

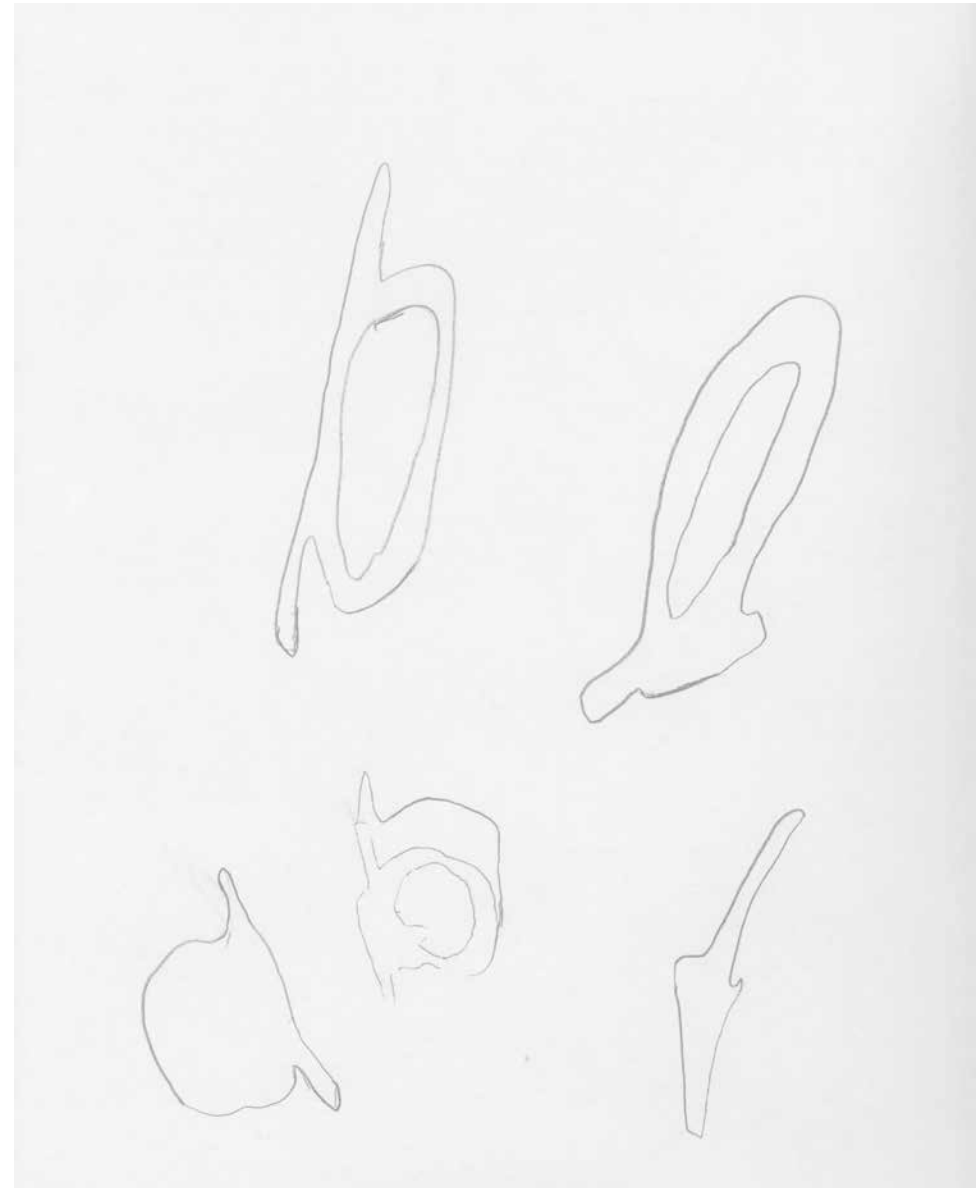
Textures, Tools, and Time

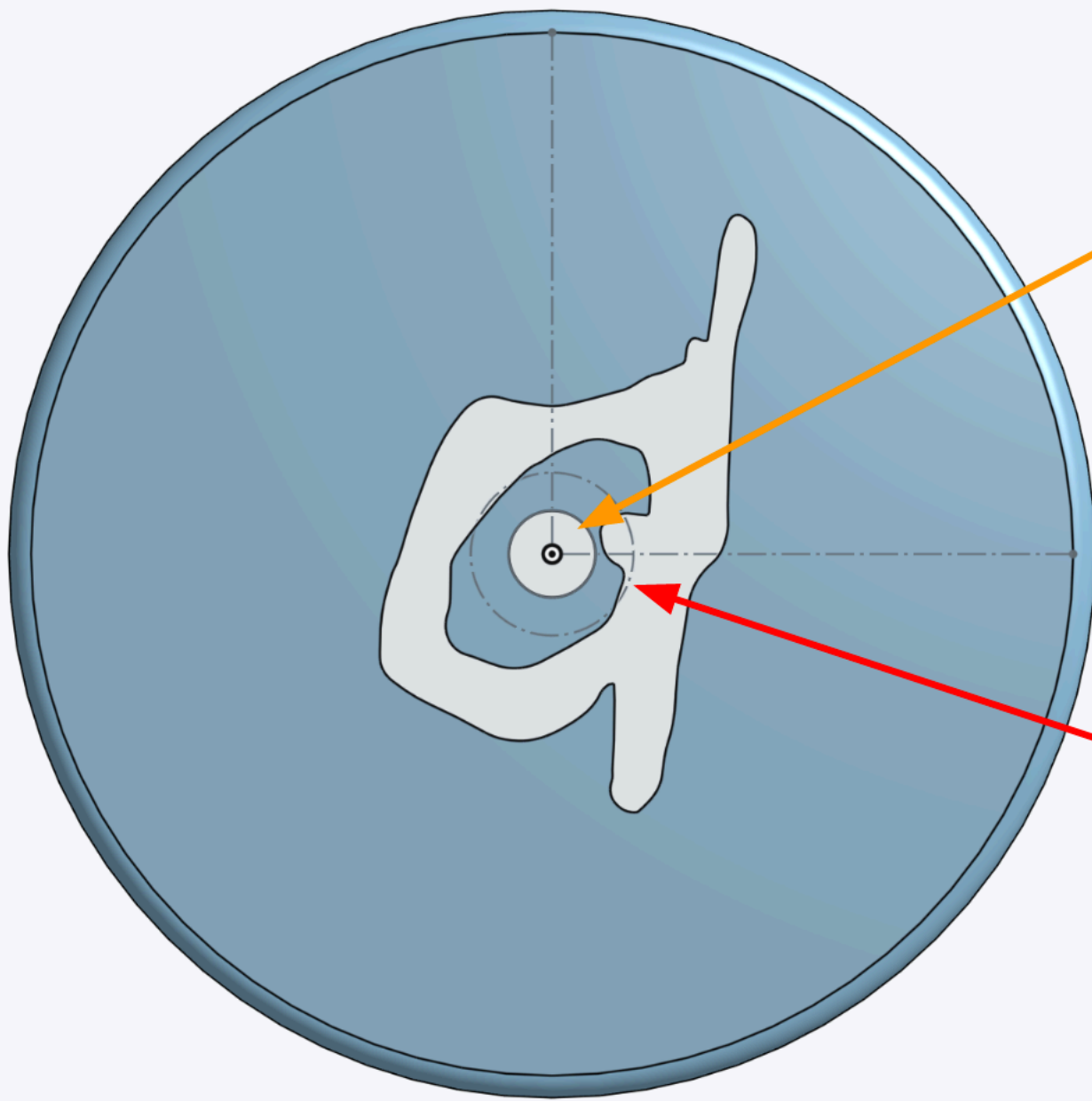
Part 1a: Collaboration

Presented by Elizabeth New & Shalya Marsh



To start our collaboration drawings of shadows were converted to vectors in Adobe Illustrator





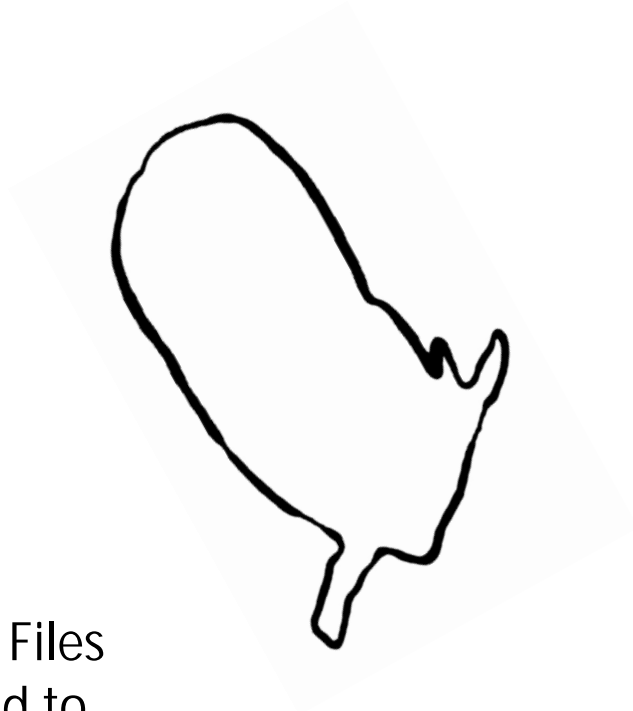
8mm hole

100mm diameter disc. 6mm thick.

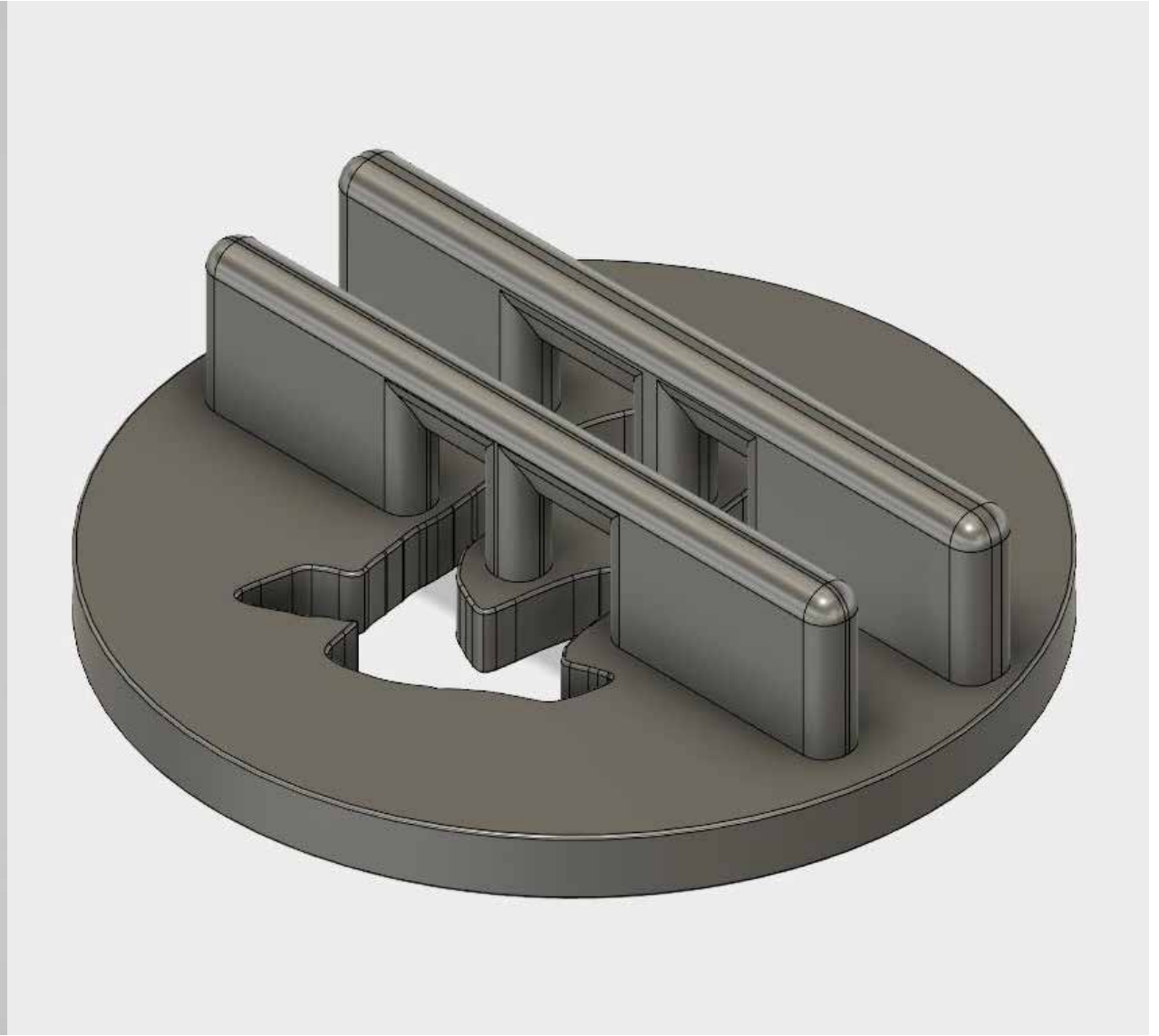
This is 15mm. Bolt will cover center part



The Illustrator Files were then used to model the extruder dies.

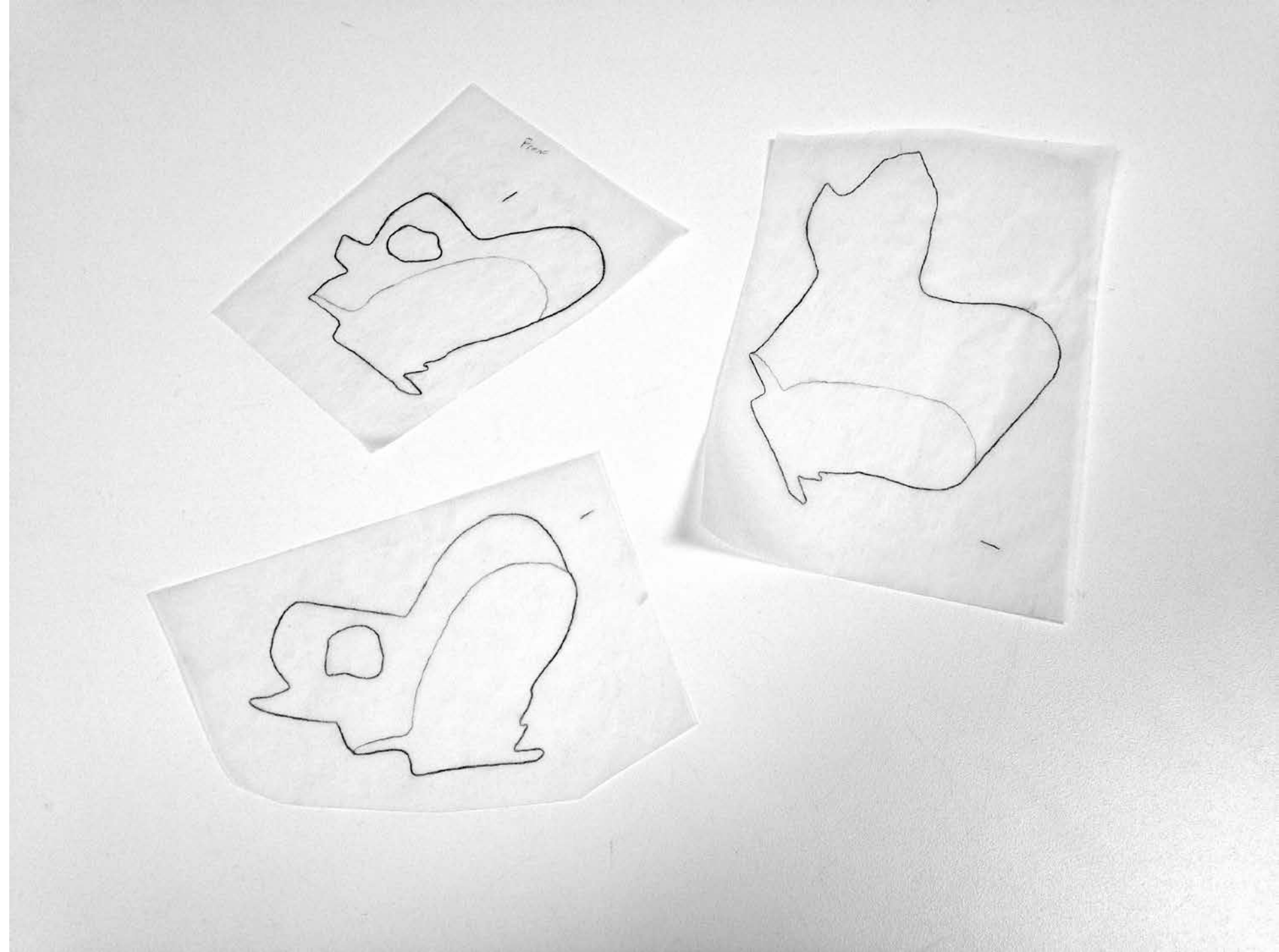






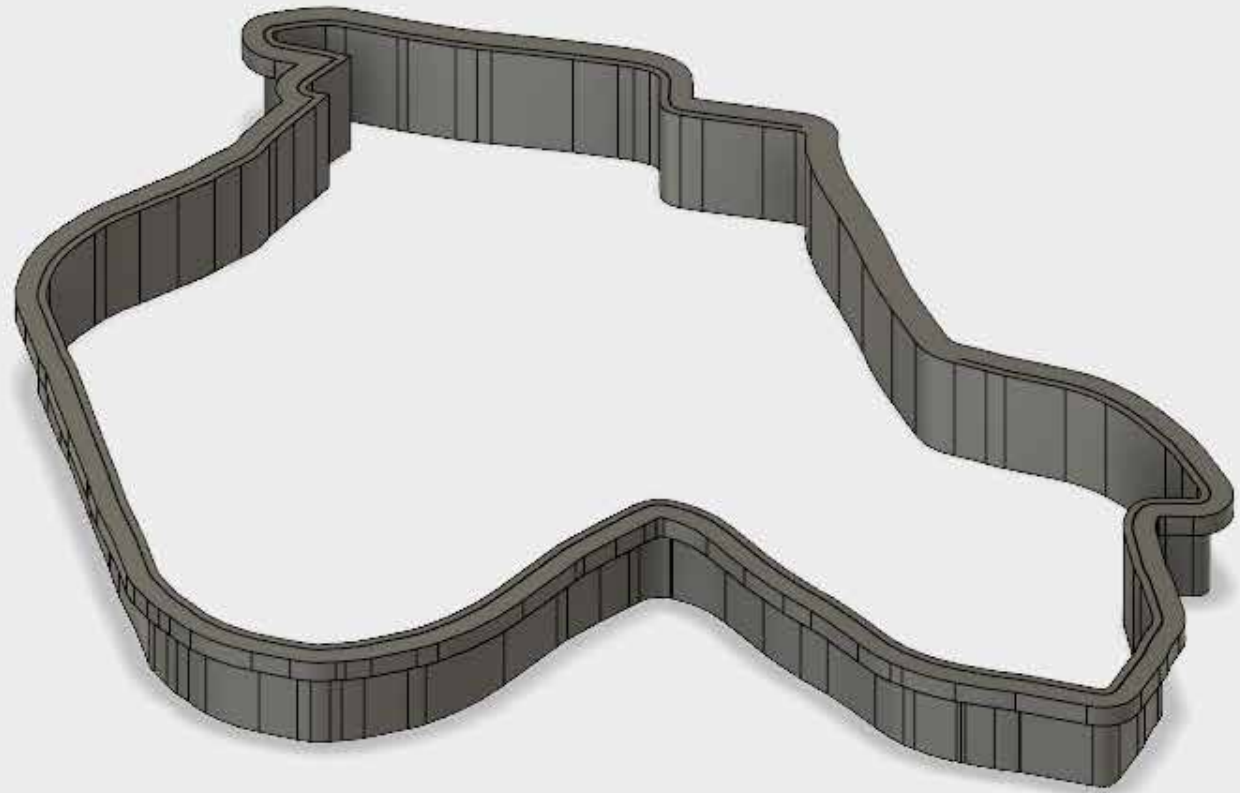


Sketchbook drawings are used as source material for extruder dies and clay cutters.



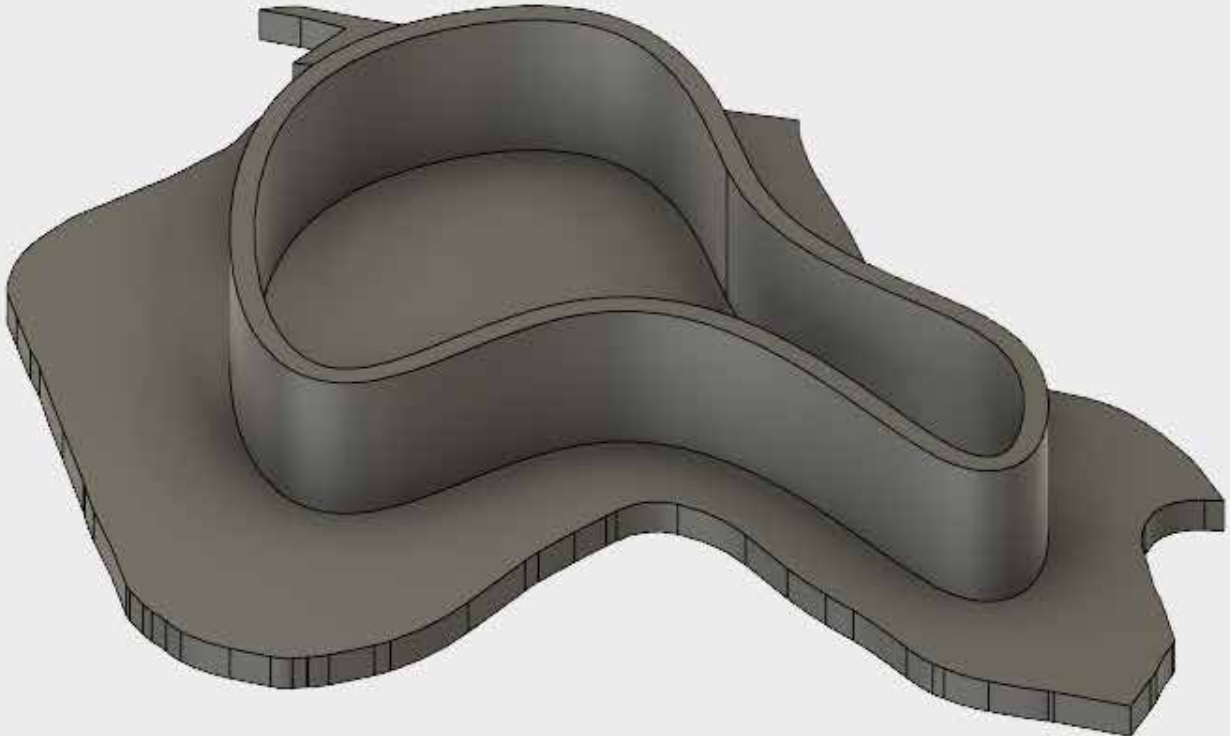


The exterior of the
tile cutter model



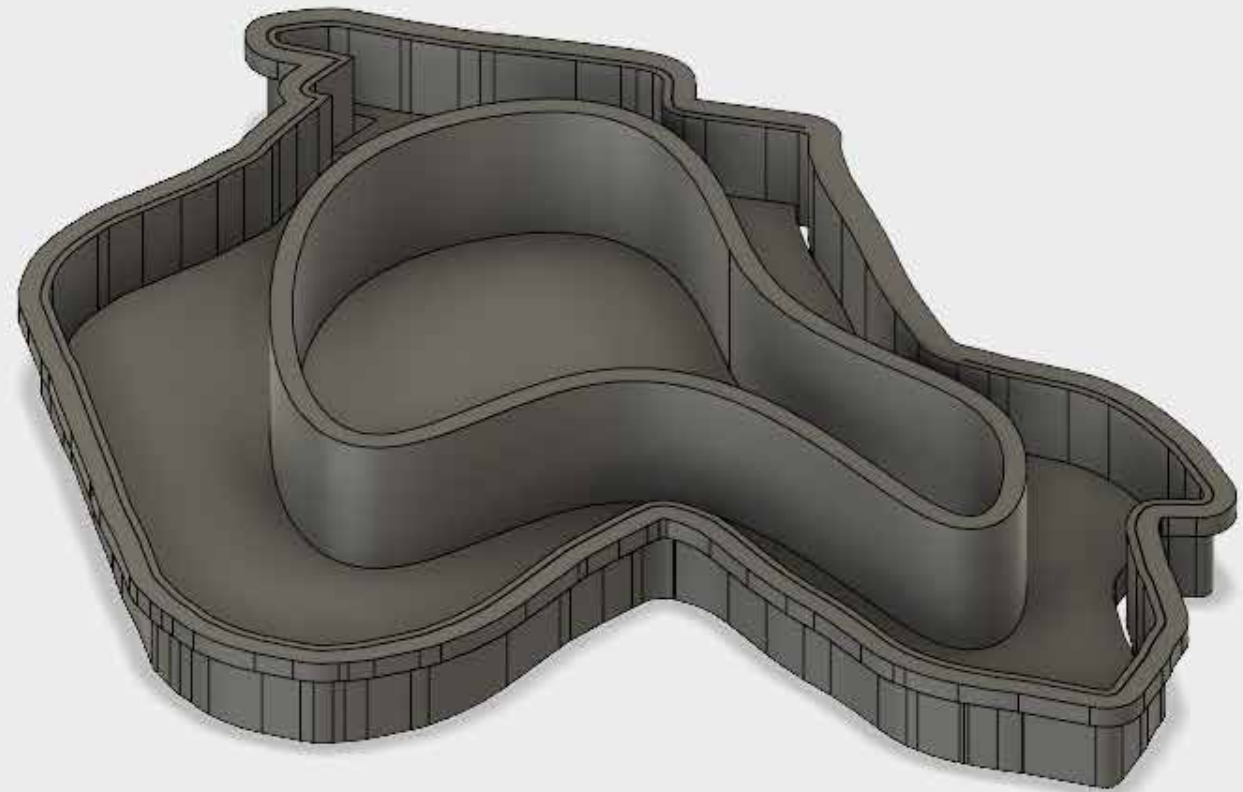


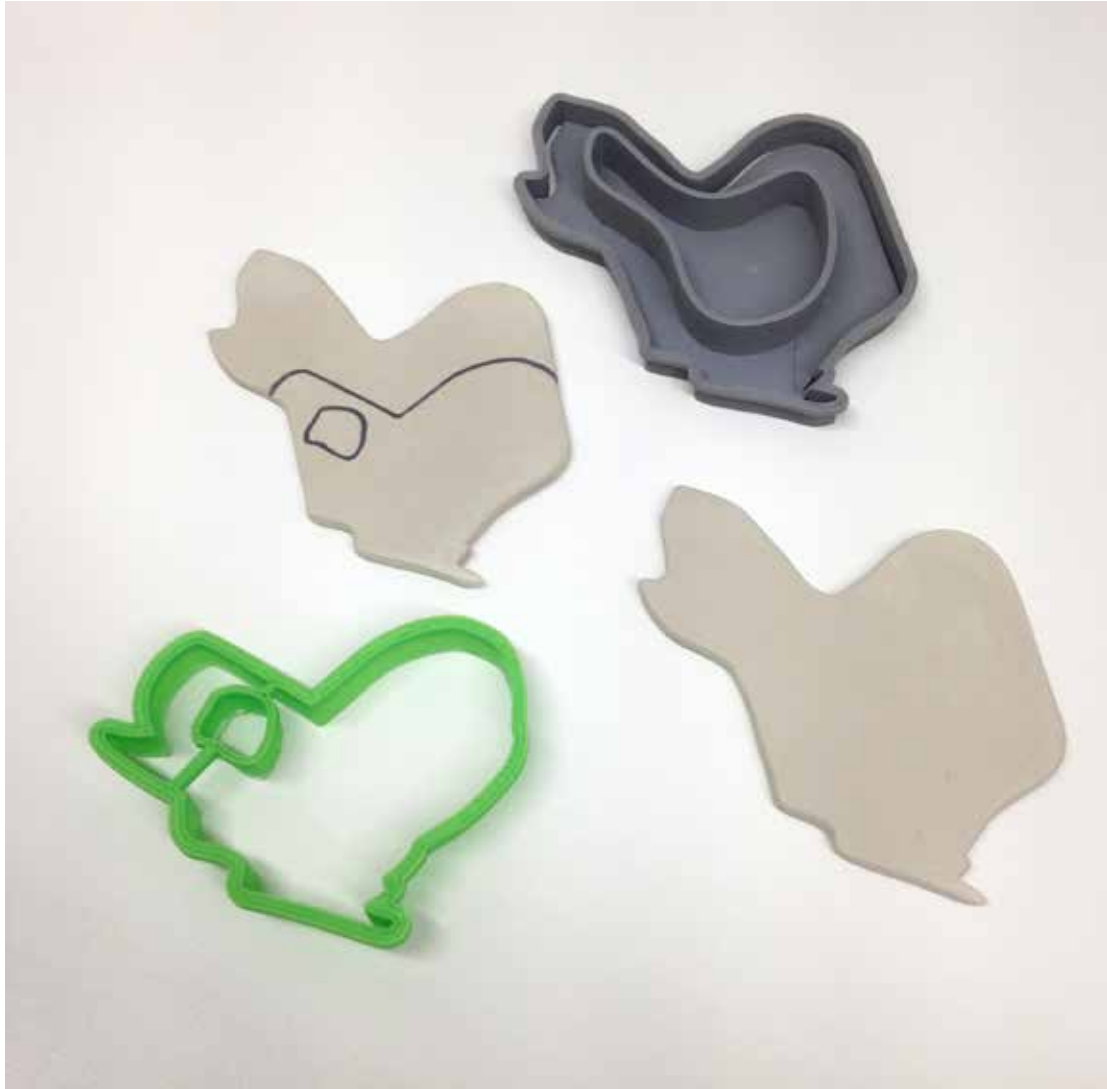
The interior part of the model is used to push the clay from the stamp.





