

# Mask Up

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Covid-19 has caused approximately 2,885,401 recorded deaths across the globe. Governments across the globe have installed mask mandates in order to slow the spread of this virus. This project was to find the most effective qualities in a mask to prevent the further spread of the virus. Research indicates a tighter fabric weave in masks corresponds to decreased spread of viral particles. The goal was to test the validity of these findings. Each variety of mask was tested by being placed on a blower then was placed at a certain distance from a candle. The leaf blower would then be activated and attempt to extinguish the lit candle. The mask and blower would then be moved up by increments of 30.5 cm until the lit candle was extinguished. The blower would be repositioned to the previous mark, and then moved forward in 1.6 cm increments until the exact distance the candle went out was located. Results showed the most effective mask was not determined by fabric tightness but more consistent on how many layers a mask contained. In the future it would be necessary to test more mask. Furthermore, research concludes that mask effectiveness may vary due to water droplets.