



Chess Set

TinkerCAD

Schedule – to help you stay on track

April 26 - 30

Monday – Sketch Pawn & Bishop

Tuesday – Sketch Rook & Knight

Wed. - Sketch King & Queen

Thursday – Finishing Touches

Friday – Design Challenge

May 3 - 7

Monday – Model Pawn & Bishop

Tuesday – Model King & Queen

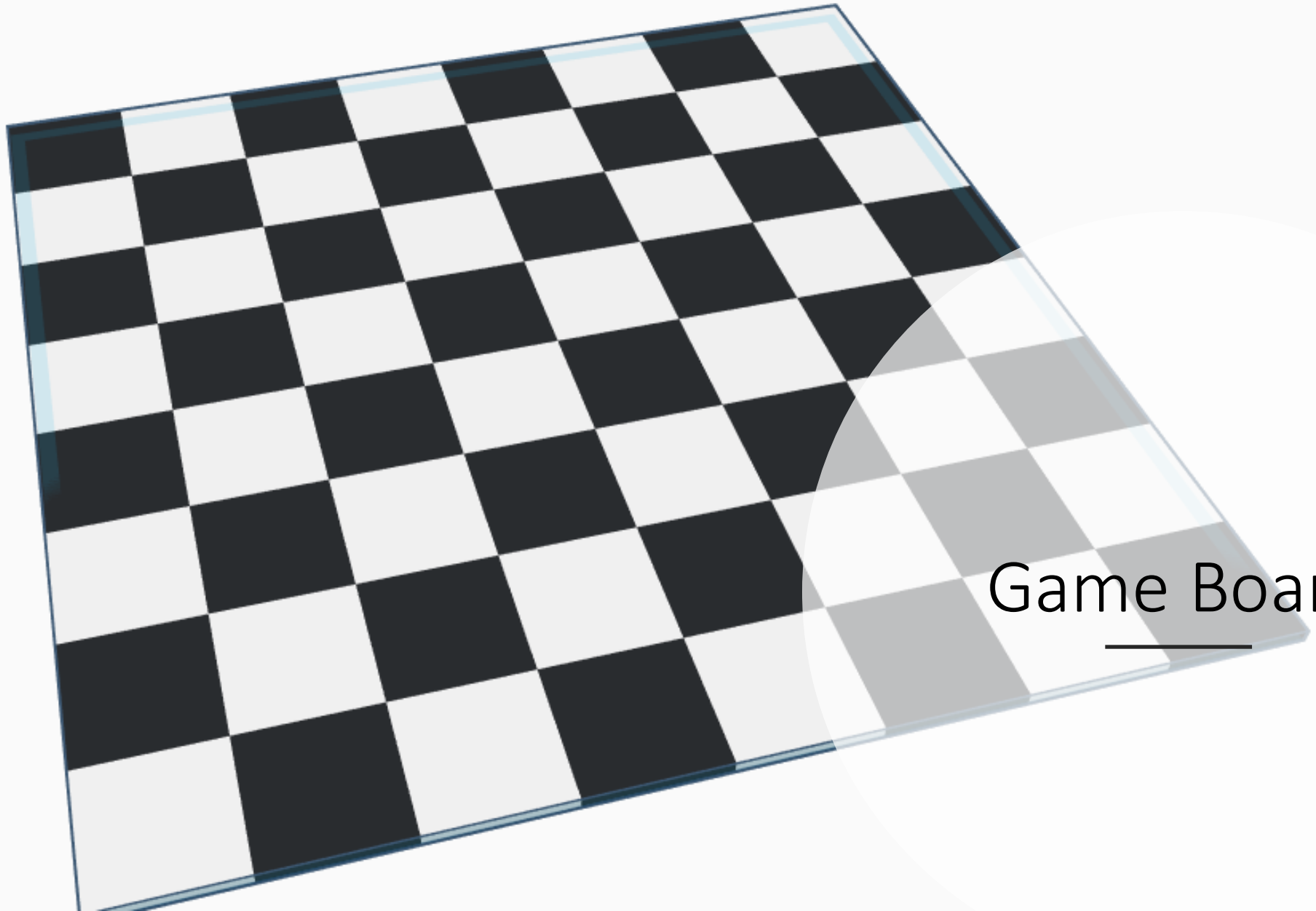
Wed. – Model Rook & Knight

Thursday – Chess Board Assembly

Friday – Design Challenge

Purposes of this project

- To create and replicate custom components.
- Assemble components to create a final technical drawing.
- Design custom parts with a similar theme.
- Draw on prior knowledge from the Recorder Project.