Here you can see
both parts together

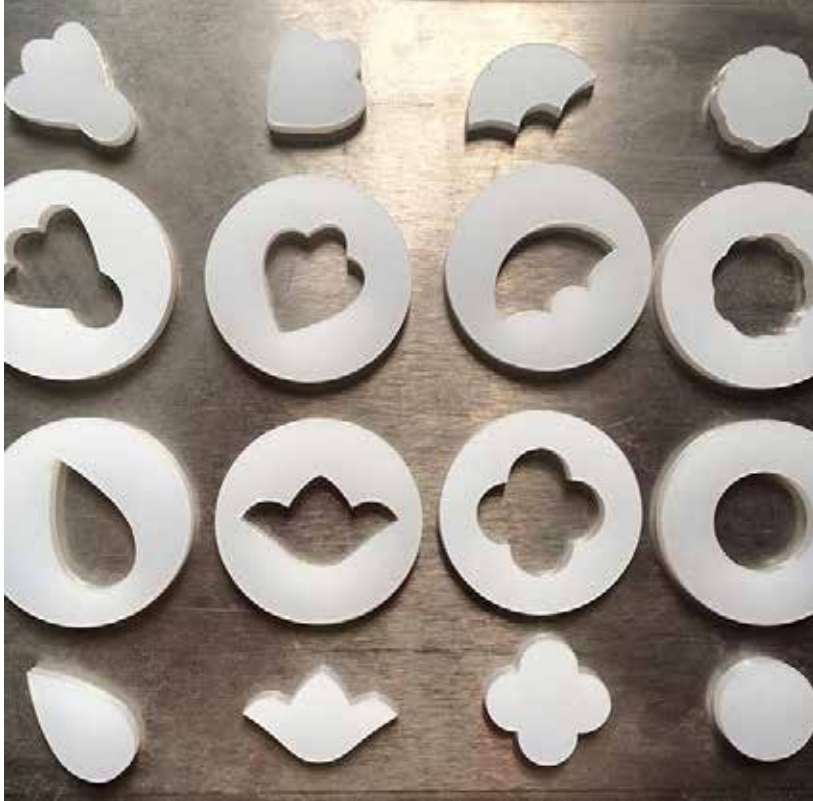






Textures, Tools and Time

Part 1b: Tools In Use



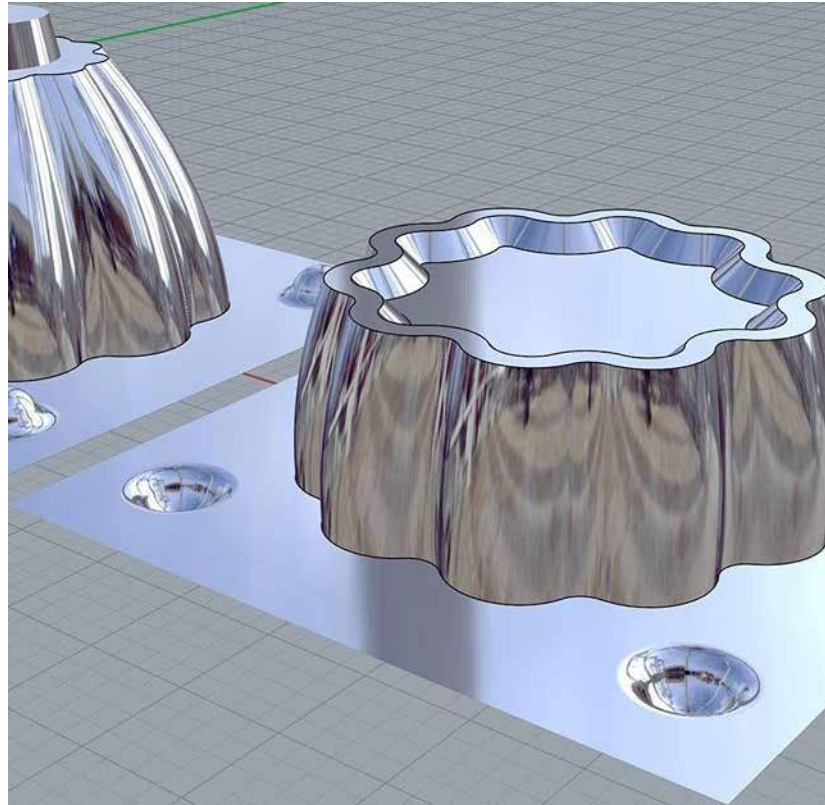
Frances Priest
Laser cut Extruder Dies



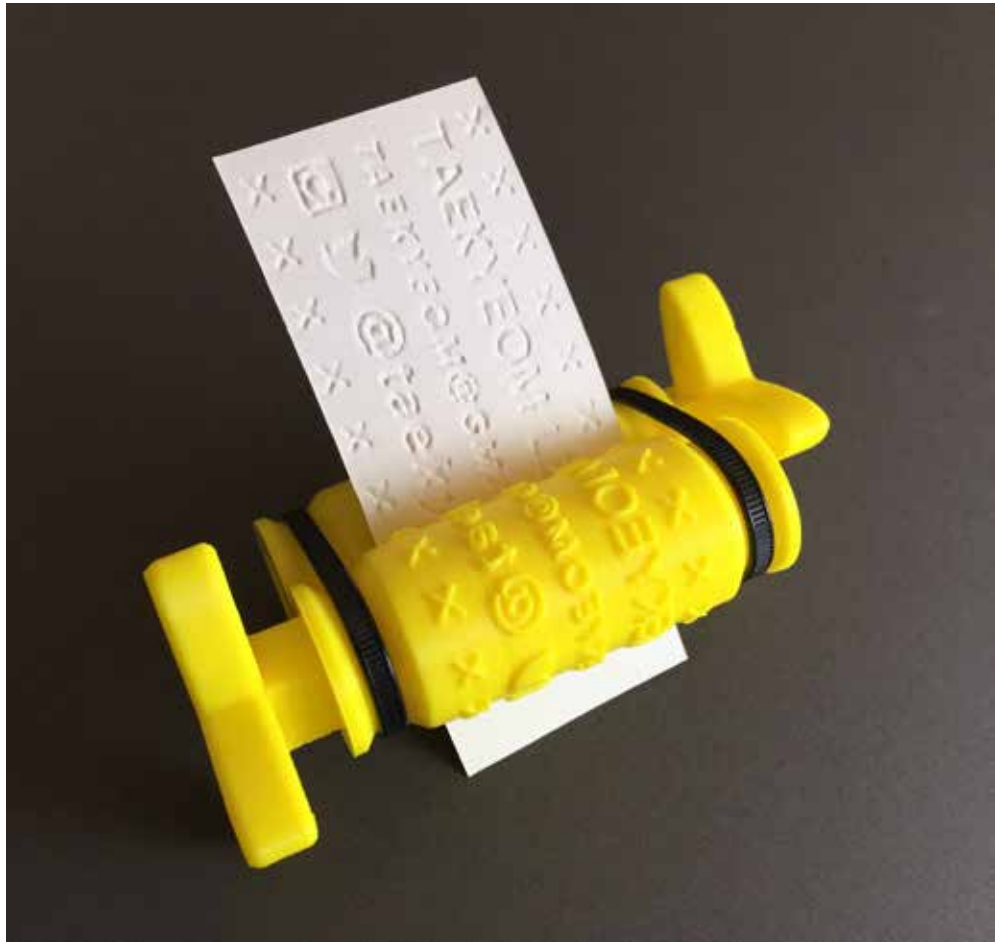
Matt Kelleher
Alfred Ceramics

This image shows a 3D printed PLA cottle system for making a plaster mold. The Cottle is filed three times with plaster to create mold parts. The yellow tumbler seen in the foreground was made from the plaster molds seen in the back.





Tyler Lotz
CNC milled blue foam
insulation for making
plaster molds



Taekyeom Lee
Stamps and Business Card Printer



Brooks Oliver
3D Printed Drying Jig

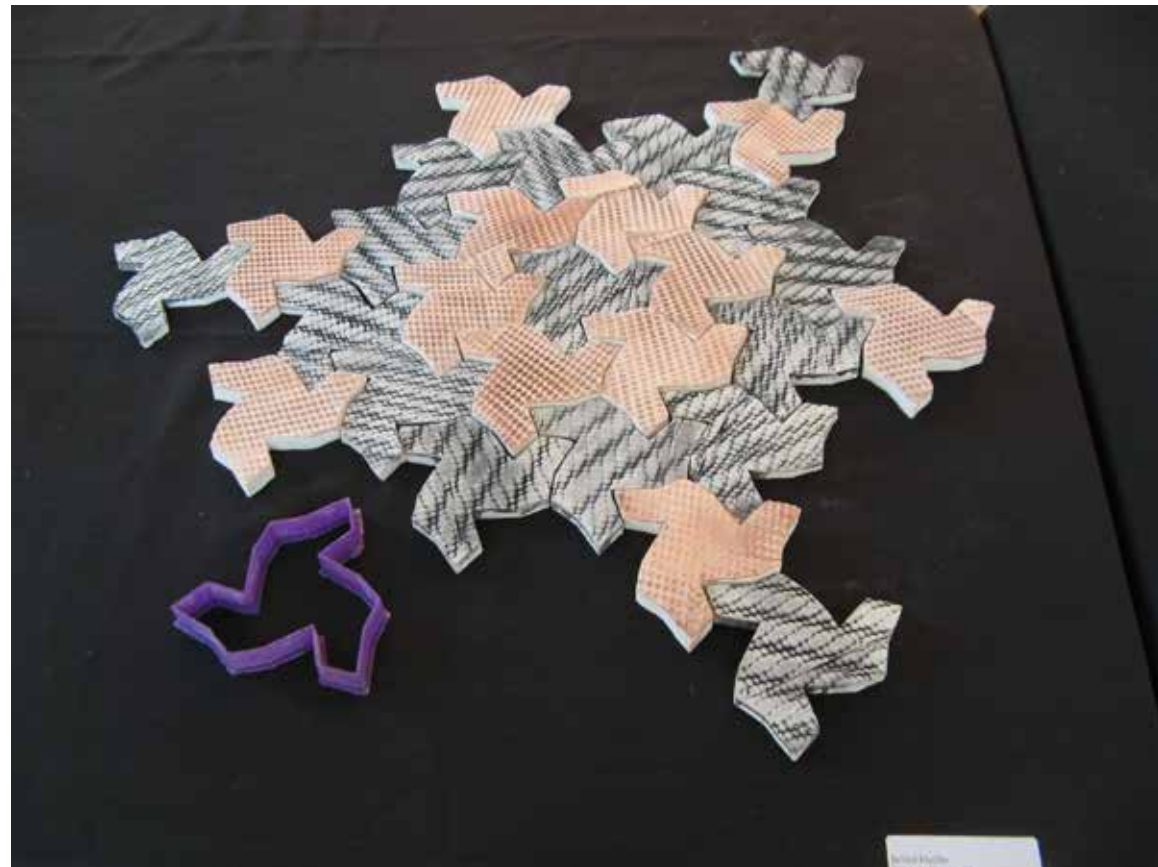




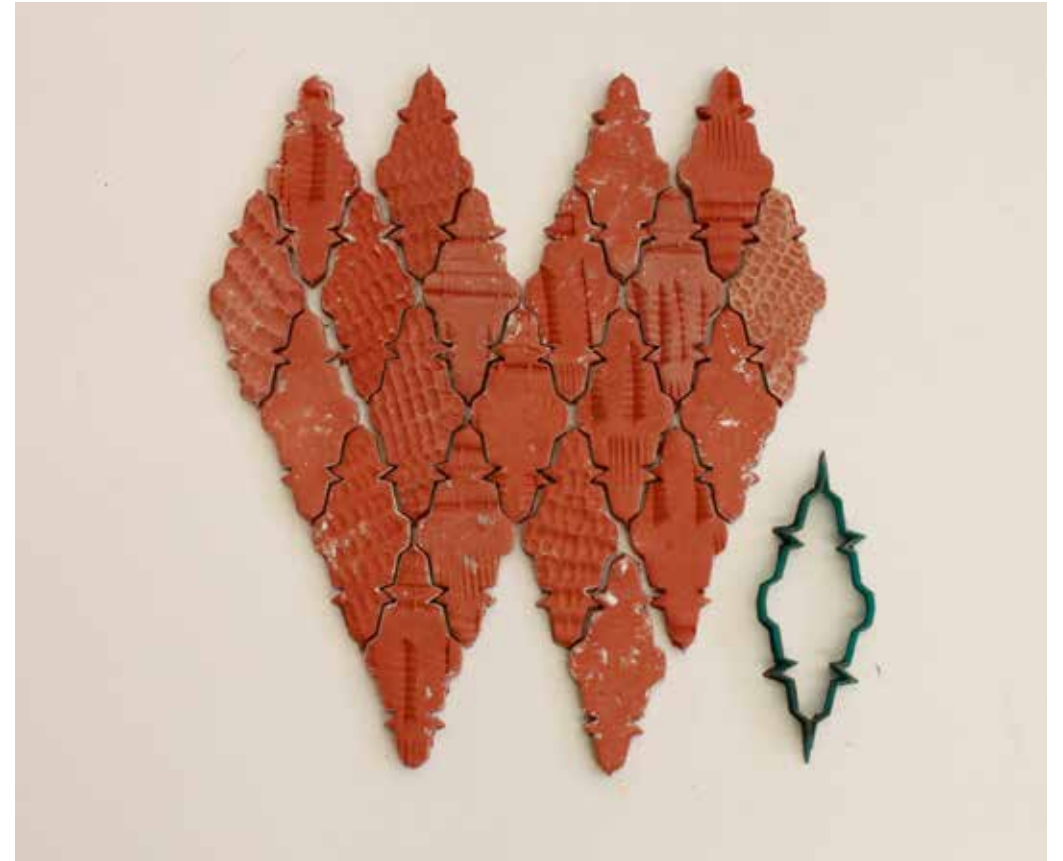
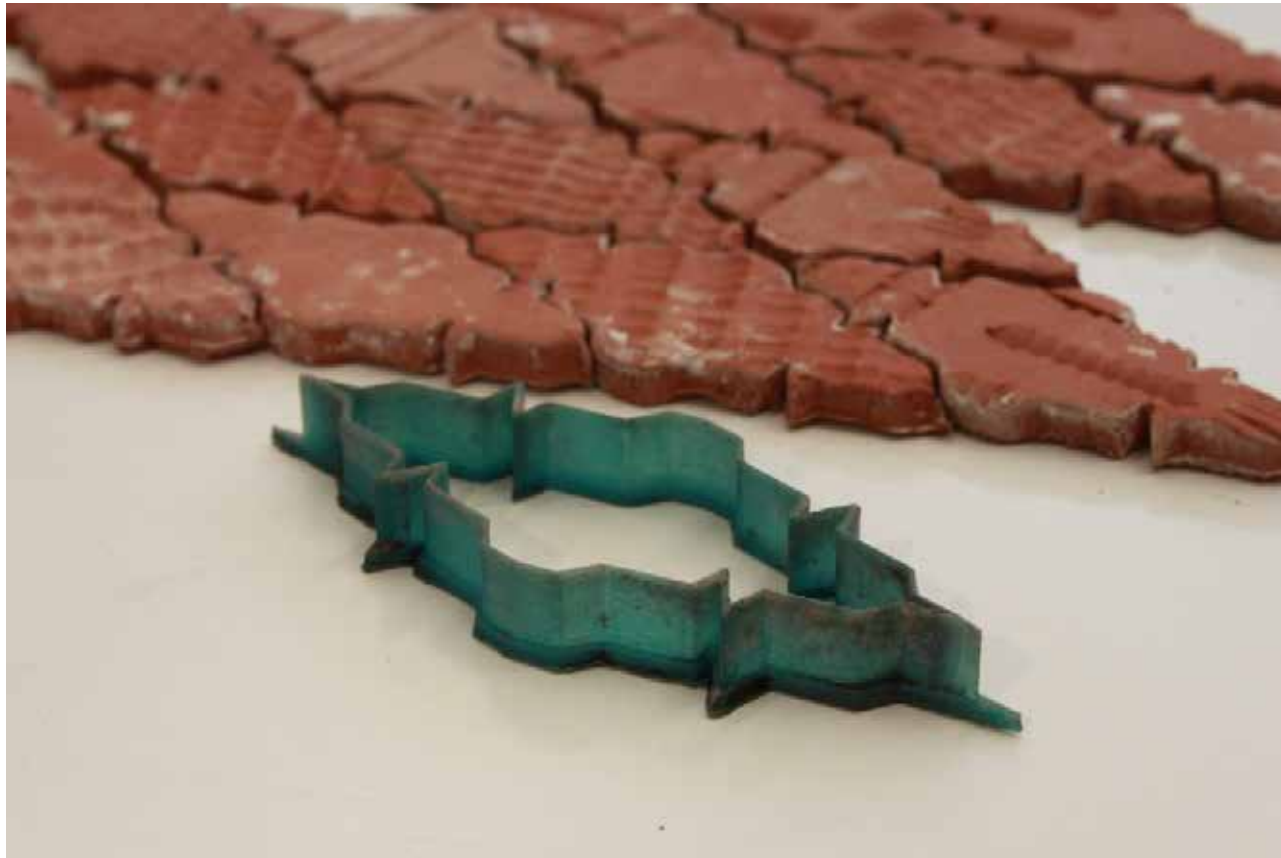
Oregon College of Art and Craft
Fab Lab

3D printed wood burning tool
printed in Steel at shapeways.com

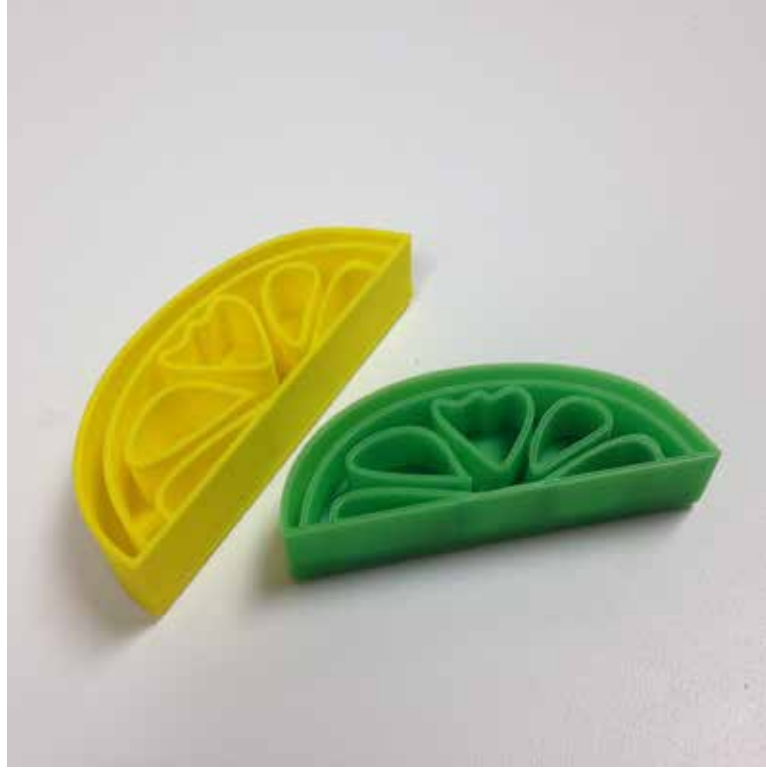




Jo Kamm's digital fabrications class at KCAI
Bisqued terra cotta tiles
Detail of the 3D printed tool used to make tiles



Jo Kamm's digital fabrications class at KCAI
Bisqued tiles created by Kendall Hammond
Detail of the 3D printed tool used to make tiles



Stamps modeled in Fusion 360 and printed on a Makergear M3
The stamps were then used to make ceramic tile.
The clay is dusted with a thin layer of corn starch to prevent the stamp from sticking.
West Virginia Universities – Art 593 3D Printing



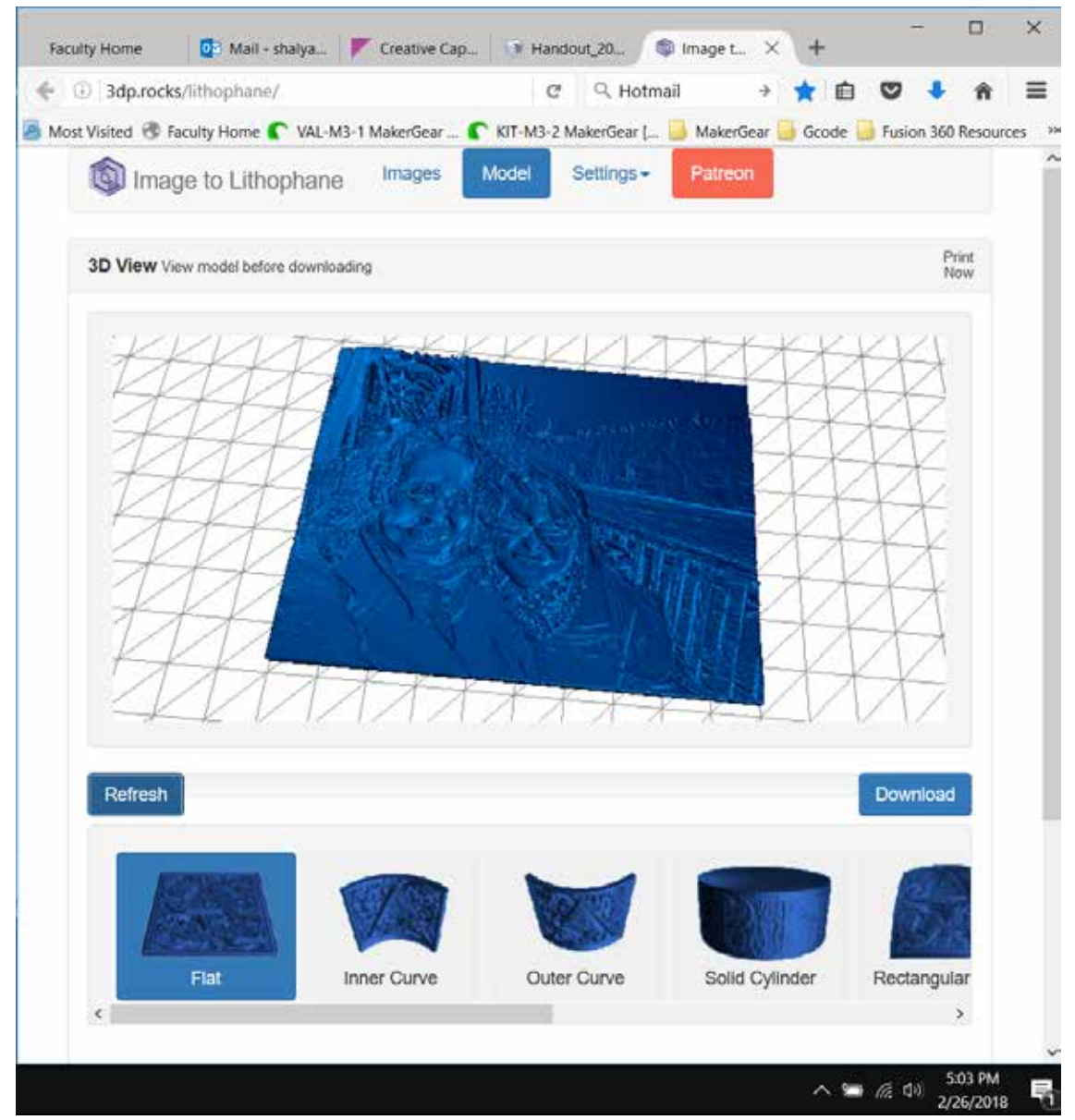
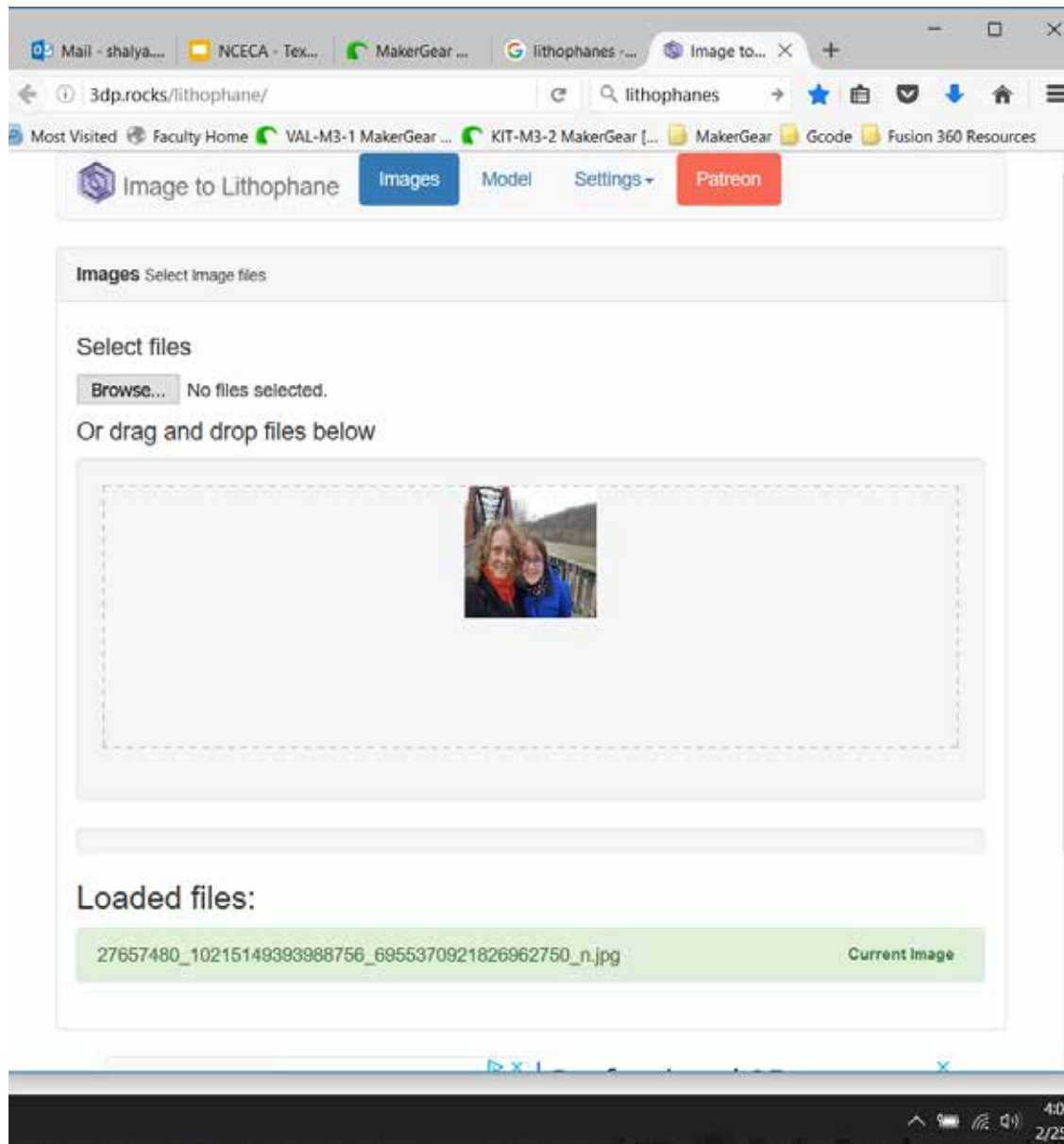
Once modeled the stamp can be scaled to provide variation.
West Virginia Universities – Art 593 3D Printing



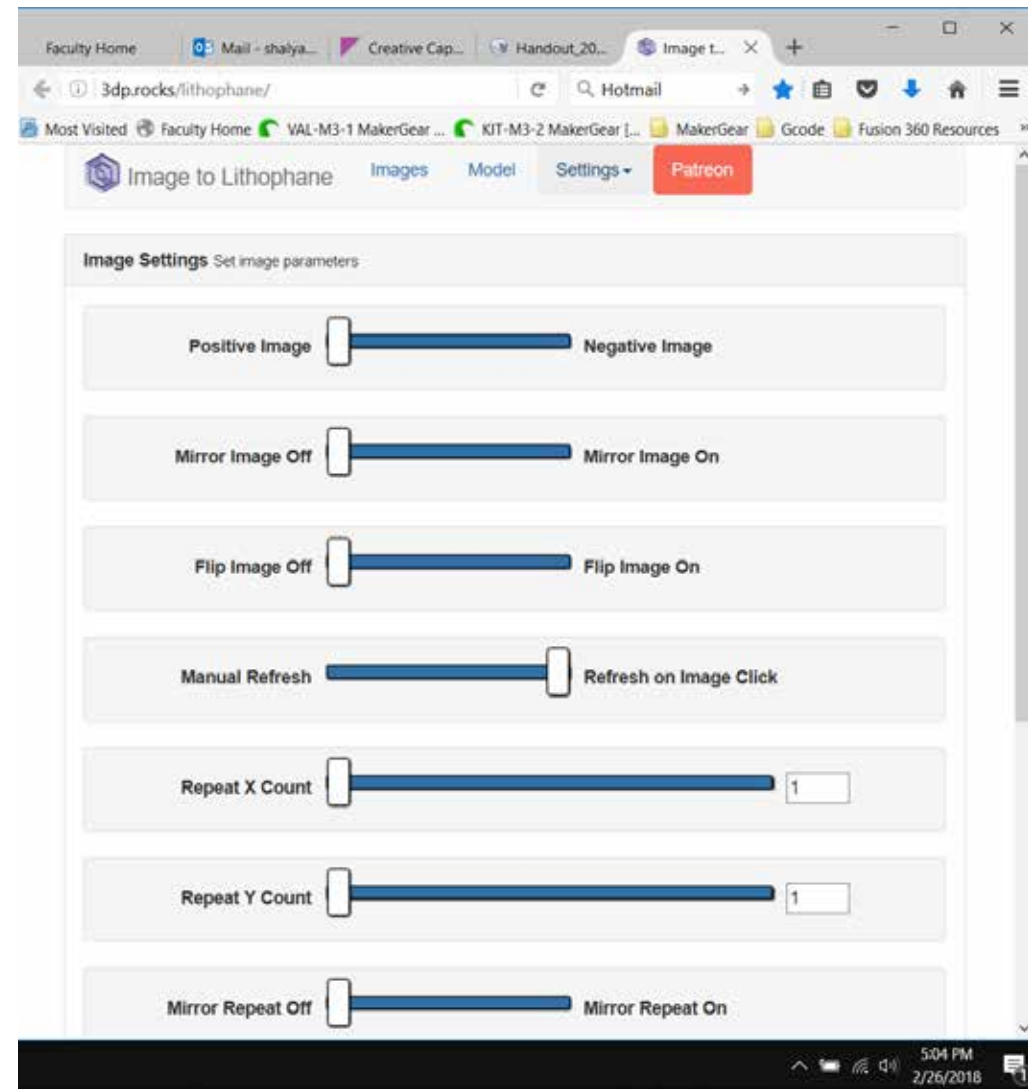
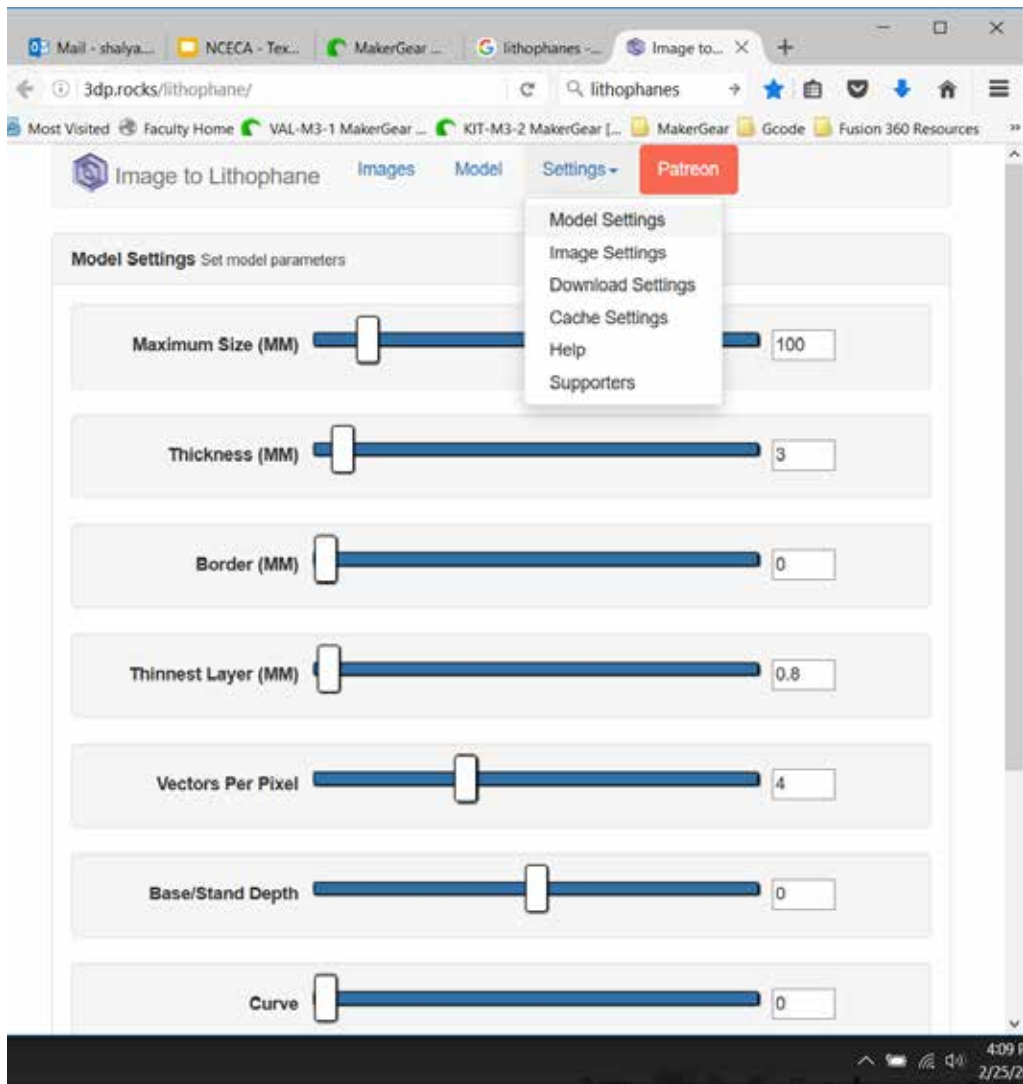
Finished Tiles
West Virginia Universities – Art 593 3D Printing



