

We would like to organize an end-of-year trip to Iceland. To do this, we had thought of creating some 3D souvenirs and printing them so that we could sell them and finance ourselves.

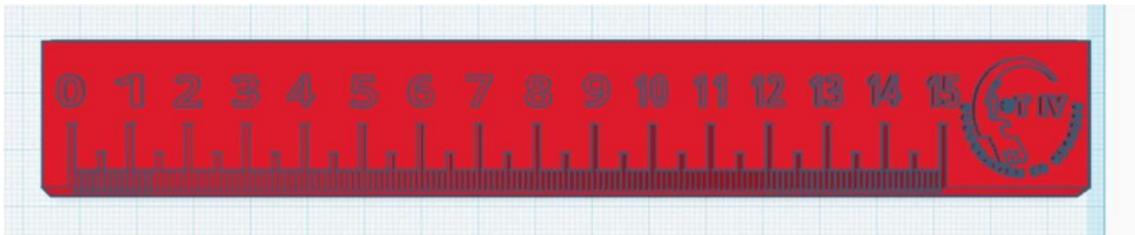
First of all, we will use the 3D online design program "Tinkercad" to create those souvenirs, and then we will create an e-shop to sell all the products that we can.

Your tasks:

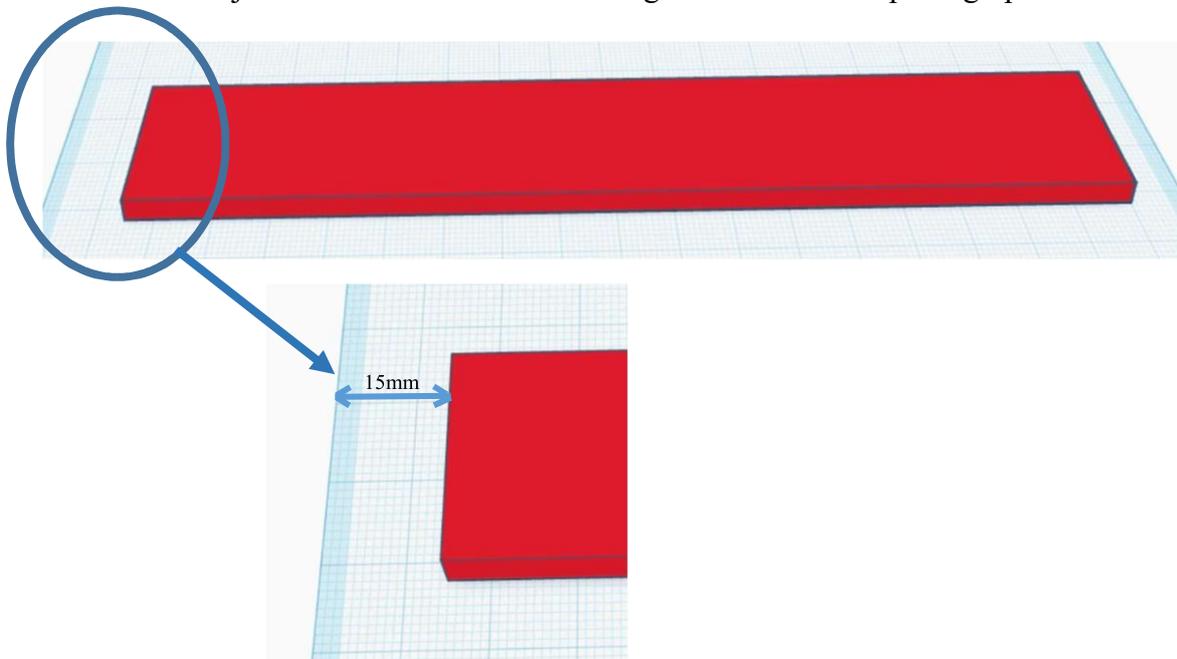
1. CREATING A 3D RULER WITH TINKERCAD

Open Tinkercad and follow the instructions.

