Handmade DIY Face masks:

The donated facemasks are comprised of:
1) A double layer of 100% cotton fabric;
2) A fused layer of non-woven interface which helps to repel moisture and water and particulate matter;
3) Elastic tie for each ear or 2- cotton ties used to tie mask around face and neck;
4) Masks are washable and re-usable. NOTE: elastic ties may alter after washing.
5) Adjust to fit

A hand-fashioned mask can provide a good fit and a measurable level of protection from aerosol. Ambient microscopic dust and other aerosols are present in the air in many workplaces. The mask may be uncomfortable or ill-fitting due to variations in material, assembly, facial structure, and handling. No easy, definitive, and affordable test can demonstrate effectiveness of use.¹

Nonwoven textiles which have been proven to be a potential media for the diffusion of Nanoparticle Respiratory Deposition (NRD) was used as the interface material in these handmade masks. A nonwoven textile is a fabric composed of fibers that are randomly oriented and held together by means other than weaving or knitting. Nonwoven textiles can be composed of a variety of materials including natural fibers, such as cotton, and manmade fibers, such as polyester. The collection efficiency of nonwoven textiles depends on the textile characteristics of weight, fiber diameter, material thickness, and material fiber density.²

The interface material/filter used in these handmade masks are non-woven and was fused between two outer layers of cotton meant to repel water, moisture and particulates. The product used was from Pellon Consumer Products. Recommended by Joann’s (how to make a face mask).³

NOTE: N95 respirator masks are the only type that can protect you from acquiring SARS-CoV-2. Any other variety, including surgical masks and homemade, are not proven to be effective at blocking the virus, which can remain in the air for up to 30 minutes.⁴

It is believed that adding filters to homemade masks will help protect against transmission. However, evidence is lacking that the masks will conform to the face tightly enough to form a strong seal, or that the filter material inside will work effectively. Standard surgical masks, for example, are known to leave gaps.

Wearing any type of mask could supply individuals with peace of mind on the theory that some physical barrier is better than none at all. Others might feel ill and want to provide a barrier from their coughs and sneezes.⁴

References:
²Vosburgh DJH. Park JH. Mines LW. Et al.
³How to make a mask. www.Joann.com
⁴Homemade facemasks may not block coronavirus like N95. March 30 2020. www.cnet.com

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