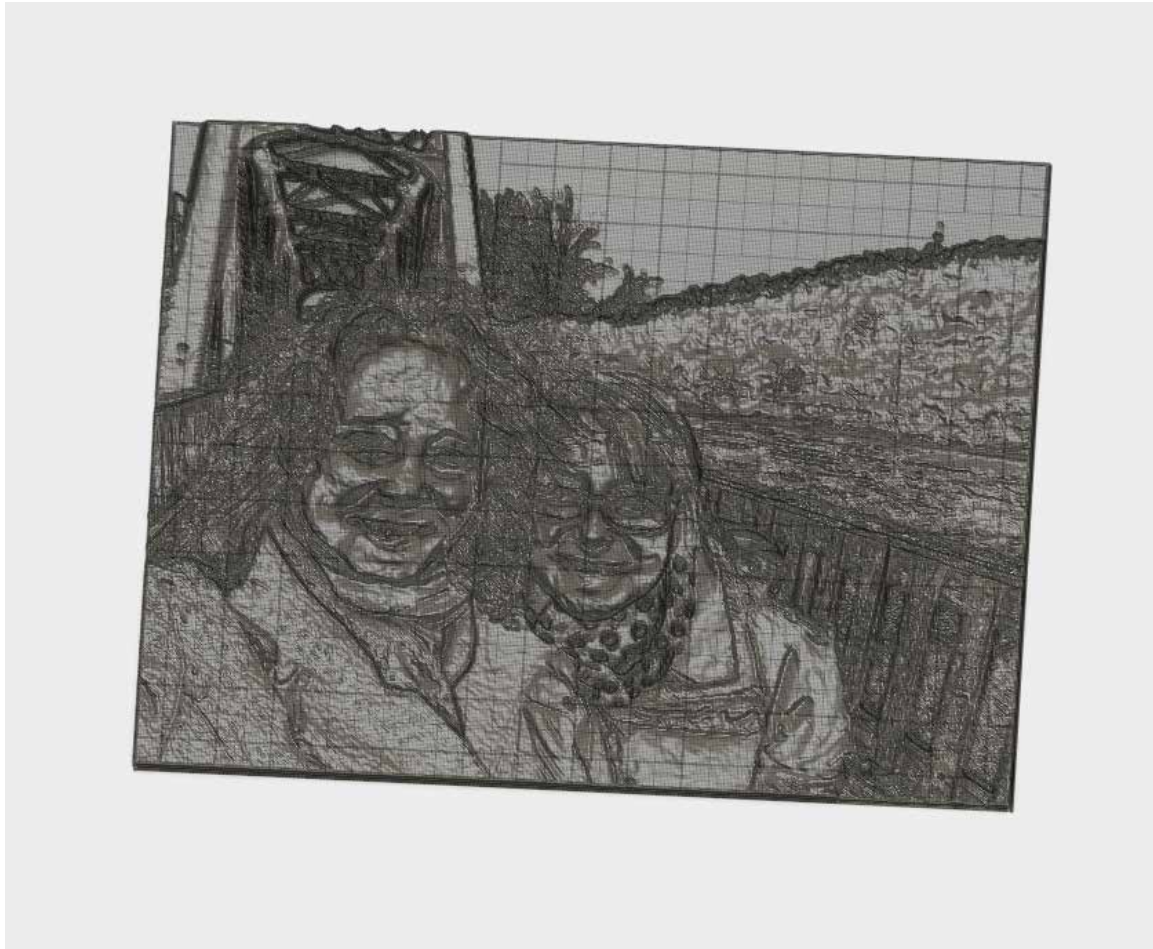
The 3D printed stamps were also used to inlay slip for mishima
West Virginia Universities – Art 593 3D Printing



Lithophane Generator: <http://3dp.rocks/lithophane/>



In the Settings Menu set the image to Positive Image so that the clay you press will be a negative
Set Thickness to determine how deep the relief is
Set the Vectors Per Pixle to determine the amount of detail in the lithophane



You can easily export an STL file for 3D printing



Textures, Tools and Time

Part 2

Presented by Elizabeth New & Shalya Marsh

Free Programs we will be talking about today

1. Tileshop- <http://asciiascetic.github.io/projects/ashlar/#> this software was developed by Colin O-Keefe for Jo Kamm at KCAI to help people create tessellated files
1. Cookie Caster - <http://www.cookiecaster.com/> app for making 3D printed cookie cutters that is PERFECT for making simple tiles
1. Tinkercad - <https://www.tinkercad.com/> - simple drag and drop shapes and great introductory tutorials for people who are just getting started.
1. Onshape - <https://www.onshape.com/> - more complex, but more options. Allows you to create shapes on multiple axis using drawings to create your shapes. Free when your files are publicly available, or if you are a student/educator otherwise there is a yearly fee.

Not everyone uses a computer in the studio



How do I make this stuff?

Making custom tessellated tiles...



**Can you use an app?
Then you can make tile cutters!**

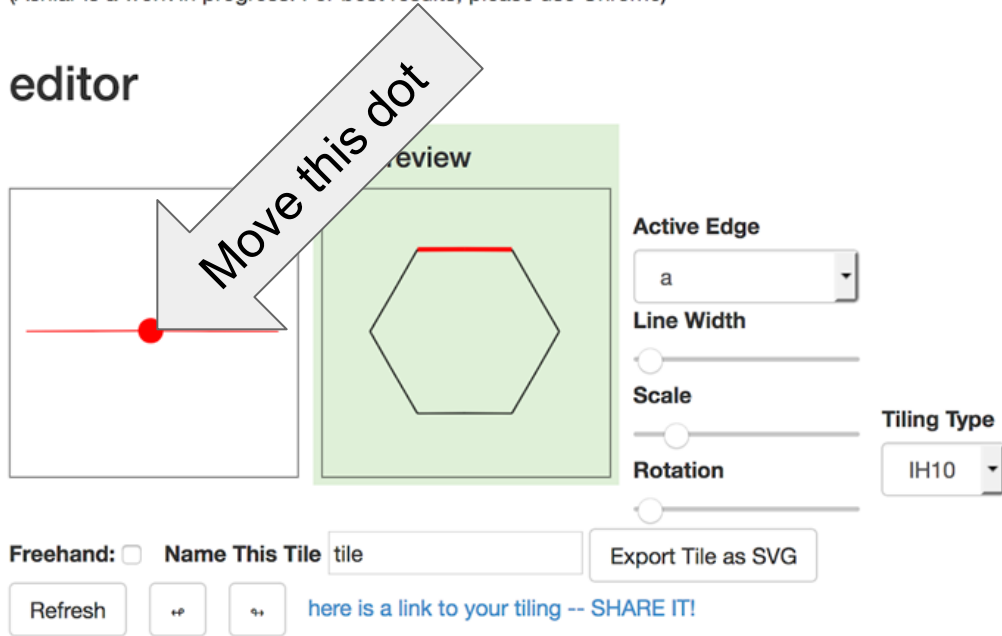
Ashlar - Tileshop



Ashlar (alpha)

(Ashlar is a work in progress. For best results, please use Chrome)

editor



review

Active Edge
a

Line Width

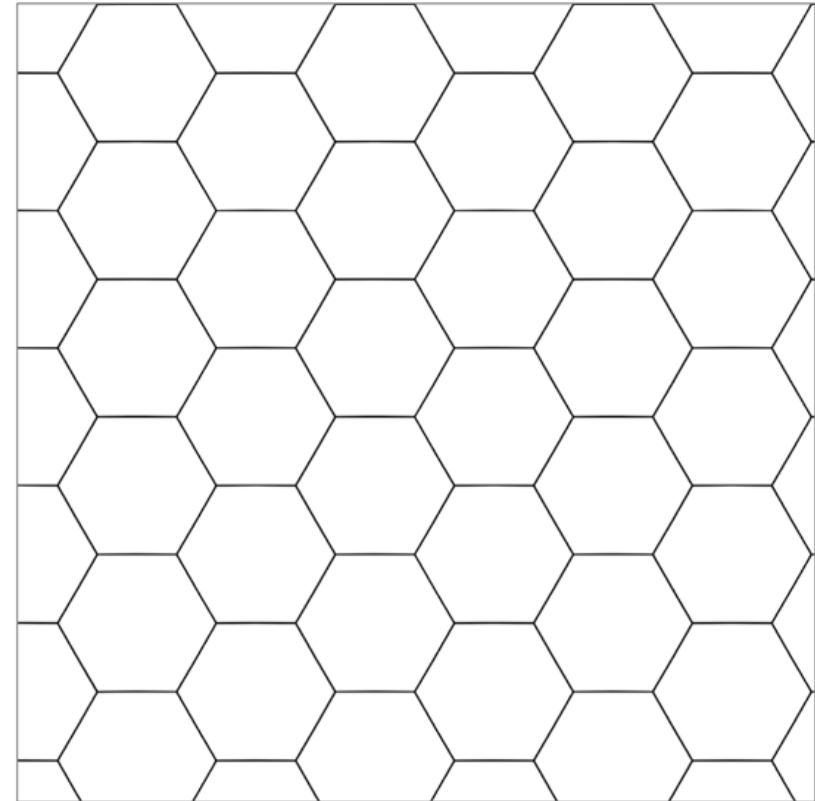
Scale

Rotation

Tiling Type
IH10

Freehand: Name This Tile Export Tile as SVG

Refresh [here is a link to your tiling -- SHARE IT!](#)



Name

Enjoying the application? Do you have a particular use case in mind? I'd be happy to [hear about it](#). Please do check out the [Source on Github](#)

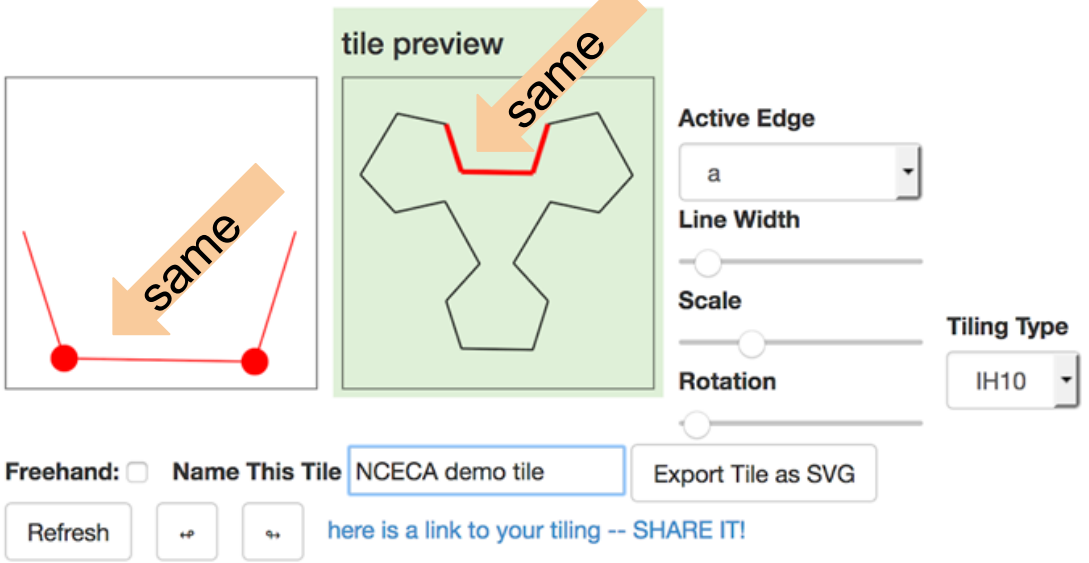
Last Updated Sun Jul 24 09:58:44 CDT 2016

Developed by Colin O-Keefe with Jo Kamm at KCAI

Ashlar (alpha)

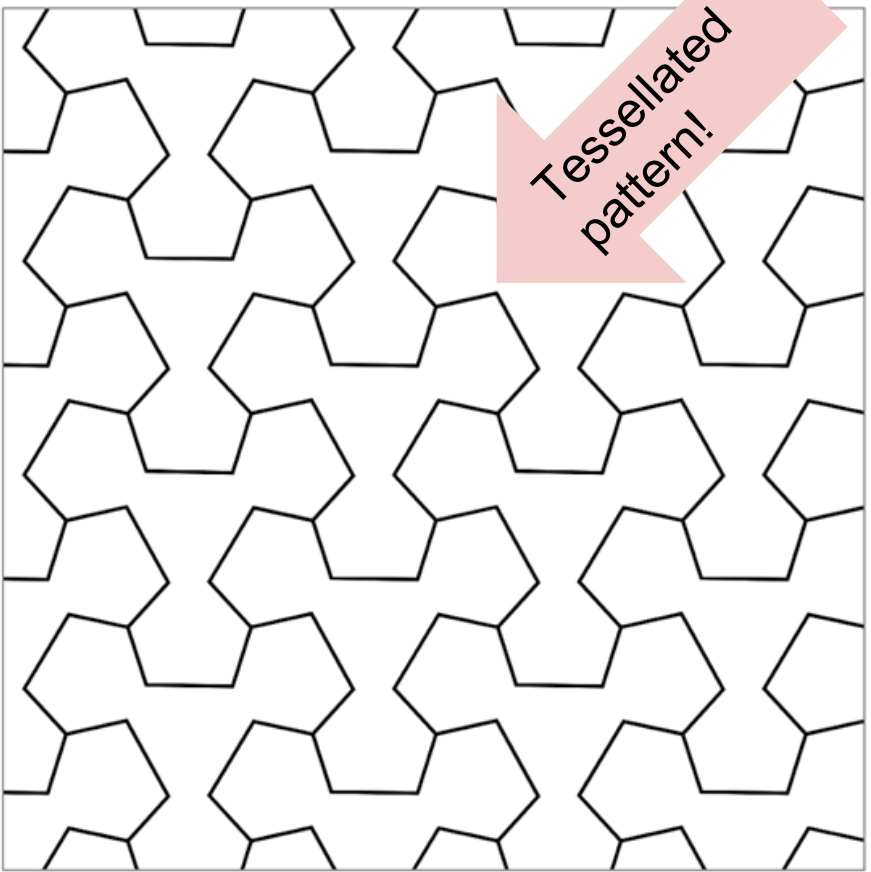
(Ashlar is a work in progress. For best results, please use Chrome)

editor



The editor interface consists of several components:

- Freehand:** A drawing area with two red dots and lines forming a V-shape. An orange arrow labeled "same" points from this area to the tile preview.
- tile preview:** A green-bordered area showing a single tile with a red outline. An orange arrow labeled "same" points from the freehand drawing to this preview.
- Active Edge:** A dropdown menu with the letter "a" selected.
- Line Width:** A slider control.
- Scale:** A slider control.
- Rotation:** A slider control.
- Tiling Type:** A dropdown menu with "IH10" selected.
- Name This Tile:** A text input field containing "NCECA demo tile".
- Export Tile as SVG:** A button.
- Buttons:** "Refresh", left and right arrow buttons, and a link "here is a link to your tiling -- SHARE IT!".



Name tiling Export As SVG

Ashlar (alpha)

(Ashlar is a work in progress. For best results, please use Chrome)

editor

tile preview

Active Edge: a

Line Width: [slider]

Scale: [slider]

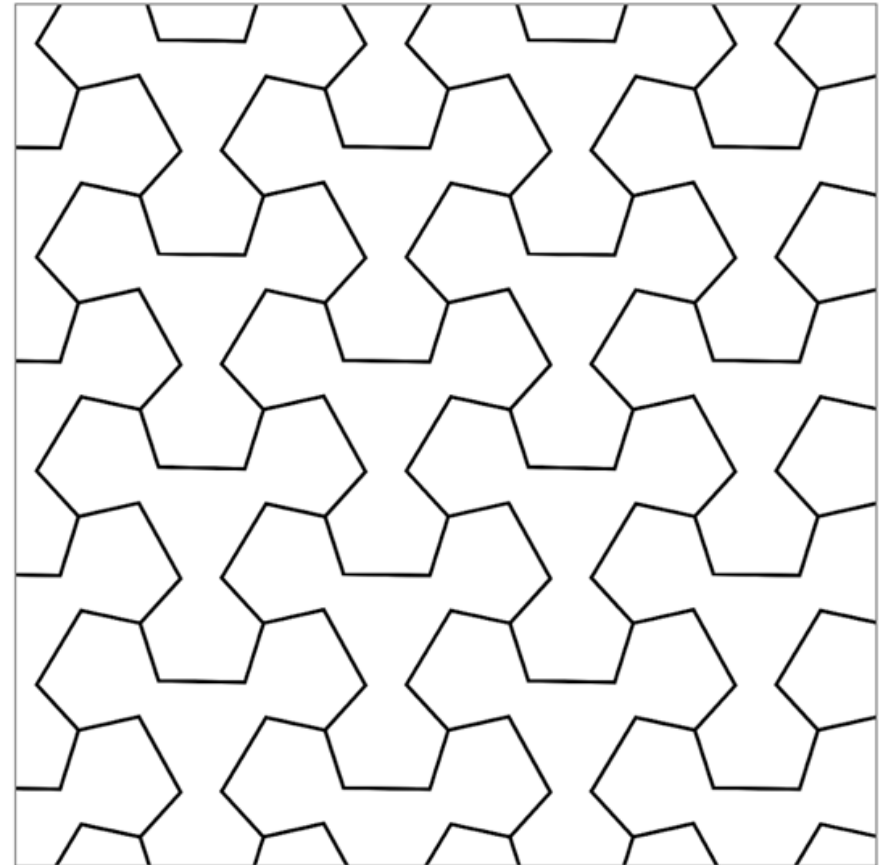
Rotation: [slider]

Tiling Type: IH1C

Freehand: Name This Tile: Export Tile as SVG

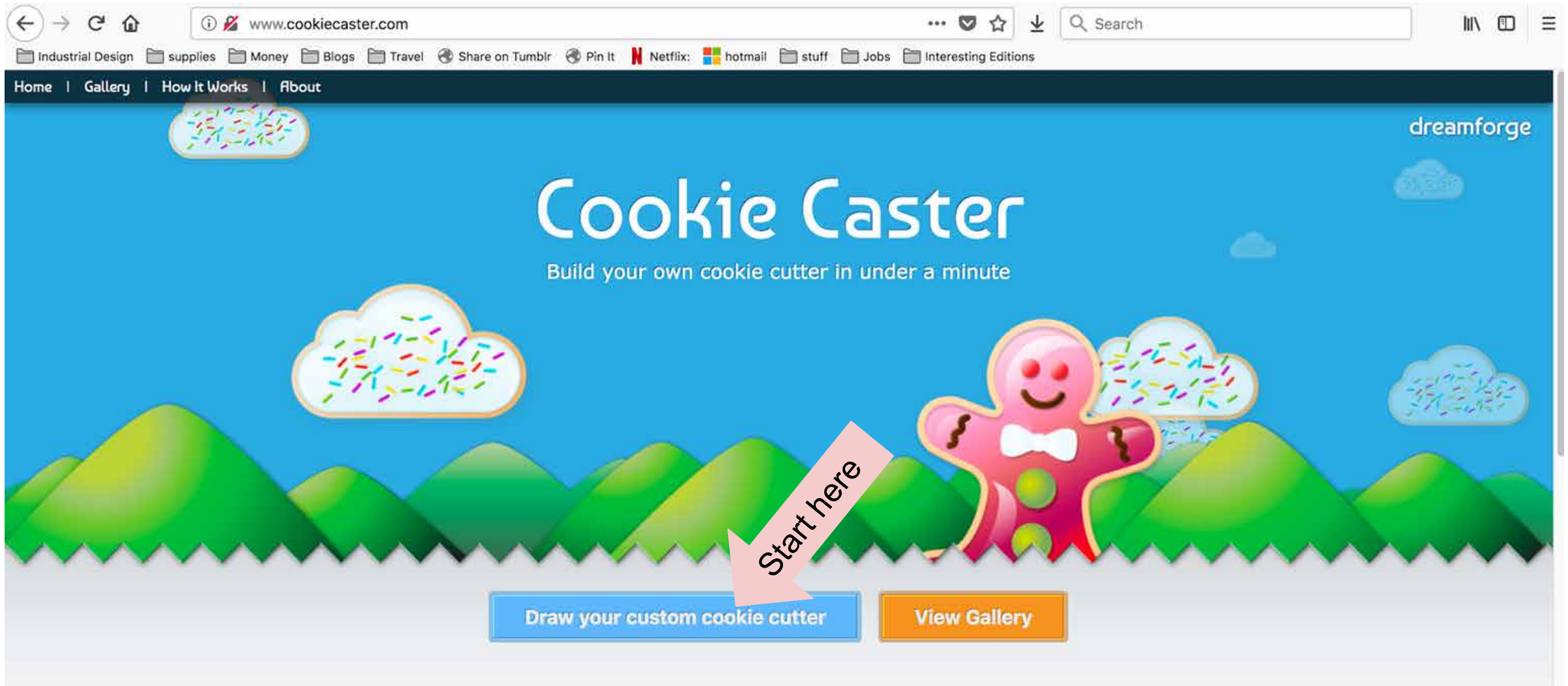
Refresh [button] [button] here is a link to your tiling -- [SHARE IT!](#)

Name and export your file, or take a screen shot



Name: Export As SVG [button]

Cookie Caster - AKA making tile cutters



The image shows a screenshot of a web browser displaying the homepage of 'Cookie Caster'. The browser's address bar shows the URL 'www.cookiecaster.com'. The website has a blue header with a navigation menu containing 'Home', 'Gallery', 'How It Works', and 'About'. The main content area features a large blue background with a white title 'Cookie Caster' and a subtitle 'Build your own cookie cutter in under a minute'. The background is decorated with green hills, a pink gingerbread man, and several clouds filled with colorful sprinkles. At the bottom, there are two buttons: a blue button labeled 'Draw your custom cookie cutter' and an orange button labeled 'View Gallery'. A pink arrow points from the text 'Start here' to the blue button. The 'dreamforge' logo is visible in the top right corner of the website.

www.cookiecaster.com

Industrial Design | supplies | Money | Blogs | Travel | Share on Tumblr | Pin It | Netflix: | hotmail | stuff | Jobs | Interesting Editions

Home | Gallery | How It Works | About

dreamforge

Cookie Caster

Build your own cookie cutter in under a minute

Start here

Draw your custom cookie cutter

View Gallery

Cookie Caster



Full Screen

Reset

(3D Viewer)

Howdy!

Would you like to take a tutorial on how to draw delicious cookie cutters?

Sure! I love cookies!

Dismiss

Select

Download Options

Max Size

Medium (3.5")

Height 0.65"

Thickness Standard (2 mm)

Download 3D File ?



New



Pen



Magic trace



Trace

Save it!

CookieCaster provides a free service to create a 3D printable model of your cookie cutter. If you don't have your own 3D printer, you can use a site like [Shapeways](#) to order after downloading your 3D model.

Cookie Caster



Click on the canvas to get started

+

-

New Pen Magic trace Trace Save it!

Upload screen shot

Full Screen Reset

Download Options

Max Size Medium (3.5")

Height 0.65"

Thickness Standard (2 mm)

Download 3D File ?

CookieCaster provides a free service to create a 3D printable model of your cookie cutter. If you don't have your own 3D printer, you can use a site like [Shapeways](#) to order after downloading your 3D model

Cookie Caster



+

-

New Pen Magic trace Trace Save it!

select

Full Screen

Reset

Download Options

Max Size

Medium (3.5")

Height 0.65"

Thickness Standard (2 mm)

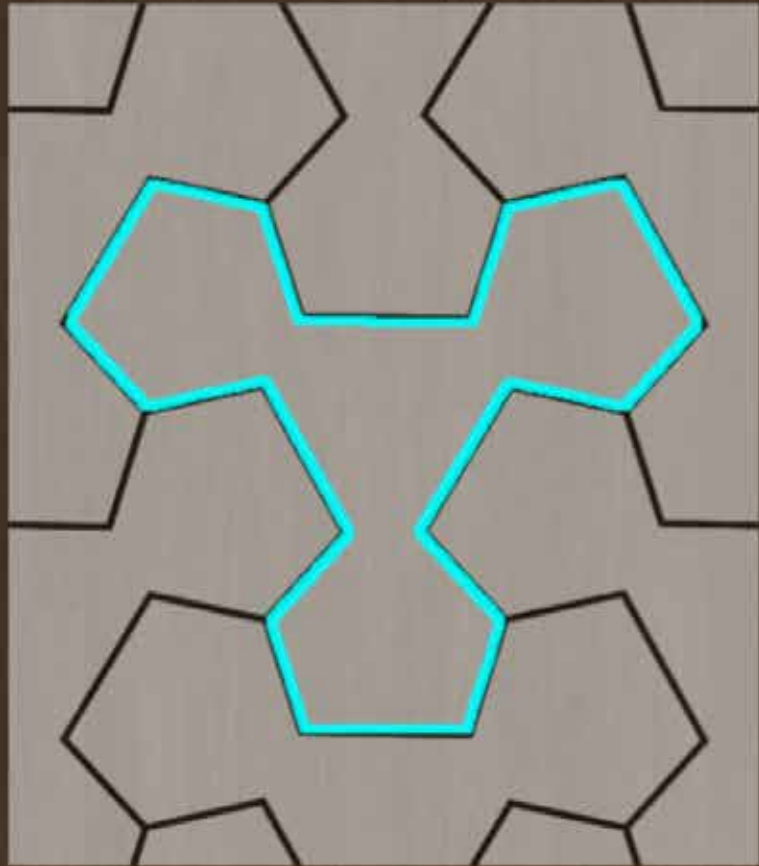
Download 3D File ?

CookieCaster provides a free service to create a 3D printable model of your cookie cutter. If you don't have your own 3D printer, you can use a site like [Shapeways](#) to order after downloading your 3D model from our site.

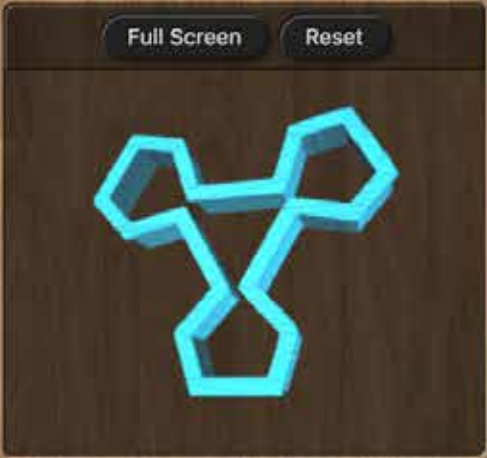
Cookie Caster



Success, your cookie cutter is complete



Navigation bar with icons for New, Pen, Magic trace, Trace, and a Save it! button.



Full Screen Reset

Download Options

Max Size

Medium (3.5")

Height 0.65"

Thickness Standard (2 mm)

Download 3D File

download

CookieCaster provides a free service to create a 3D printable model of your cookie cutter. If you don't have your own 3D printer, you can use a site like [Shapeways](#) downloading your 3D model

More cool samples from Jo Kamm's workshop...

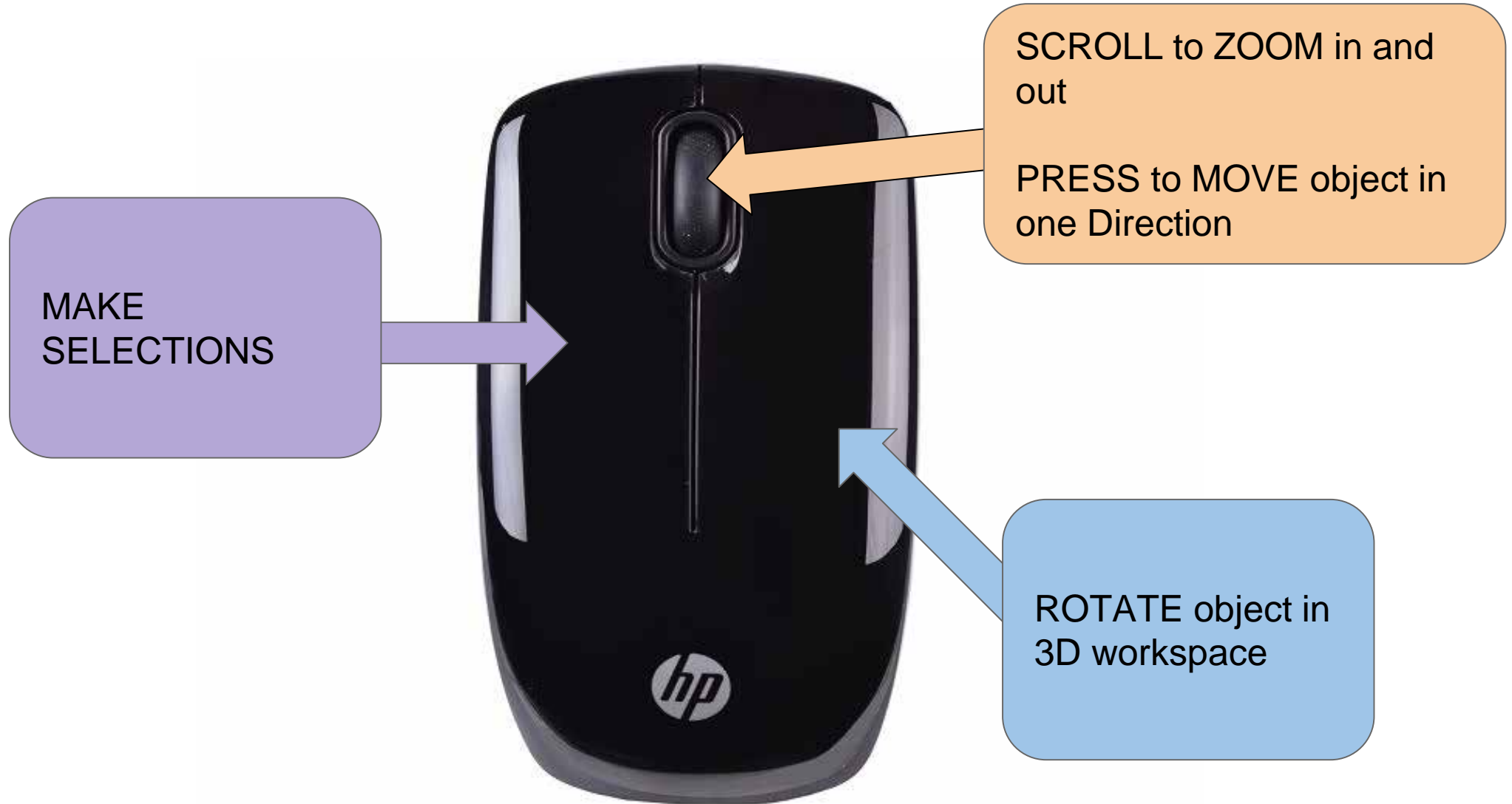


Making a texture roller

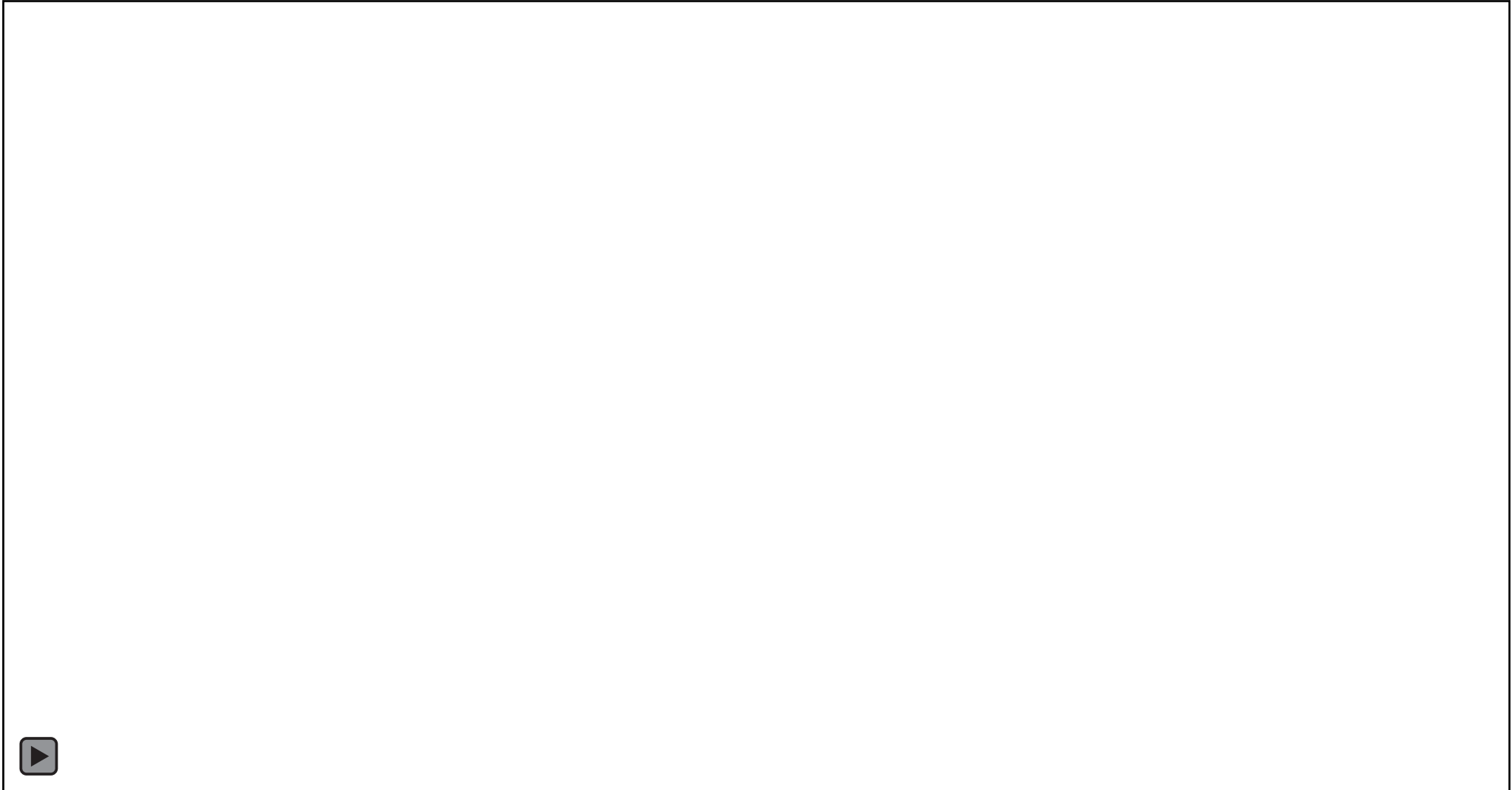


Only slightly more complicated than the cutter

Your mouse is really important.