Game Board

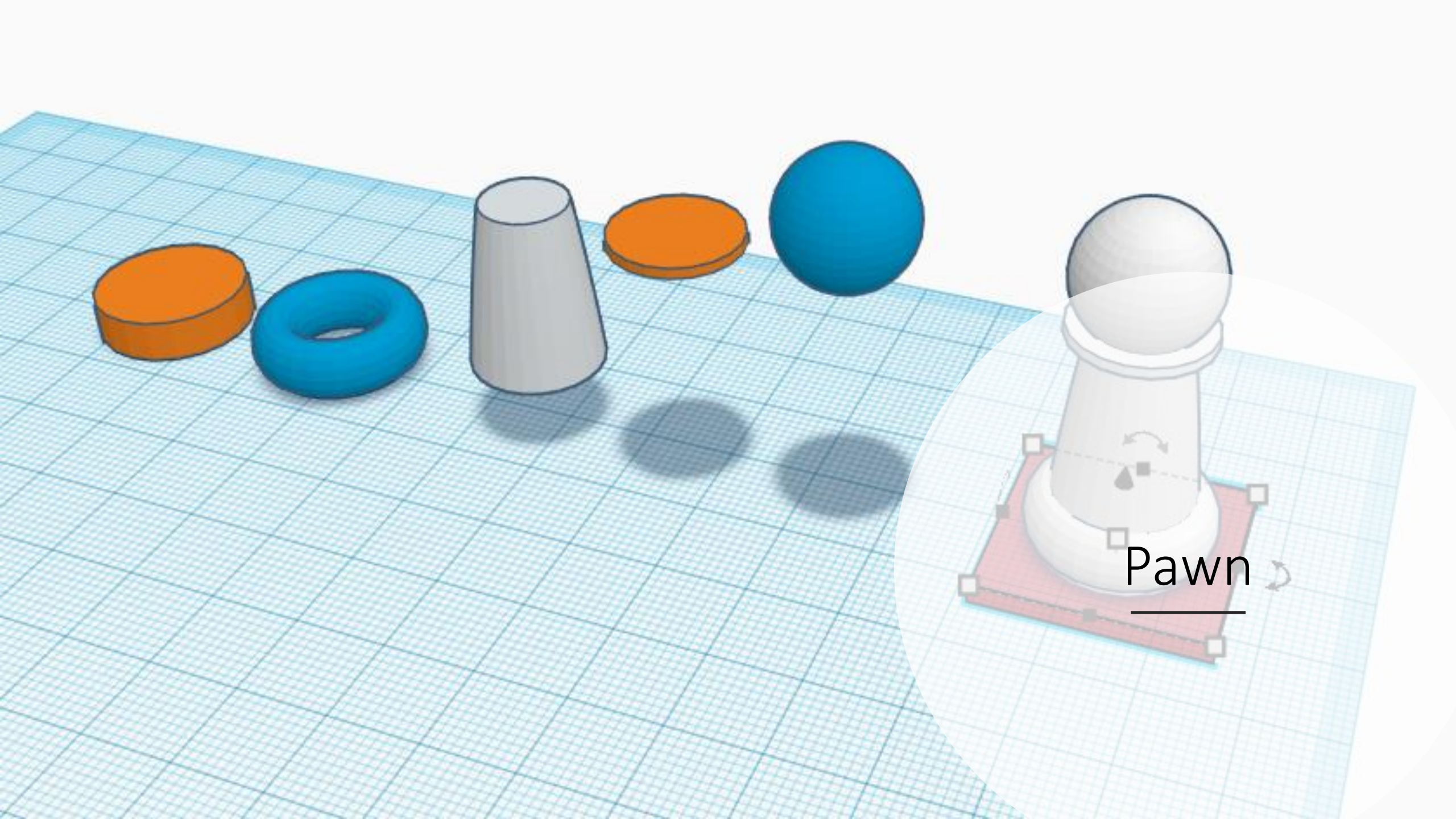
Game Board Steps

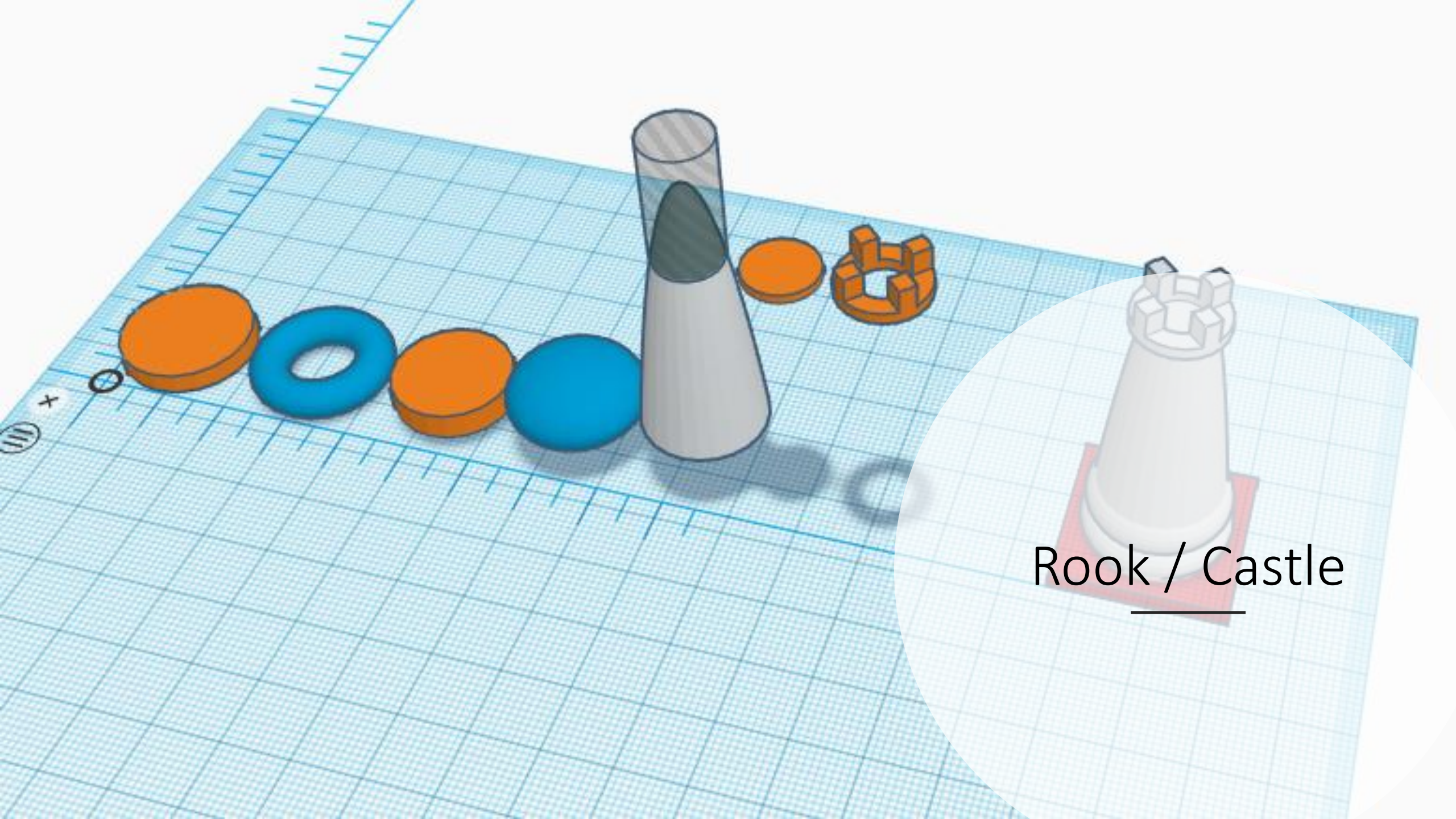
1. Bring a box into the Workplane.
2. Size the box 25mm x 25mm x 2mm
3. Place the box just underneath the work plane
4. Place the ruler tool in the corner of the Workplane.
5. Zero-in your box to the corner where the ruler was placed.
6. Duplicate your box along the x-axis (x7)
7. Colour and Group the row of boxes.
8. Duplicate the group of boxes along the y-axis
9. Mirror every second row of boxes to make the checker board pattern.

