reusing.



3 Iron your mask at a high temperature.



4 Store your sanitized mask individually in a dry, clean plastic bag used solely for this purpose. Make sure it is tightly sealed.

Important Information

- **How often do I have to wash my face mask?** Always after each use.
- **Is it possible to wash it in a washing machine?** It is not ideal since the washing machine may damage it (mask may become loose or lose shape, its fabric may wear out, etc.), which would require more frequent replacements.
- **Is it possible to boil the mask?** Boiling does not completely replace the previously mentioned procedures to clean your mask, but it may be an alternative in cases where washing it with soap and water is not possible. Be aware that boiling your mask may damage the fabric and shorten its life.

Caution! *Be careful when handling the mask in boiling water to avoid burns and other accidents.*

Attention! *Do not disinfect your masks in dishwashers, microwaves or pressure cookers. It may cause accidents and damage your appliances.*

- **Can I wash masks made of paper or nonwoven fabrics?** No. They must always be discarded after use, as washing reduces their effectiveness.

**By wearing a mask, you will protect yourself
and everyone around you!**

#MasksForAll

#FightingForHealth

#HomemadeFaceMask

#DesignUfpr

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This version of the booklet made possible by

The Academic Publishing Advisory Center (Centro de Assessoria de Publicação Acadêmica – CAPA) of the Federal University of Paraná (UFPR).

Developed by

UFPR Rede COVID19 - Integrated graphic design actions

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