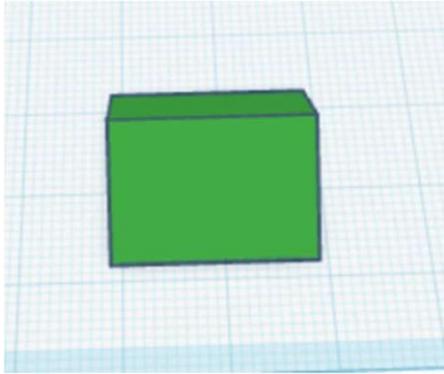
This is the object we would like to create:



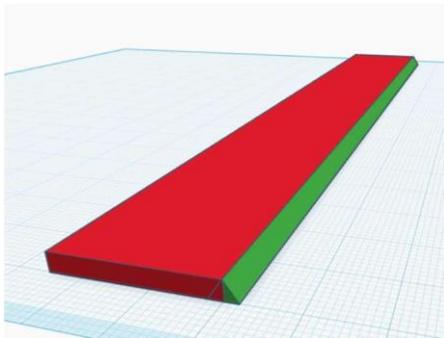
- Add a cube and transform it with the following measurements 180x25x3 mm. And adjust it to 15 mm from the left edge as shown in the photograph:



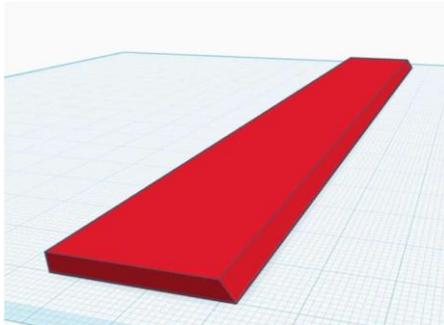
- Add a roof, rotate it from 0° to 90°.



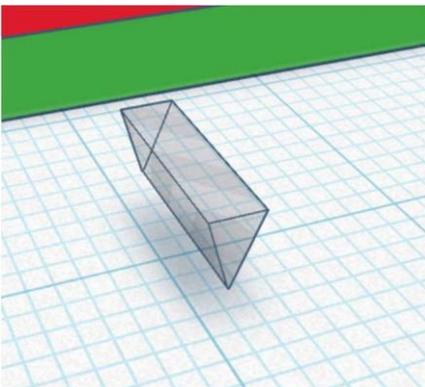
- Change the dimensions to 180x4x3 mm and adjust it to the lower part of the modified cube.



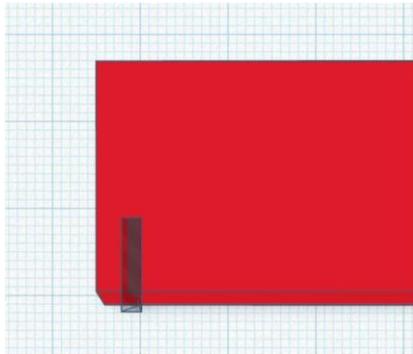
- Group the two elements together:



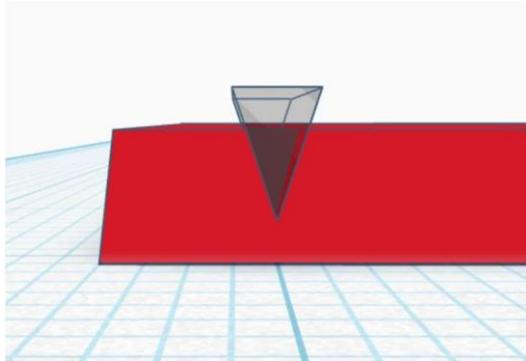
- Add a roof of 2x5x2 mm and change it to hole. Rotate it 180°. Raise it to 1mm from the ground.



Select the top view. We place our inverted roof 5mm to the left of the ruler.