Game Pieces

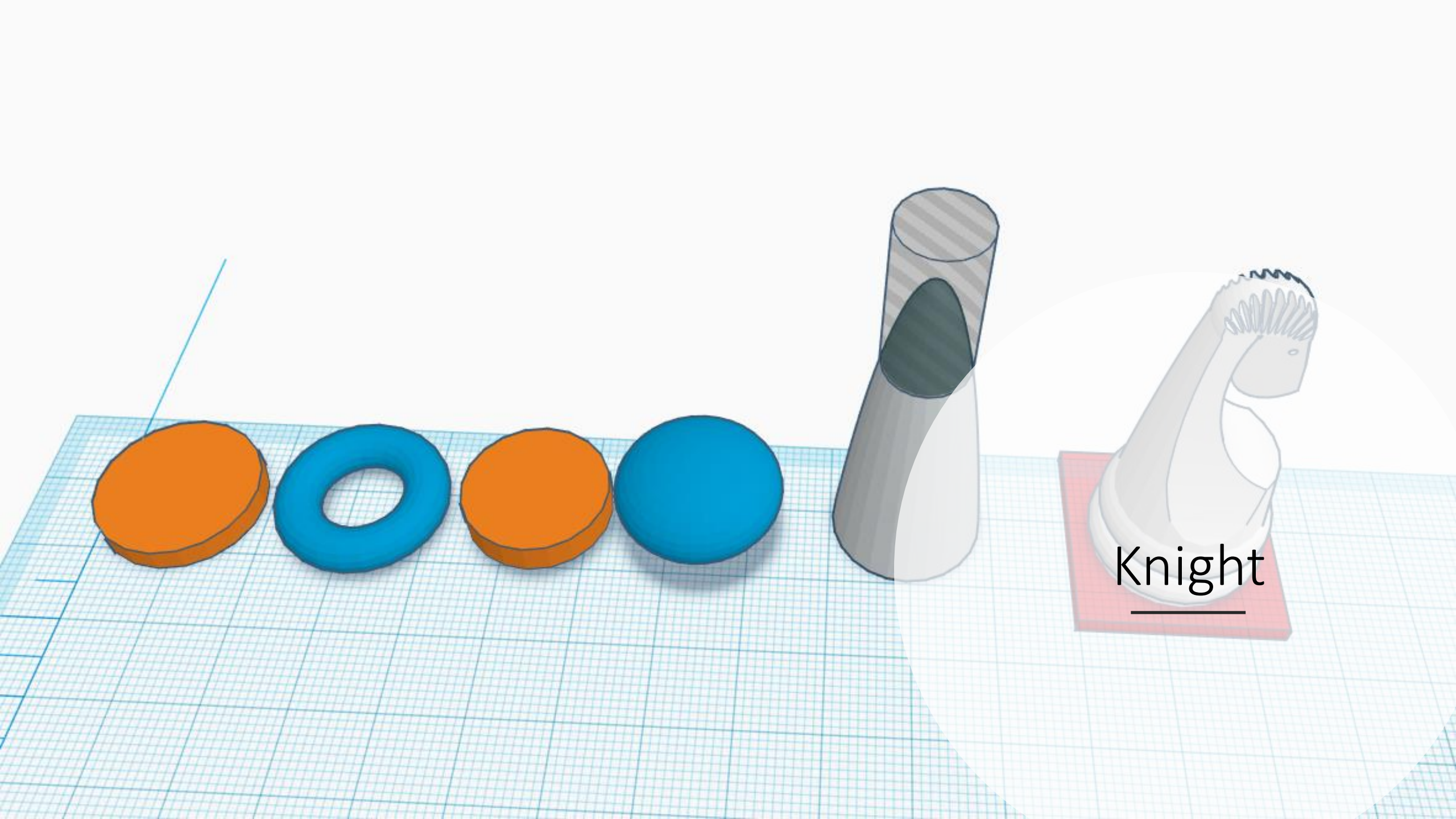
For this project, I will not be providing you with the steps to create the game pieces. Rather, I will be providing you with a set of parameters to follow.

1. Your game pieces should fit centered on each game tile.
2. Your game pieces should follow a theme (use google to draw inspo)
3. You'll need to create 1 of each – Pawn, Rook, Knight, Bishop, Queen & King.
4. You should create a 'New Project' in TinkerCAD to organize your parts.
5. Use the images in the following slides to get an idea of assembly of each piece.