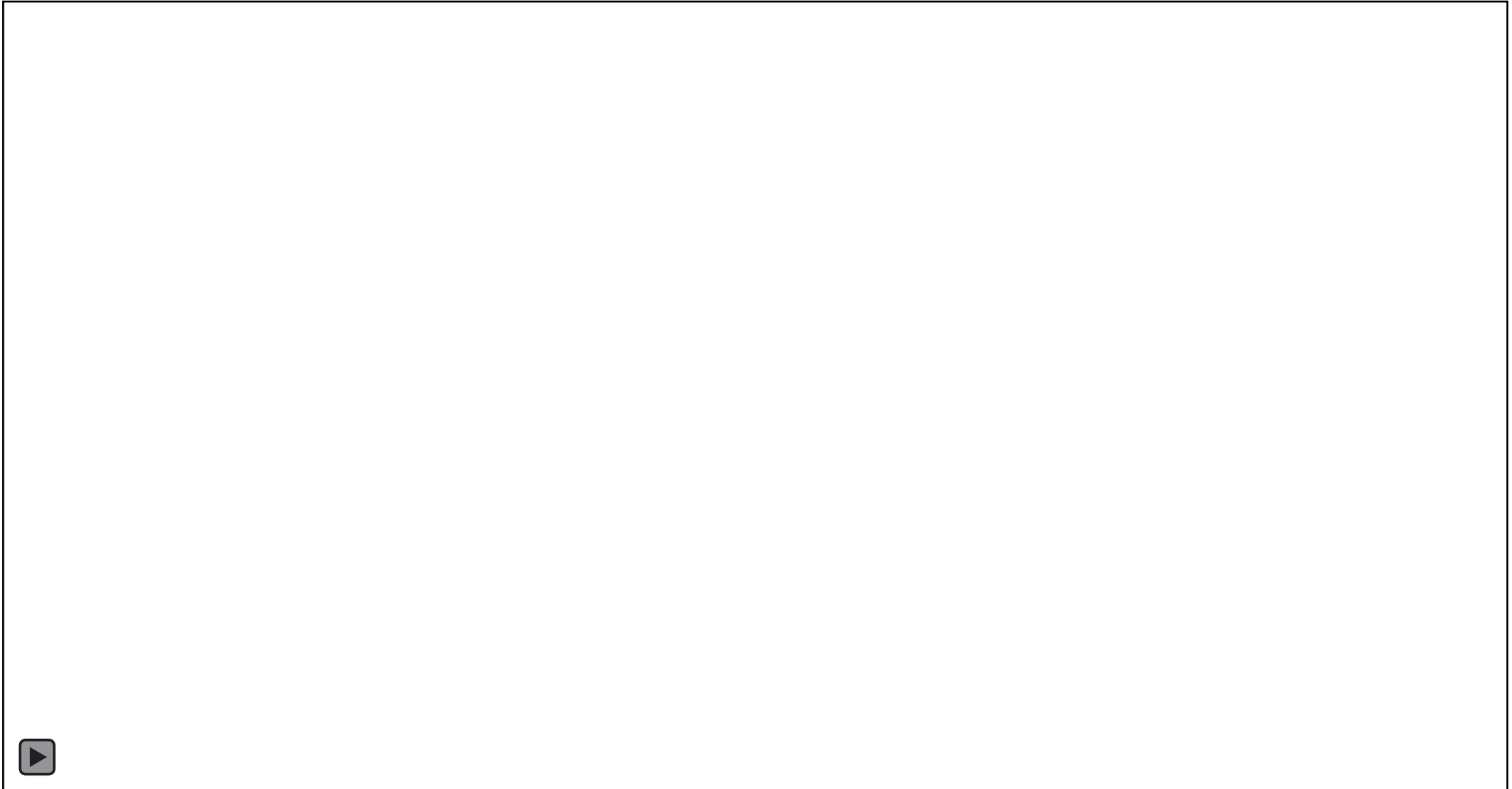
Left Mouse Button - make selections



Center Button - Move and Zoom



Right Button -rotate in 3D workspace



TinkerCad

Great free software for your very first 3D models

Tinkercad is a simple, online 3D design and 3D printing app for everyone.

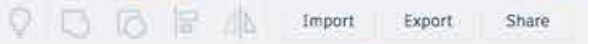
Tinkercad is used by designers, hobbyists, teachers, and kids, to make toys, prototypes, home decor, Minecraft models, jewelry – the list is truly endless!

[Start Tinkering now](#)



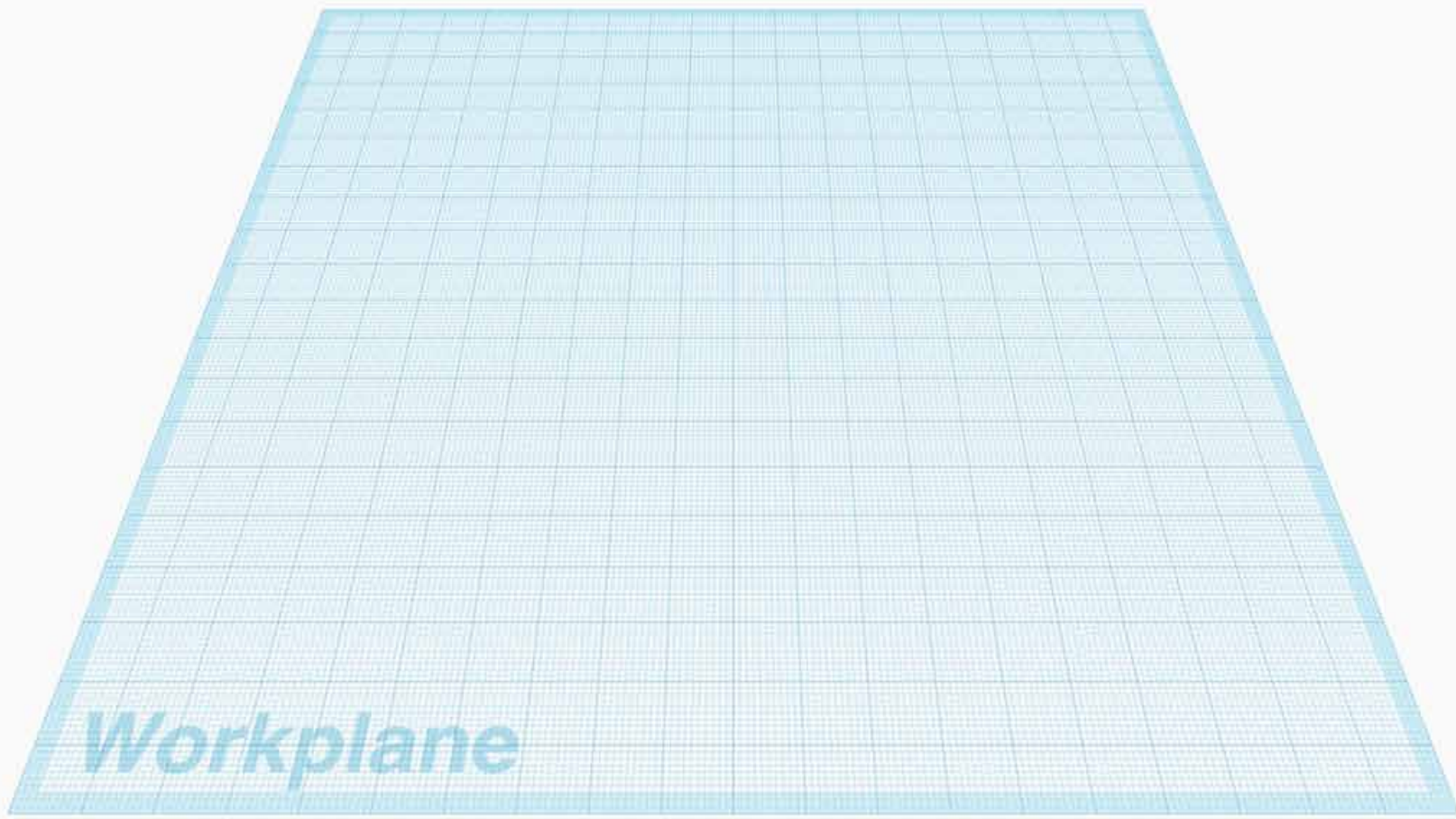
Lets get started

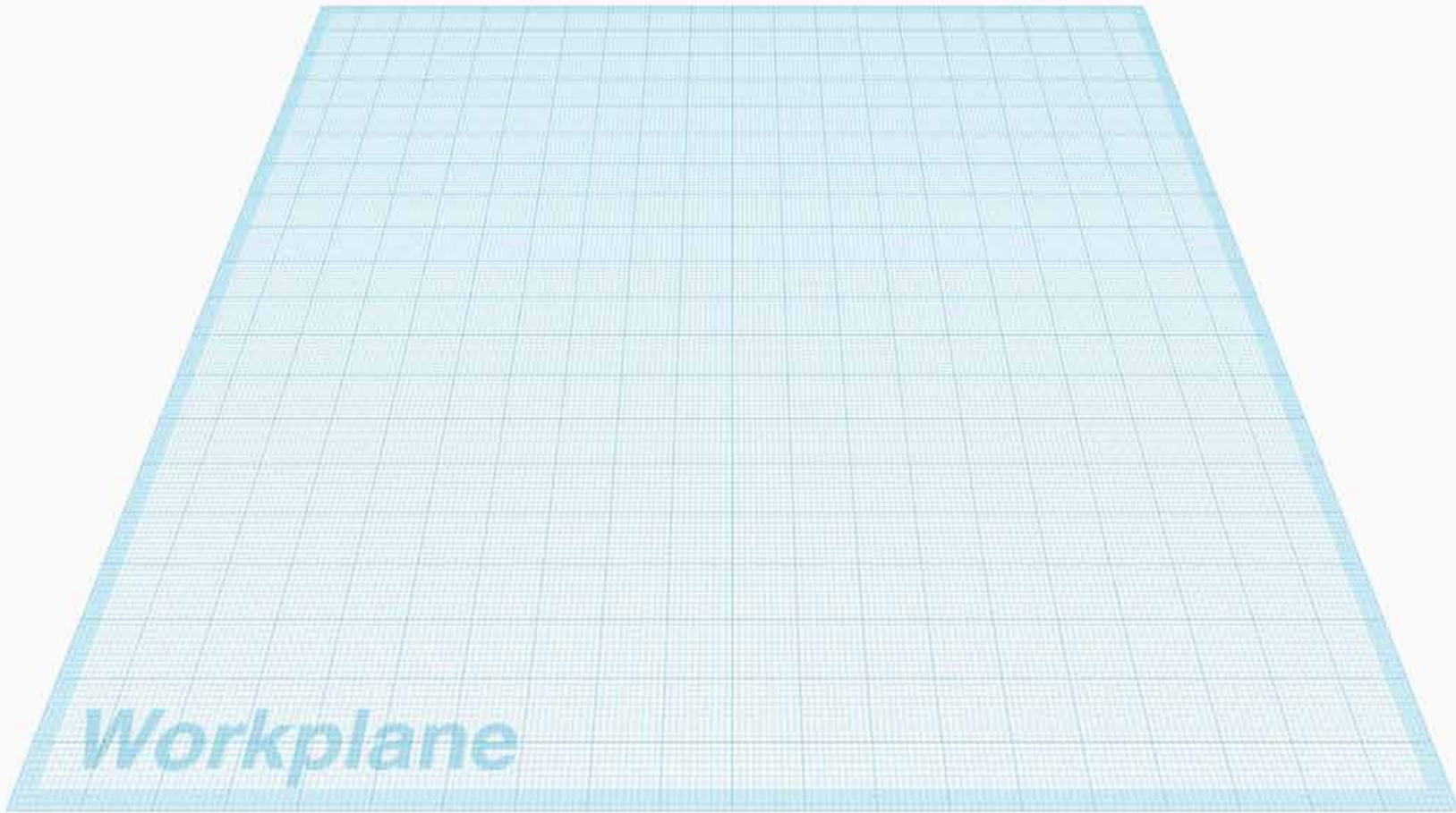
The image shows the Tinkercad website interface. At the top left is the Tinkercad logo (TINKERCAD) and a navigation menu with links for FEATURES, LEARN, TEACH, GALLERY, BLOG, and BETA. On the right, there is a search bar and a user profile icon. The main content area features a user profile for 'newer42' with a blue robot avatar and an 'Edit profile' link. Below the profile is a 'DESIGNS' section with a count of 3 and a notification that says 'You are currently using a free account.' A large white box titled 'My recent designs' contains two buttons: 'Create new design' and 'Create legacy design'. A prominent red arrow points to the 'Create new design' button. On the left side, there is a sidebar with a search bar for designs, a 'COLLECTIONS' section with 'My recent designs' selected, a 'PROJECTS' section with 'Project 2' and 'salt and pepper shaker.1', and a 'TWEETS' section featuring a tweet from Tinkercad about an event in Columbus, Ohio, with the OETC logo below it.



Tinkercad Basic Shapes














- Box
- Cylinder
- Box
- Cylinder
- Pyramid
- Roof
- Round Roof
- Text
- Sphere
- Wedge
- Cone
- Half Sphere





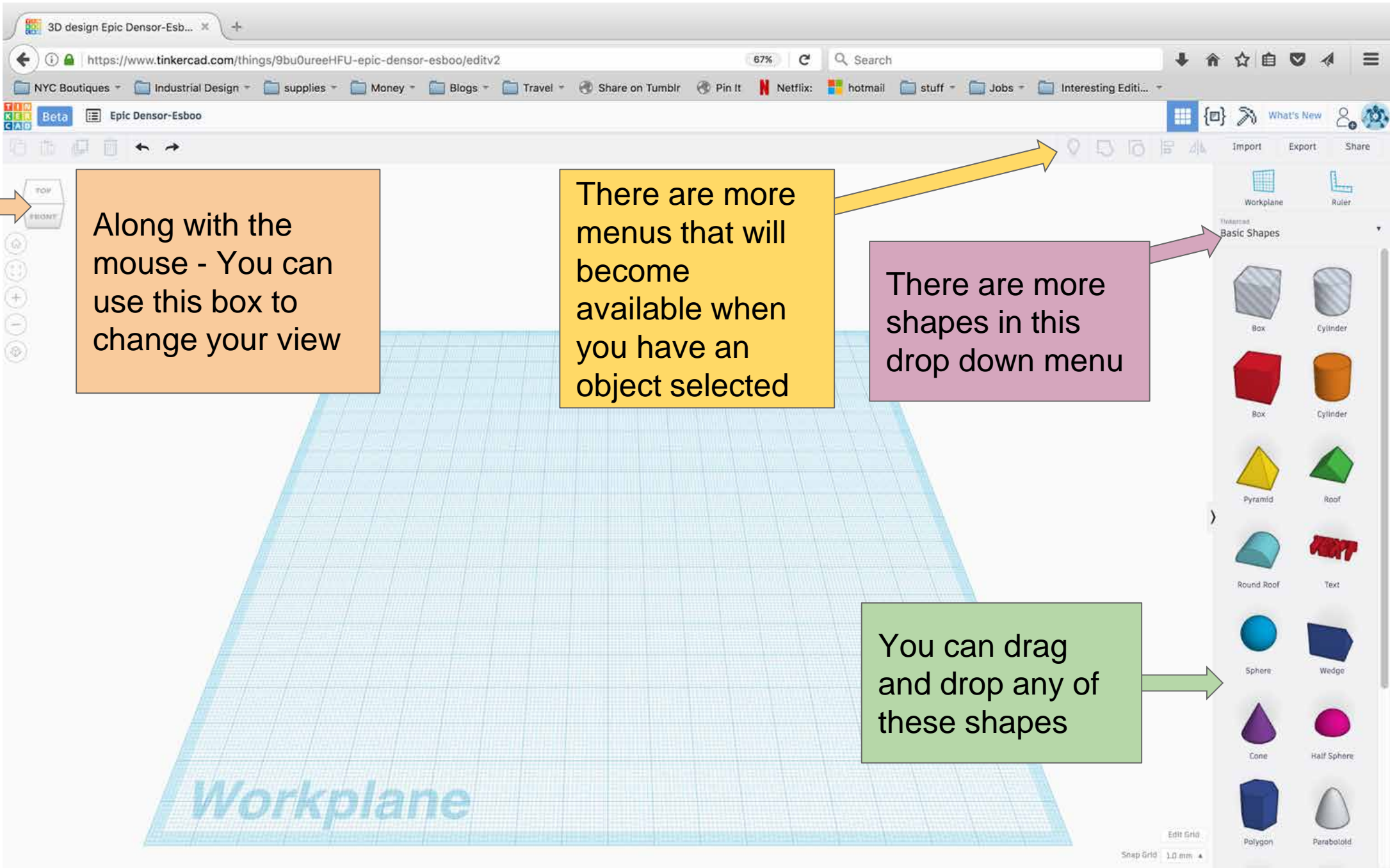
Workplane Ruler

Tinkercad Basic Shapes

 Box	 Cylinder
 Box	 Cylinder
 Pyramid	 Roof
 Round Roof	 Text
 Sphere	 Wedge
 Cone	 Half Sphere
	

Edit Grid

Snap Grid 1.0 mm

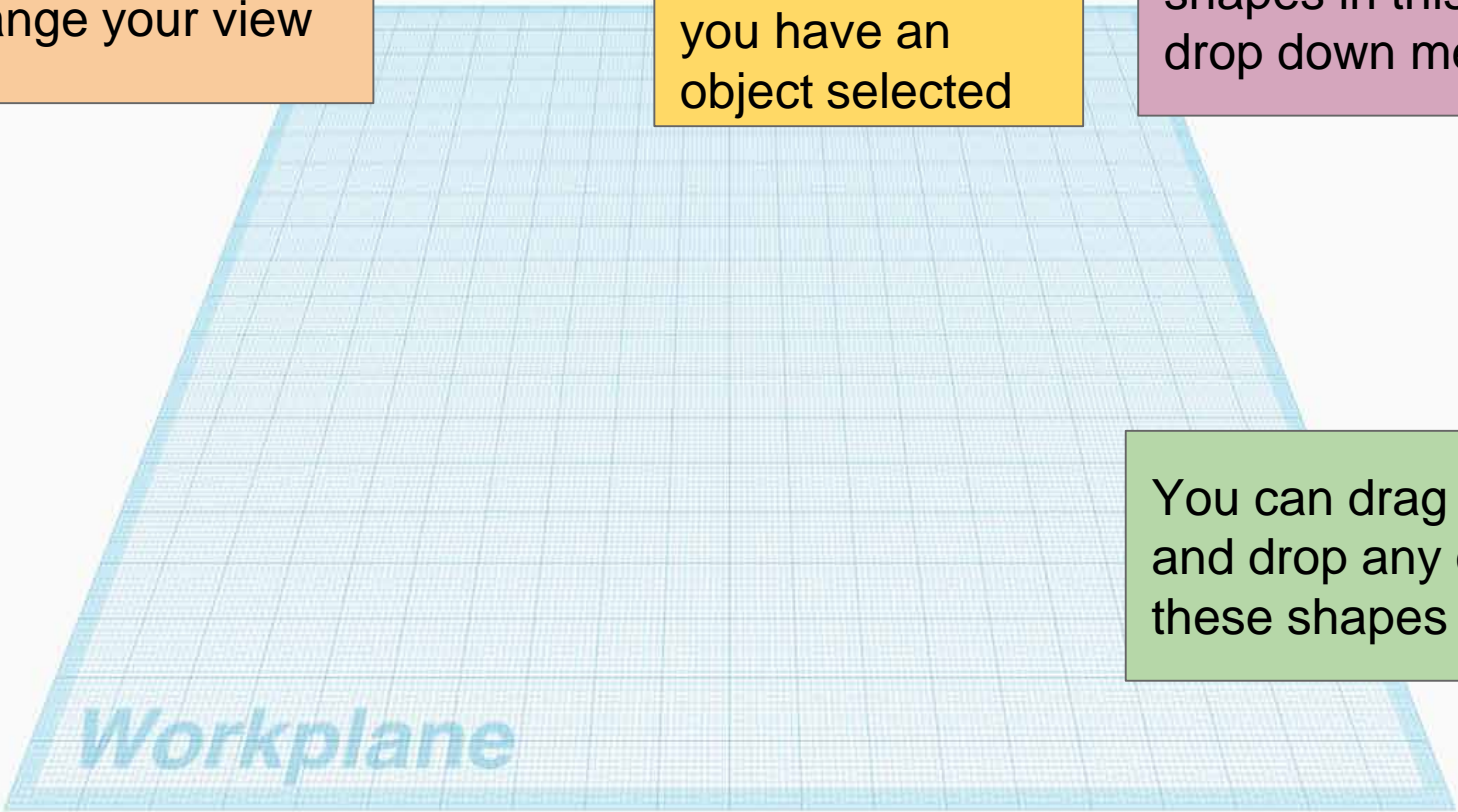


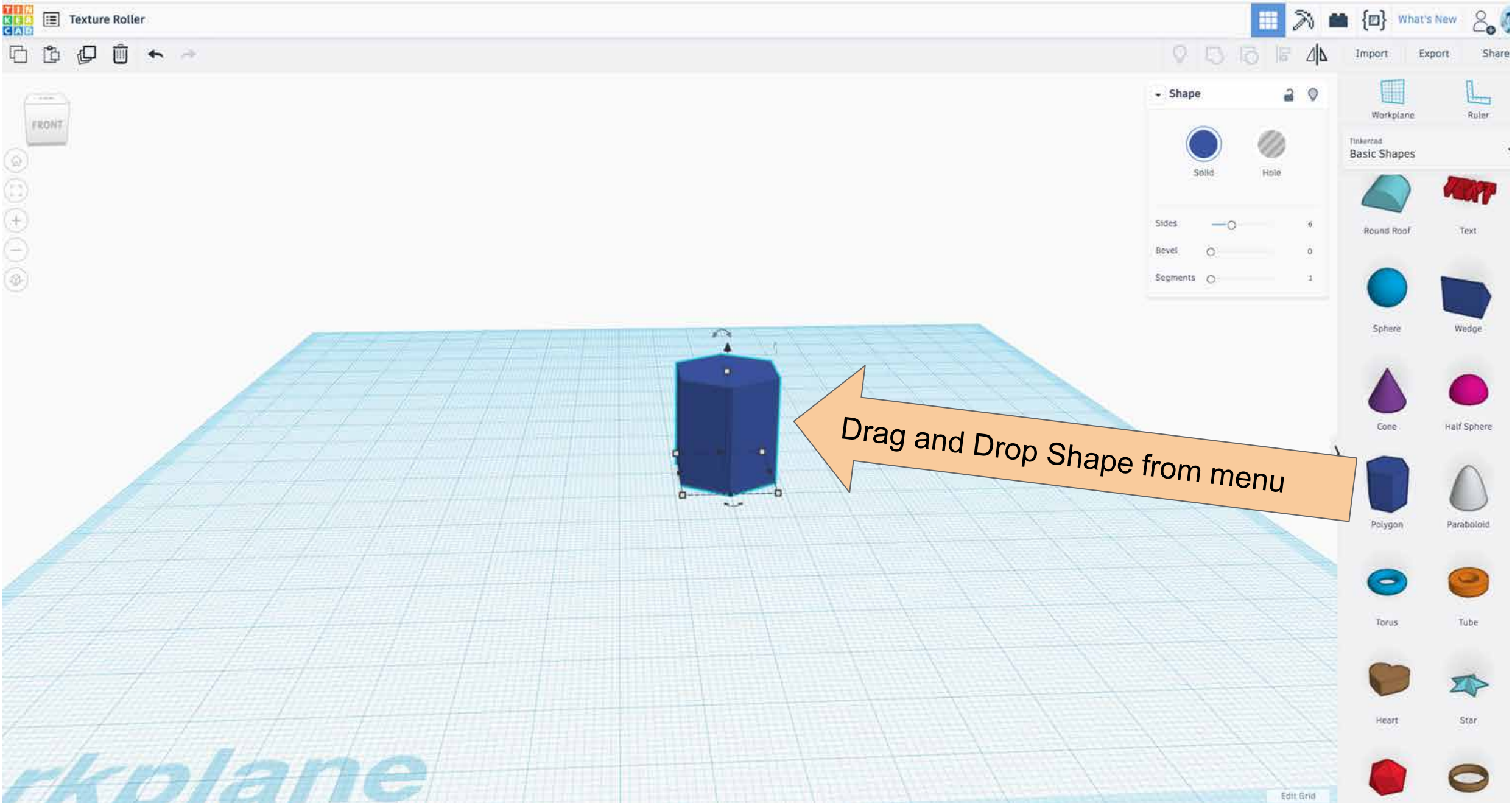
Along with the mouse - You can use this box to change your view

There are more menus that will become available when you have an object selected

There are more shapes in this drop down menu

You can drag and drop any of these shapes



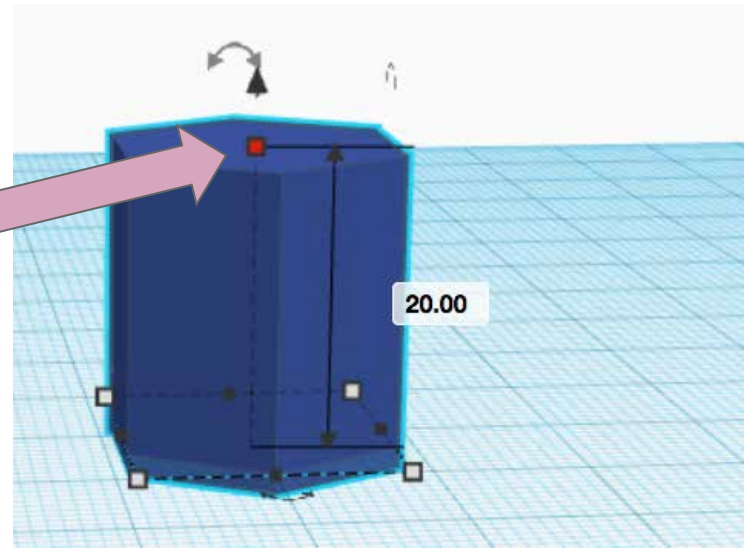


Drag and Drop Shape from menu

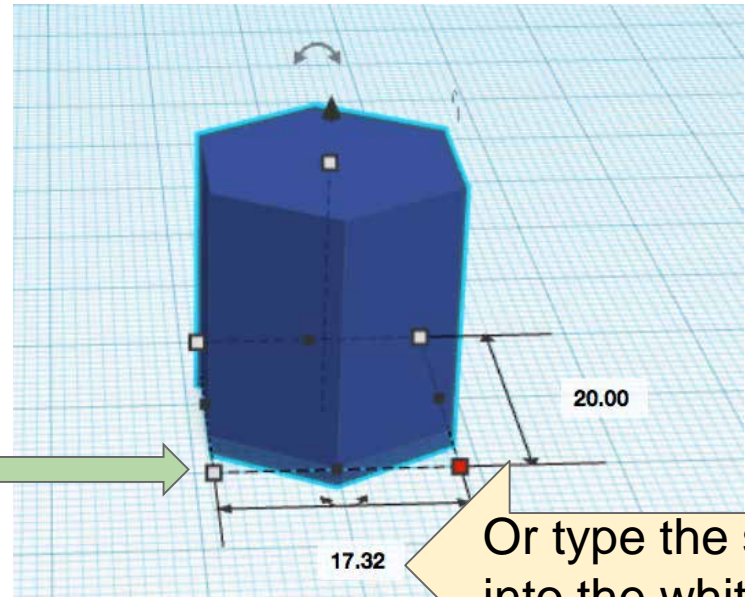
Use this arrow to raise and lower the part



Top Dot will show the height of the object, and allow you to change it by dragging the dot.

