

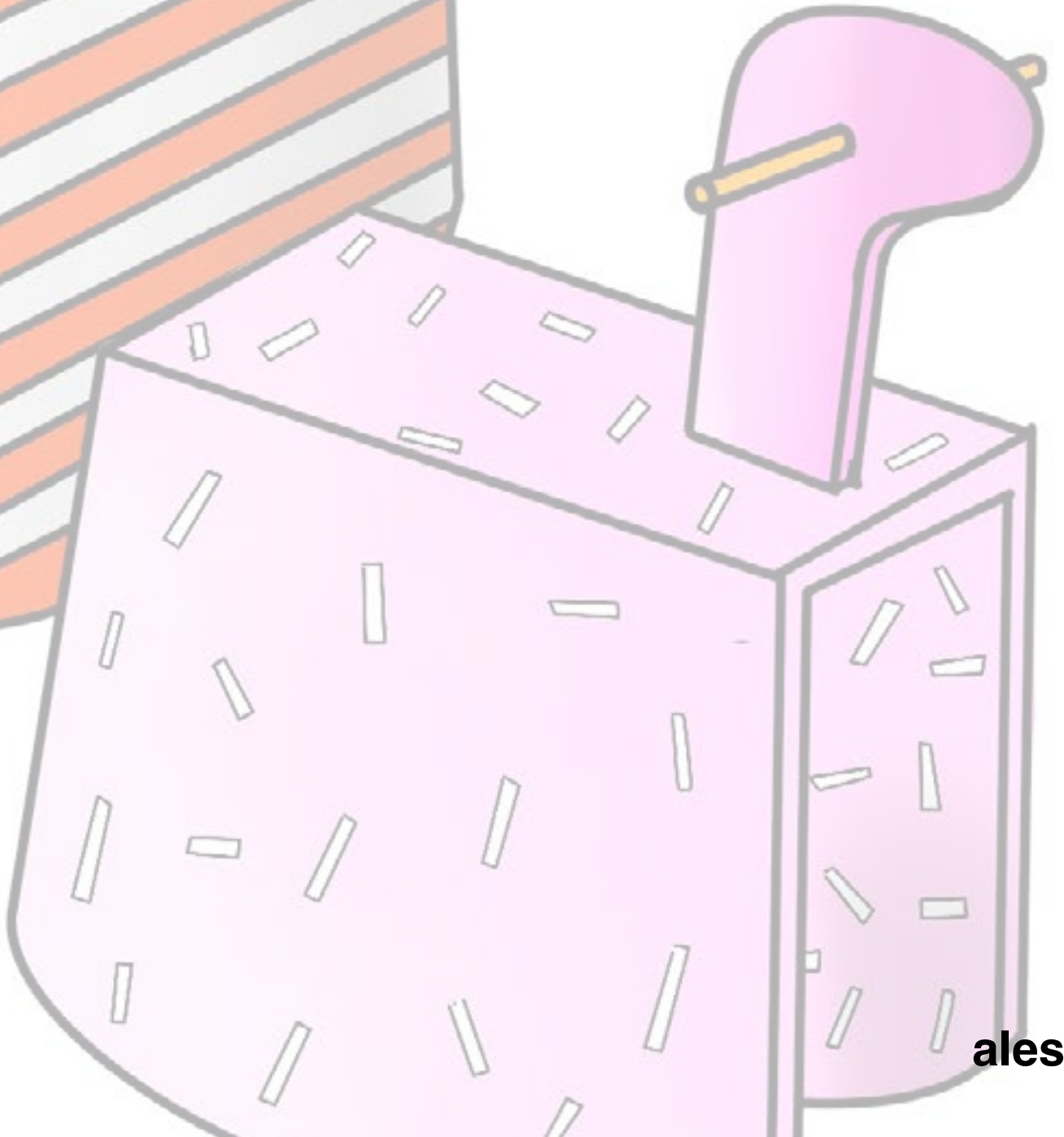
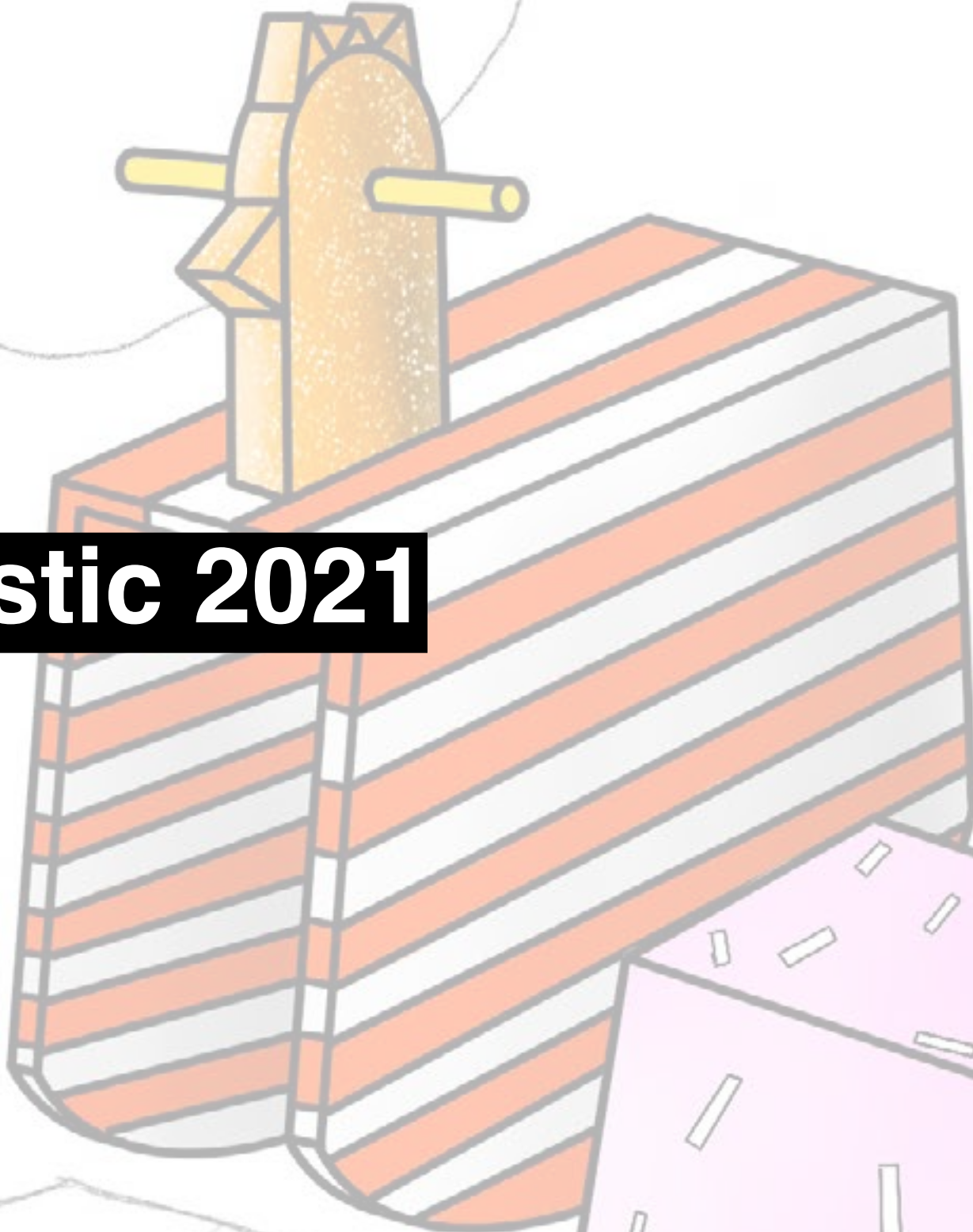
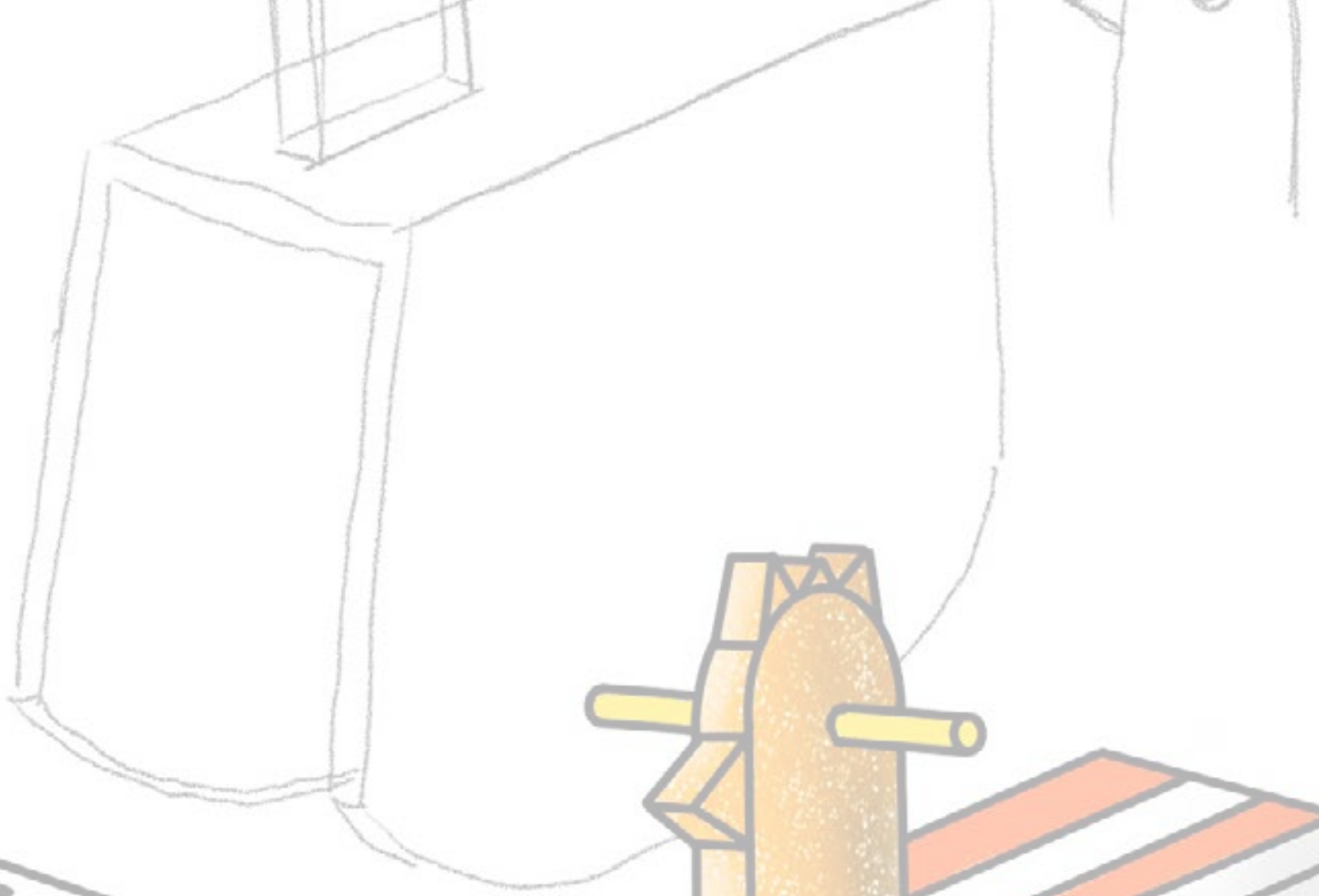
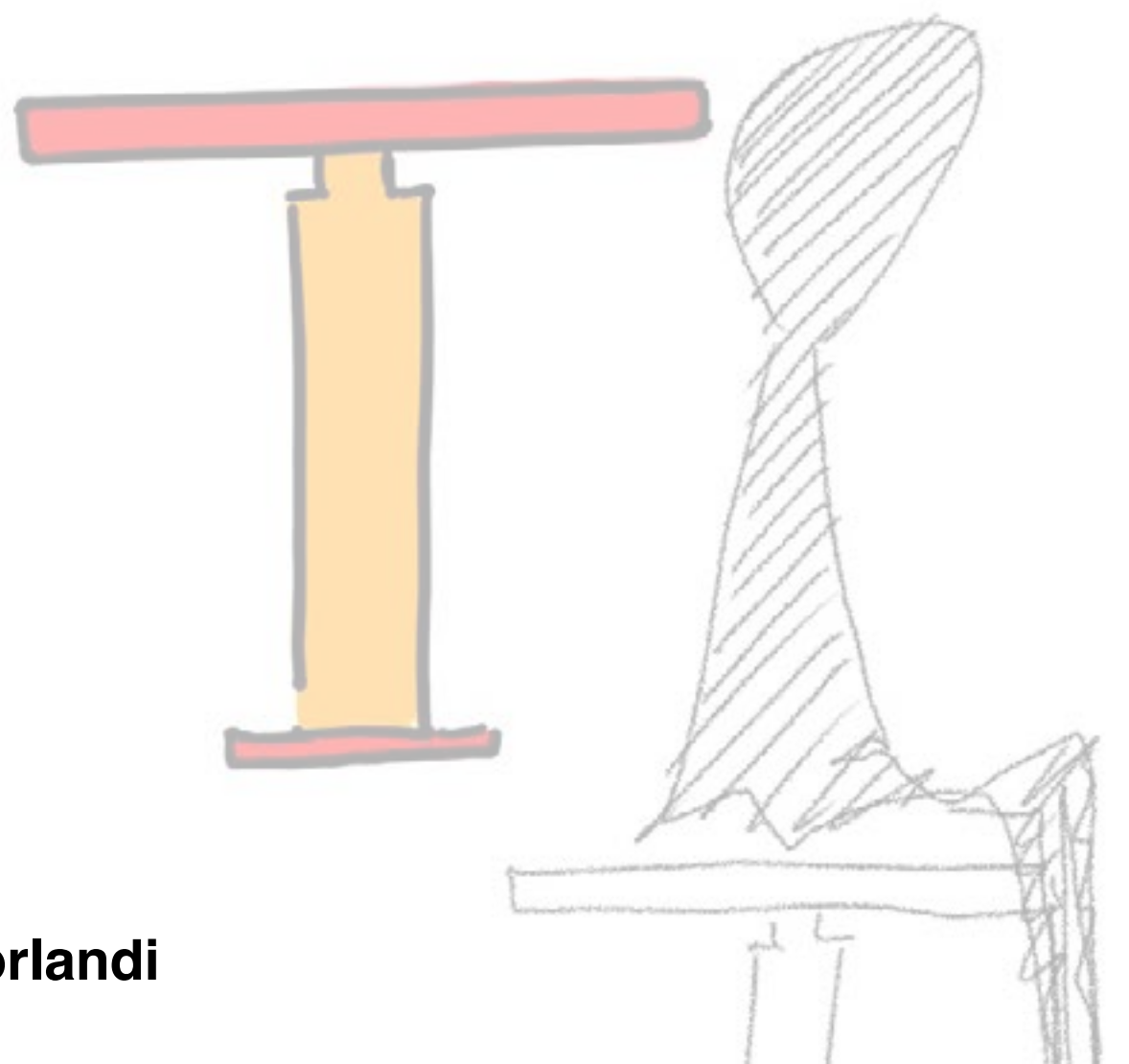
DIFFERENT  
SIZE