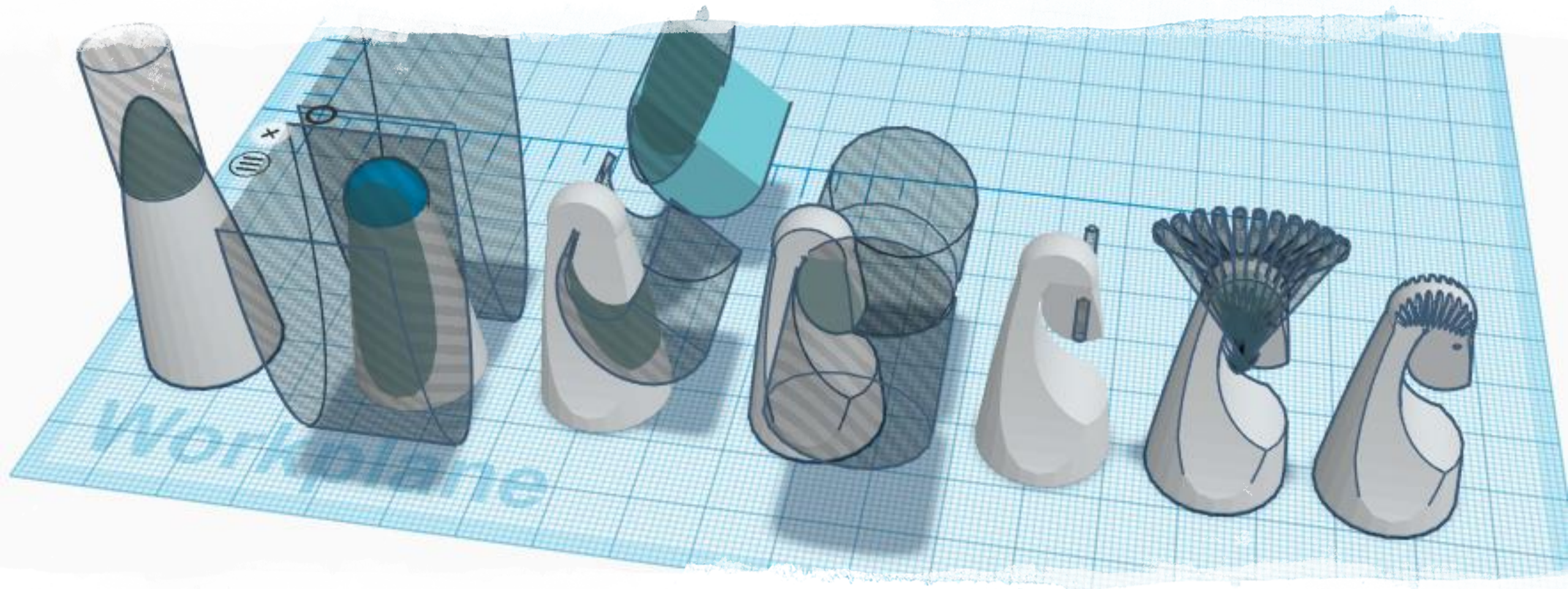




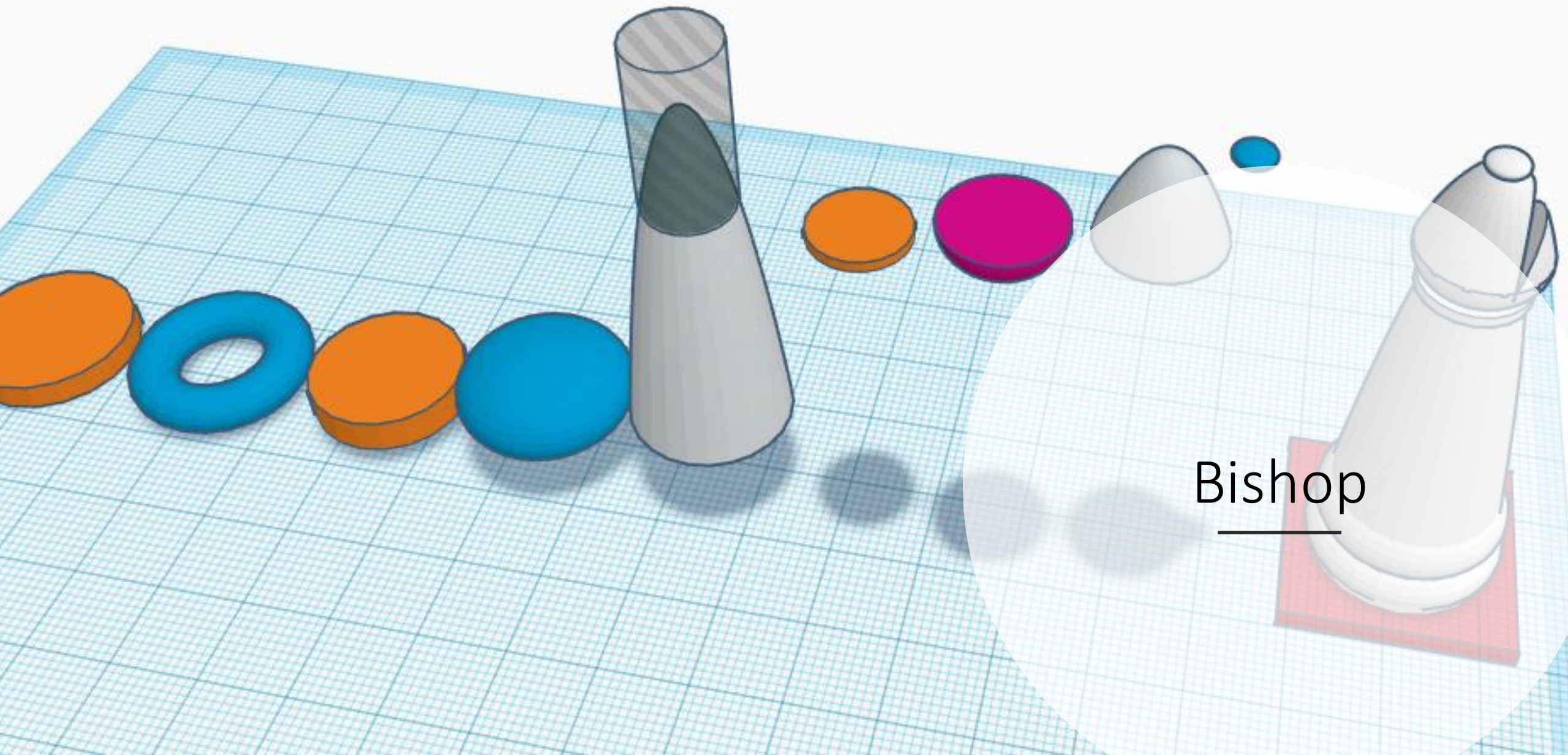
