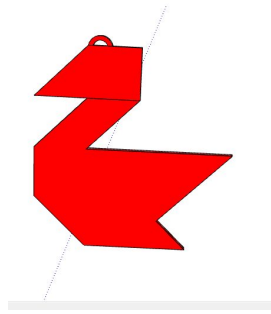# 3D printing Trophy Winner Tangram

Once designed tangram pieces and some other figure in SketchUp, it's time to print the trophy that the winner of the game will receive. It will be based on a figure made with pieces of the tangram. To do this we will use our 3D printer.

First you must decide what your trophy is. A key ring, a pendant, a pin, a medal ... .. Once decided, Customize design of your figure as appropriate. For example, if you decided to be a key you will have to make a hole or a handle.

Second, we resize our figure since the end result must be inscribed in a circle of diameter 8 cm. To do this, you can learn how the scales are made in SketchUp following the next steps:

1. Look up the Institute's website: http://iesleliana.edu.gva.es/ies/
2. Select from the top menu "Aula Moodle" then "Courses Technology Department" and then "SketchUp". Enter this course as guest.
3. Once inside the course you can view the video tutorial "9 Scales and symmetries" where you can learn different ways to reduce your figure. You will see that there are many video tutorials you can view if you want to learn more.

Once you have finished the piece, save the file in the proper format to print it. For that:

1. On the File menu, choose Export STL
2. Open it in CURA and select light infill. You may need "support" or "build plate adhesion". Ask your teacher. Finally, save it with the extension gcode.
3. Your Trophy is ready to be printed.

Here are some examples:

| bird pin | hanging Duck | Duck for hanging |