Hungarian National Assembly printing project.

The National Assembly is one of the most emblematic buildings and also one of the most attractive and famous for tourists.

It was designed by Imre Steindl and it was built between 1885 and 1904. It is located on the banks of the second longest river in Europe, the Danube. Unfortunately, the architect went blind and he was unable to see his work completed.

Forty million bricks, half a million precious stones and 40 kg of gold were used to build this building. In addition, we can see the most precious treasure of his country inside, the crown jewels, which were stolen several times.

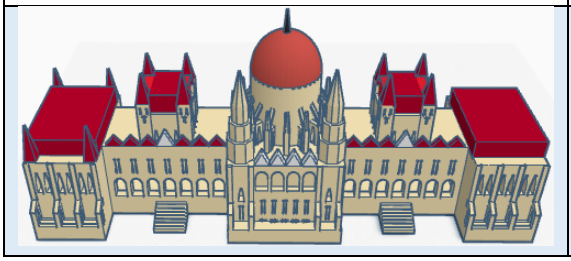
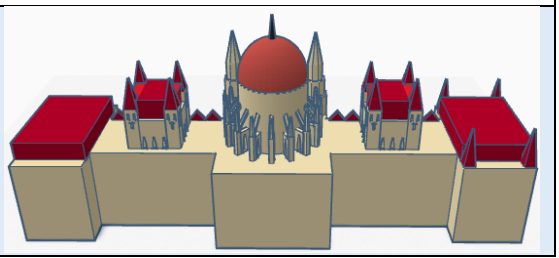
In this activity, we are going to model this construction to scale.

- It is 268 metres wide, 123 metres long and 96 metres high.
- The dome and two identical structures on each side are on the top.

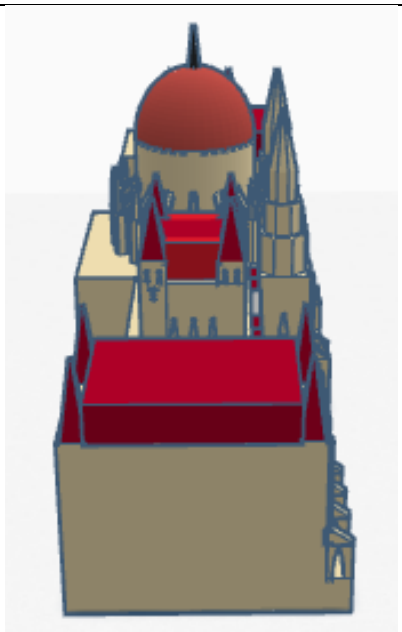
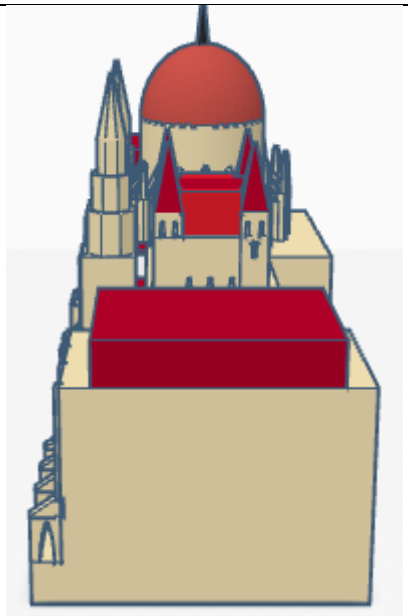
Objectives

- Master the use and modifications of basic shapes.
- Replicate this monument in Tinkercad.
- Empty some parts with other empty structures.

Reference model designed with Tinkercad.

Front View	Rear View
	

Lateral view

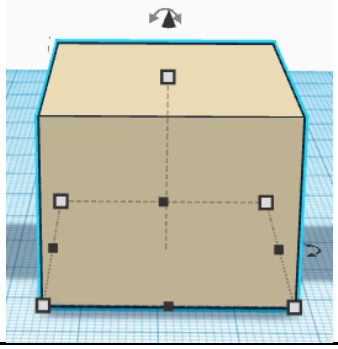
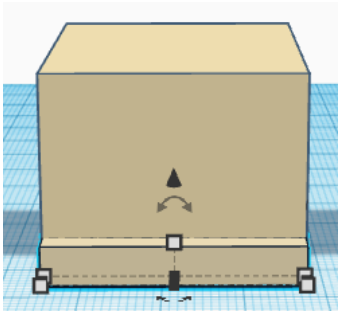
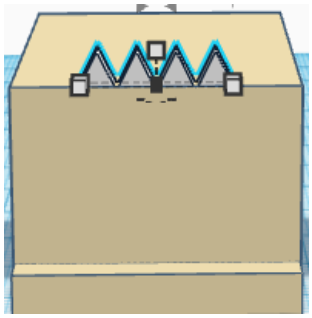
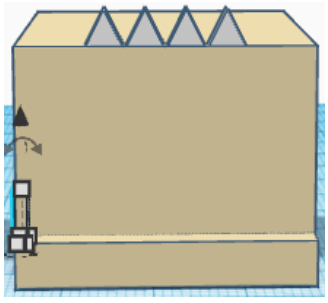
	

