

MASKS TO THE TRASH

Sofía Serrano, Ana López, Erika Zhu, Lucas Ruiz, Cayetana Roca, Giulia Duma.
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SPAIN

Presentation: Hello we are Ana, Cayetana, Erika, Sofía, Lucas and Giulia from IES Gerardo Diego and today we are going to talk about our project: MASKS TO THE TRASH

INDEX: First of all, we will do an introduction about the problem we are going to talk about, then we are going to talk about the problems of the masks and how those affect the world. After that we will talk about our objective, the design of our idea and finally our opinion.

Introduction: We usually see masks as a solution for covid, but we decided to change our perspective, if we talk about pollution masks are not a solution, but a problem.

Problems of the masks: Masks were not really used before covid, but now they are and after using them, people have to throw them away, but, here is the problem, people do not know where to throw them. This causes the masks to contaminate the streets and many more places, it also usually affects animals because they unconsciously eat the thread of the mask or sometimes the entire mask. Here we have some photos of the results of these. As we can see in this graph, how the mask has been contaminated and how it rises during the months. Approximately 0.75 units per person and per day, leading to additional emission. We can see examples such as the penguin or a bird with its legs tied with the mask and the last one we can see an ocean full with covid materials.

OBJECTIVE

HOW: We decided to change this by putting some special bins for masks, so people don't throw them in the wrong bin. After throwing them, our idea is to bring them to a recycling center.

WHERE: For now we wanted to start putting the bins all over Pozuelo in the parks, near the schools, on the streets...

EXPECTATIONS: Our expectations about this project are that mask bins become something normal that you can easily see or use in your daily life.

DESIGN: Now we are going to show the design that the bins will have, showing it with a drawing that Ana made. As you can see the bins will have the draw of a mask in the center of the bin, to indicate they are used for throwing masks, we don't have the exact measurements of the bins yet, but we wanted them to be big so a high number of used masks will fit on it easily, it would have a rounded shape, and also a rounded cover for open it from there.

Material: now let's talk about the material of these mask bins, our idea is to make them with used masks as a way to recycle them, masks are made up of polypropylene, we searched at what point the masks will be stuck together so we will be able to use them for making the bin, also as they will have viruses so we also searched at what point these viruses will die. The point of fusion of polypropylene is 160 degrees and the point of temperature at which the viruses die is 92 degrees for 15 minutes, knowing this I put 20 masks in the oven at 200 degrees for 20 minutes, and here is the result, as you can see is really resistant.

OUR OPINION: We decided to put special bins because most of the time people does not know where to throw masks and they throw them in the wrong bin, without them even realizing they are contaminating, and we wanted to change that.

End: Thank you for listening, we hope you liked our ideas in order to decrease pollution.

Design of the bin:



Material:

Step by step of how we recycled used masks:

1. We used the oven, oven paper, a metal tray, something heavy and flat, and used masks.
2. We took the strings and the metal of the masks off, and after that, we put the oven at 200 degrees.



3. Then, we put the oven paper around the used masks and put them on a tray.
4. Carefully we put a heavy and flat object on top of it, this is useful so the masks won't move and it will make it flat.



5. Finally, we put it in the oven for 20 minutes and we had a resistant block of used masks as a result.