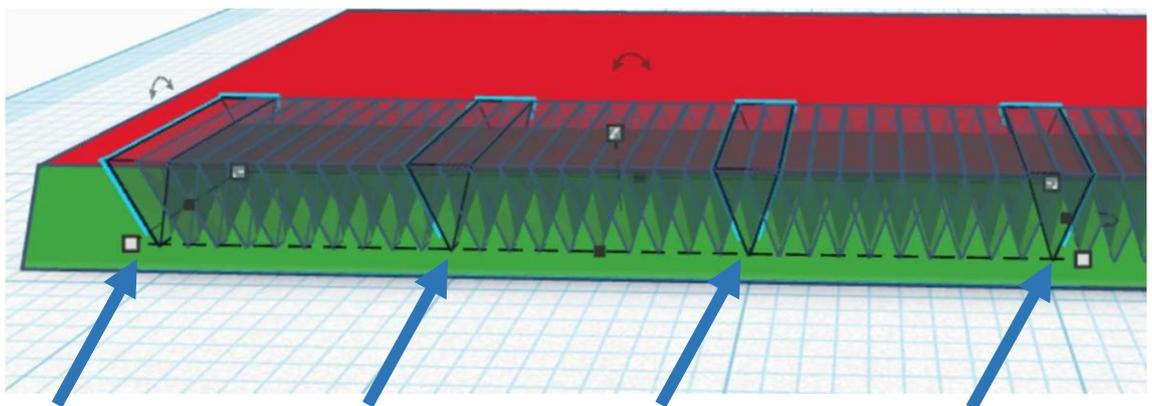
Here is the image from the frontal view:



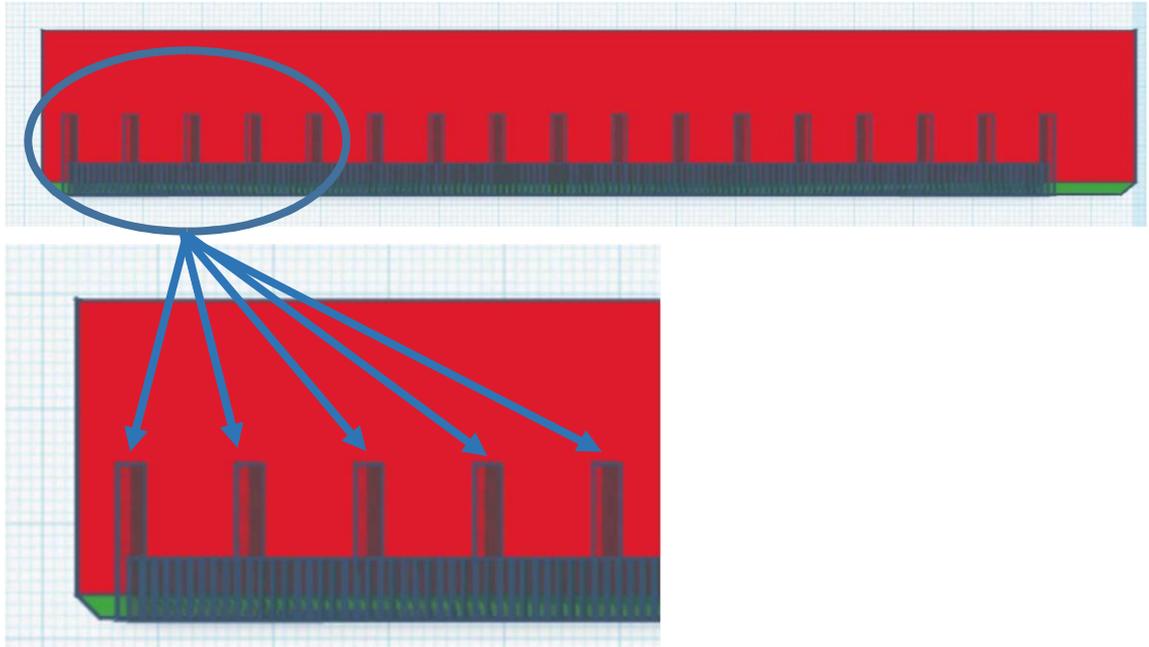
Copy and paste the same inverted roof along the ruler for 15 cm, i.e. 150 times. So it should look like this:



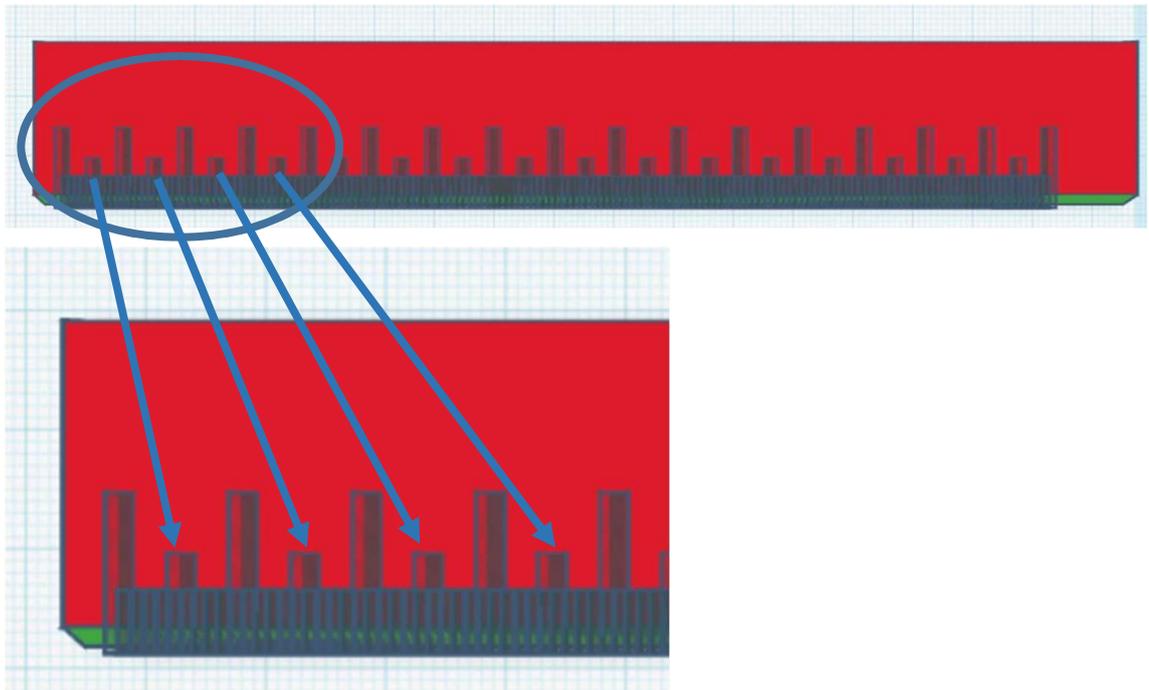
Select the inverted roofs from the first one and ten by ten, which will be the centimeters of the ruler:



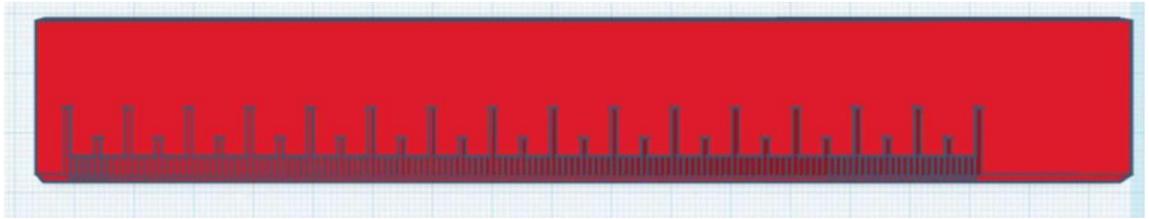
And when they are all selected, change the length to 13mm:



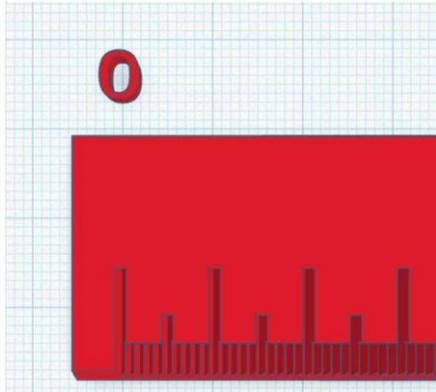
- Then, lengthen up to 8mm the millimeters referring to the middle of each centimeter, as shown in the picture:



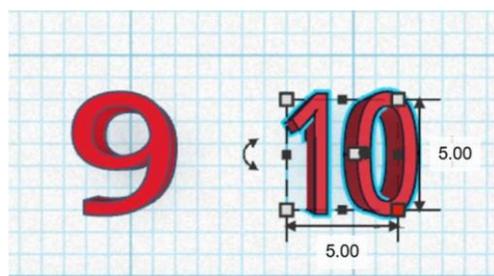
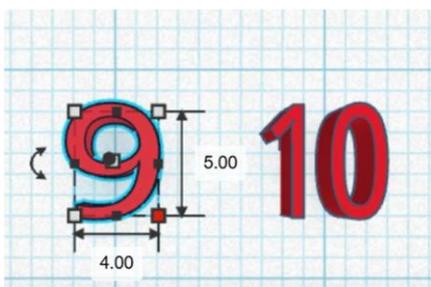
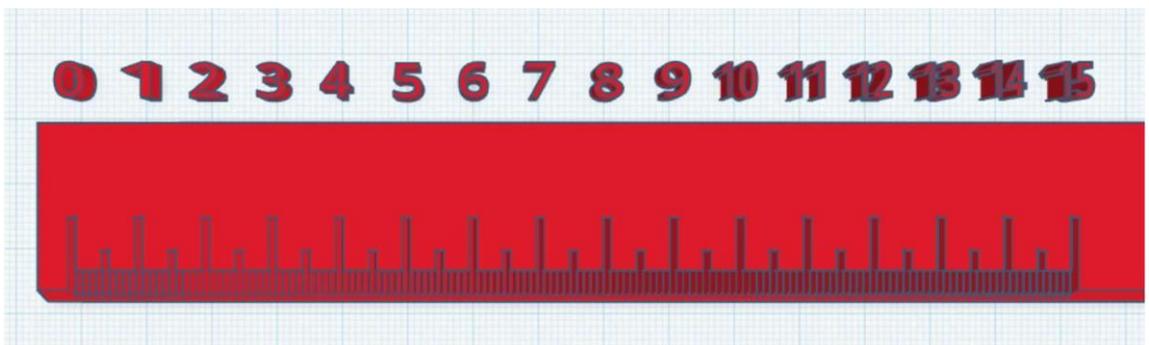
Group all the elements together. It should look like this:



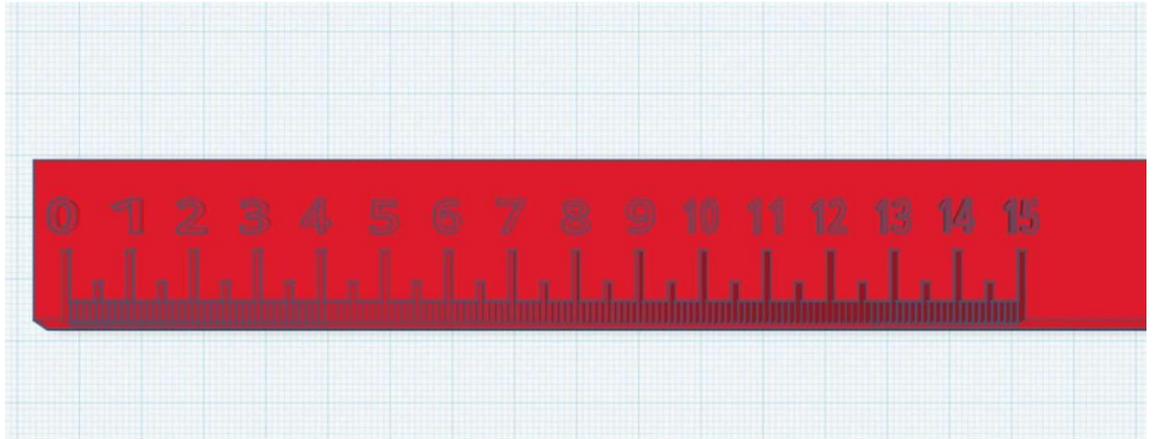
- Now, insert a text box. We change the font to “Sans” and in text we write the number zero: 0. With the number created, we modify its measures to 5x4x4 mm.