STOOL

**guiltless plastic 2021**

ROCKING  
ANIMALS







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languages: Italian - English

I've graduated with a degree in Product Design from NABA Academy in Milan, but it all starts at my young age.

I was drawn towards design by an early passion for drawing. As a child my parents would discover my pencil/pen sketches laying around the house. I learned to draw by sketching the items that surrounded me. This early sketching created an interest in the design and manufacturing of furniture, particularly the use of wood and other raw materials fabricated using traditional methods. During my studies in college, I started to review how sustainable materials could be incorporated into the manufacturing of products. I still love sketching, but my studies have also allowed me to become skilled at using Adobe Suite and Cinema 4d.

## brief

We must use the huge quantity of plastic waste generated in our urban and public life: this category aims to create an incredible and unexplored virtuous circle to reward our local communities with recycle projects coming from plastic waste collected by cities.

Creative talents have to design prototypes and works entirely constructed in recycled plastic, for use in urban and public spaces such as streets, stations, educational institutions, children's playgrounds, parks, squares, sports facilities, stadiums, hospitals, harbors, means of transport, places of cultural interest.

The designers must succeed in creating projects that are a synergy of safety, ergonomics, accessibility, durability and aesthetics, exclusively using recycled plastic while creating beauty and value for our city.

For this Category, it is required predominantly the use of recycled plastic, and to send a realistic mock-up or prototype of the project if it's selected as a Finalist.

## research

I've always been attracted to the world of recycled plastics. I think it's very important to explain to people the great possibilities that it can give, especially if it's reused.

Many people don't know that it is also recycled, it has the same effect as when it is produced for the first time, it's beautiful and durable!

So I decided to do some experiments and melt some caps. Given my passion for the design of Ettore Sottsass and the Memphis Group, I thought, why not try to make a series of textures and then create urban objects?

My research studies plastic and wants to understand how to create different textures. My first experiments are based on a line drawing, but in this way it is possible to recreate many other types of textures, like circles, rectangles, etc..

# plastic

Initially I tried to understand which and how many types of plastic exist. Which ones are recyclable and especially how.

Many plastics are recyclable, but only HDPE and PP can be dissolved at low temperatures. Consequently, with the equipment at my disposal I immediately focused on them.

Plastic is a plural reality, so it is more correct to speak of “plastics”, a great variety of polymers, each with its own characteristics, properties and fields of application.

According to the DIN 7728 and 16780 standards (as well as ISO 1043/1), each plastic material is associated with an abbreviation, which uniquely identifies it.

## HDPE 2 (High Density Polyethylene):

Polyethylene is the simplest of synthetic polymers and is the most common of plastics. It is a thermoplastic resin and is presented as a transparent (amorphous form) or white (crystalline form) solid, with excellent insulating properties and chemical stability. It is a very versatile and economical material. In its “high density” variant, it is not very branched and therefore has high intermolecular forces, which give it greater rigidity. The most common applications are:

- bottles for containing detergents or food;
- toys;
- plastic caps;

## PP 5 (Polypropylene):

Polypropylene is a thermoplastic material that has found its widest applications in the isotactic form. It is characterized by a high tensile strength, low density, good thermal resistance (the melting point is 165 °) and abrasion resistance. Many common plastic objects are made of polypropylene, starting with household items and toys.



**moodboard**



// recycled structures



# **nine steps**

**I experimented for several months with a method that could work to give life to this series of textures, starting from the simplest that is the line.**

