



# Making 3D Masks

By the Western Pennsylvania School for Blind Children

With the assistance of [Make the Masks](#) and local coordinator Tom Joseph

## **Printing the Files**

- Two .stl files need printed per mask and are located at [www.makethemasks.com](http://www.makethemasks.com)
- We suggest PLA material, but others such as ABS will work
- Takes 3-6 hours and varies printer to printer
- Designed to be printed without supports
- Print an array if possible, source file is included if one would like to modify
- Designed for Adult Large, scale to 90% or less for smaller masks

[Mask templates](#) can be found [here](#).

## **Making the Mask**

- Sand around the edge touching face with 200 + sandpaper
- For added seal, a self-adhesive gasket material (Weatherseal “D” Profile 5/16 inch wide found at a local hardware store) can be applied on the inside edge of the masks
- A second gasket is applied underneath the first gasket around the nose area - 7 in. seems to work best
- Fasten elastic cord to the attachments and adjust to desired tension
- Elastic chord, string, straps, or any variation can be used as ties

## **Placing Filter**

- Existing clinical masks can be used as filter patches (surgical masks for surgical, and N-95 masks for better protection) by cutting them into 2.5 in squares, can get 6 filters from one mask
- Place filter material on the inside of the mask and fasten by pushing holding ring and filter together into space

## **Aseptic Technique**

- These masks are reusable, but each person should have their own
- Masks can be cleaned and disinfected by soap and water as well as disinfectant agents
- Practice good hygiene by washing hands before and after changing filters and removing mask
- Clean mask often, change filter often

[Making of the mask demo.](#)

## **For additional questions or assistance, contact:**

- For distribution related questions, contact local coordinator Tom Joseph at [tom@epiphanyenv.com](mailto:tom@epiphanyenv.com)
- Visit [www.makethemasks.com](http://www.makethemasks.com) for more information and further instruction
- If you’re wondering how to get started, reach out to WPSBC Equipment Technician Molly Eads at [gildersleeve-eadsm@wpsbc.org](mailto:gildersleeve-eadsm@wpsbc.org)

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