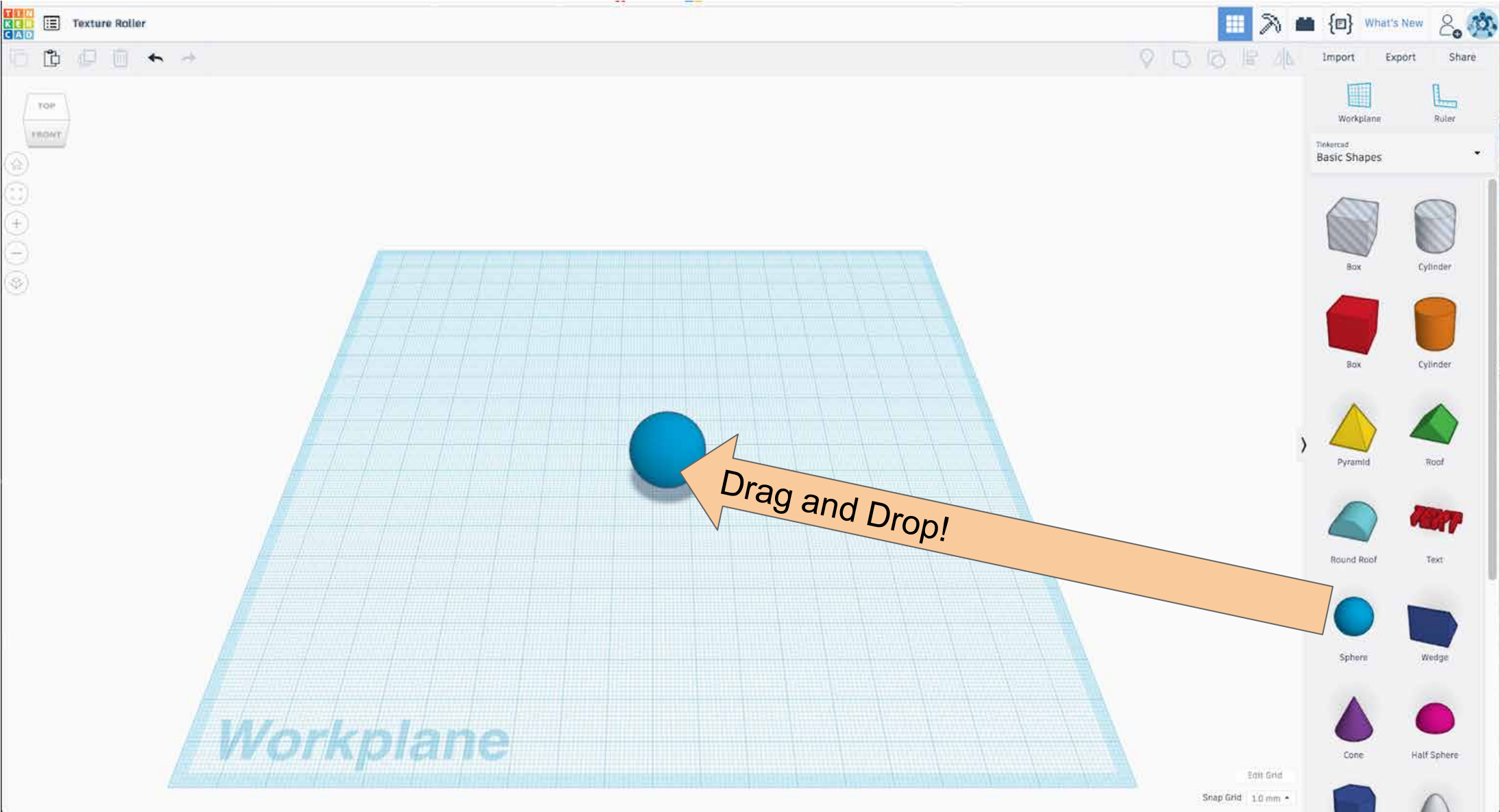


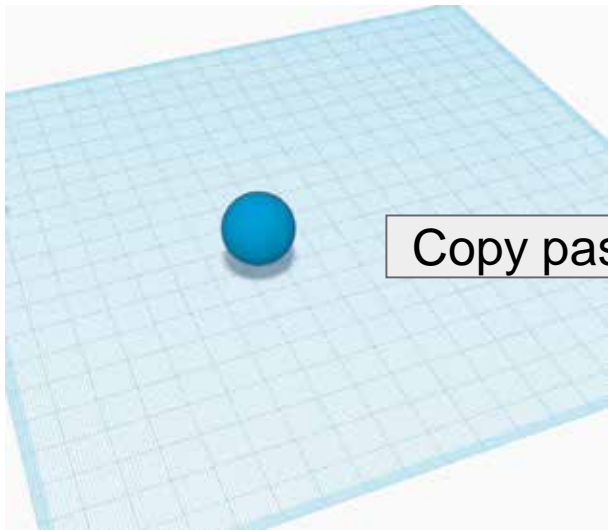
When you hover on these white dots it will give you the length and width of the part. Drag with these dots to change the length and width



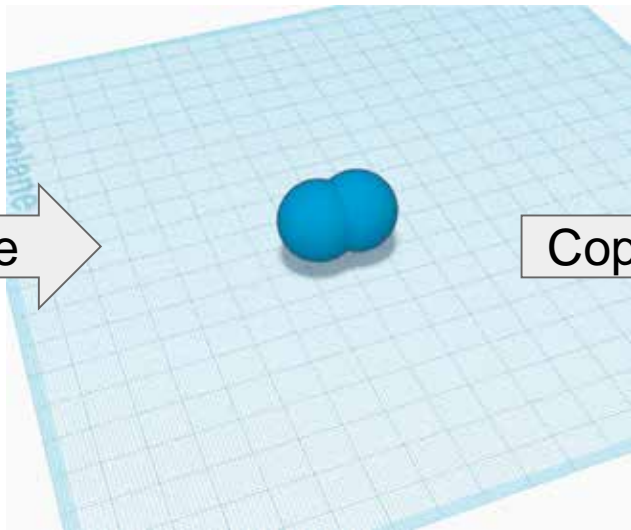
Or type the size into the white box

Now the texture roller!

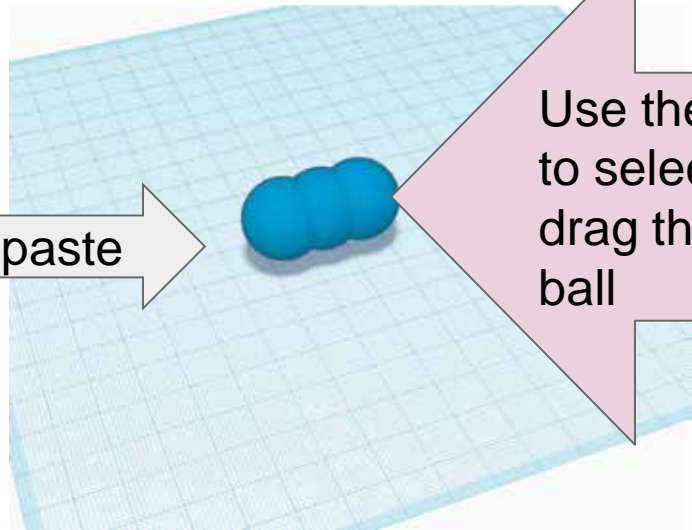




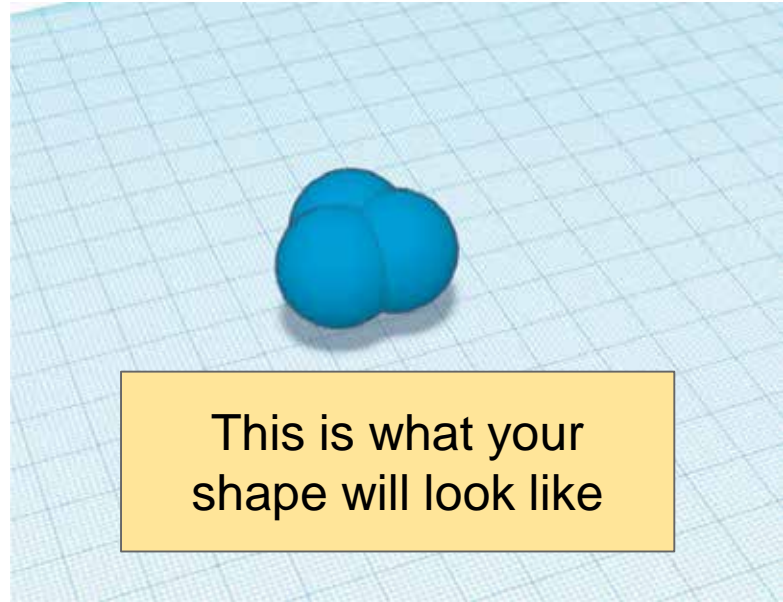
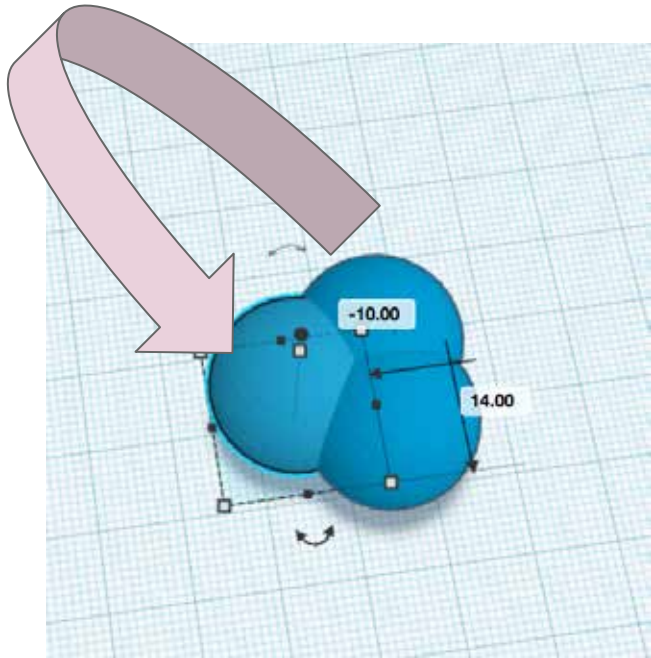
Copy paste



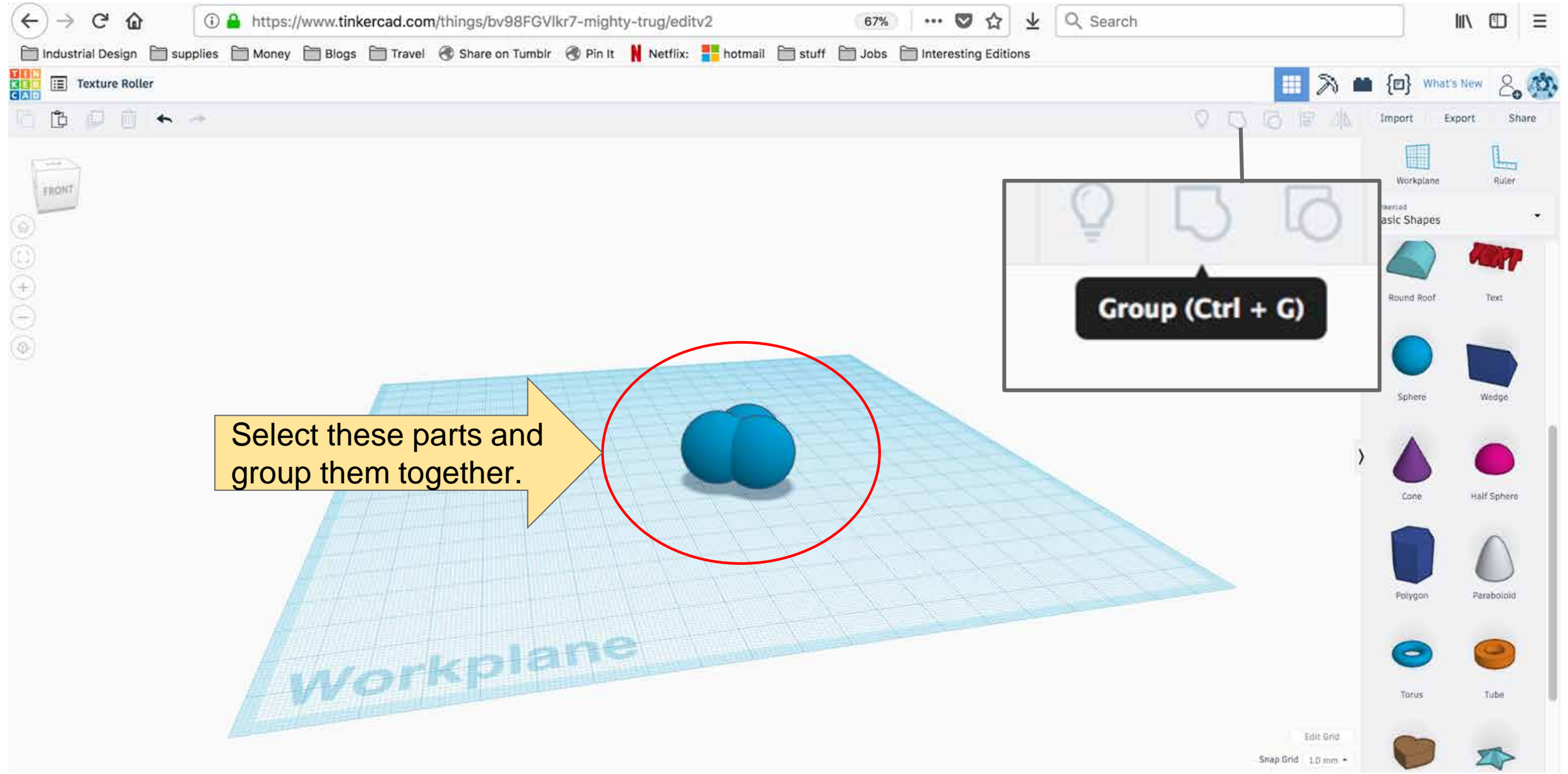
Copy paste



Use the arrow to select and drag the last ball

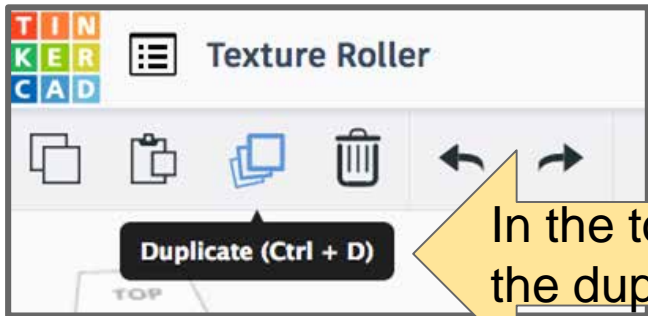


This is what your shape will look like

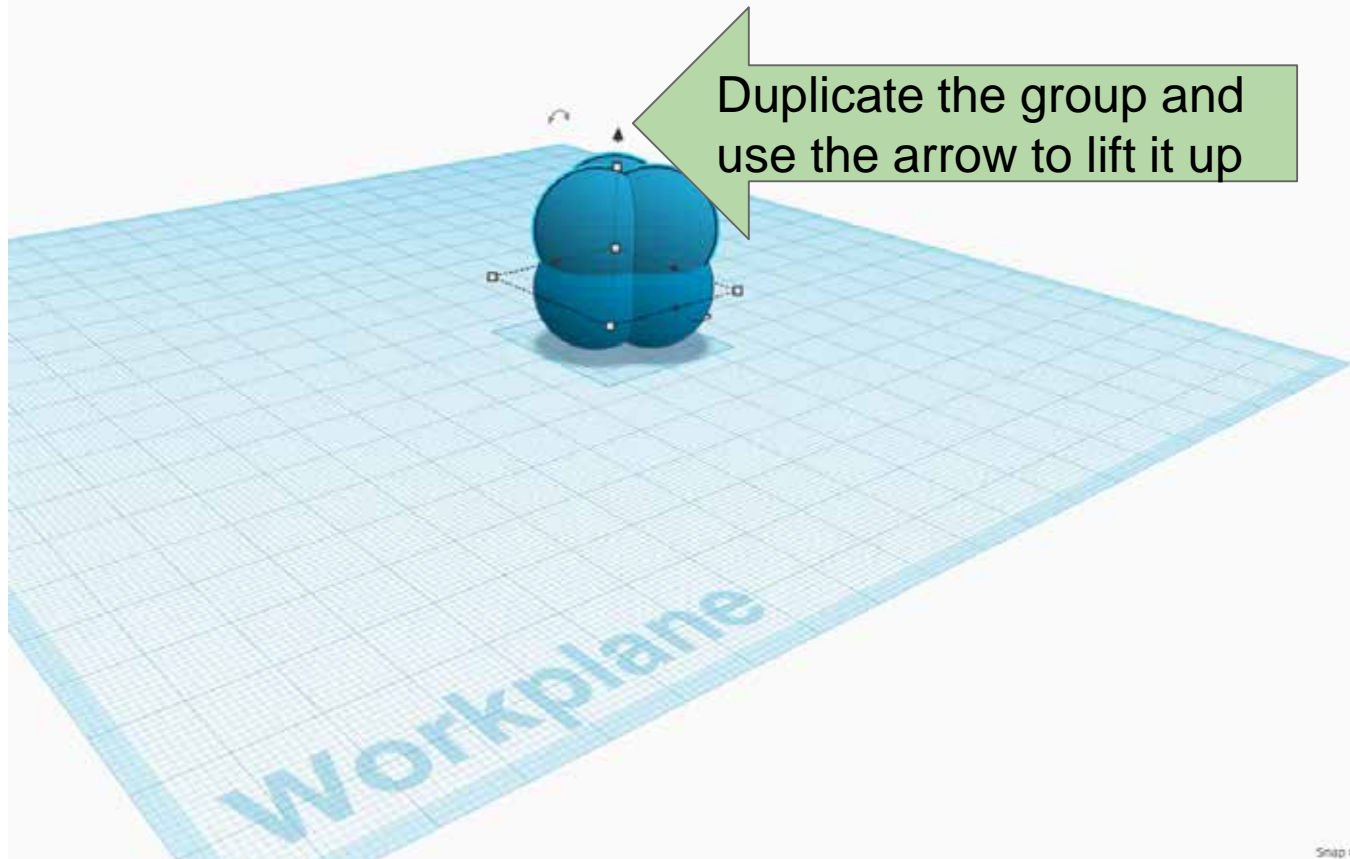


Select these parts and group them together.

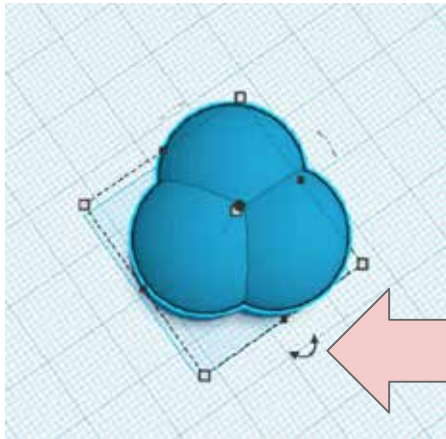
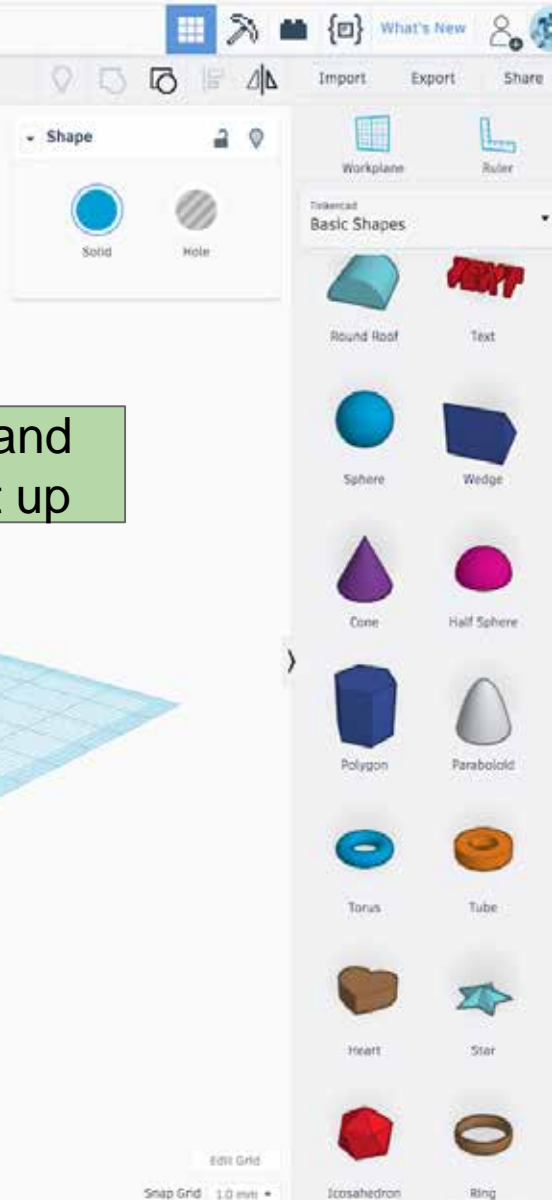
Group (Ctrl + G)



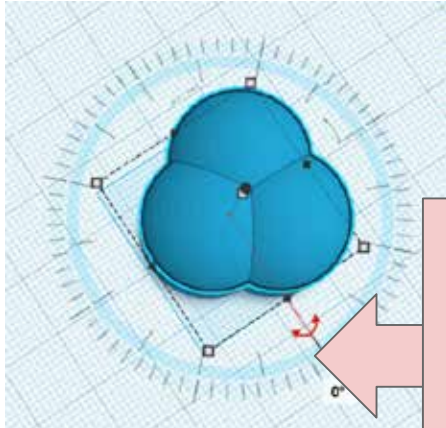
In the top left corner is the duplicate button



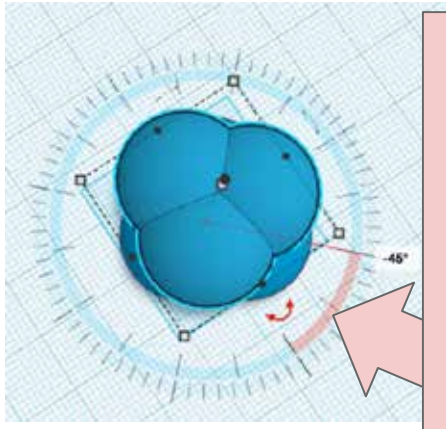
Duplicate the group and use the arrow to lift it up



Select arrows to turn the part

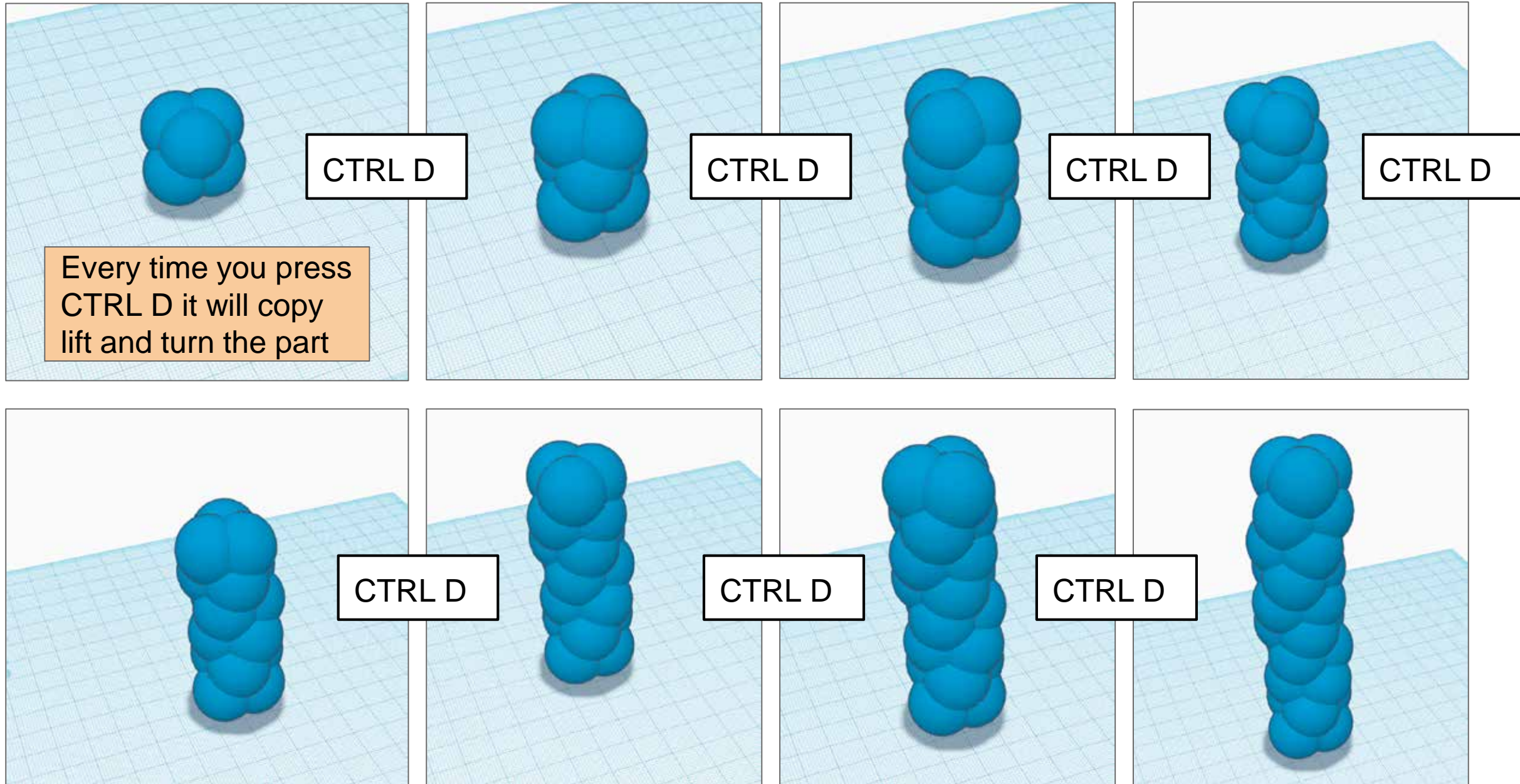


The compass will appear



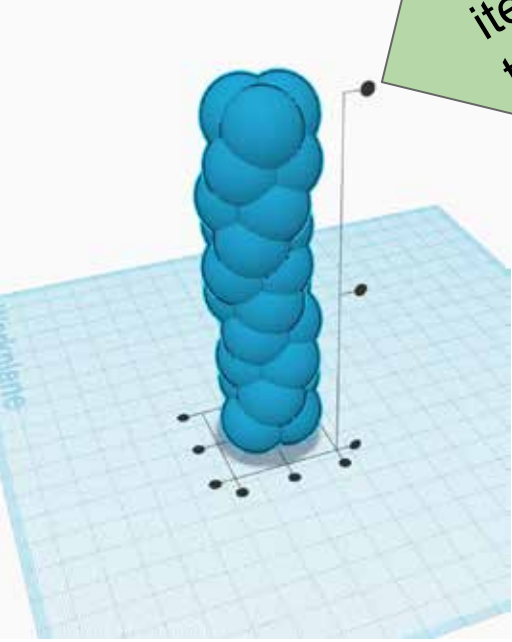
The red section shows you how far you have turned.

Control D is duplicate, it will copy an entire action if all the parts are selected!

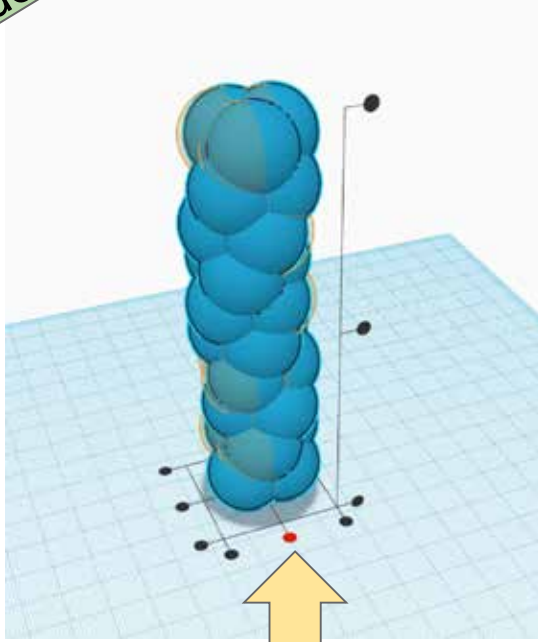




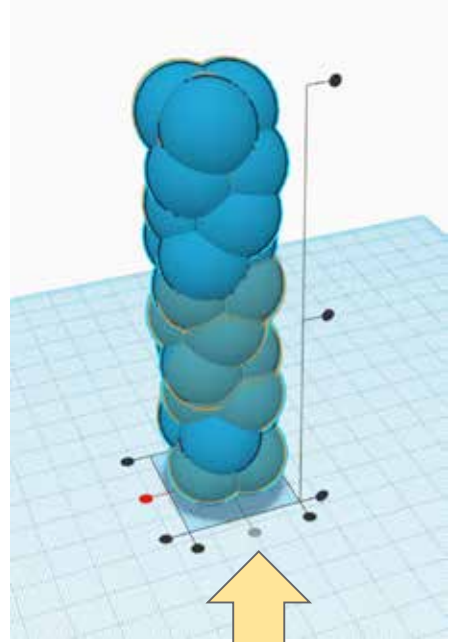
When you select your items and choose align these dots show up



