



Lace your numbers

Learning Objectives:

- Know how to manipulate simple shapes using tinkercad.com
- Understand how 3D printers work.
- know how to modify files already made in order to appropriate them.

Level of Difficulty: Level 2

List of Materials Required:

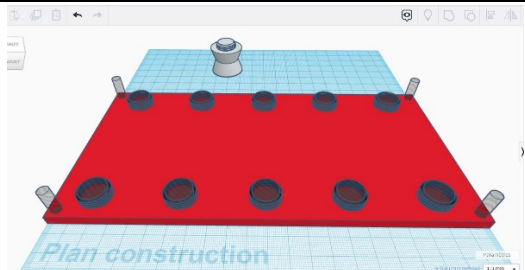
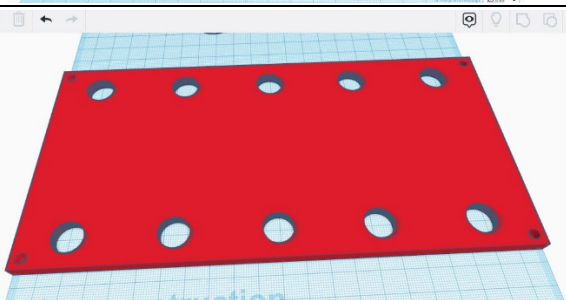
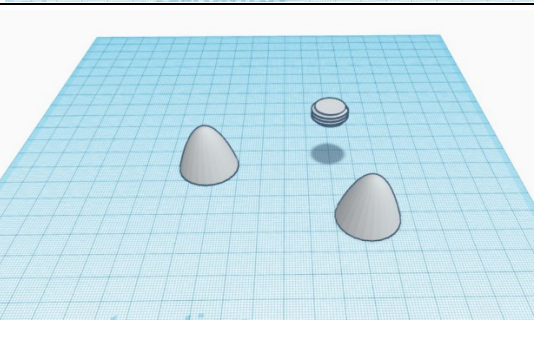
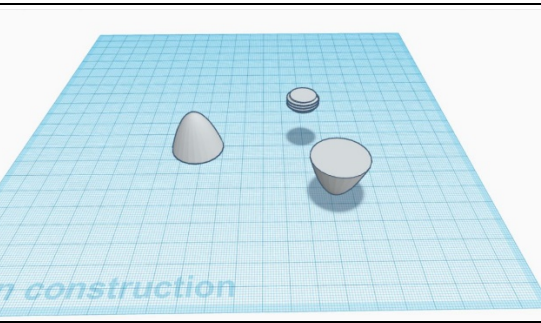
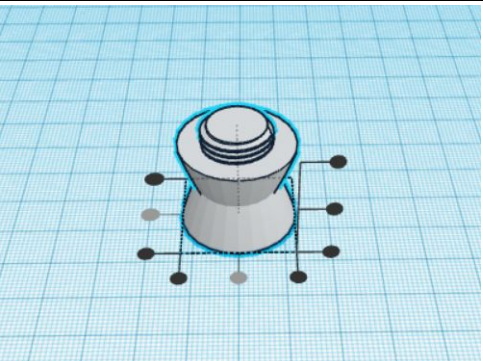
- A 3D printer
- A spool of filament for the 3D printer (one color is enough)

3D Modelling Skills Needed:

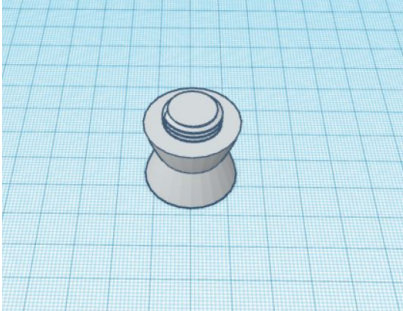
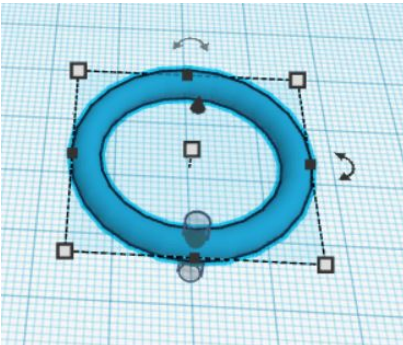
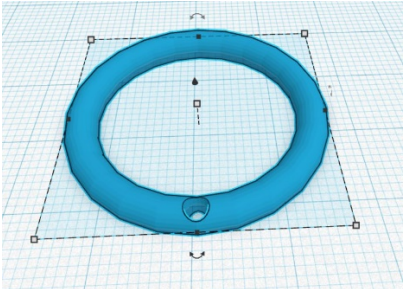
- Know how to move an object on the plan
- Know how to merge two shapes
- Know how to resize an object
- How to align different object
- How to rotate an object
- How to make a screw and a thread



Step-by-step 3D Modelling

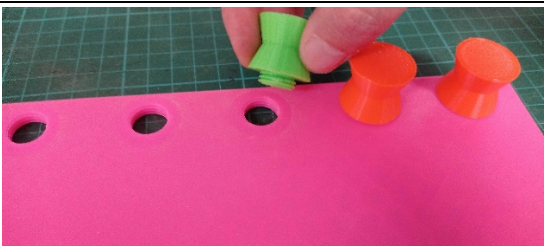
<p>Step 1</p>	<p>Create the support with the holes</p> <p>Dimension: 220x110x5mm</p> <p>thread: diam16.5mm</p>	
<p>Step 2</p>	<p>Merge the thread and the support</p>	
<p>Step 3</p>	<p>Create the screw</p> <p>Take two paraboloid and a thread on your plan</p> <p>Paraboloid: 25mm/diamx20mm/high</p> <p>Screw: diam15mm</p>	
<p>Step 4</p>	<p>Rotate one to 180°</p>	
<p>Step 5</p>	<p>Align the three shapes</p>	



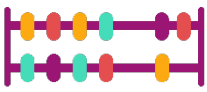
Step 6	Merge the shapes	
Step 7	Take the torus Dimension: 33x33mm Tube (internal dimension): 2mm	
Step 8	Merge the shape. Dimension: 2.83x2.83mm	


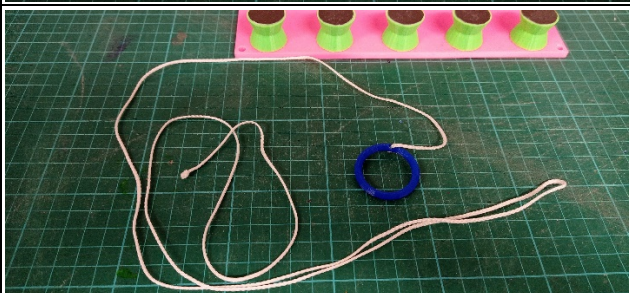
Creation of the Exhibit

Assemble/disassemble and store the exhibits, accompanied by the corresponding time-frames

Step 1	screw the studs in place	
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Step 2	Add a sticker to write on it	
Step 3	Add a string to the top	

Design Map