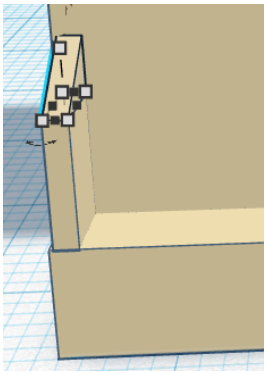
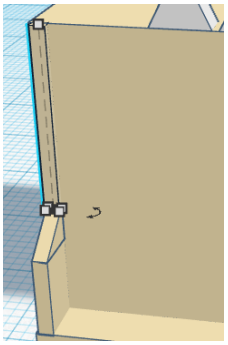
Model features

To replicate this model, we are going to divide the construction in 2 different parts, but here we have only one:

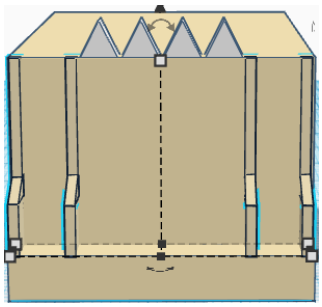
- Central and upper part.

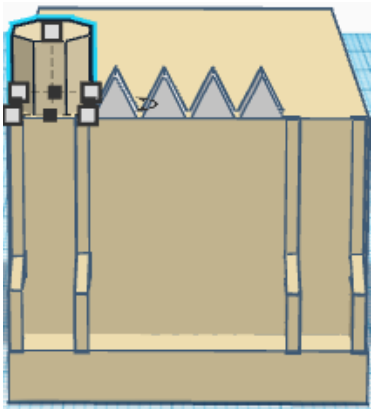
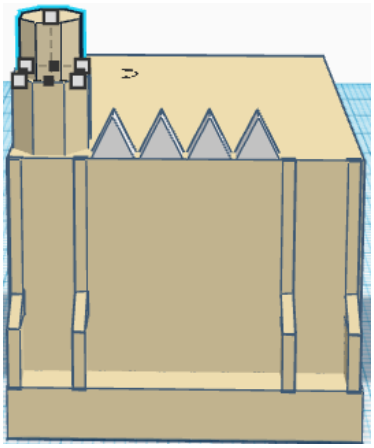
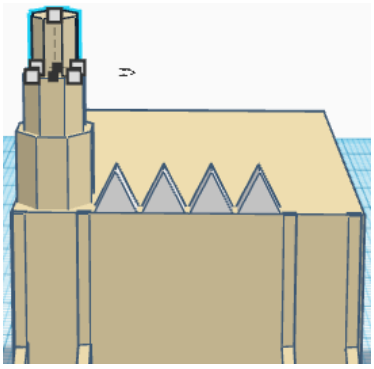
CENTRAL PART

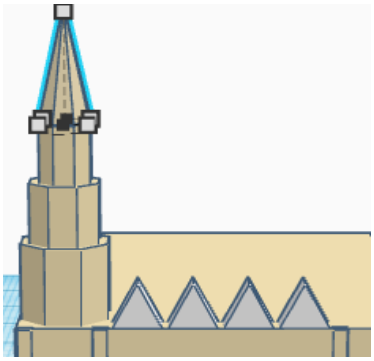
3D OBJECT	Size(mm)	Image
Box	33mm Wide x 39mm Long x 26mm High.	
Box	33mm Wide x 3.5mm Long x 5mm High.	
4x Roof	4mm Wide x 2mm Long x 4mm High.	
Box	1mm Wide x 3.50mm Long x 6mm High.	

Wedge	1mm Wide x 3.50mm Long x 2.50mm High.	
Box	1mm Wide x 0.50mm Long x 13mm High.	

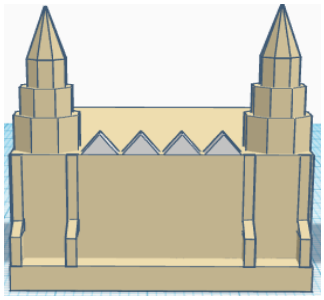
We duplicate the structure we have already created in the last 3 steps, and we duplicate it three times as we move it.