**During my experiments I could understand many mistakes made by myself, but with time I learned to solve them.**

**The final procedure will be listed in nine steps below.**

**1 // collection of caps**



**// recycled structures**



**2 // washing**



**// recycled structures**



**3 // shredding**



**// recycled structures**



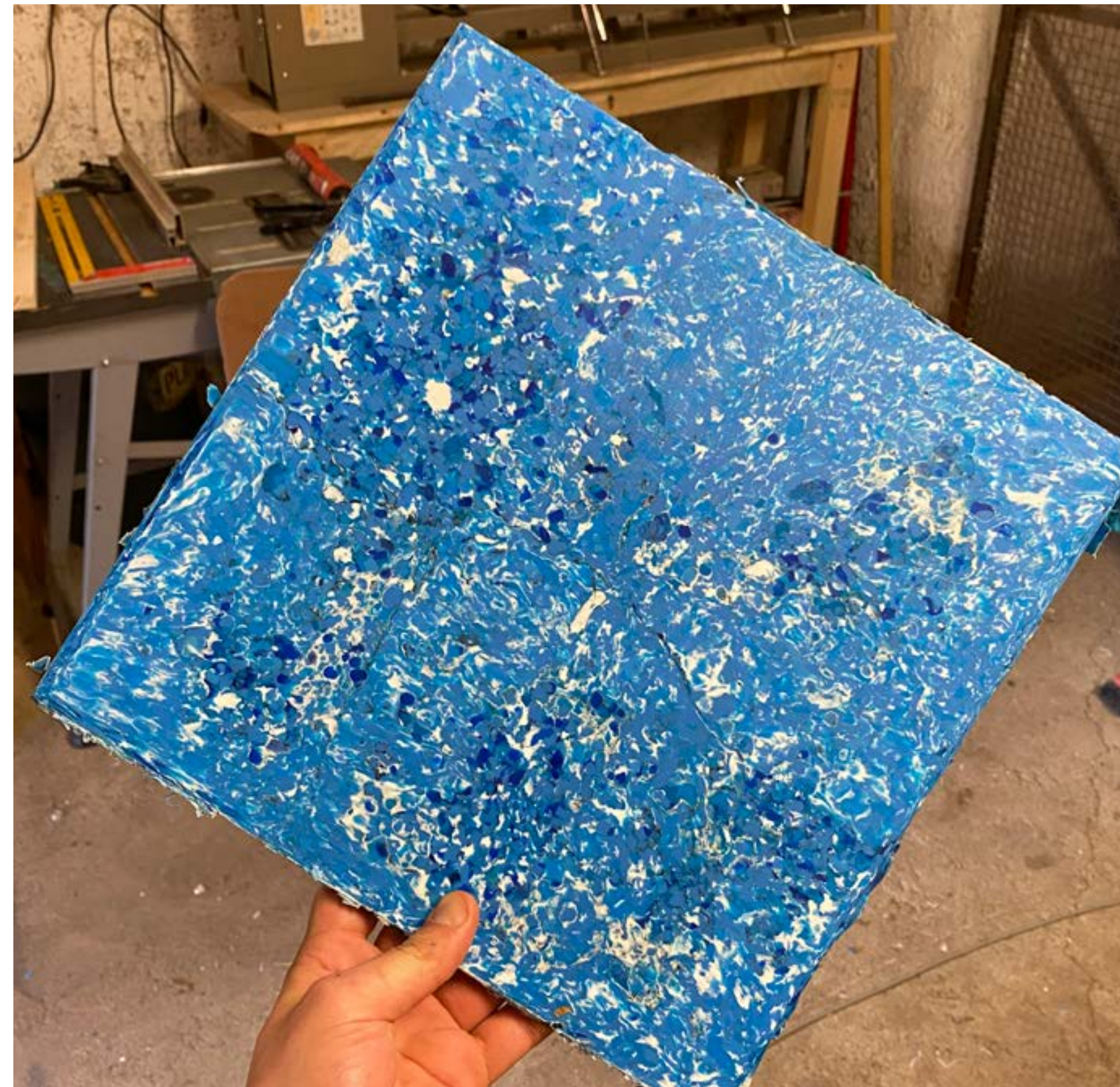
**4 // melting**



**// recycled structures**



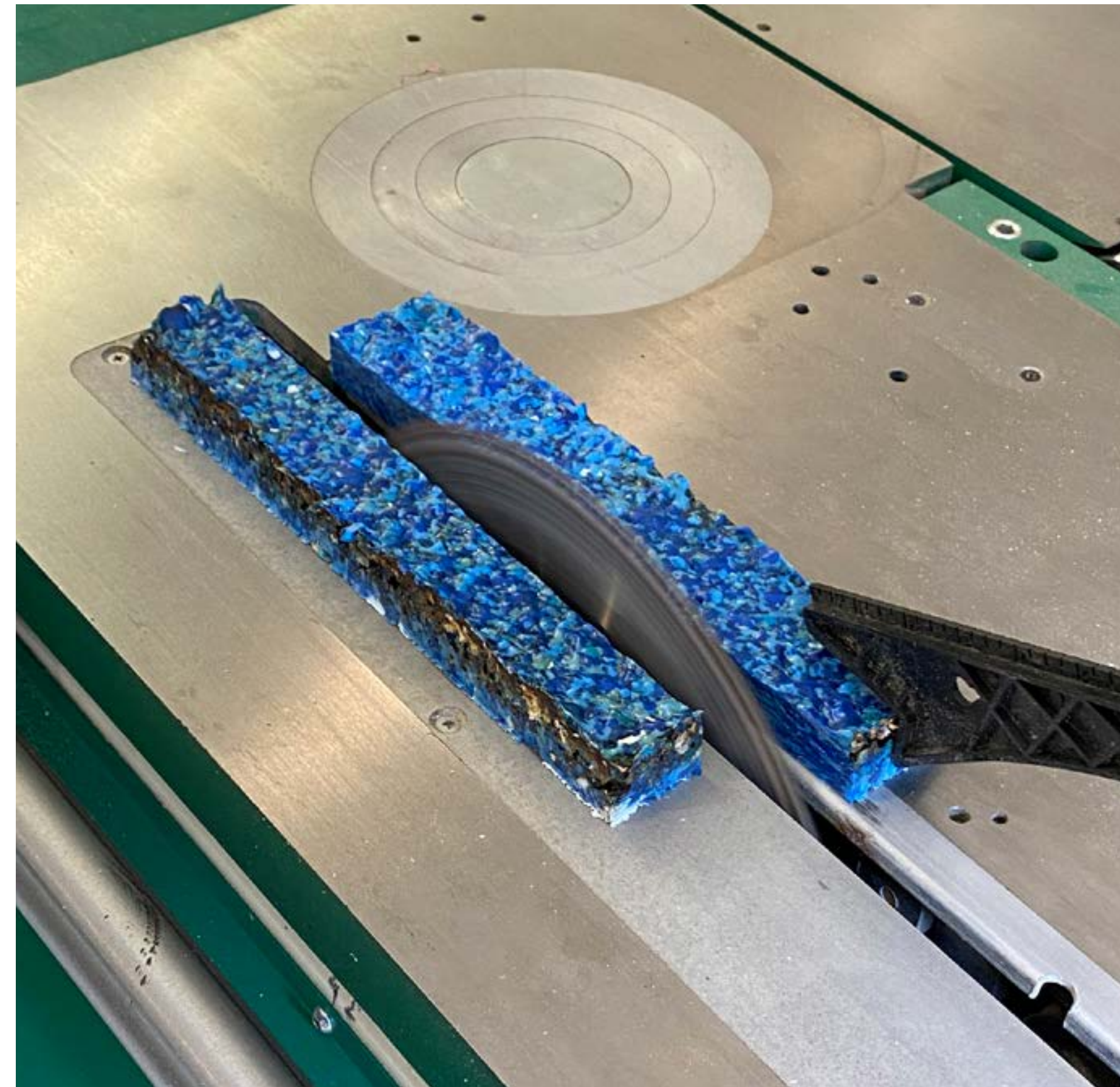
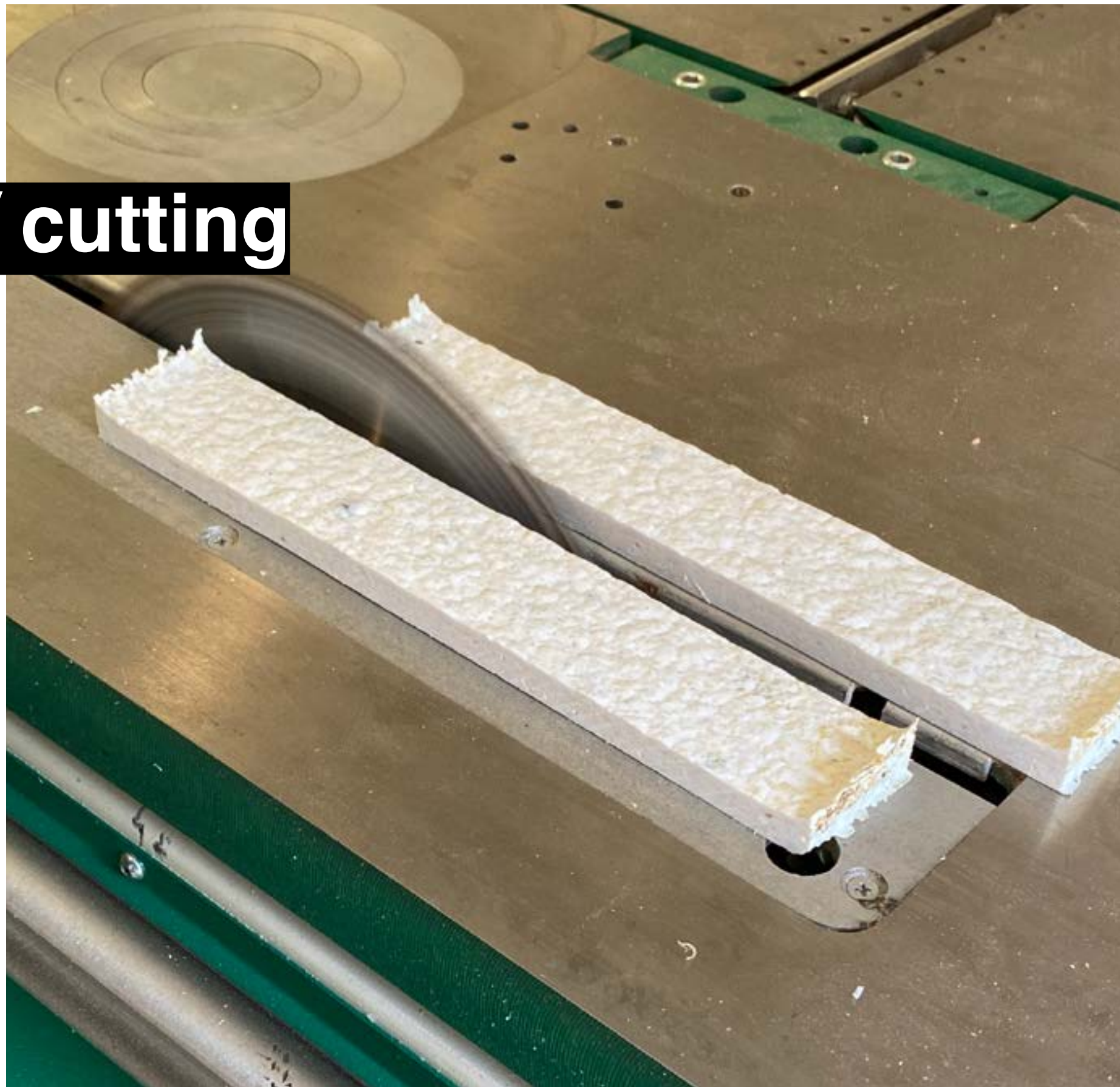
**5 // intermediate result**