Rook / Castle



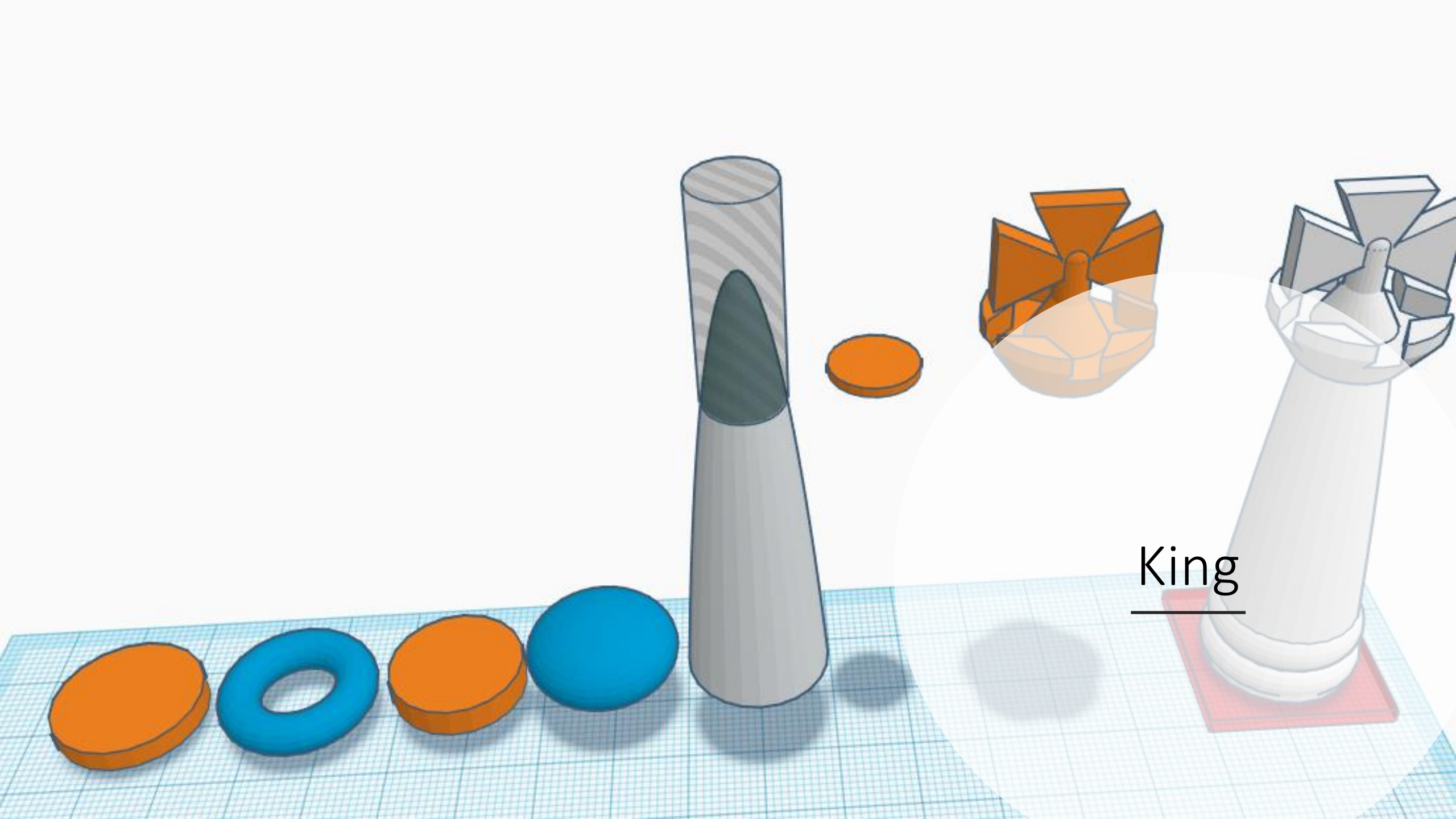
Knight



Knight (top)