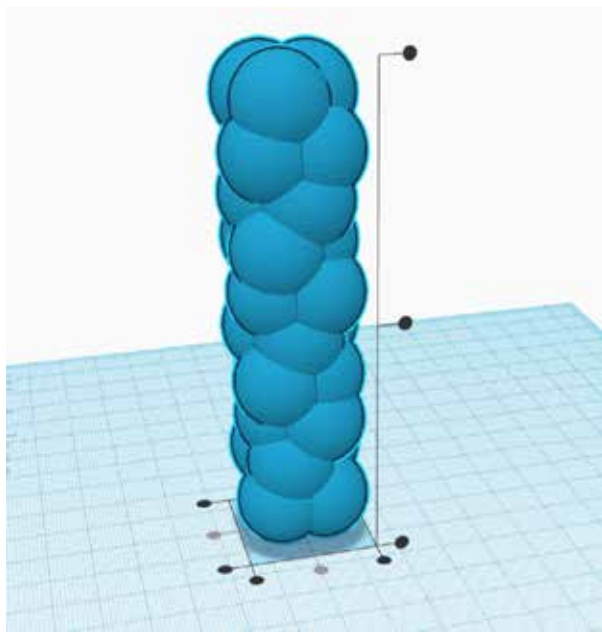
Wobbly part



When you select the red dot it will align in that direction



When the parts are aligned the dot turns grey



Aligned part

Shape

Solid Hole

Sides: 20

Bevel: 0

Segments: 1

Workplane Ruler

Tinkercad Basic Shapes

Box Cylinder

Box Cylinder

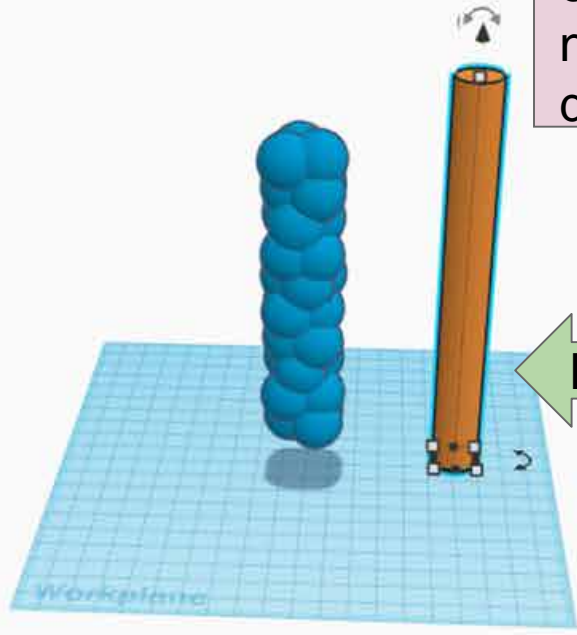
Pyramid Roof

Round Roof Text

Sphere Wedge

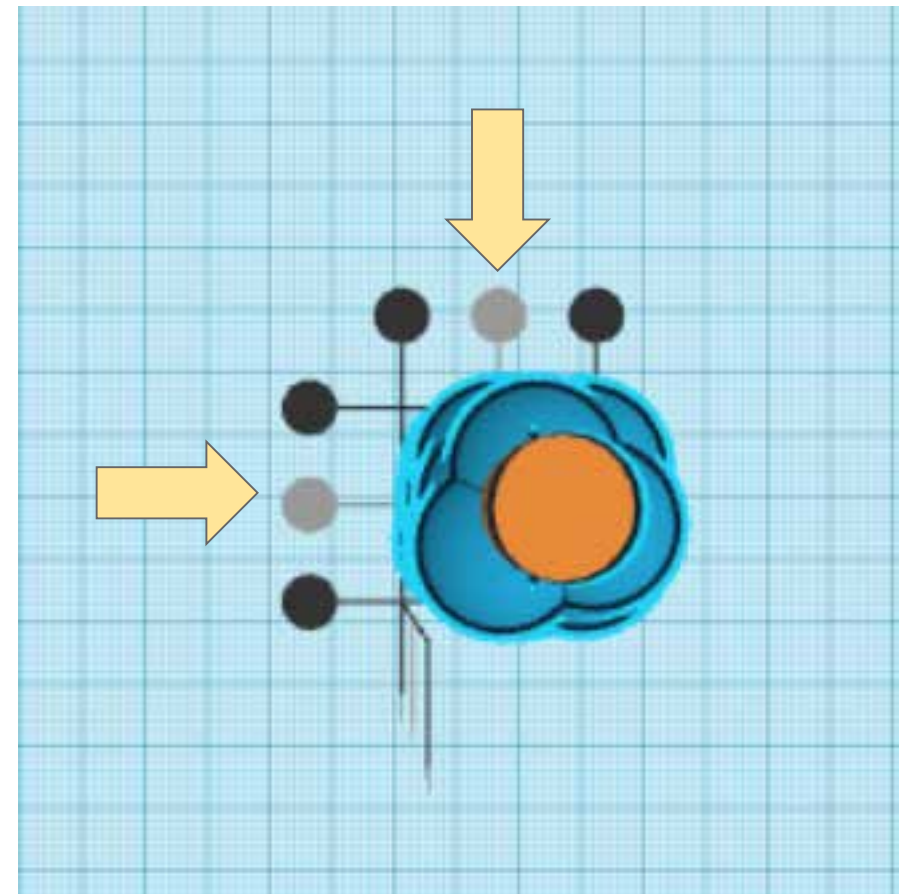
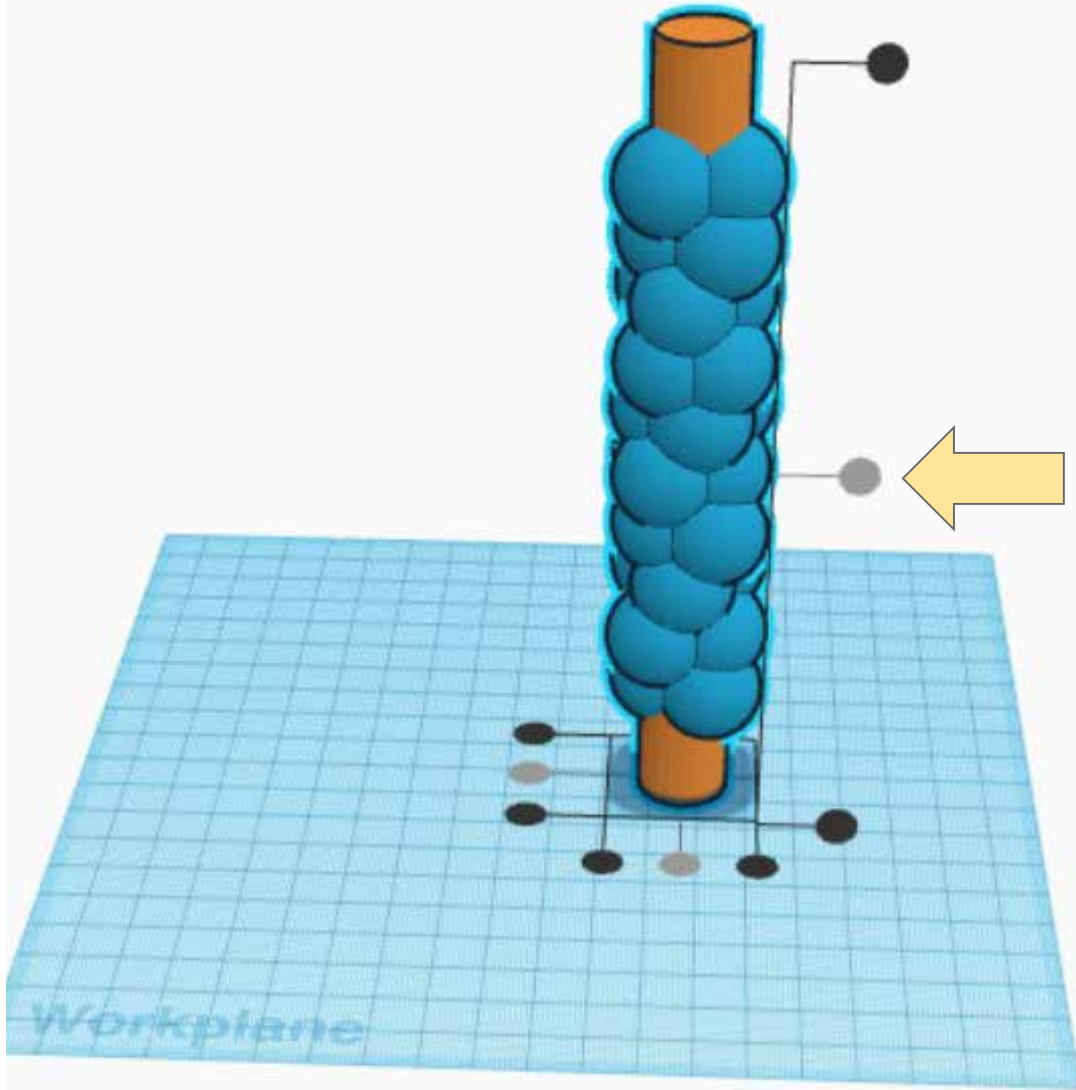
extend

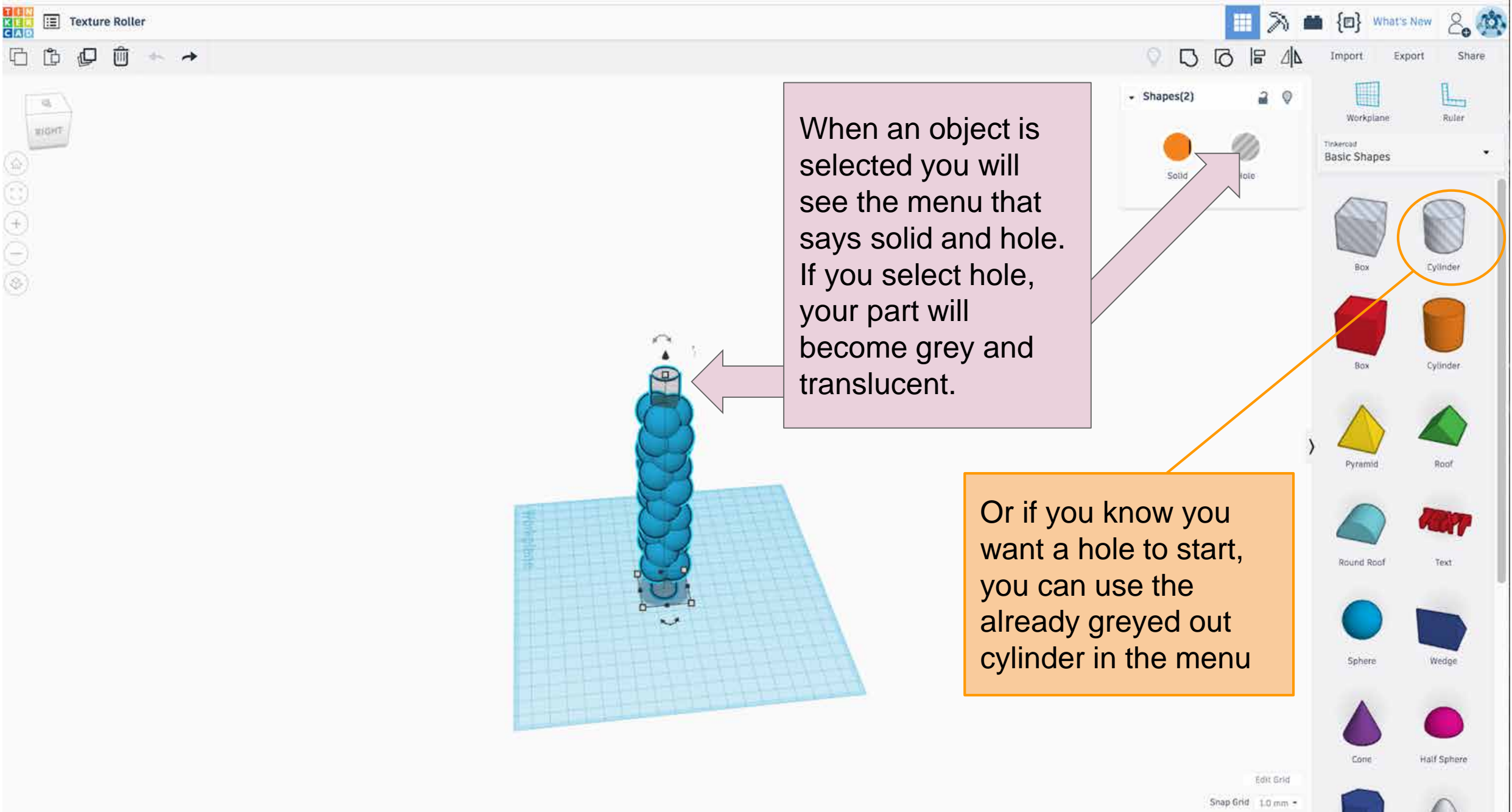
Drag and Drop



To create a hollow space in the center, select a cylinder and use the white dot at the top to drag it taller until it is longer than the roller.

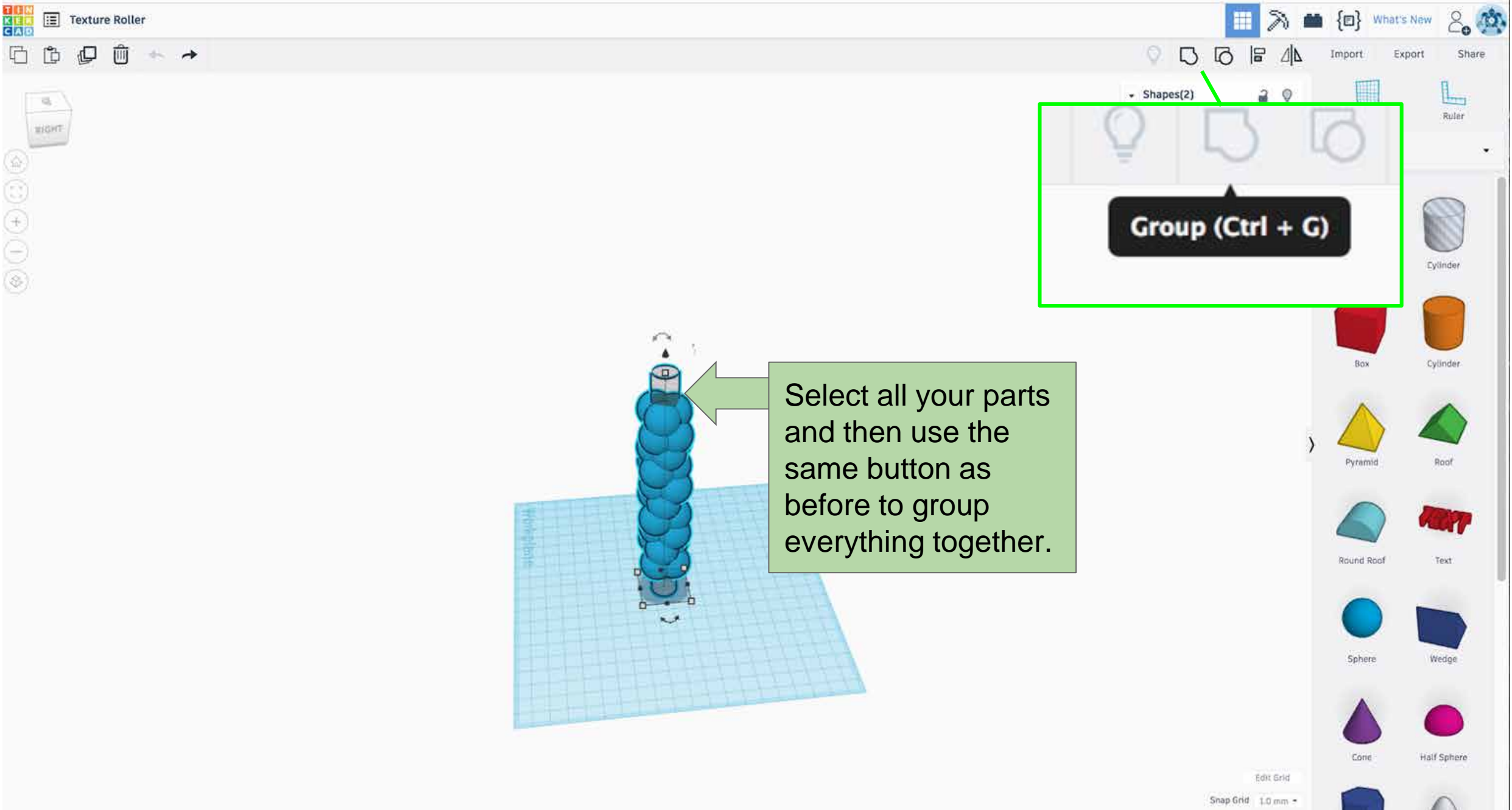
Use the same alignment tools to center the cylinder in the roller.





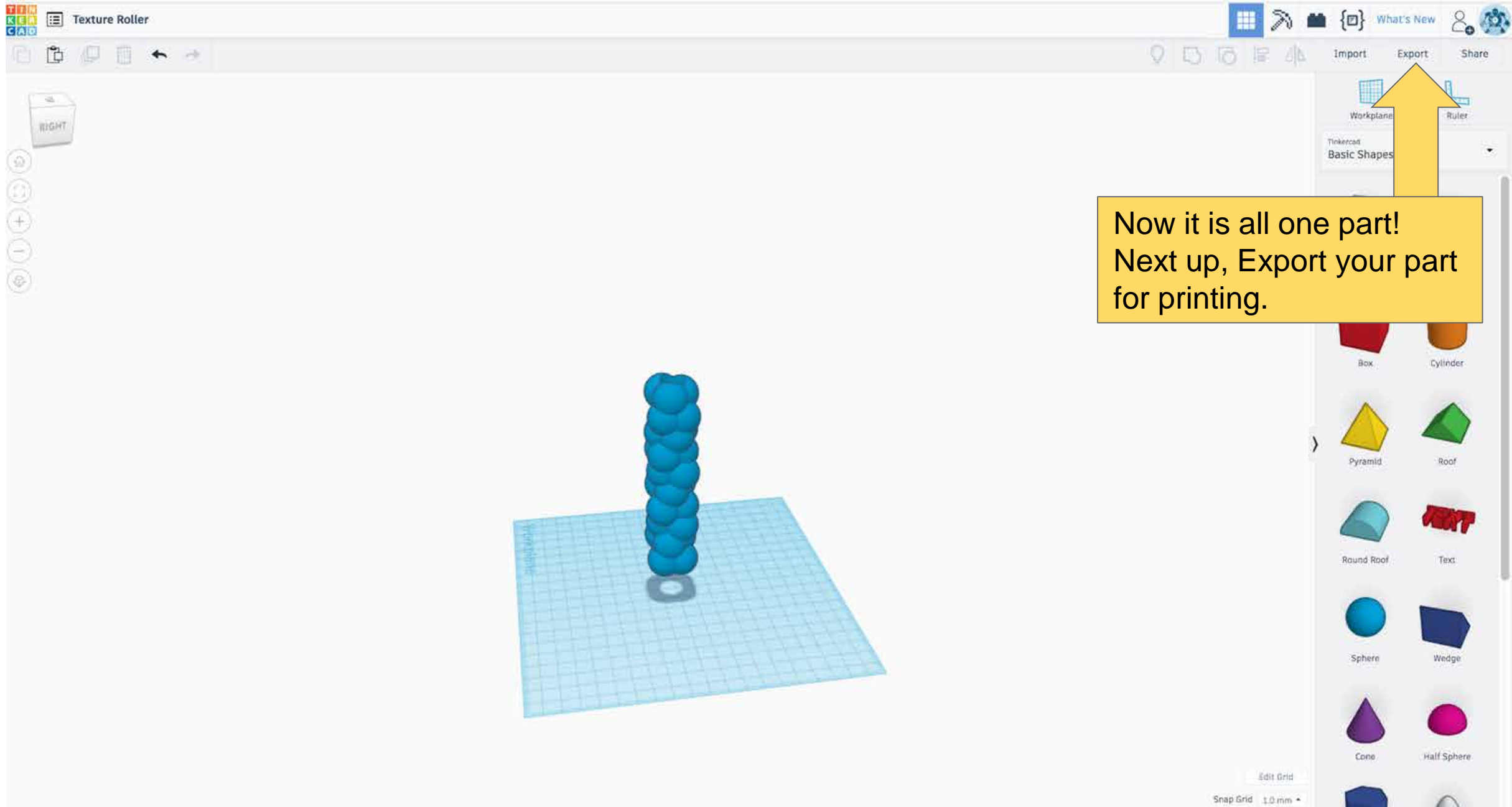
When an object is selected you will see the menu that says solid and hole. If you select hole, your part will become grey and translucent.

Or if you know you want a hole to start, you can use the already greyed out cylinder in the menu

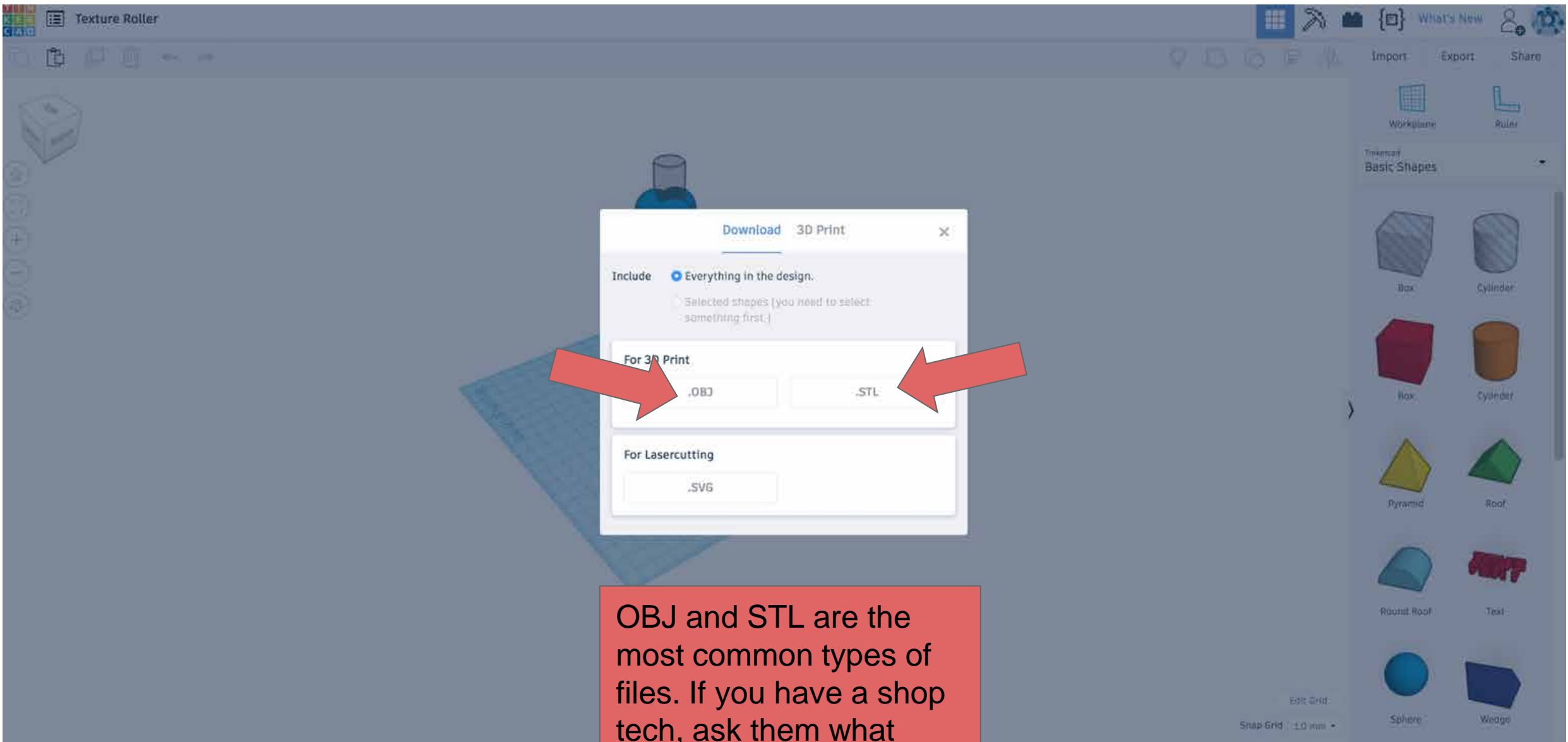


Group (Ctrl + G)

Select all your parts and then use the same button as before to group everything together.



Now it is all one part!
Next up, Export your part
for printing.



OBJ and STL are the most common types of files. If you have a shop tech, ask them what types of files your machines can understand.

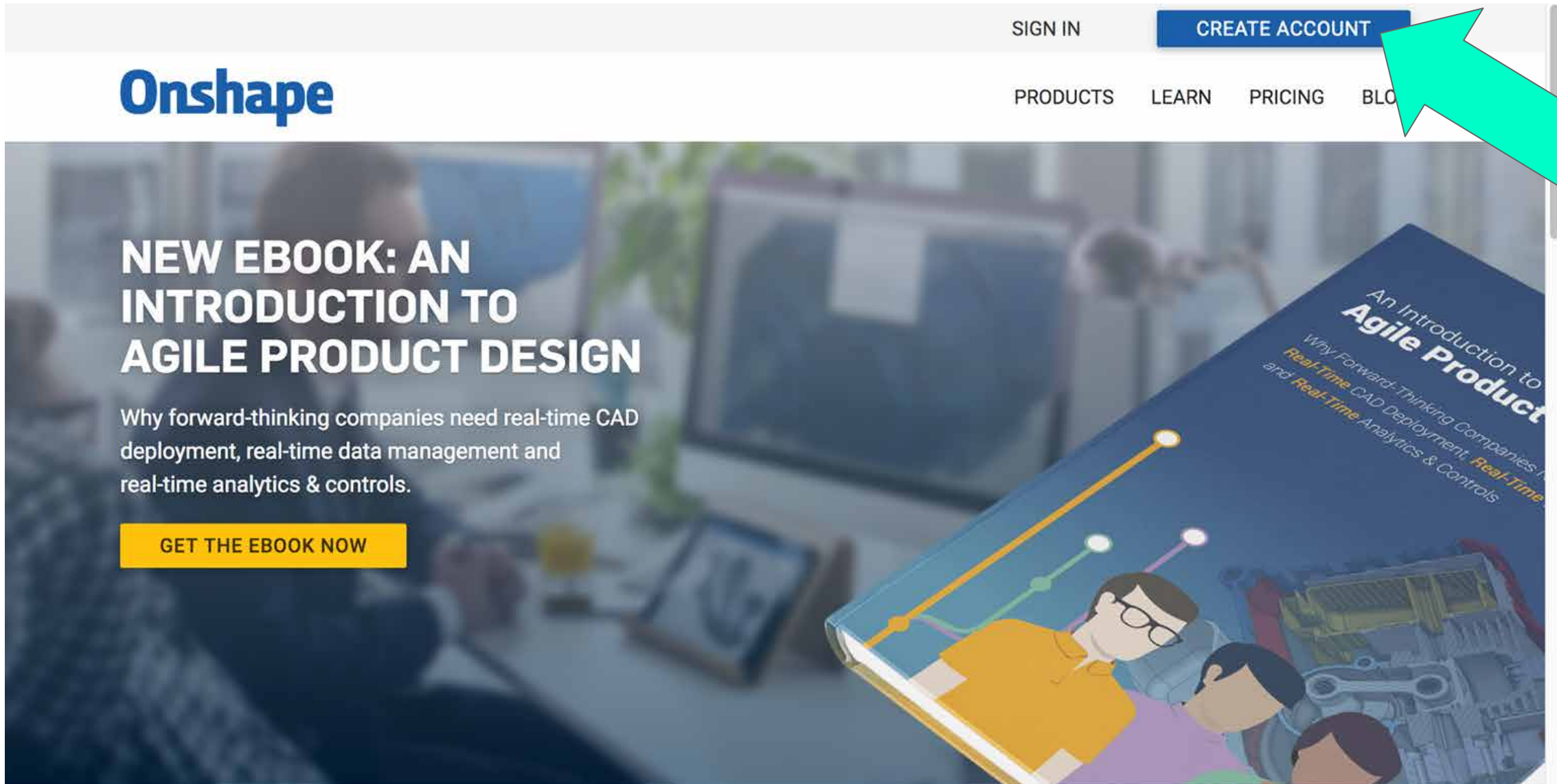
Making a custom glaze stencil:



Kinda tricky, but well worth the effort.

Onshape.

Try this after TinkerCad gets boring.



The image shows a banner from the Onshape website. At the top right, there are navigation links: "SIGN IN" and "CREATE ACCOUNT" (highlighted with a blue background and a red arrow pointing to it). Below these are "PRODUCTS", "LEARN", "PRICING", and "BLOG". The main banner features the Onshape logo on the left. The central text reads "NEW EBOOK: AN INTRODUCTION TO AGILE PRODUCT DESIGN". Below this is a sub-headline: "Why forward-thinking companies need real-time CAD deployment, real-time data management and real-time analytics & controls." At the bottom left of the banner is a yellow button that says "GET THE EBOOK NOW". On the right side of the banner is an illustration of a blue book cover with the title "An Introduction to Agile Product Design" and the subtitle "Why Forward-Thinking Companies Need Real-Time CAD Deployment, Real-Time Analytics & Controls". The cover also features an illustration of three people looking at a screen displaying a 3D CAD model.

SIGN IN **CREATE ACCOUNT**

PRODUCTS LEARN PRICING BLOG

Onshape

NEW EBOOK: AN INTRODUCTION TO AGILE PRODUCT DESIGN

Why forward-thinking companies need real-time CAD deployment, real-time data management and real-time analytics & controls.

GET THE EBOOK NOW

An Introduction to **Agile Product Design**
Why Forward-Thinking Companies Need **Real-Time** CAD Deployment, **Real-Time** Analytics & Controls

Opening page - Create a new file

The screenshot shows the Onshape web interface. At the top left, the 'Onshape' logo is visible. A search bar contains the text 'Search in Recently opened'. On the right side of the top bar, there are buttons for 'App Store', 'Invite friends', and 'Share', along with a user profile icon for 'Elizabeth New'. Below the top bar, there is a 'Create' button and an upward-pointing arrow icon. The main area is titled 'Recently opened' and contains a table with columns: 'Name', 'Workspace', 'Modified', 'Modified by', 'Owned by', and 'Size'. The table is currently empty, with a light blue message box stating 'No recently opened documents.' To the right of the table is a sidebar titled 'Pick a document...' with fields for 'Owner', 'Description', 'Labels', 'Created by', 'Last modified by', and 'Default workspace'. On the left side of the interface, there is a sidebar with navigation links: 'Recently opened', 'My documents', 'Created by me', 'Shared with me', 'Elizabeth New Design', 'New label...', 'Public', 'Tutorials & Samples', and 'Trash'. An orange arrow points from the 'Create' button to the 'Tutorials & Samples' link. A green arrow points from the 'Tutorials & Samples' link to the text 'Links to Tutorials'.

Create ↑

Recently opened

Name	Workspace	Modified	Modified by	Owned by	Size
No recently opened documents.					

Pick a document...

Owner

Description
No description

Labels
No labels

Created by

Last modified by

Default workspace

Recently opened

My documents

- Created by me
- Shared with me
- Elizabeth New Design
- New label...

Public

Tutorials & Samples

Trash

Links to Tutorials

The onshape workspace

Onshape Onshape Simple Cup Main App Store Share Elizabeth New



Features (4)

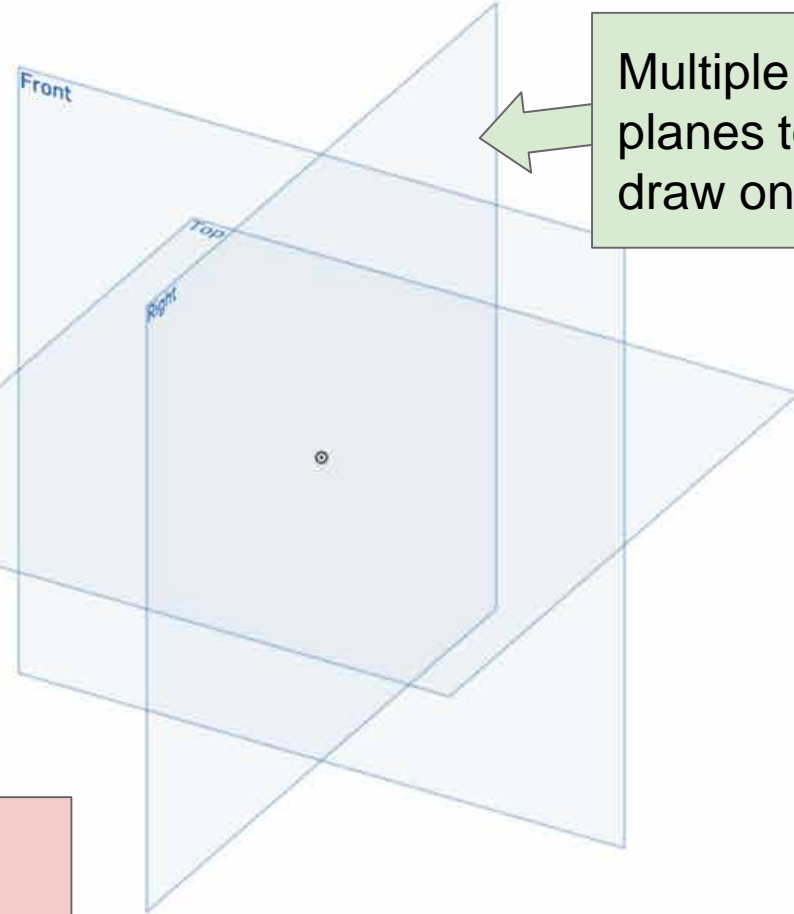
Filter by name or type

- Default geometry
 - Origin
 - Top
 - Front
 - Right

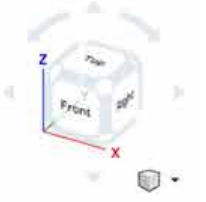
MANY tools. Most of which we will not discuss today due to time - Watch their tutorials, they are great.

This is a menu of every step you make. You can choose what sketches or features you want to work on.

Always keep in mind you can use the ESC key to get out of any feature you are using.