**// recycled structures**



**6 // cutting**



**// recycled structures**



**7 // compositing**



// recycled structures



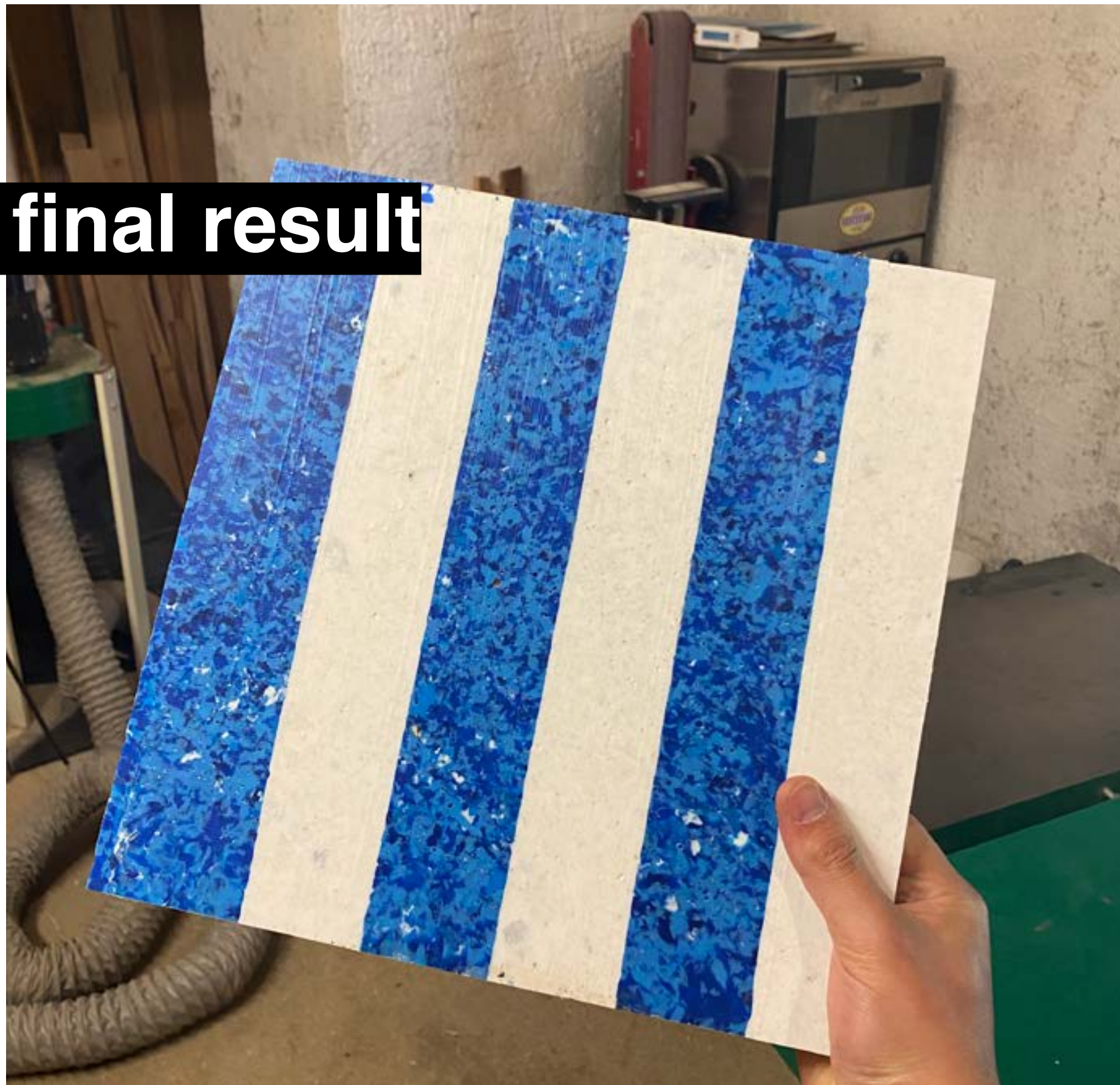
**8 // melting**



**// recycled structures**



9 // final result

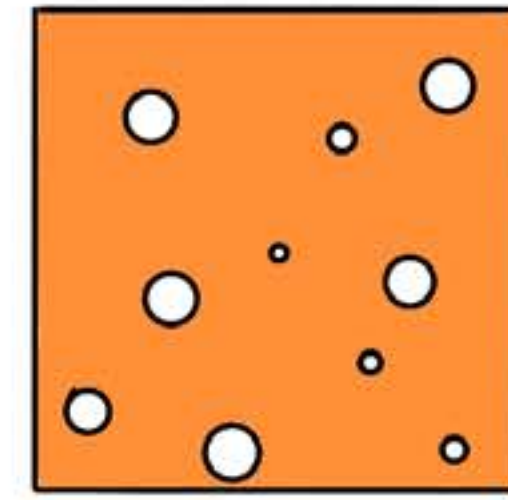
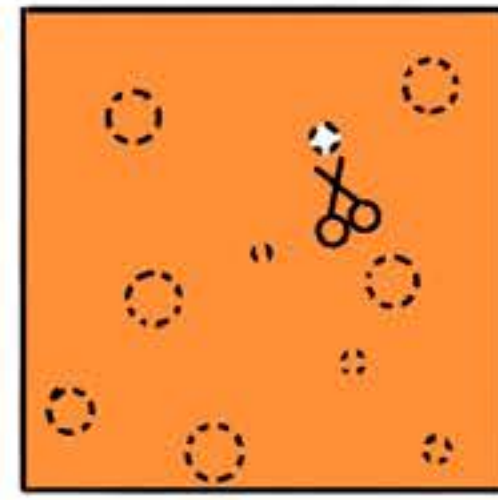
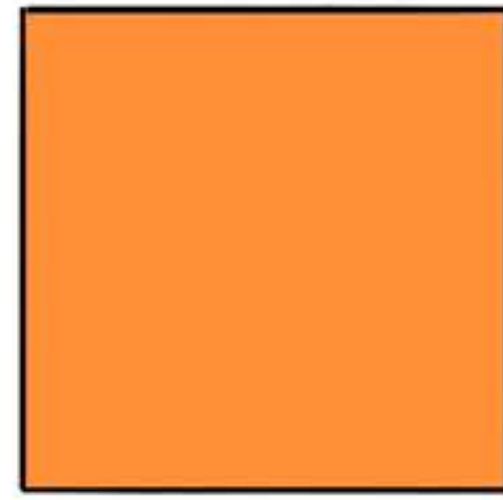


// recycled structures



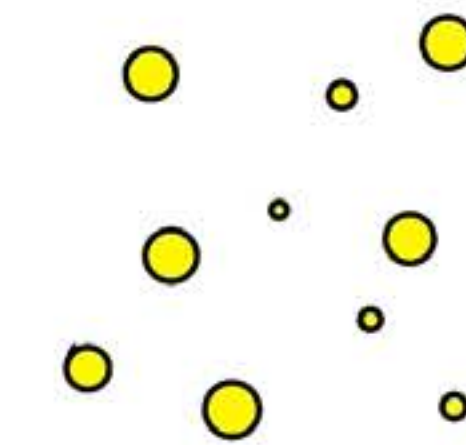
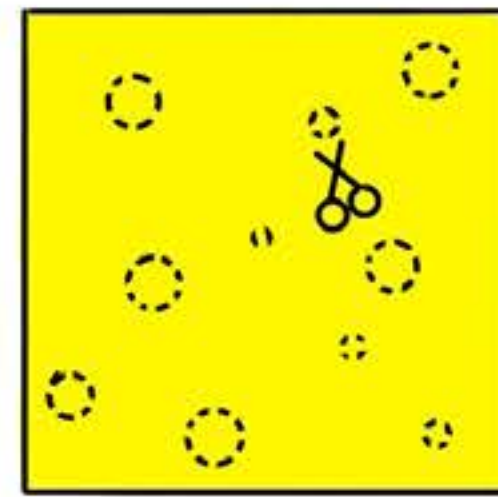
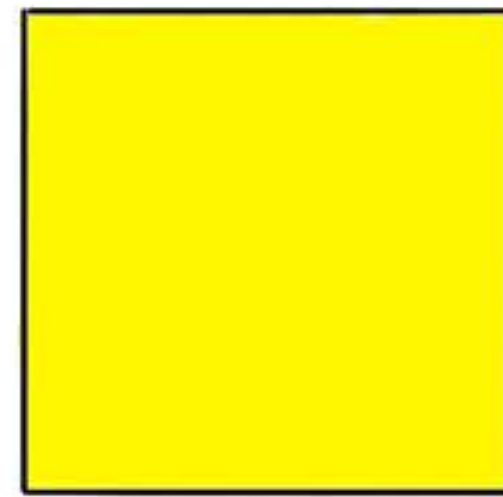
**example with  
circle shape**

