1. I believe I have the math and science and engineering knowledge needed for this project. Math knowledge is extremely minimal, only needed for measurements, and for science I only am required to understand the properties of copper and how plastic is affected by washing machines. I have plenty of knowledge in engineering which is what allowed me to come up with this design in the first place.

* My original plan probably would not hold against time. Before the mask was not washable due to the copper inside slowly being destroyed from the washing machine. But by adding a sleeve to replace it you can wash the mask separately with no issues.
* The materials should hold against time just fine simply because their purpose doesn’t involve anything stressful. It’s only a mask to hang on your face. The part of the mask on the outside is just fabric so it’ll be just fine in the sun and thanks to it’s design it can be washed for continuous use.
* My design requires no heat at all, heat will be generated from the mask being on your face but it doesn’t affect the design in any way. The only part that can be considered moving is the mask when you breathe and talk and it wont move a whole lot thanks to the nosewire down the middle and thin copper inside. No real loads except on the straps and it isn’t really transferred it just hangs there.
* No Energy required at all.
* No chemical or biological transformations involved in this at all.
* No electronics involved.

1. Yes we have met our ethical responsibility for the design of this product.
2. 

* So building starts with stitching of the mask, We use wool. The wool is extracted from sheep and then spun into fabric. The raw wool is then cleaned and picked off twigs and vegetables stuck inside. The wool will have various baths including alkaline. Wool is fed through a carding machine and turned into slivers. Wool is then spun into fabric and finally put through a miller and turned into a dense felting matter.
* Copper is mined from oxide and sulfide ores. The refining process depends on the ore, though for every ore type mined copper must first be concentrated to remove gangue(unwanted materials). The ore is first crushed and powdered into a ball or rod mill. After crushing it is concentrated by froth fluctuation.
* The copper film is inserted into the mask and the mask is sealed up. Velcro straps are attached to the mask for it to be worn.

1. There really should be no issues with the wool section of the masks development except for potential air pollution from the factories.

* Meanwhile the copper section can have an effect on the environment because it requires mining and potentially stripping the land. Some pollution can also come from the factories and other waste from the chemicals used to create the copper.
* No issues will come from stitching it together and adding the velcro either.

1. The mask will help immunocompromised people a lot and keep them safe from germs in the air. The mask is also far superior to a normal mask since it doesn't just catch germs but kills them too. This mask can help significantly lower the spread of covid.