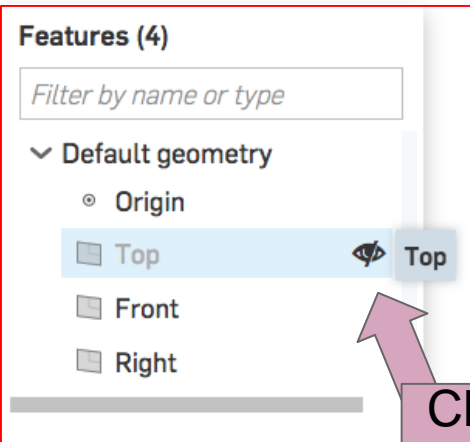
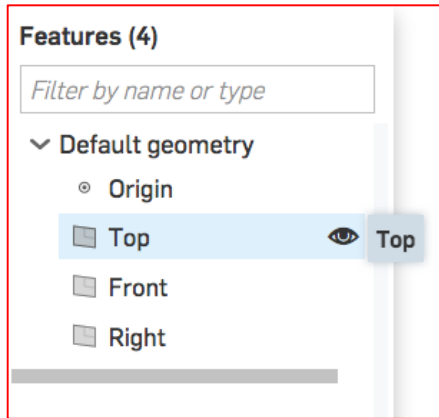


Multiple planes to draw on.

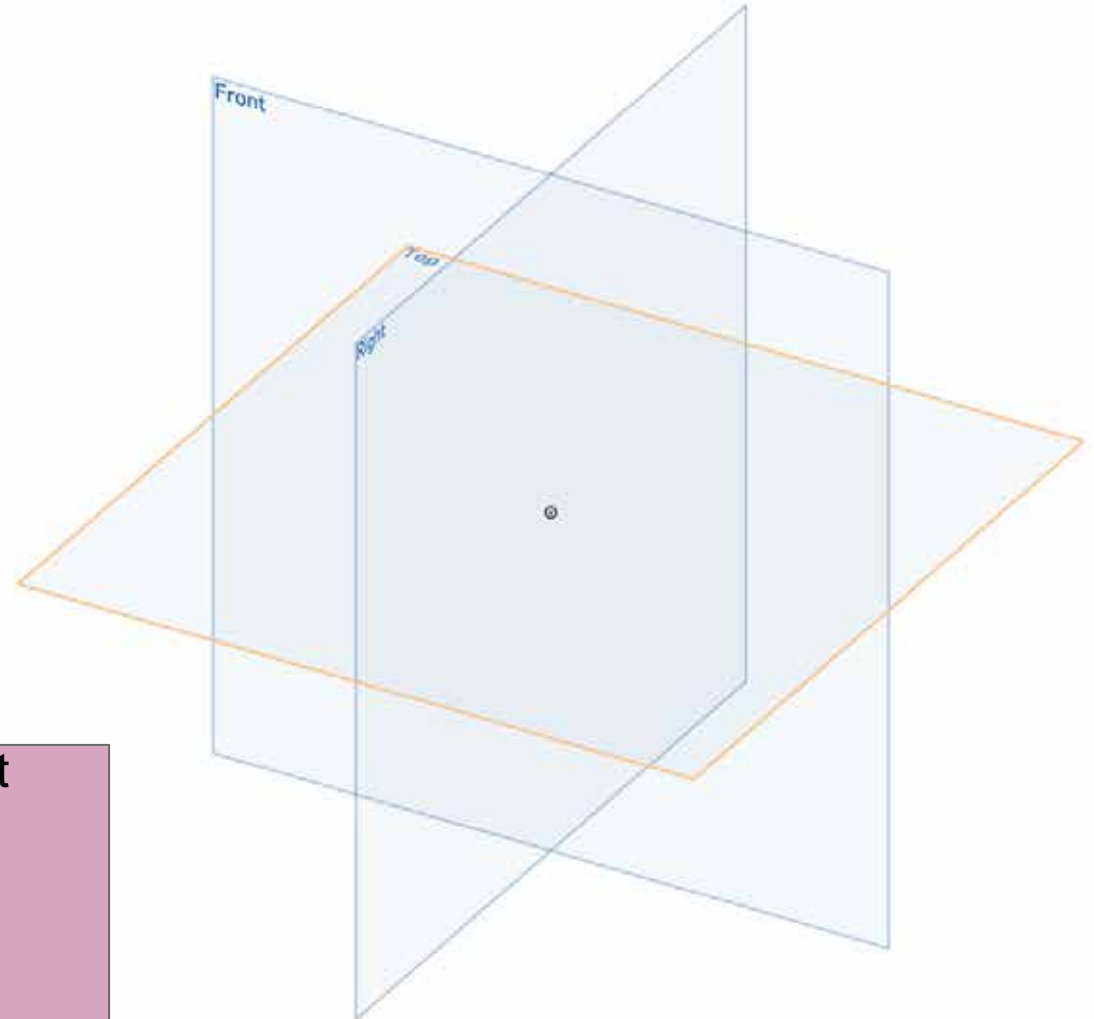


This box is like the direction box in Tinkercad. Along with your mouse. It lets you choose what direction you view the object.

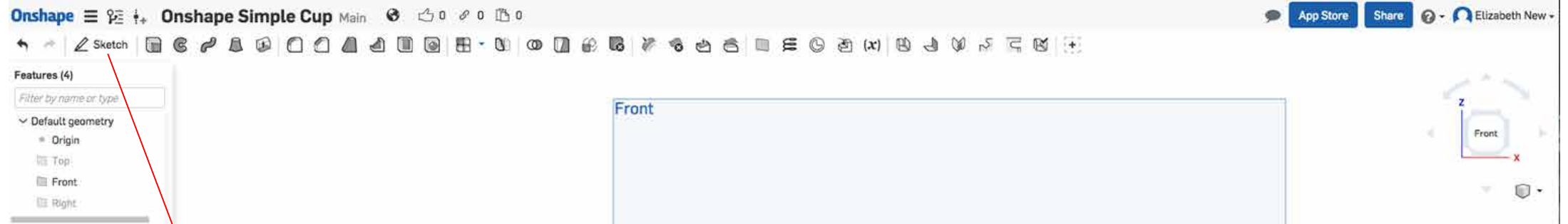
Decide what plane to draw on - hide the other ones



Click on the eye. When it is crossed out then the top plane is no longer visible. Follow the same process for the right plane. We will be working on the Front Plane only.



Start your sketch by clicking the sketch button



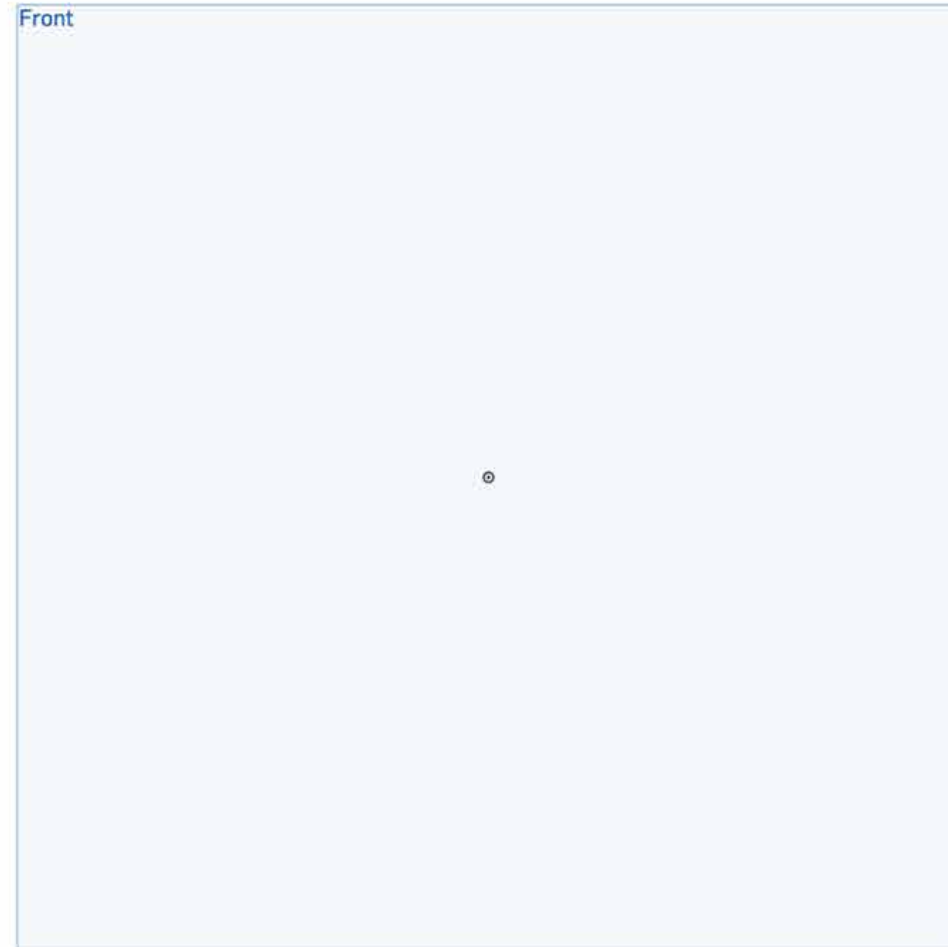
Onshape Onshape Simple Cup M



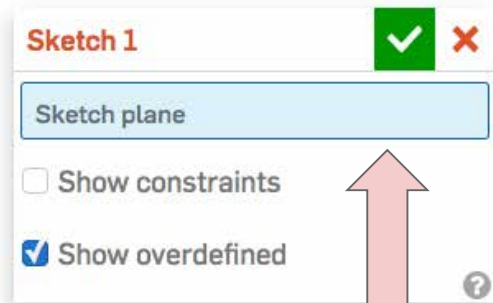
Create new sketch (Shift-s)

Create a new sketch on the selected plane or planar face. A sketch is the basis for all parts and must be created in order to use Extrude or other feature tools.

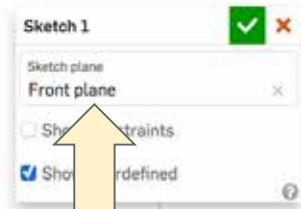
1. Select a plane or planar face.
2. Select a sketch tool (line, rectangle, etc).
3. Create sketch curves.
4. Click the green checkmark to save or the red x to cancel.



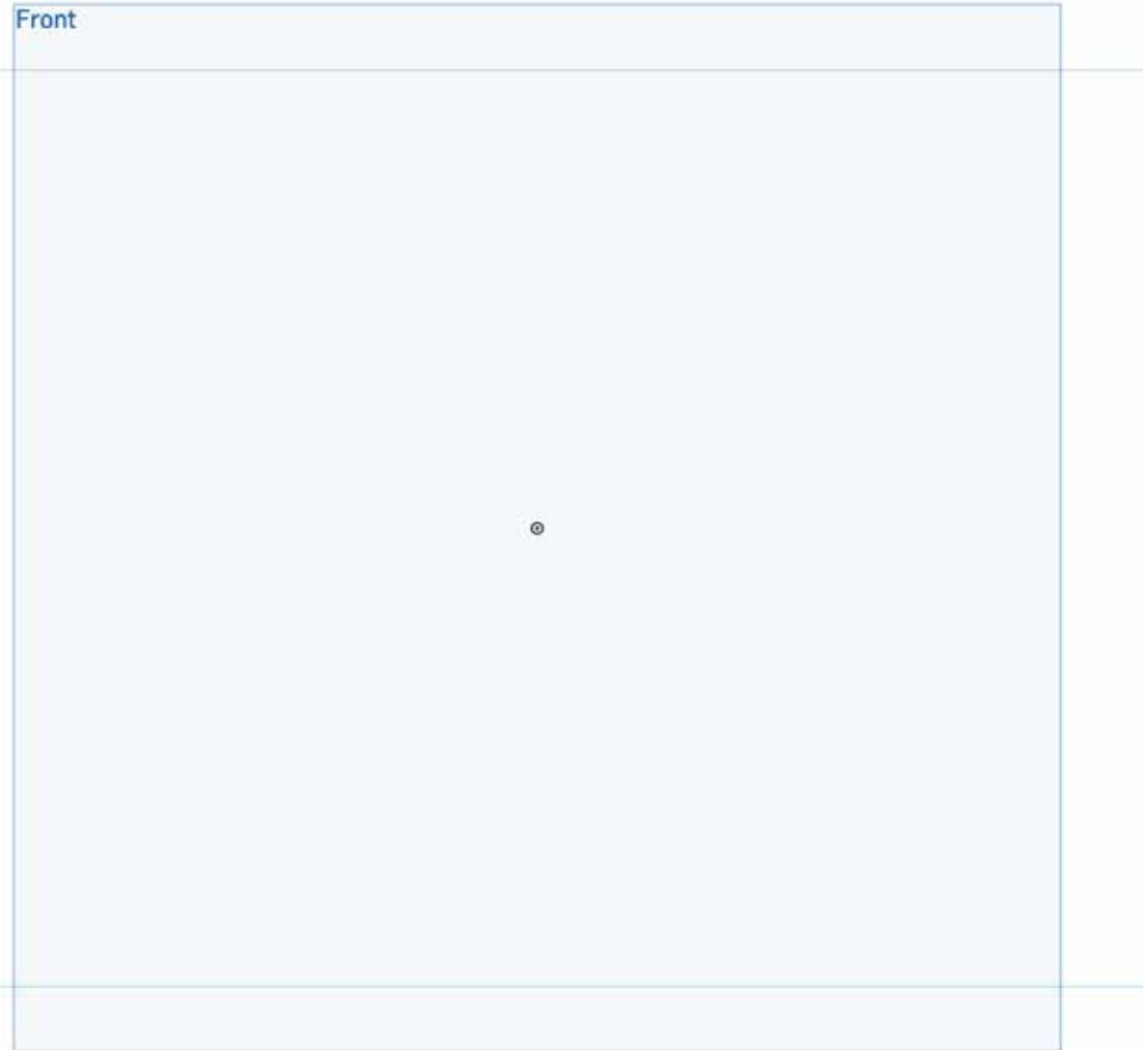
Choose a plane to draw on.



This box will show up first (make sure it is highlighted blue)

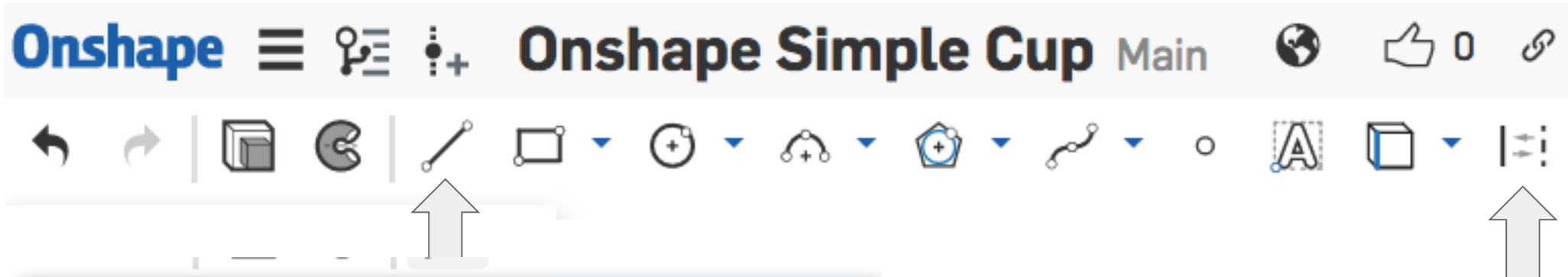


When you click on the Front Plane the box will auto fill, and it will allow you to start sketching.



Sketch 1 - Practice - make a center line

This is part of the menu at the top left of the screen. We will be using the LINE button and the CONSTRUCTION button



Line (l)

Create a line between two points or a chain of lines.

1. Click the start point.
2. Click the end point.
3. Repeat to create a chain of lines or double-click to end.

Construction (q)

Create new construction geometry or convert existing entities to construction.

Construction geometry is ignored when the sketch region is used for features.

1. Select Construction icon.
2. Select a sketch tool to create construction geometry.

Or, select a sketch entity, then toggle its state by selecting the Construction tool.

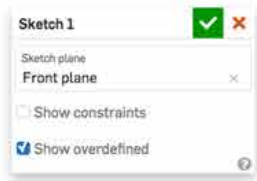
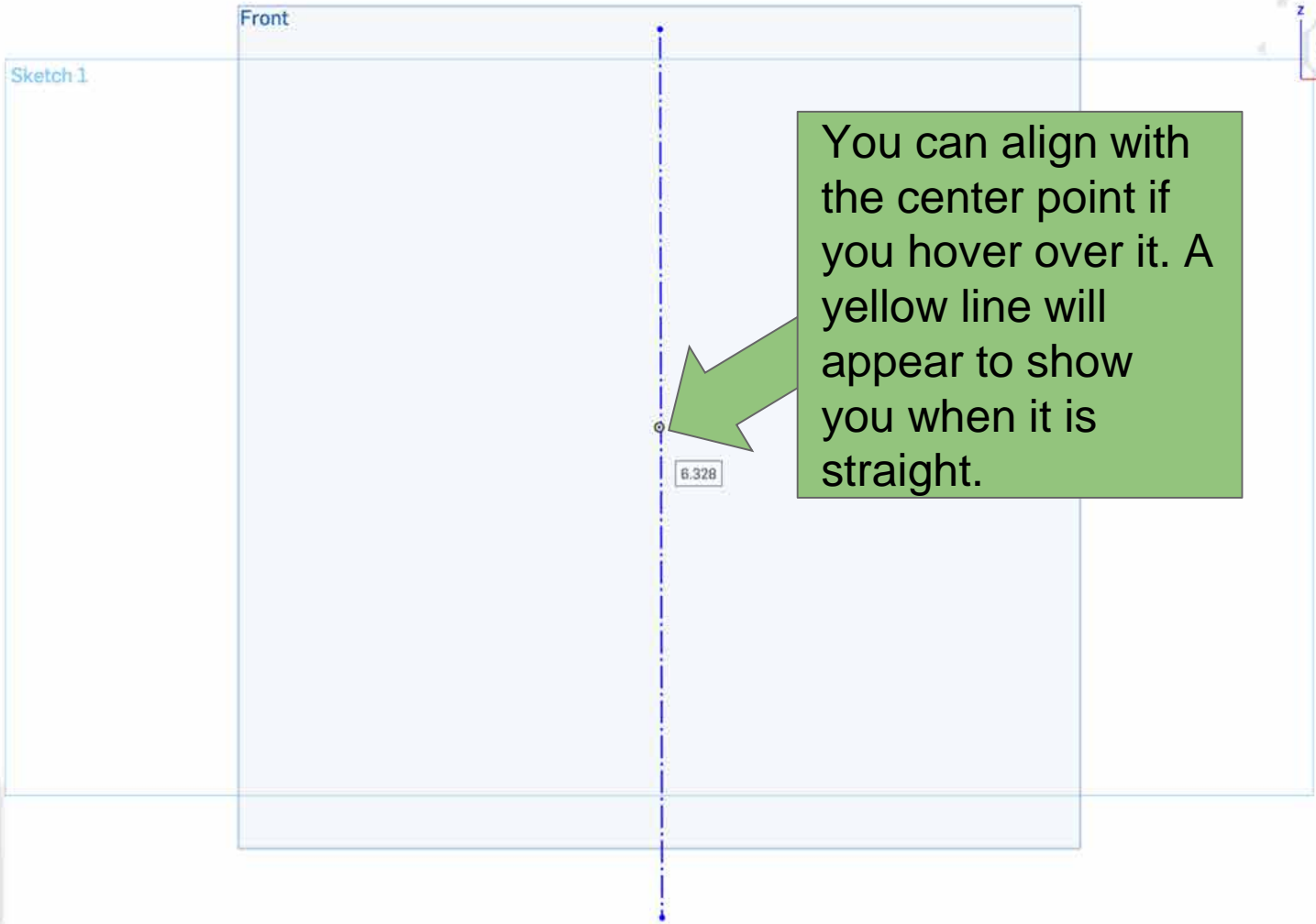
Selected buttons



The name of your sketch so you can find it later if you want to change something



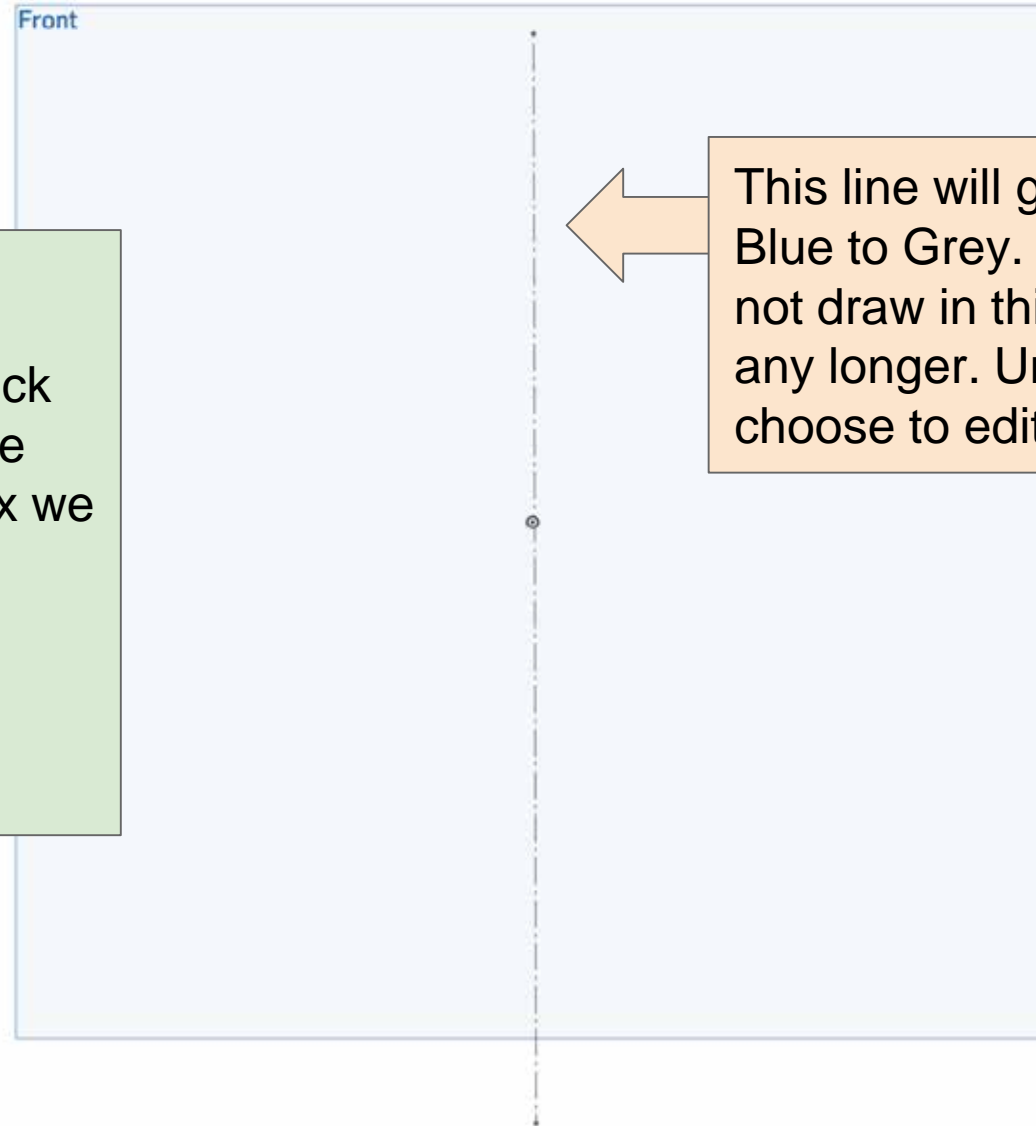
You can align with the center point if you hover over it. A yellow line will appear to show you when it is straight.



Finish your first sketch



Click the green check mark in the sketch box we created earlier to finish the sketch.



This line will go from Blue to Grey. You can not draw in this sketch any longer. Unless you choose to edit it.

2nd sketch

Onshape Simple Cup Main

App Store Share Elizabeth New

Features (6)

Filter by name or type

- Default geometry
 - Origin
 - Top
 - Front
 - Right
- Sketch 1
- Sketch 2**

Sketch 2

Sketch plane: Front plane

Show constraints

Show overdefined

Front

Sketch 2

Front

z

x

You have now started sketch 2 you can view sketch 1 below it, but the things you do in sketch 2 will not affect sketch 1.

Sketch 2 begins the same way as sketch one. Select the sketch button and then select the front plane.

To get started on the stencil...

Onshape **Plate Stencil** Main App Store Learning Center Share Elizabeth New

Sketch 1
Sketch plane: Top plane
 Show constraints
 Show overdefined
Final

Sketch 2 Top

Ø203.2

Extrude 3

Parts (0)

Part Studio 1 | Stencil Design.dxf (1) | Stencil Design.dxf Drawi... | Stencil Design.dxf | Stencil Design.dxf Drawi... | Assembly 1

Select the circle from the sketch menu and draw the circle from the center point to the size you want.

You can edit the size by using the measurement tool in the toolbar. In this case I used mm, but you can also change your measurement to inches in the main menu

Approve circle drawing

The image shows the Onshape software interface. At the top, the title bar reads "Onshape" and "Plate Stencil Main". The top toolbar contains various icons for navigation and editing. On the left, the "Features (12)" panel is visible, with "Sketch 1" selected and highlighted in blue. A green checkmark icon is positioned next to the "Sketch 1" header, and an orange callout box with the text "Click the check box" points to it. Below the "Sketch 1" header, a dropdown menu shows "Sketch plane" set to "Top plane", with options for "Show constraints" (unchecked) and "Show overdefined" (checked). The main workspace displays a circular sketch on the "Top" plane, with a diameter dimension of $\text{Ø}203.2$. A dashed vertical line indicates the sketch's axis of symmetry. The "Sketch 1" label is also visible in the workspace. On the right, a "Top" view icon is shown. The bottom taskbar displays the current project name "Part Studio 1" and several open files: "Stencil Design.dxf (1)", "Stencil Design.dxf Drawi...", "Stencil Design.dxf", "Stencil Design.dxf Drawi...", and "Assembly 1".



Features (12)

Filter by name or type

- Default geometry
 - Origin
 - Top
 - Front
 - Right

- Sketch 1
- Extrude 1**

Extrude 1 ✓ ✕

Solid Surface

New

Faces and sketch regions to extrude

Face of Sketch 1 ✕

Symmetric ▾

Depth 0.7 mm

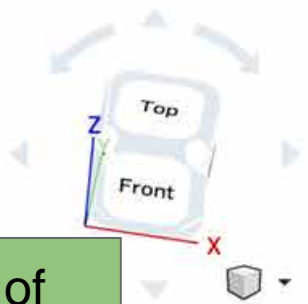
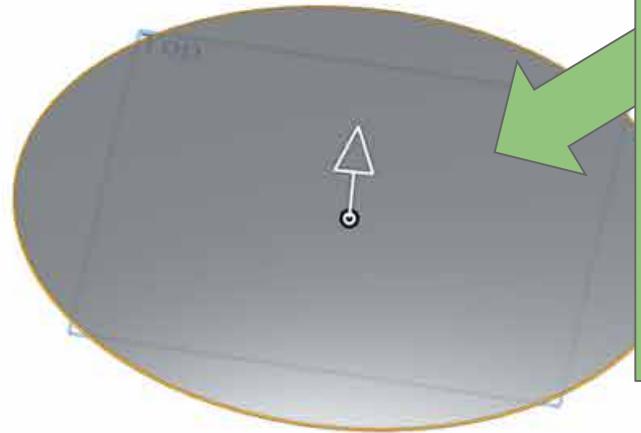
Draft

Slider control

Select "new" from sub menu

Type in thickness

Select the face of the drawing you want to extrude (like a clay extruder!). Use the arrow to control the amount, or the box in the menu on the left





Features (12)



Filter by name or type

▼ Default geometry

⊙ Origin

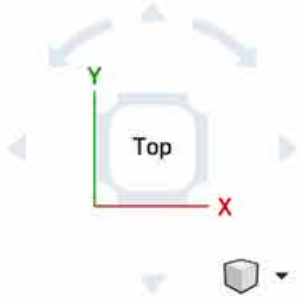
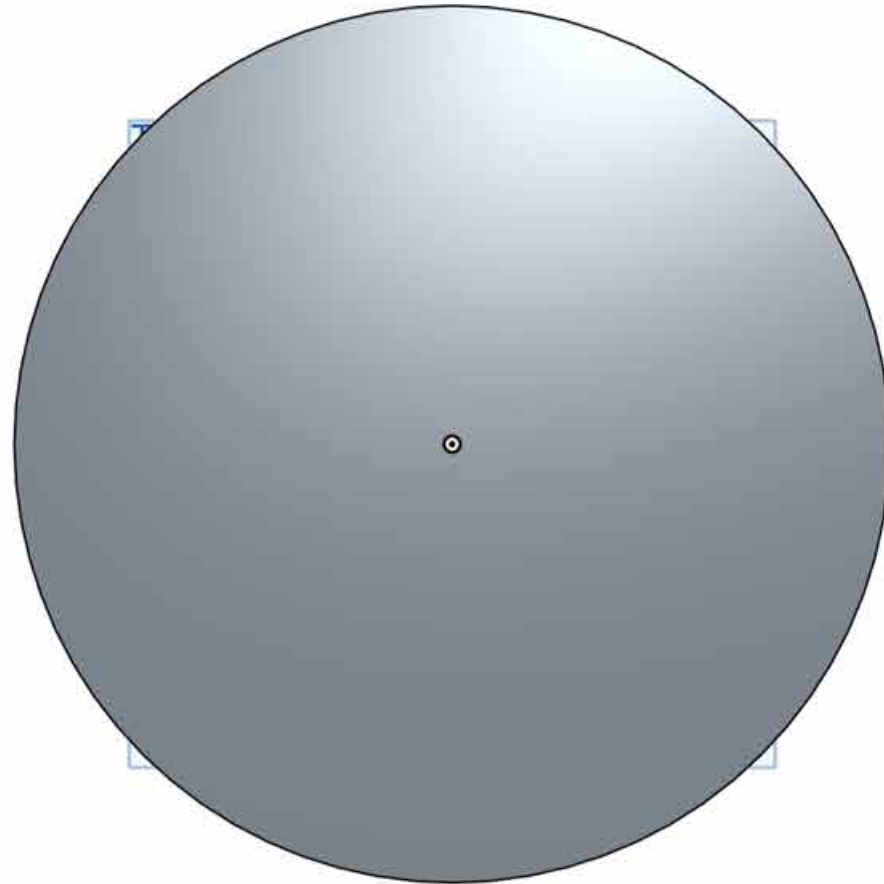
▣ Top

▣ Front

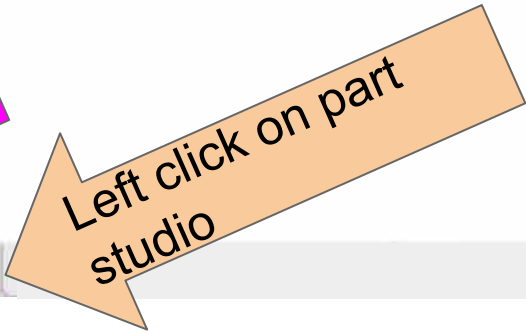
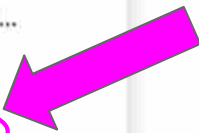
▣ Right

✎ Sketch 1

📄 Extrude 1



- Go to App Store
- 📄 Add application...
- 📊 Create Material Library
- {📁} Create Feature Studio
- 📄 Create Part Studio
- 📄 Create Assembly
- 📄 Create Drawing...
- 📁 Create folder
- 📄 **Import...**



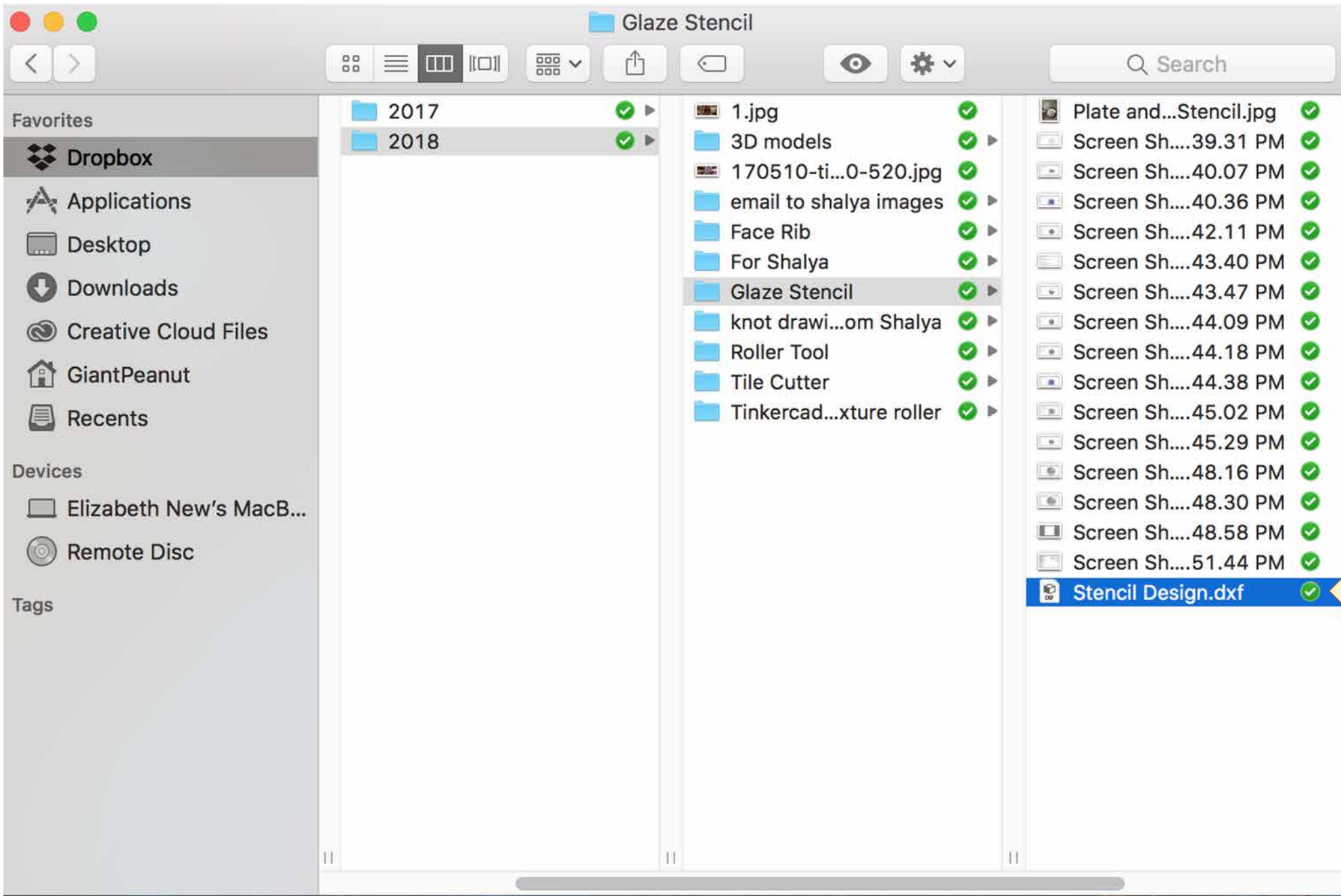
Left click on part studio

🔍 + 📄 Part Studio 1

You will need a DXF or DWG file

The screenshot displays the Convertio website's interface for converting JPG files to DXF. At the top, a navigation bar includes links for various services like OCR, Bitcoin to USD, PDF to Word Online (marked 'NEW'), PDF to PPT, Merge PDF, Split PDF, Compress PDF, Compress PNG, MP4 Converter, and Resize Image (marked 'NEW'). The Convertio logo is on the left, and 'Login' and 'Sign Up' buttons are on the right. The main heading is 'JPG to DXF Converter' with the subtext 'Convert your jpg files to dxf online & free'. A prominent green 'CONTINUE' button is on the left. To its right, a '3 Easy Steps' guide lists: 1. Click 'Continue', 2. Run and Install, and 3. Open new Tab. A 'MyQuick ⇨ Converter' logo is also present. Below the guide, a link says 'Don't want to see ads? — Sign Up'. The main conversion area has a dark grey background with a red 'From Computer' button and icons for file selection. It features dropdown menus for 'JPG' and 'DXF'. At the bottom, it states '100 MB maximum file size' with a 'Sign Up' link, and offers to 'Save converted files into my' with options for 'Dropbox' and 'Google Drive'.