FIRST ORANGE PLASTIC TILE

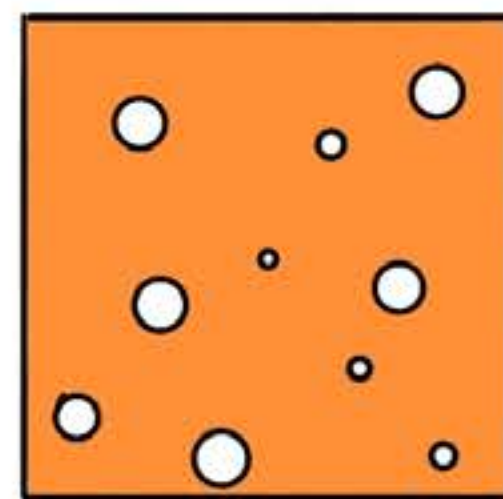


PERFORATED  
PLASTIC  
TILE

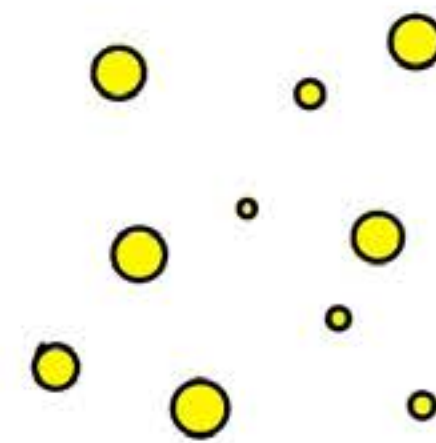
SECOND YELLOW PLASTIC TILE



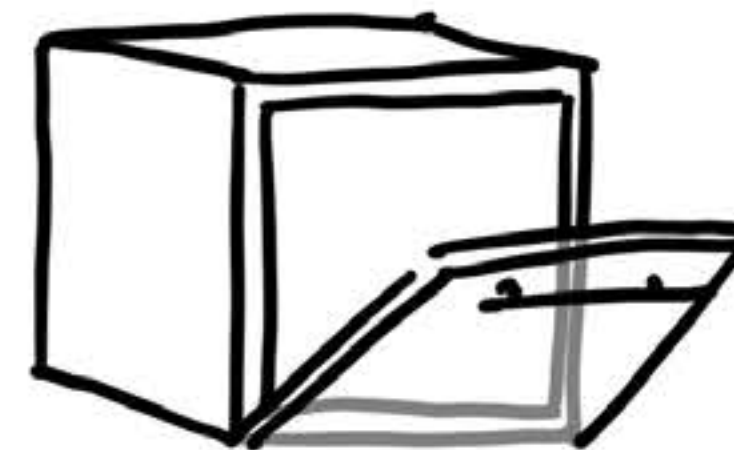
PLASTIC  
HOOPS



+

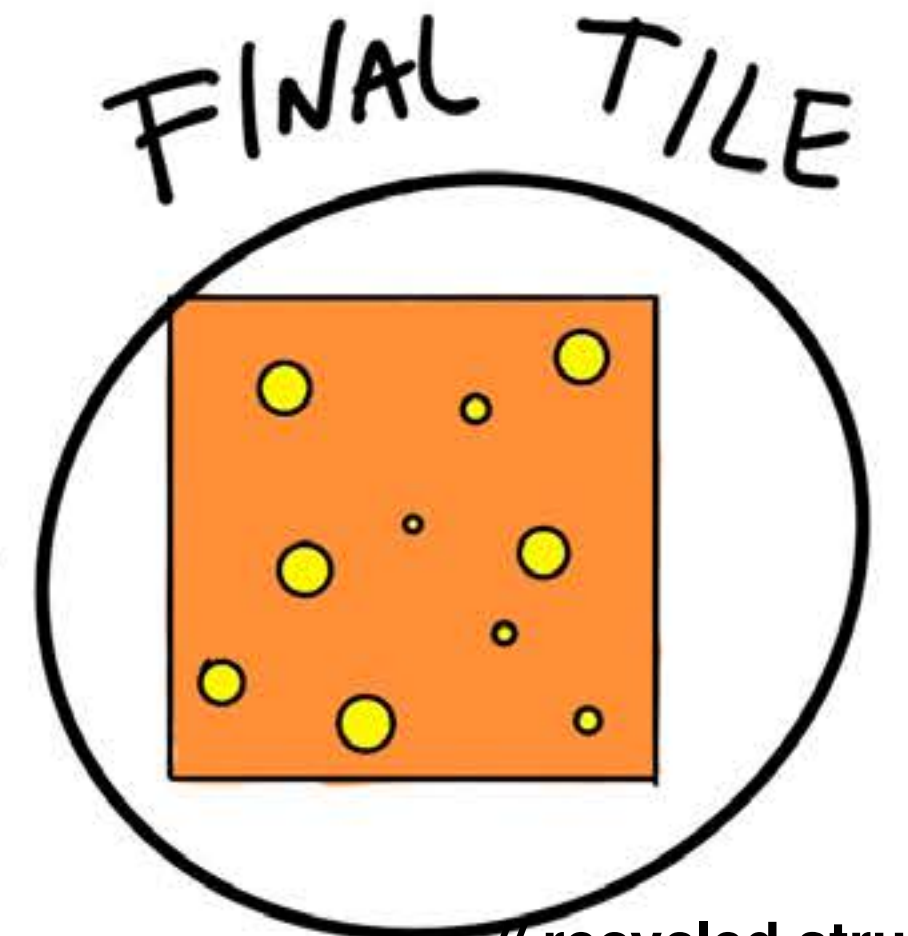


+



OVEN

=



FINAL TILE

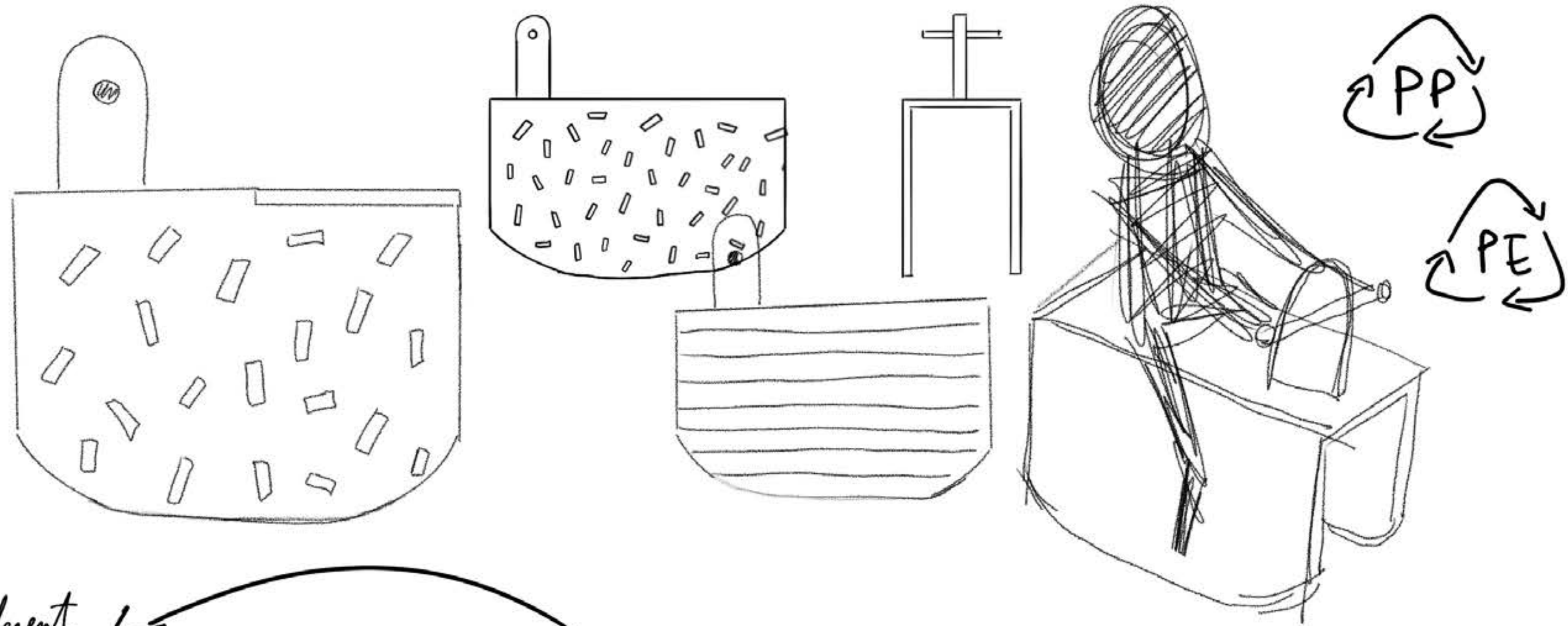
// recycled structures



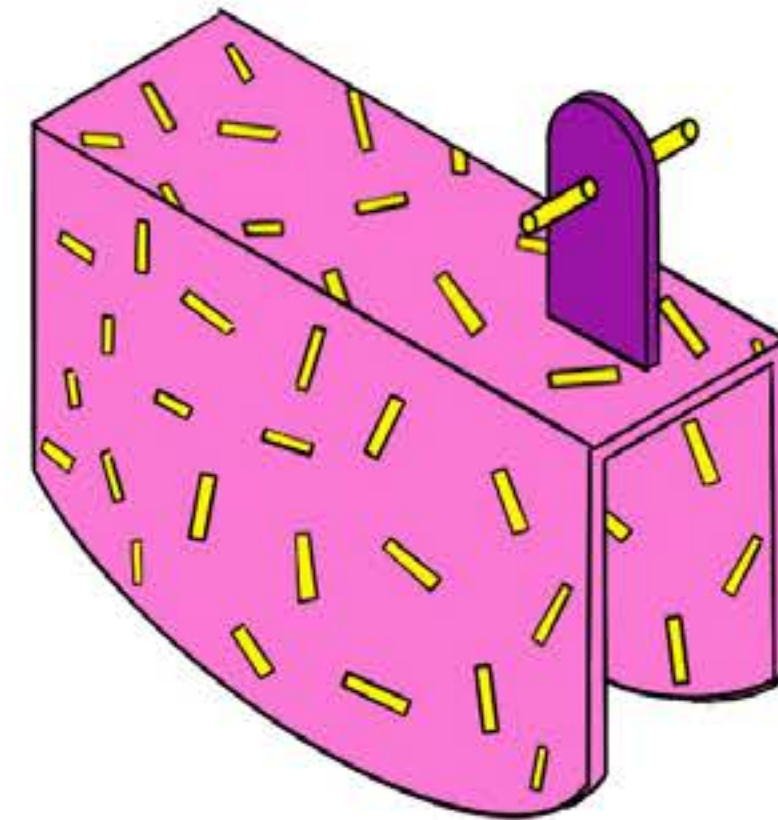
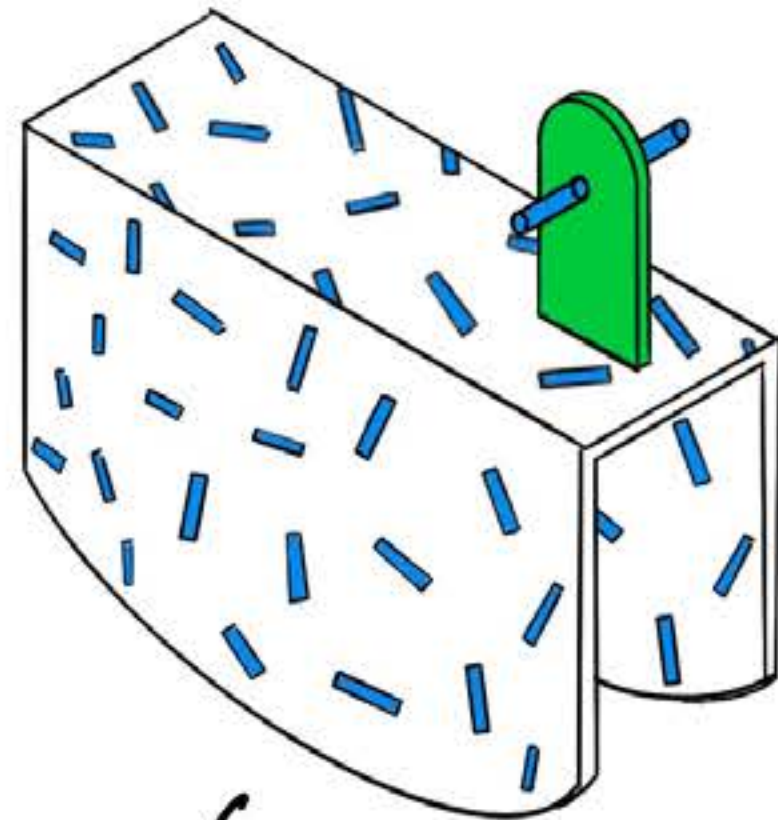
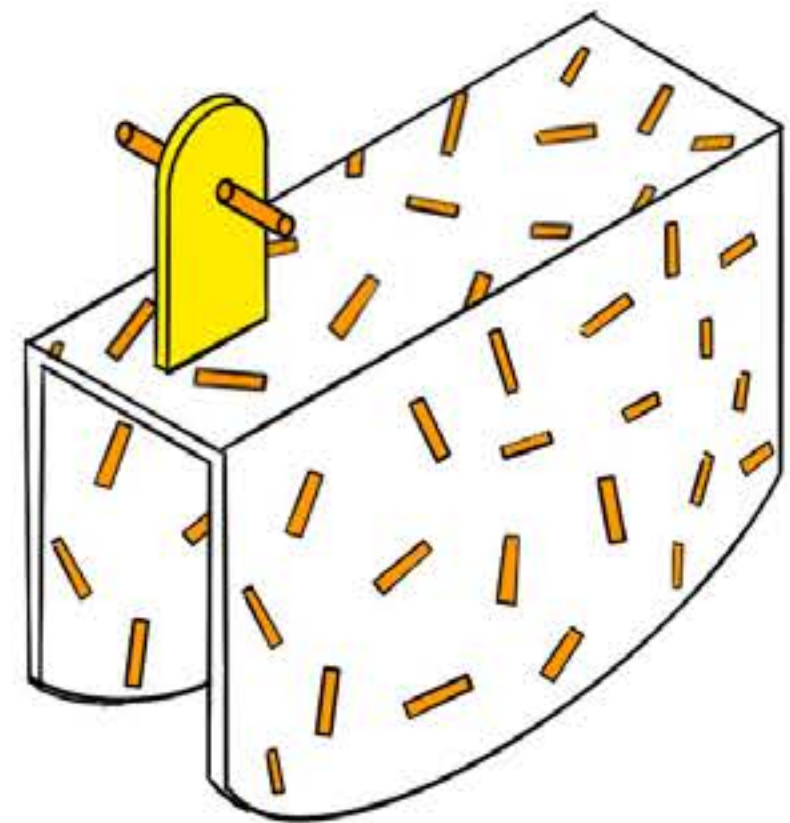
# **recycled structures**

**After finding a correct method, I decided to think and give life to a series of urban objects consisting of a stool and a rocking animal, colorful and cute will entertain parents and children.**



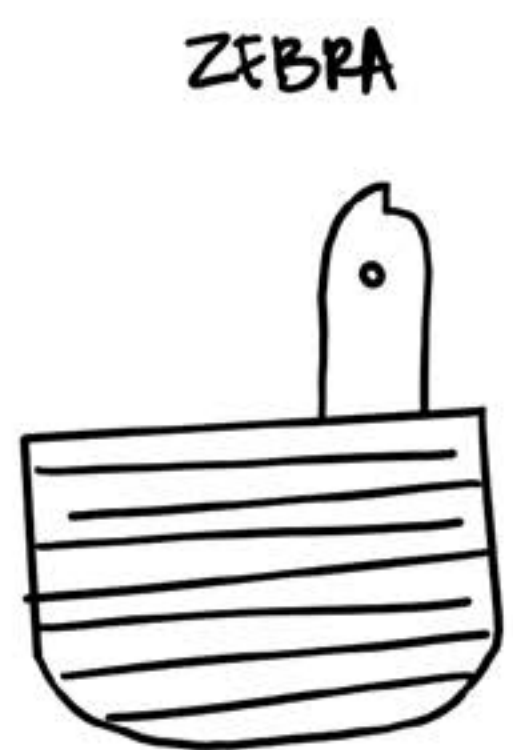
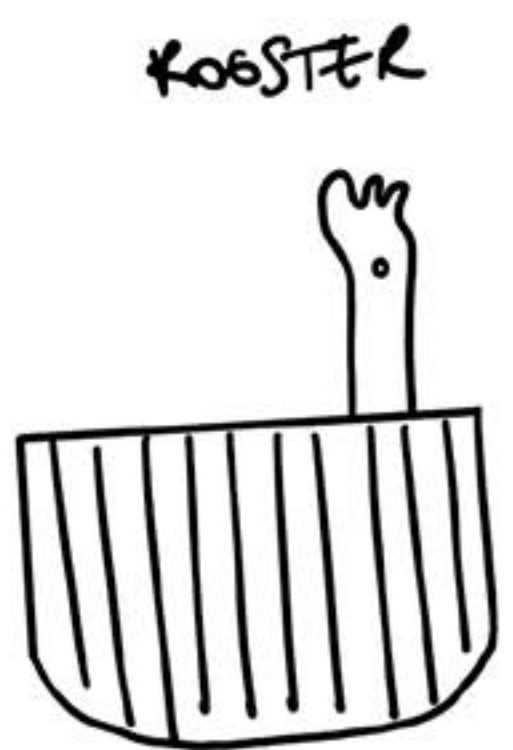
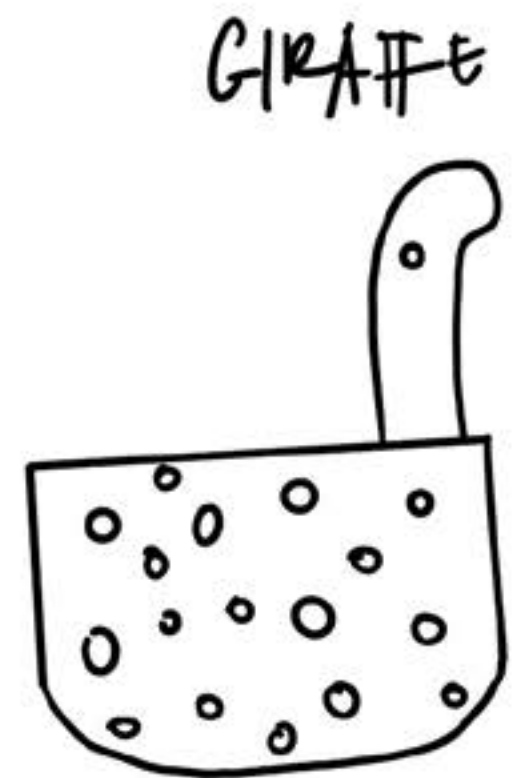


