BASE’s 3D Printed Safety Masks

The BASE program at Bunsold Middle School has been using the 3D printers to make safety masks for those in need who don’t have them. Currently, the printers can only print the small size, but fit can be adjusted. Mask prototype is made of a contoured mask and filter housing. No special tools are required for building. Users will supply and install the elastic/cord. These are not a replacement for N95 Masks. For contact information, visit Brandy.spurgeon@mevsd.us. For more instructions https://engineering.rowan.edu/_docs/3dmask/3d-printable-mask-instructions-v3.pdf

Instructions for building and putting on the mask:

1. Submerge mask (Not filter) in hot water (60 C/140 F) for 1-2 minutes
2. Remove and quickly mold to face (This can be done multiple times if necessary, mask takes about 30 seconds to cool)
3. Attach elastic/cord through eyelets and trim excess to adjust for individual use
4. Insert 2 layers of 2 X 2 sterile non-woven sponge into filter housing
5. Lay 4 X 4 sterile non-woven gauze over filter housing, and snap housing into mask (Should feel tight)
6. Trim excess gauze and discard

FOR DISINFECTING THE MASK:

1. Push filter housing out of mask and discard sponge and gauze in the filter housing
2. Disinfect all mask components with disposable germicidal wipes, isopropyl alcohol or bleach solution (Recommended application for Sani-Cloth Bleach Germicidal Wipes: 1 minute; Sani-Cloth Prime: 3 minutes)