There are free options online but they need some work



Select your file



Features (12)

Filter by name or type

- Default geometry
 - Origin
 - Top
 - Front
 - Right
- Sketch 1
- Extrude 1
- Sketch 4**
- Extrude 4
- Sketch 2
- Extrude 2
- Sketch 3
- Extrude 3

plate stencil

Sketch 4

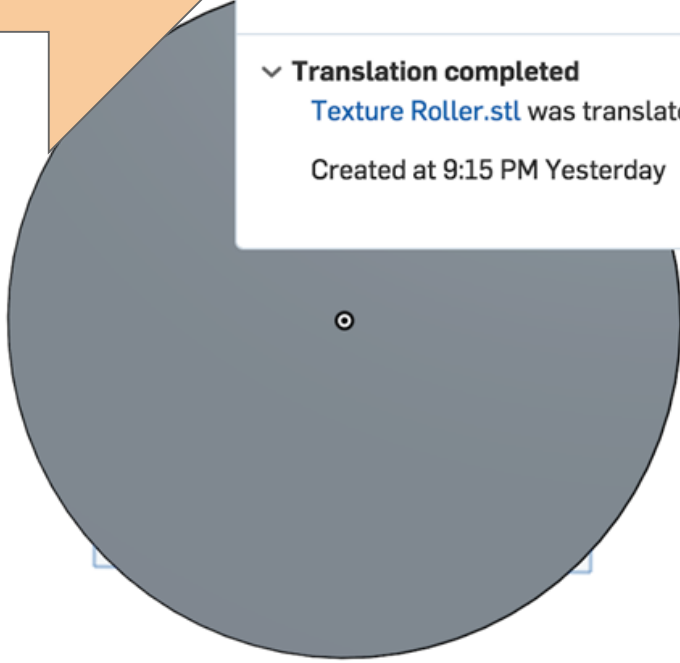
Sketch plane

Face of Extrude 1

Show constraints

Show overdefined

This menu opens and will tell you if your file uploads successfully



Notifications (2 new, 2 total)

[mark all as read](#) [delete all](#)

- Upload completed**
[Stencil Design.dxf](#) was uploaded successfully.
Created at 9:43 PM Today
[mark as read](#) [delete](#)
- Translation completed**
[Texture Roller.stl](#) was translated successfully.
Created at 9:15 PM Yesterday
[mark as read](#) [delete](#)



Features (12)

Filter by name or type

- Default geometry
 - Origin
 - Top
 - Front
 - Right
- Sketch 1
- Extrude 1
- Sketch 4**
- Extrude 4
- Sketch 2
- Extrude 2
- Sketch 3
- Extrude 3

Parts (1)

Sketch: Insert a DXF or DWG file

Current document | Other documents

Face: **Plate Stencil**

Main

Search DXF or DWG files

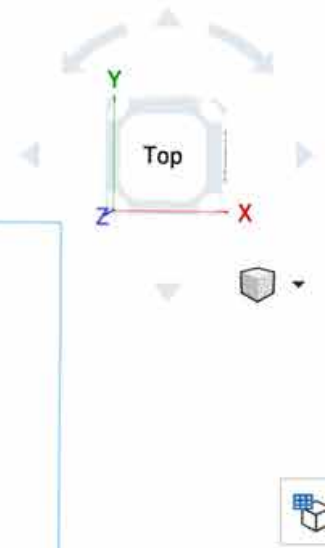
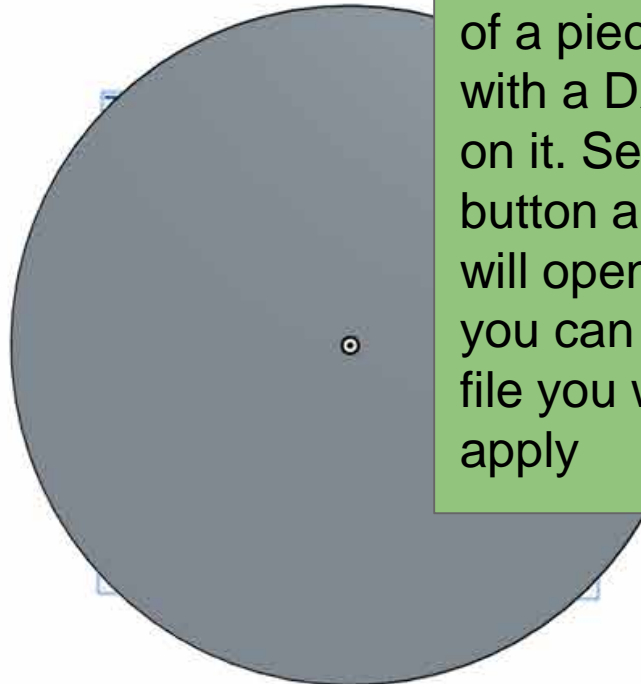
Stencil Design.dxf

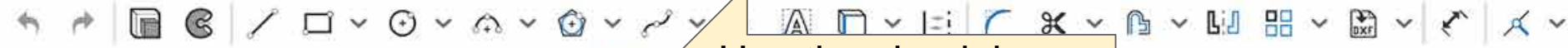
Units: Millimeter

Use file origin position

Import

In the sketch menu bar there is an icon of a piece of paper with a DXF written on it. Select this button and a menu will open where you can select the file you want to apply





Features (12)

Filter by name or type

▼ Default geometry

- Origin
- ▣ Top
- ▣ Front
- ▣ Right

Sketch 1

Extrude 1

Sketch 4

plate stencil

Sketch 4

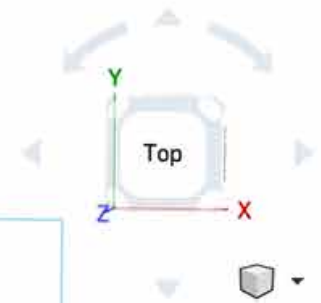
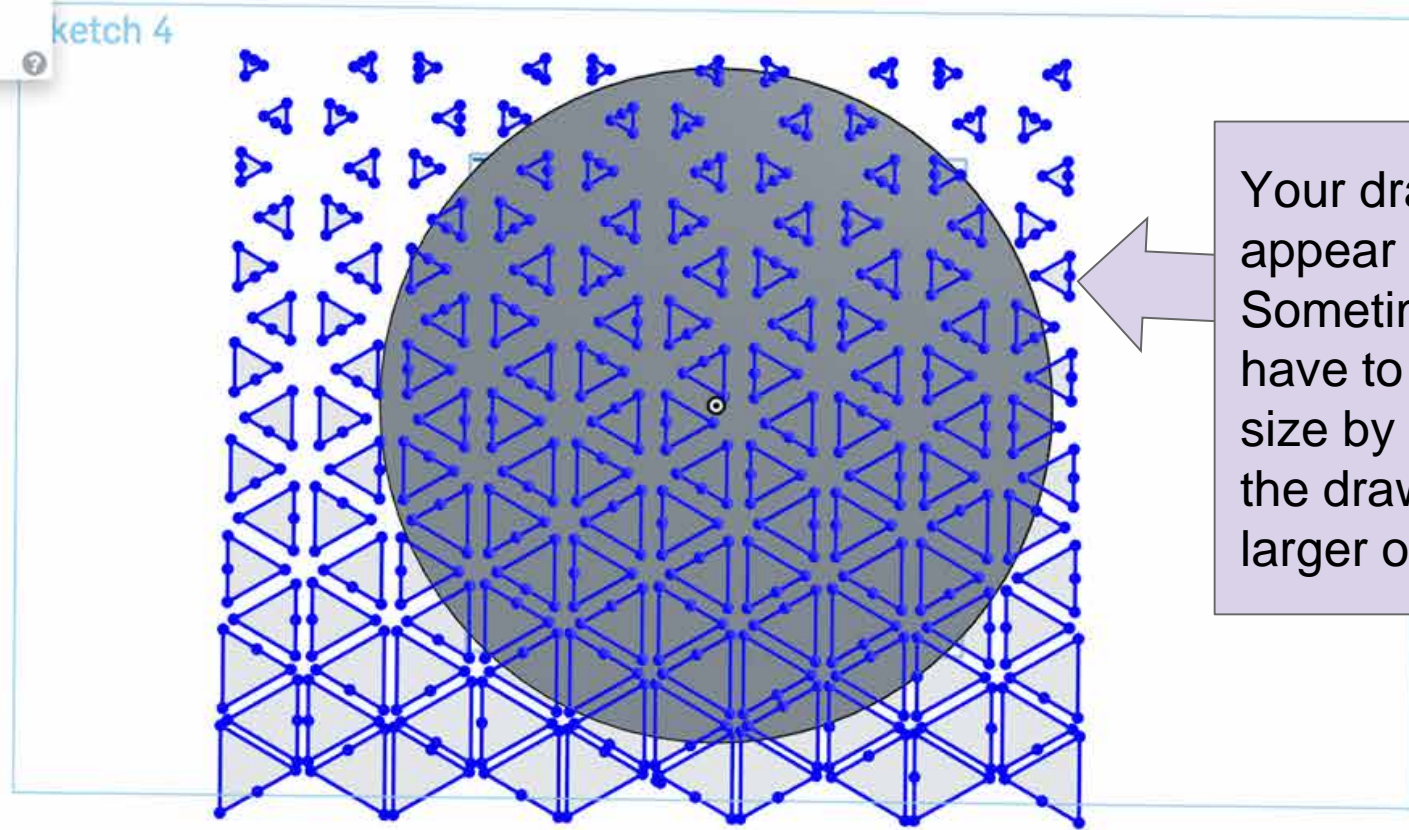
Sketch plane

Face of Extrude 1

Show constraints

Show overdefined

Use the check box to exit the sketch



Your drawing will appear in the file. Sometimes you will have to adjust the size by dragging the drawing to be larger or smaller.



Features (12)

Filter by name or type

- Default geometry
 - Origin
 - Top
 - Front
 - Right
- Sketch 1
- Extrude 1
- Sketch 4
- Extrude 4**

Parts (1)

Extrude 4

Solid Surface

New Add Remove

Faces and sketch regions to extrude

- Face of Sketch 4
- Face of Sketch 4
- Face of Sketch 4

Through all

Draft

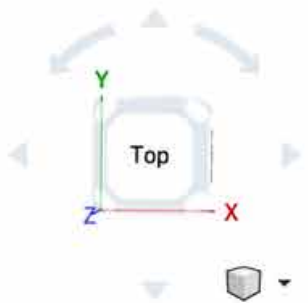
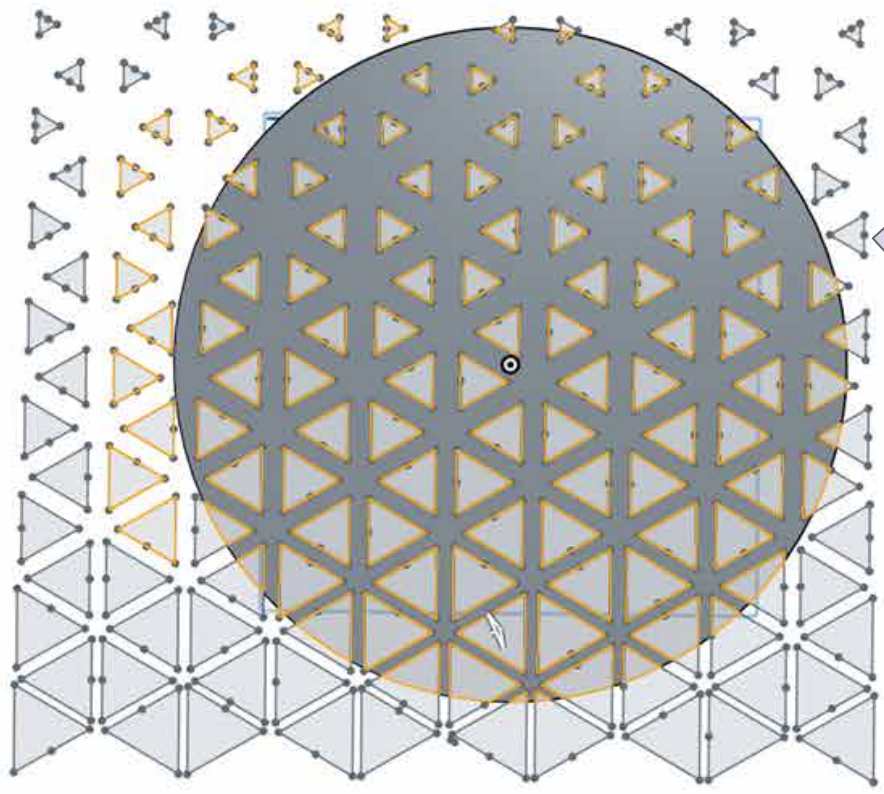
Second end position

Merge with all

Merge scope

plate stencil

This time use the "remove" sub menu



When you hover over the sections they will turn orange.

Each of the sections can be selected separately so that you can control how much of the drawing is used.

Features (8)

Filter by name or type

- Default geometry
 - Origin
 - Top
 - Front
 - Right
- Sketch 1
- Extrude 1
- Sketch 4
- Extrude 4**

Parts (1)

Extrude 4

Solid Surface

New Add **Remove** Intersect

Faces and sketch regions to extrude

- Face of Sketch 4
- Face of Sketch 4
- Face of Sketch 4

Through all

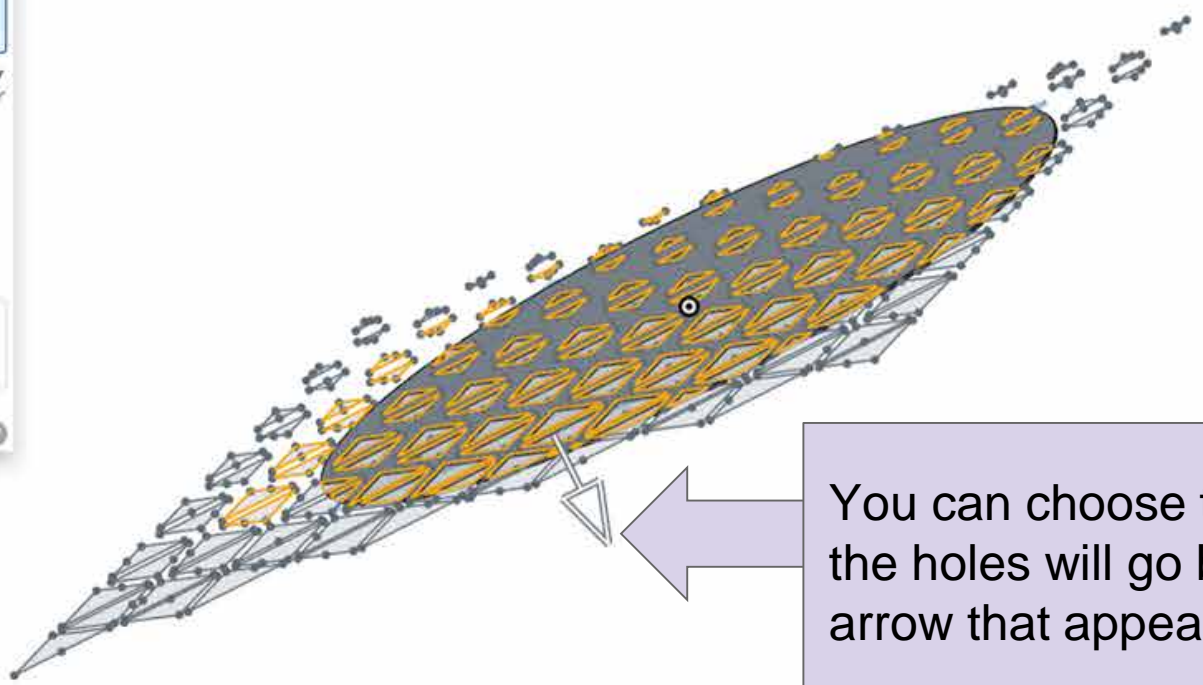
Draft

Second end position

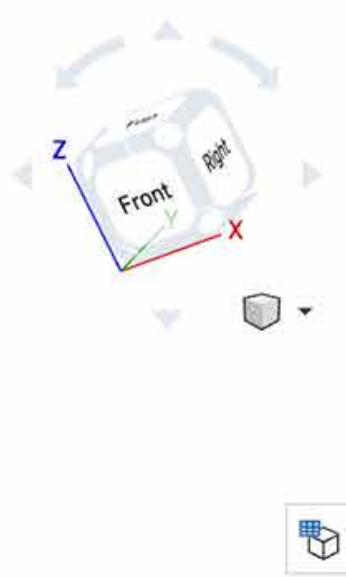
Merge with all

Merge scope

plate stencil



You can choose the depth that the holes will go by using the arrow that appears

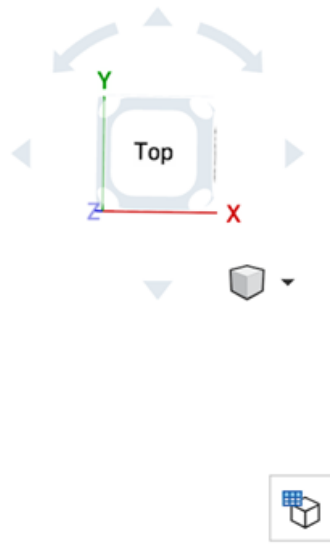




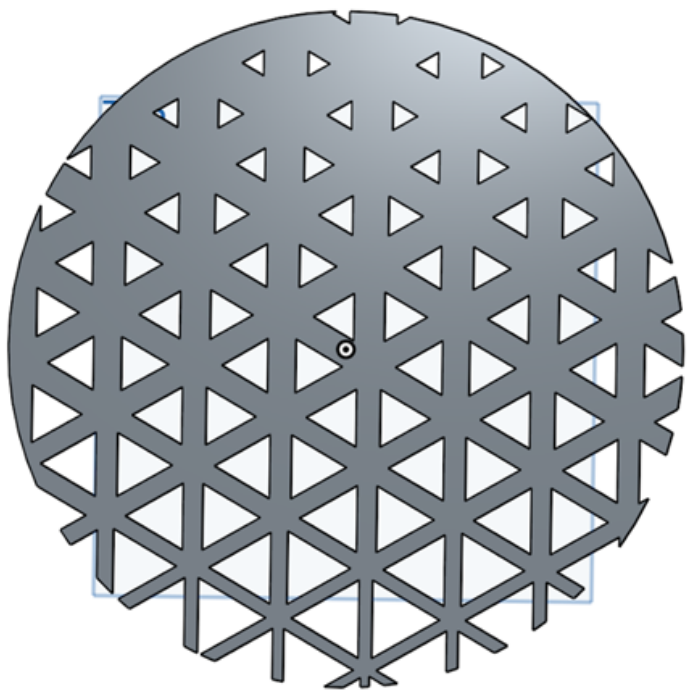
Features (12)

Filter by name or type

- ▼ Default geometry
 - Origin
 - ▣ Top
 - ▣ Front
 - ▣ Right
- ▣ Sketch 1
- ▣ Extrude 1
- ▣ Sketch 4
- ▣ Extrude 4



Here you can see and select all the steps you have taken



TAH DAH!
Its Finished.

▼ Parts (1)

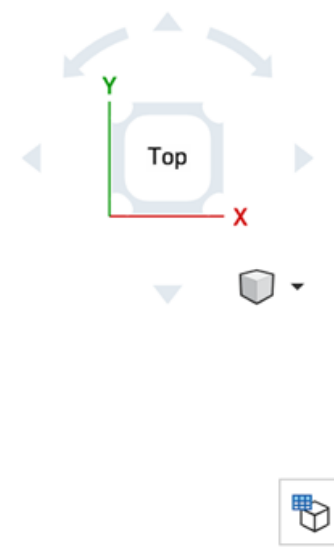
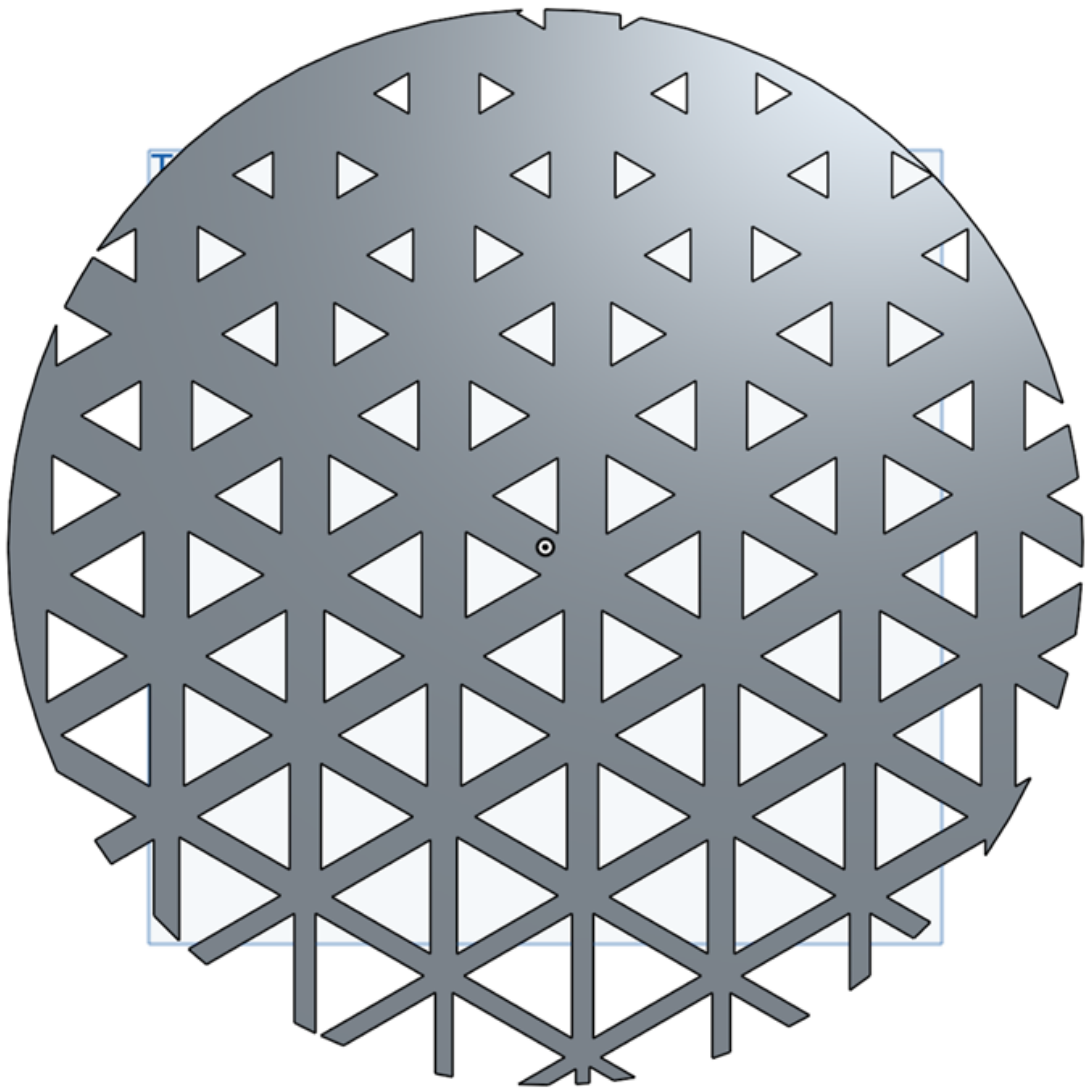


Features (12)

Filter by name or type

- Default geometry
 - Origin
 - Top
 - Front
 - Right
- Sketch 1
- Extrude 1
- Sketch 4
- Extrude 4

To export your file, left click on the part studio tab at the bottom of your screen and select the Export option



- Delete
- Open in new browser tab
- Rename...
- Properties...
- Show code
- Duplicate
- Copy to clipboard
- Create Drawing of Part Studio 1...
- Select as document thumbnail
- Move to document...
- Export...



Features (12)

Filter by name or type

- Default geometry
 - Origin
 - Top
 - Front
 - Right
- Sketch 1
- Extrude 1
- Sketch 4
- Extrude 4
- Sketch 2
- Extrude 2
- Sketch 3
- Extrude 3

Parts (1)

Export

File name

Glaze Stencil **Name your part**

Format

STL **Select your file type from the menu**

STL Format

Binary **Select the Binary, not text**

Units

Millimeter **Select the measurement**

Resolution

Medium **Select the quality of the file**

Options

Download **Select Download.**

Export unique parts as individual files

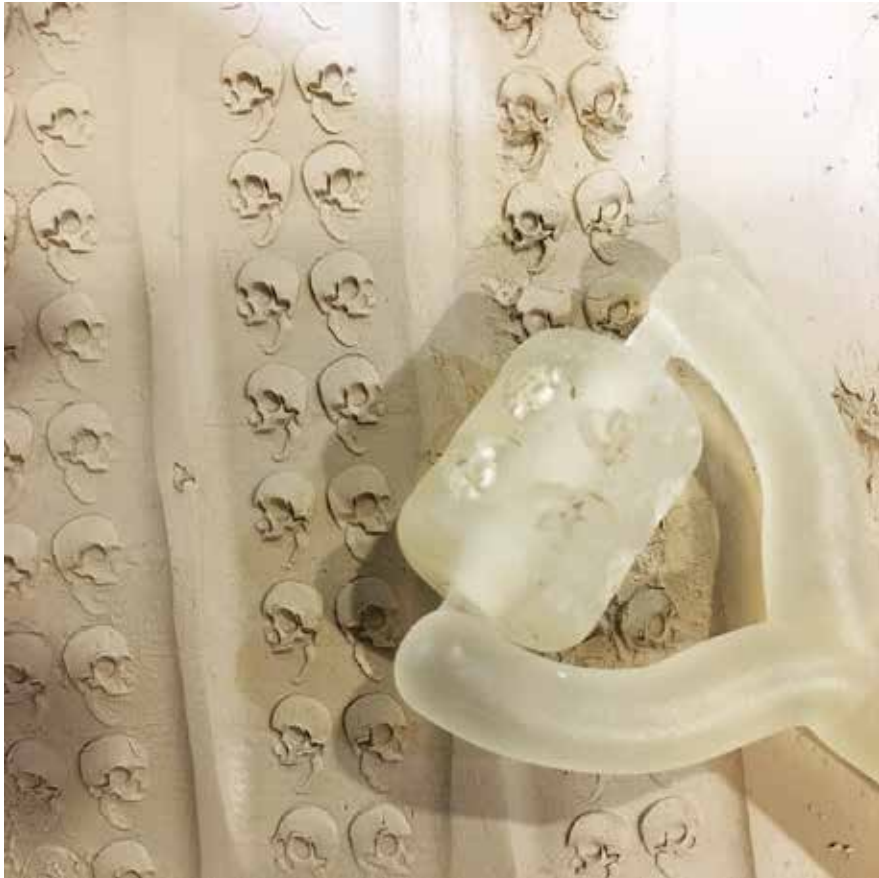
[OK](#) [Cancel](#)

additional uses...



Custom face rib

Skull pattern roller



Different materials = different textures

Make these tools - files online

TinkerCAD Roller:

<https://www.tinkercad.com/things/bv98FGVlkr7>

OnShape Glaze Stencil:

<https://cad.onshape.com/documents/0908c4d75915e5d3ea932a5b/w/b9af6cb192f2f2ce782b47aa/e/c12b1055f9364ec4fdf26380>

OnShape Face Rib:

<https://cad.onshape.com/documents/ca02b8ce3ab7f0f66d4ed38e/w/d7634d6fe46fca737b9e3121/e/0d53b131c8420ab30e83cda0>

OnShape Skull Roller:

<https://cad.onshape.com/documents/c024a854842259f6dcafbbf6/w/34d545cdfb76251443751db7/e/b772574a756569f905859506>

**Many thanks!
questions?**

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