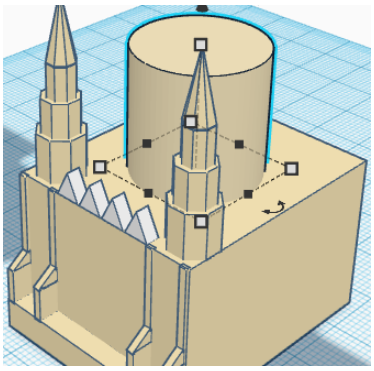


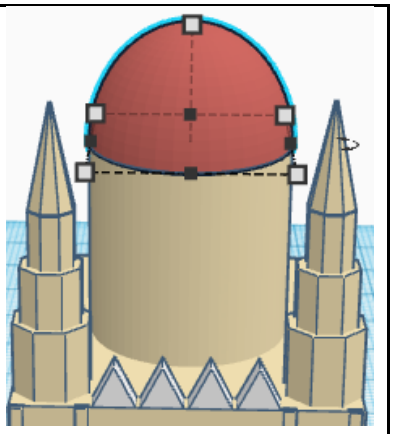
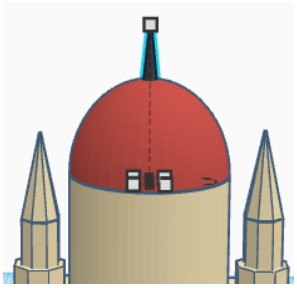
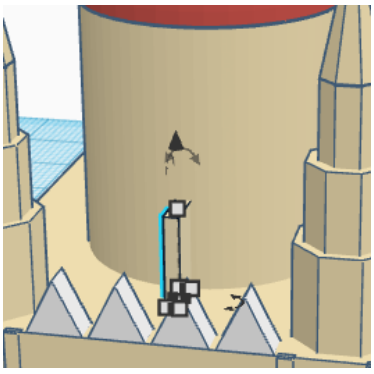
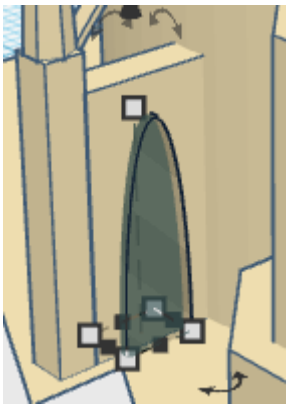
Polygon (8 sides)	7mm Wide x 7mm Long x 7mm High.	
Polygon (8 sides)	5.50mm Wide x 5.50mm Long x 5.50mm High.	
Polygon (8 sides)	4mm Wide x 4mm Long x 5.50mm High.	

Cone. Radius base 10, sides 8	4mm Wide x 4mm Long x 10mm High.	

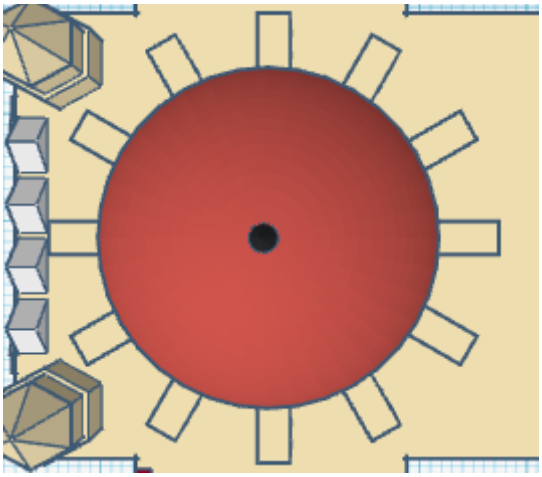
Now we duplicate the tower structure and place it on the other side.

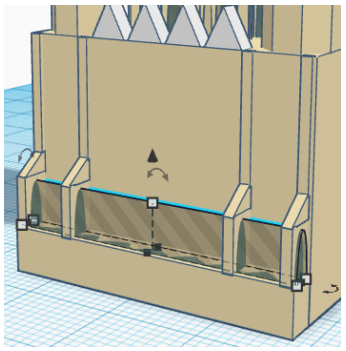
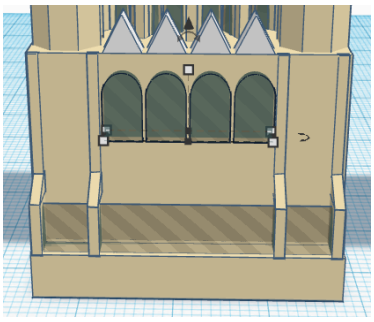