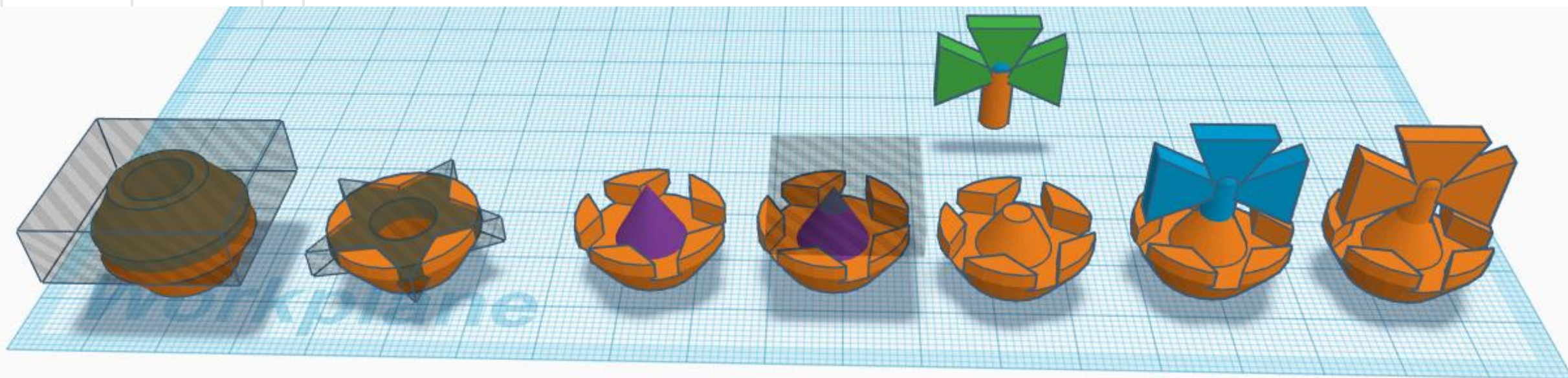


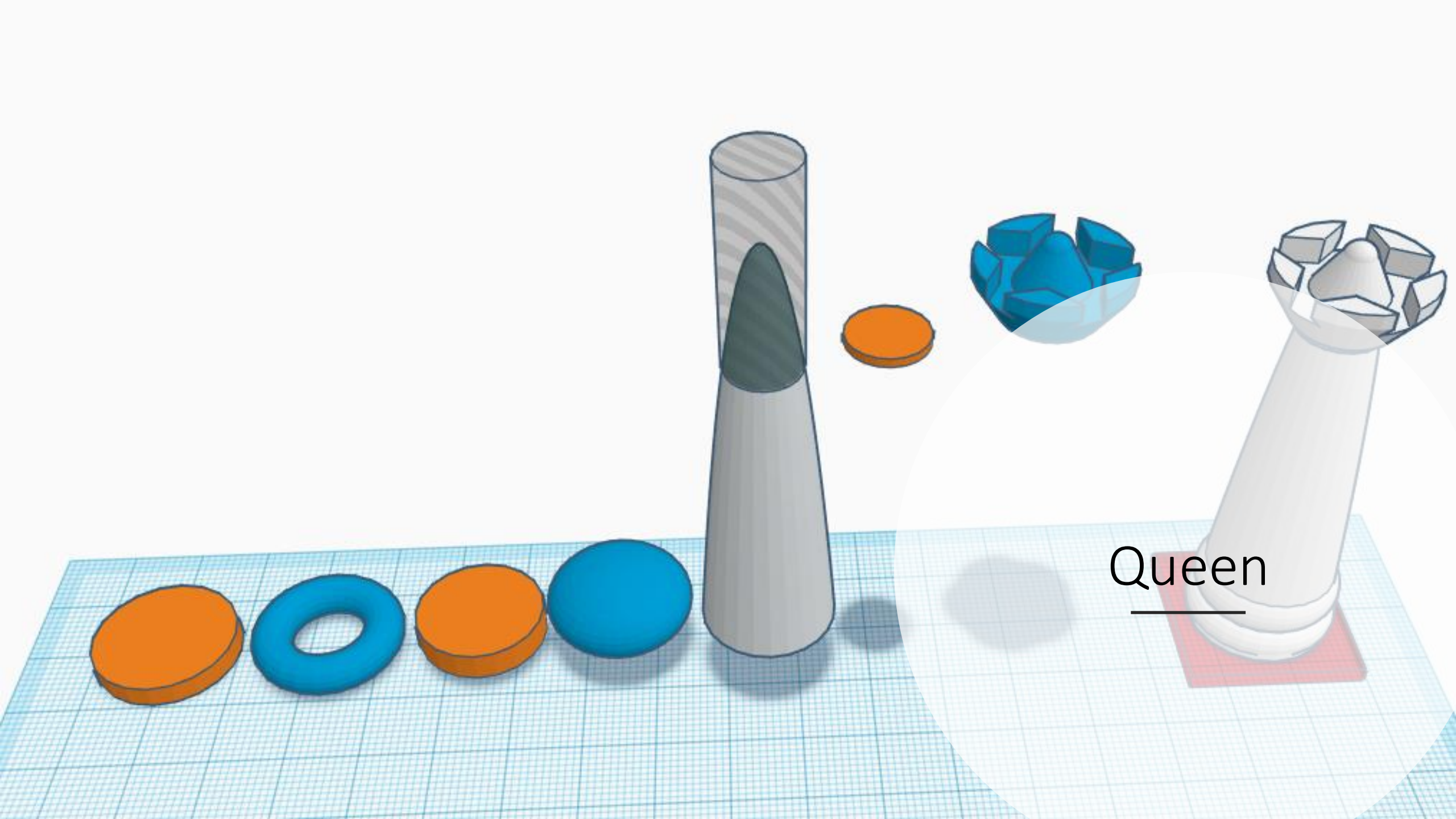
Bishop



King

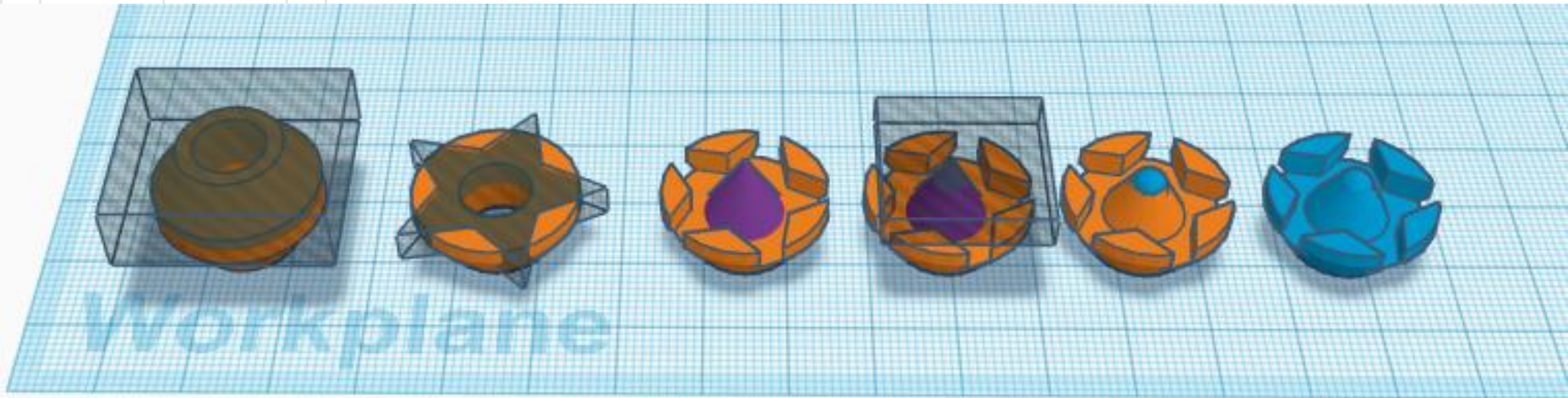
King (top)





Queen

Queen (top)





Assembly

Assignment Submission

- Submit .stl file of assembled chess board to Teams.
- Submit photos and/or scans of sketches for each piece.
- Complete Project Reflection in Microsoft Forms.