*different  
colours*



*DIFFERENT  
TEXTURE*



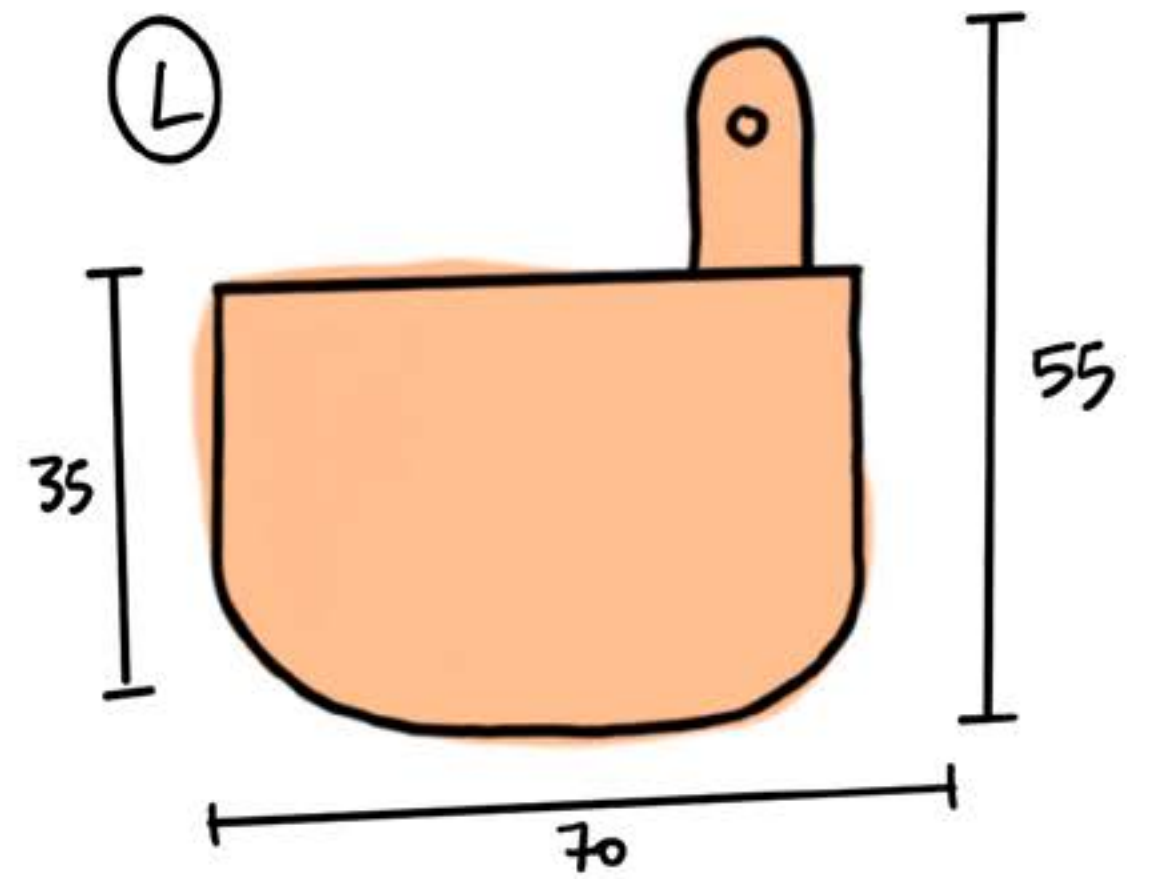
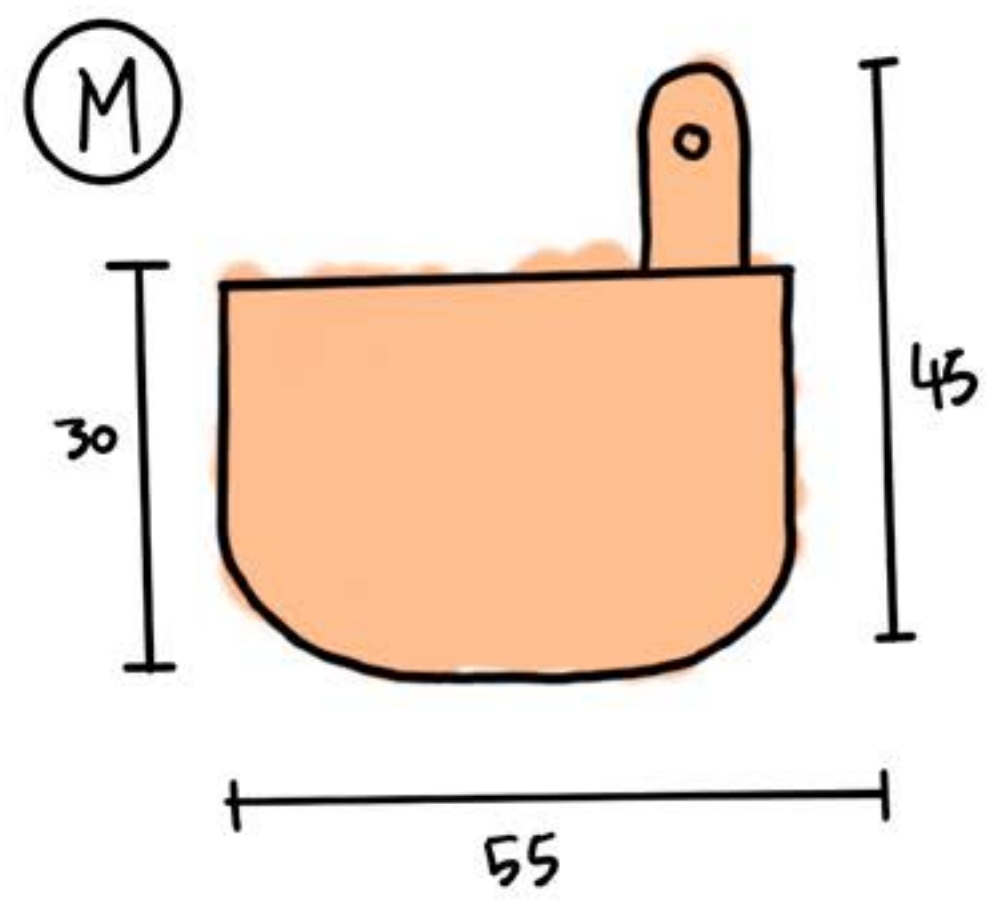
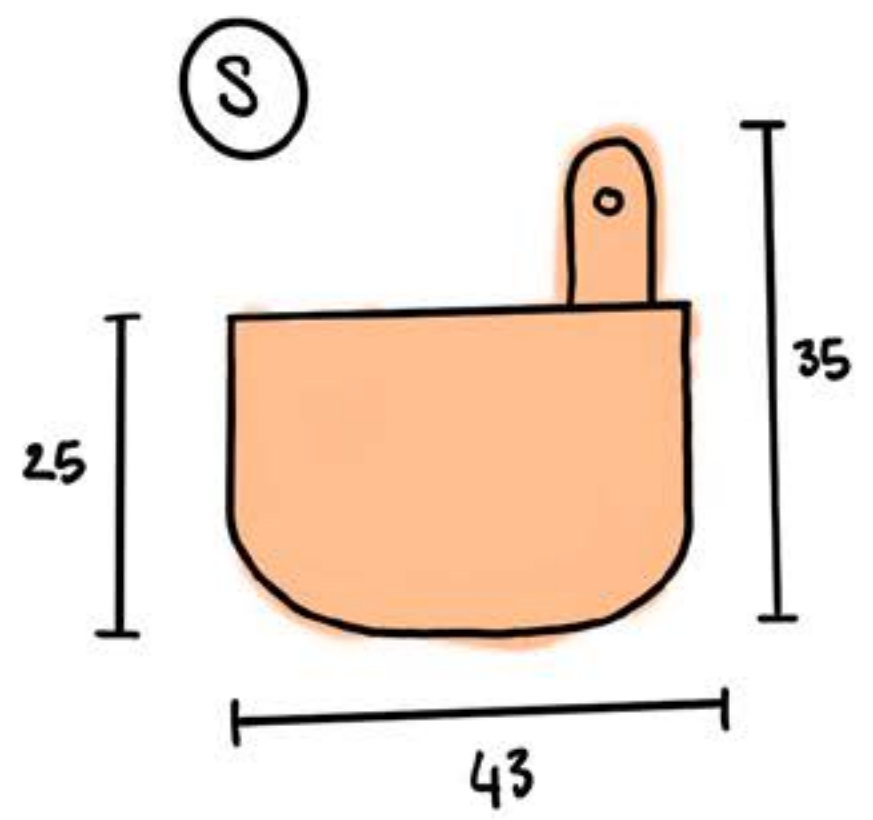


DIFFERENT SHAPE OF HEADS  
TO MAKE DIFFERENT  
ANIMALS

The rocking animals can be proposed in different size.

