Designing a 3D object

Objective

Your goal is to design a tile for printing on a 3D printer

Procedures

1. Start Firefox

2. Sign into tinkercad.com (You can create a free account)

3. Create a tile template as follows:

   - Create a Box 60 x 60 x 3 (everything is measured in mm) and hit Lock Transformation
   - Create a Box Hole 80x80x20 which is 20 mm below height zero. Lock Transformation

4. Start by finding a theme. Suggestions:

   - Castles/Houses
   - Cityscapes
   - Terrain
   - Abstract/Pattern
   - Flag

5. Guidelines:

   - Make sure to take turns on who has the mouse!
   - The maximum height is 20 mm
   - Do not go off the sides of the Tile Box
   - Make sure all parts that you add are attached to the Tile Box
   - It will be printed in a single color

6. Finishing your tile:

   - Select the Tile Box, and select "Unlock transformation"
   - Select the Floor Hole, and select "Unlock transformation"
   - Select all with your mouse and push the button Group
   - Save changes

7. Save for 3D printing in STL format and print.