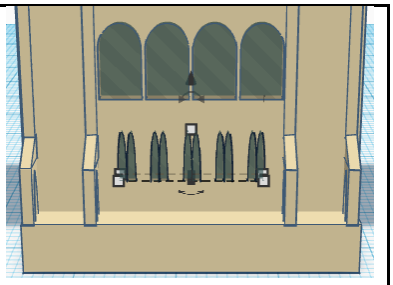
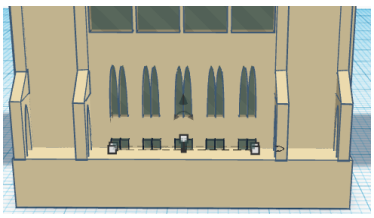
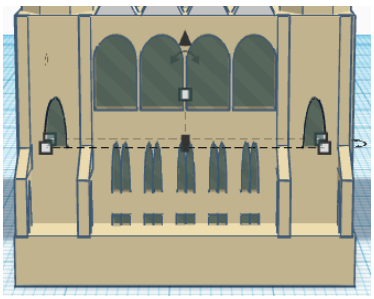
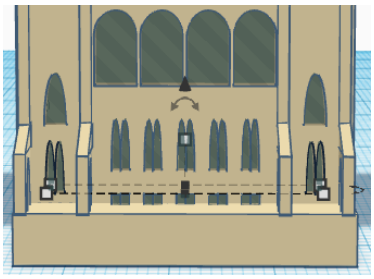
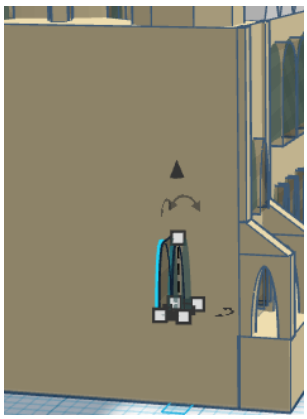
Cylinder	20mm Wide x 20mm Long x 20mm High.	
Half sphere	20mm Wide x 20mm Long x 12mm High.	

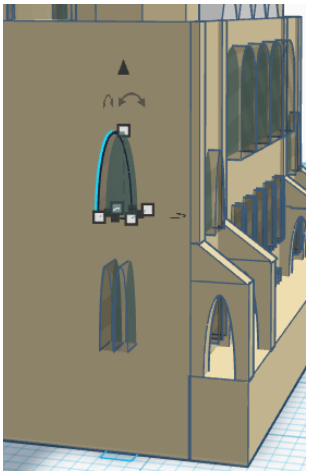
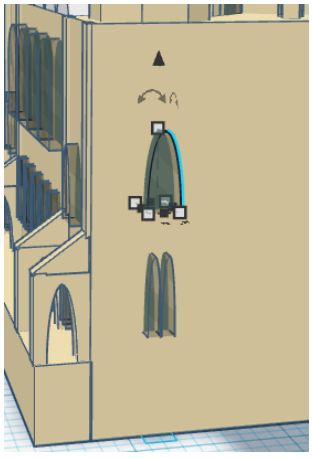
		
Cone	4mm Wide x 4mm Long x 20mm High.	
Box	2mm Wide x 3.50mm Long x 10mm High.	
Empty round roof	2mm Wide x 1.50mm Long x 6mm High.	

Once we have finished the structure with the last 5 steps we group them, duplicate and place it on the opposite side of the cylinder, besides we use the symmetry tool in order to change the position and place it on the wall. Now we group both structures and rotate it 22. 5º until we complete the dome.



Empty round roof	2mm Wide x 33mm Long x 5mm High.	
4 x Empty box + Round roof	4mm Wide x 3mm Long x 7.25mm High.	
10 x Empty round roof	0.75mm Wide x 2mm Long x 5mm High.	

		
Empty box	0.75mm Wide x 0.75mm Long x 1mm High.	
2 x Empty round roof	2mm Wide x 3mm Long x 5mm High.	
4 x Empty round roof	0.75mm Wide x 3mm Long x 5mm High.	
2 x Empty round roof	0.75mm Wide x 3mm Long x 5mm High.	

2 x Empty round roof	0.75mm Wide x 3mm Long x 5mm High.	
Empty round roof	2mm Wide x 3mm Long x 5mm High.	
Empty round roof	2mm Wide x 3mm Long x 5mm High.	

We have finished the central part of the building.