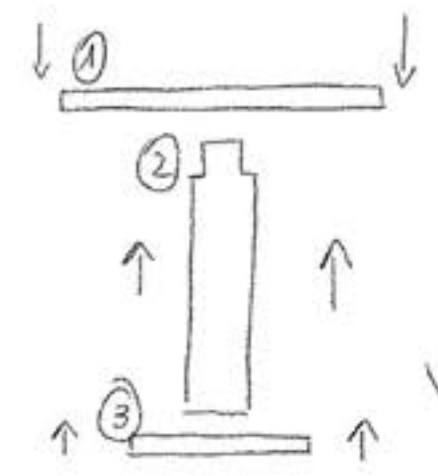
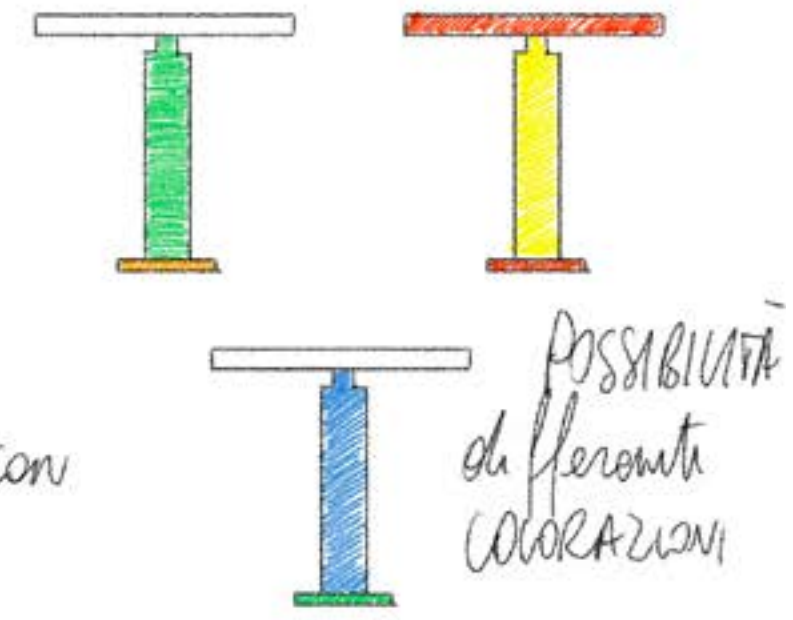
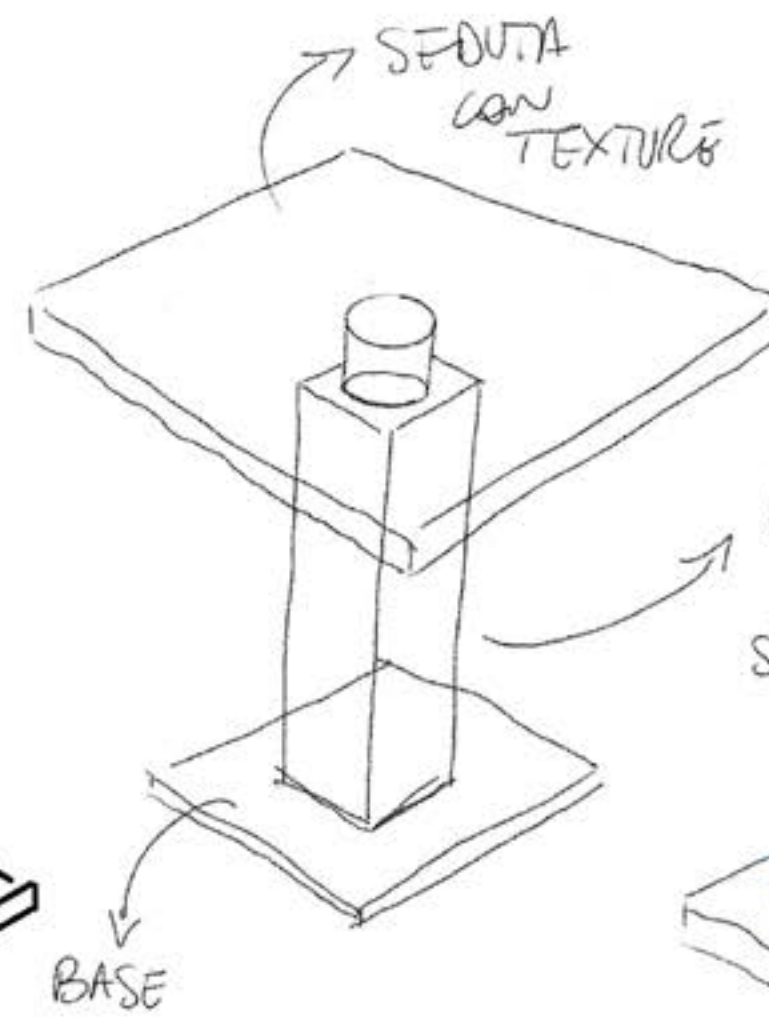
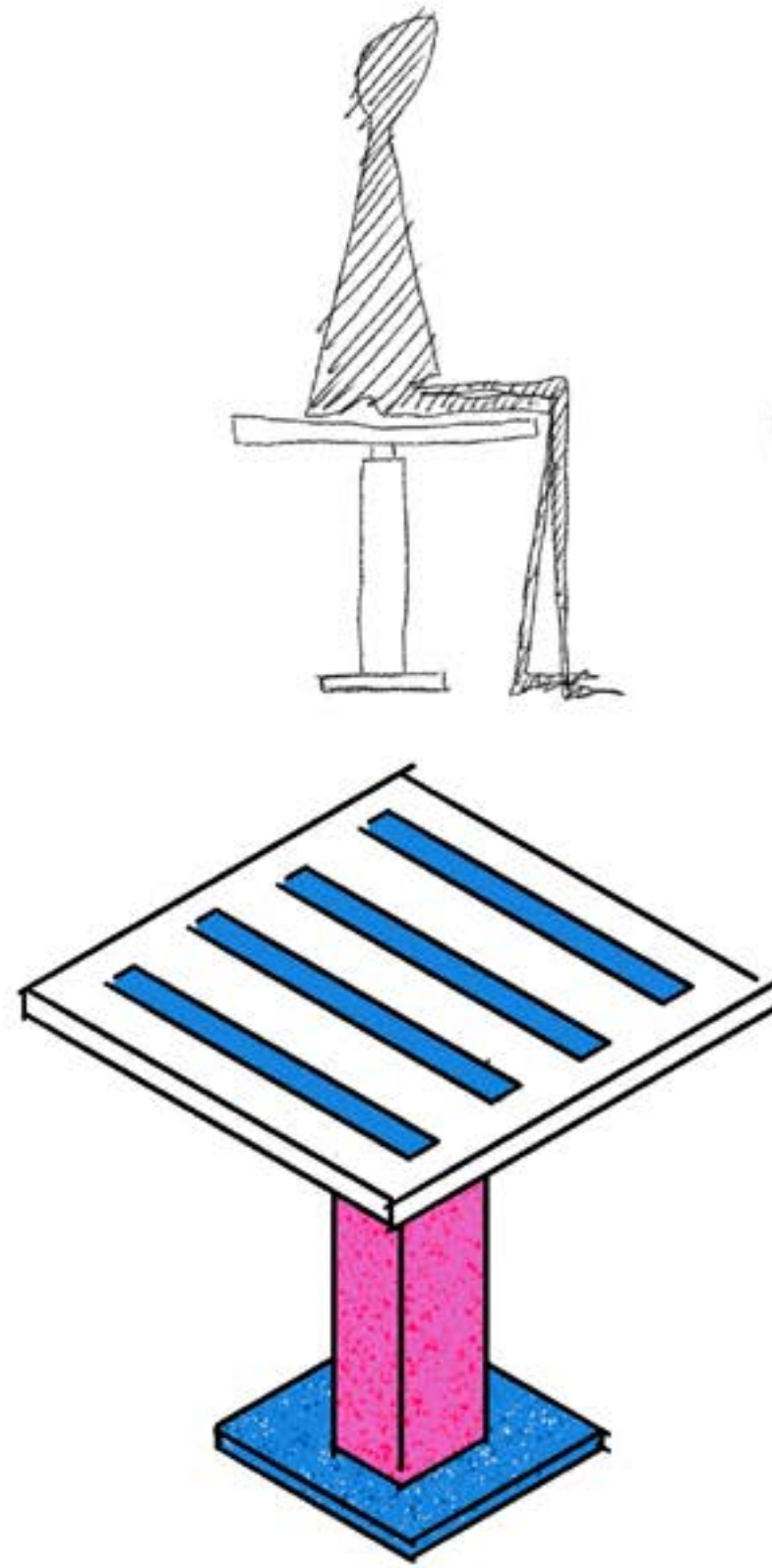
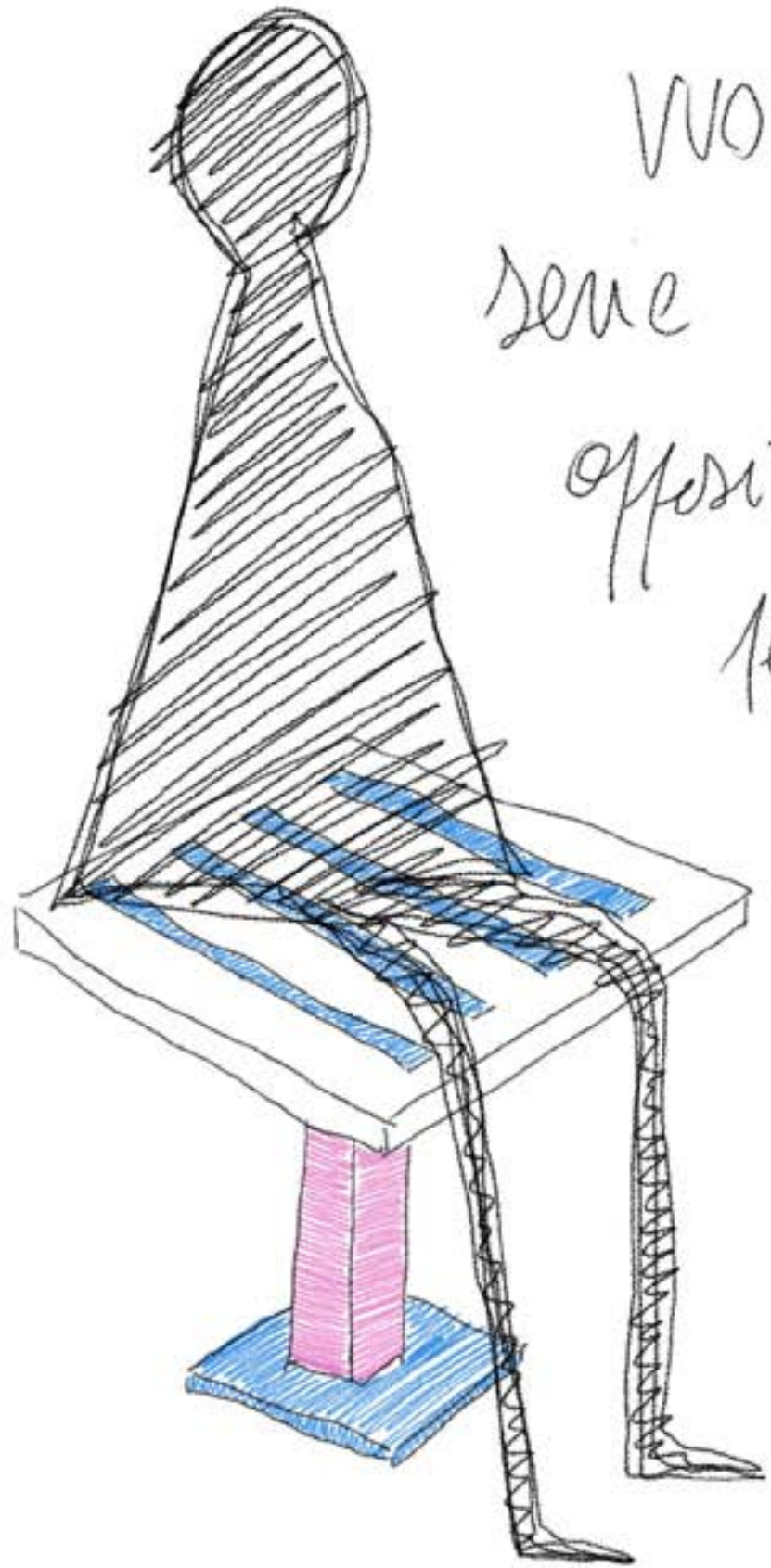
Different shapes of the head and texture present on the body, will give life to different animals.