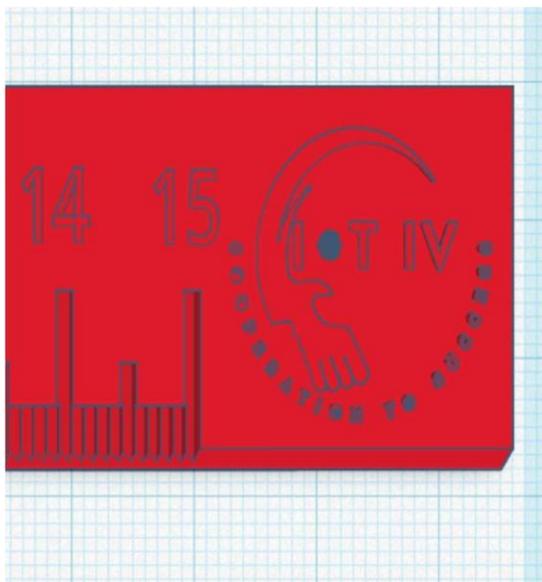
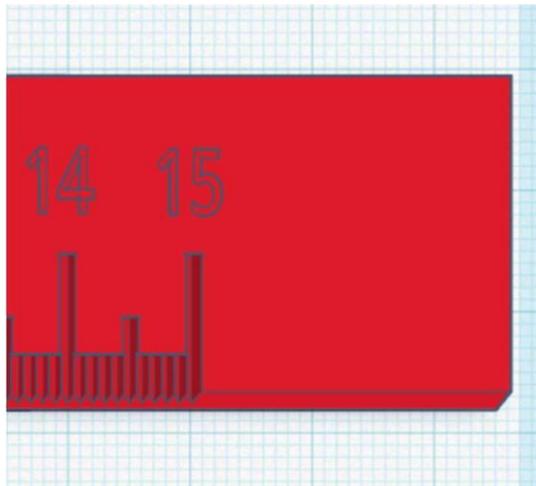
- Before putting it on top of the line, let's create all the numbers up to 15. But be careful! From number 10 to 15 they will have a width of 5 mm, so their measures will be: 5x5x4 mm



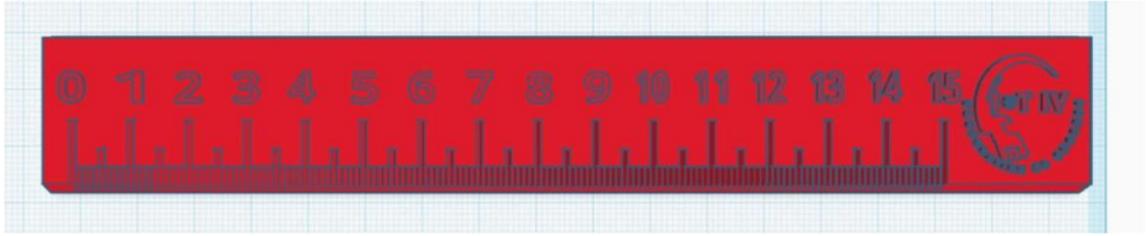
Put the numbers on top of the highest lines of the ruler.



- Convert ICT IV logo from .jpg to .svg and upload it to Tinkercad
- Change the size of the logo to 20x20x4 and place it on the right side of the ruler.



- Group all elements together:



- Save as GroupX (Change the “X” for your group number) in .stl format
- And send also a link to all the teacher’s email using this button in Tinkercad



o cestmir.glogar@mendelova-stredni.cz o lucie.matejikova@mendelova-stredni.cz
o szymon.skalski@nowotarski.edu.pl o
krzysztof.trojan@zst.nowotarski.pl o gretar@fnv.is o hrafnhildurg@fnv.is o
javier.cerrada@salesianos.edu o antonio.yepes@salesianos.edu o
jorge.soler@salesianos.edu

- Attach the .stl file to the shared folder on Drive too.