MORE SIZE





il progetto finale  
 VOLE RAPPRESENTARE una  
 serie di ELEMENTI URBANI  
 oppositamente pensati  
 per GRANDE e  
PICCOLI

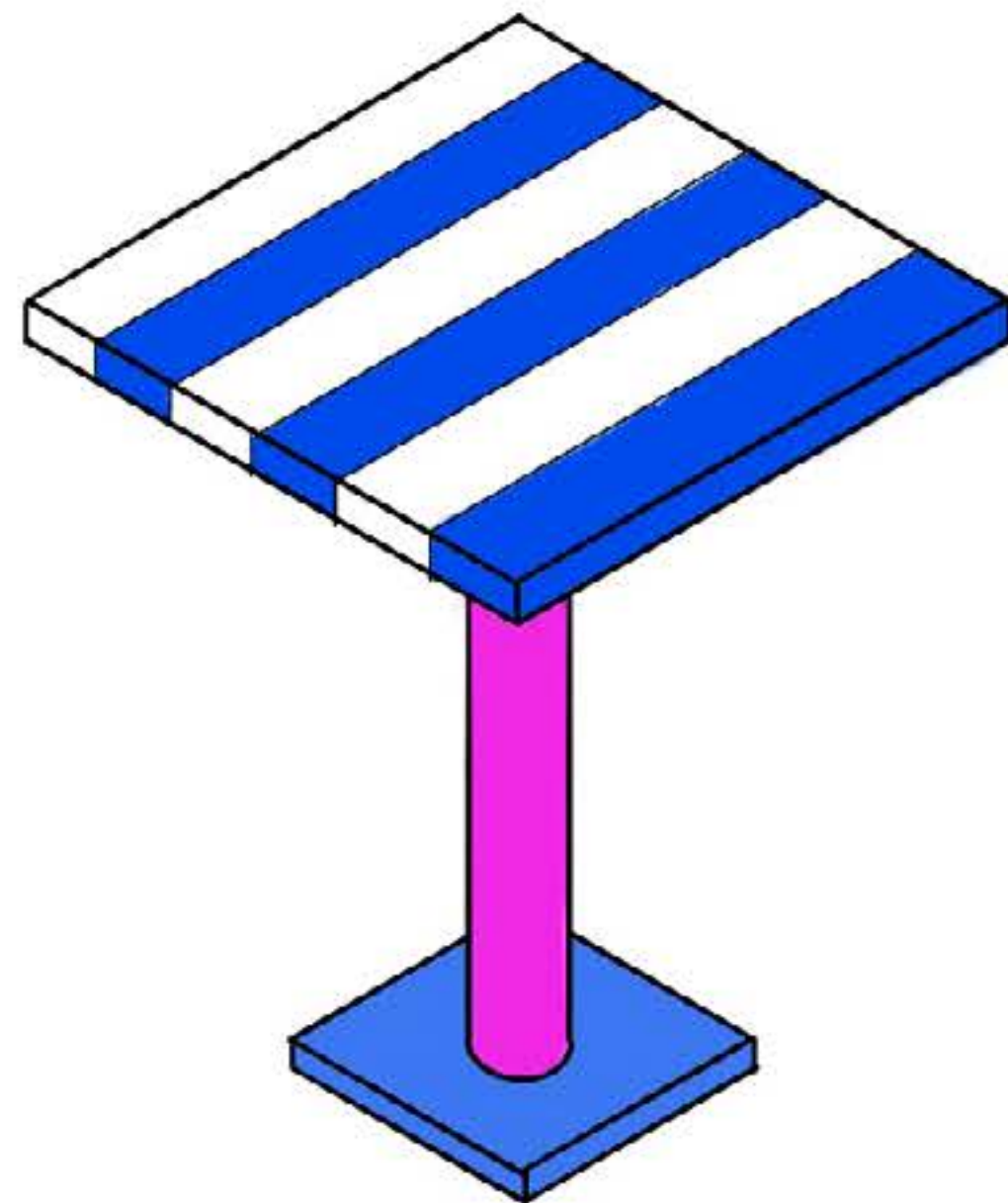


COMPOSIZIONE



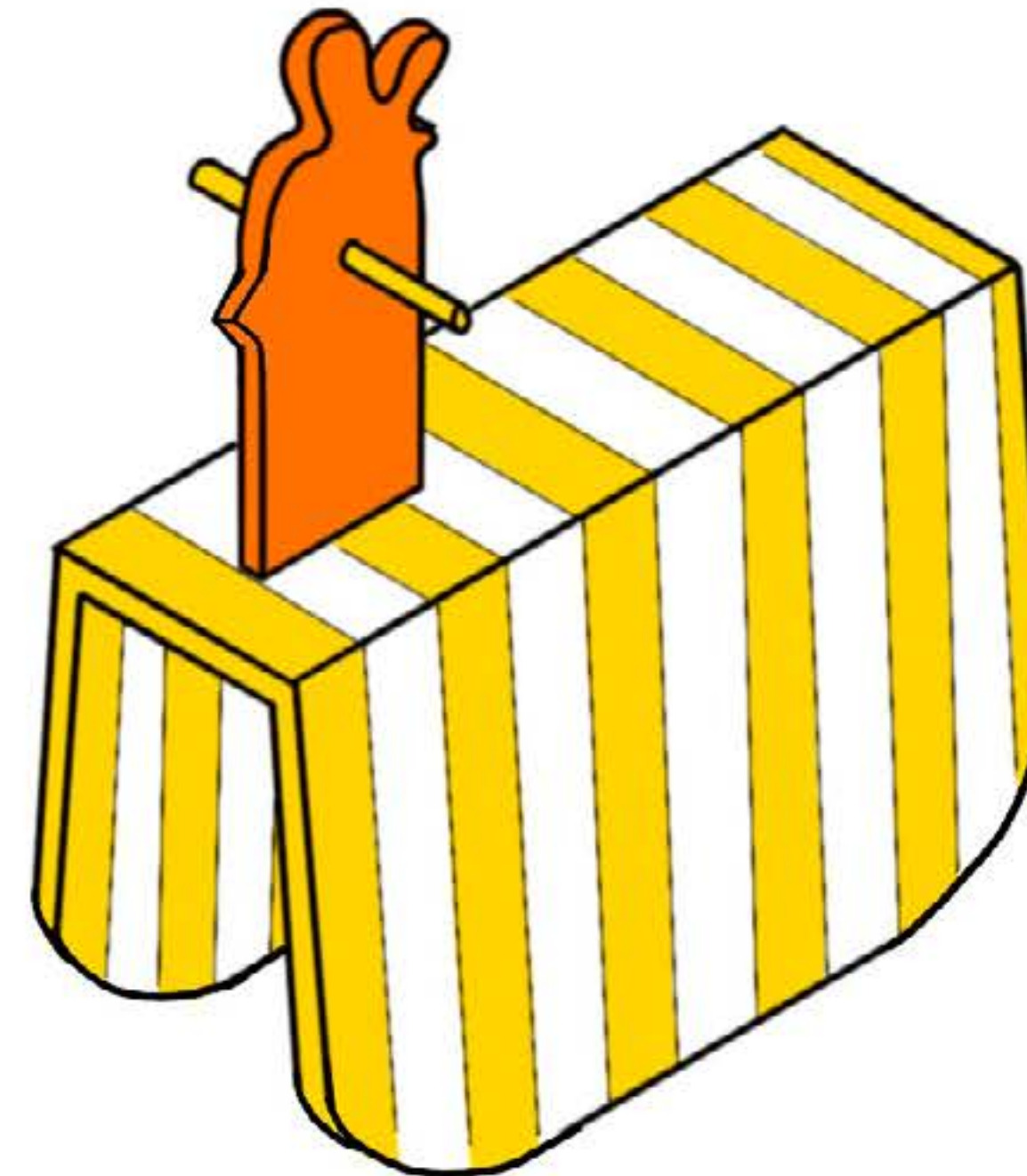


# KYOTO STOOL



(inspired by Shiro Kuramata table)

# ROCKING ANIMAL



My final proposal is to create a stool and a medium-sized rocking animal. The shapes will be made possible by non-visible joints made of plastic or wood.



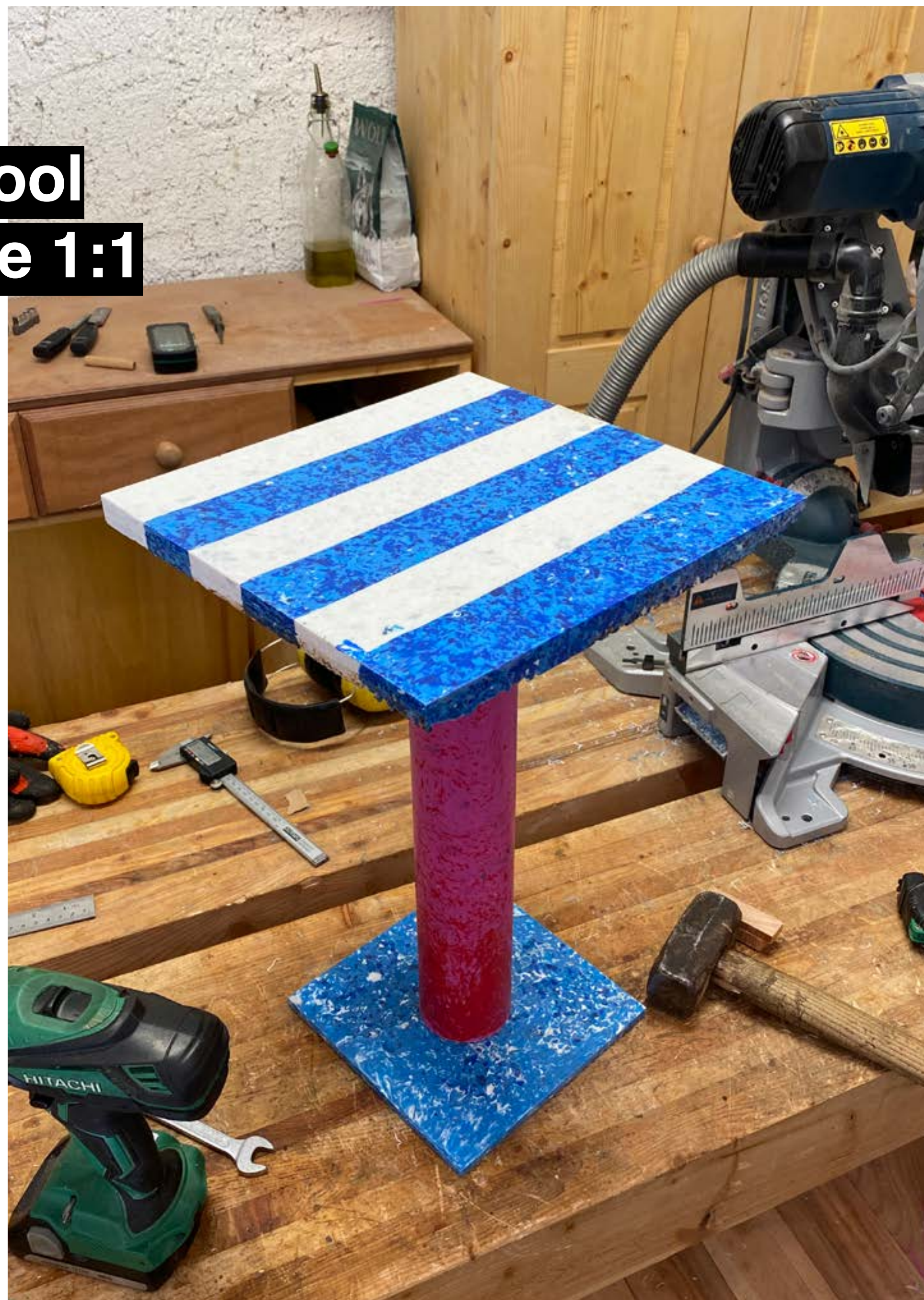
# **prototype**

**I created a series of prototypes to better understand if my projects could really take shape.**

**I had a chance to create a full-scale stool. The rocking animal I could not create it in real scale because I had some difficulty in finding the right amount of plastic (especially the orange and yellow colors, which I would like to use for the animal proposed by me) But in a short time I will have the required quantity.**



**stool**  
**scale 1:1**



// recycled structures



**rocking animal  
scale 1:1**



**// recycled structures**





**scale 1:2**



**// recycled structures**





// recycled structures



**thank you**