# 3D PRINTING BASICS: COOKIE CUTTERS



It is part of the Elmhurst Public Library's vision to be a place of discovery for our community. One of the ways we do this is by offering over 100 classes and programs a month for patrons of all ages. Our goal is to help community members to explore their interests, engage with technology, create and innovate, and connect with others.

#### Let's Get Started

Cookie Caster is a free, easy to use online tool for creating custom cookie cutter files. Those files then can be uploaded to the Elmhurst Public Library for 3D printing.



#### Today we'll cover:

- Dropping anchors and pulling out curves
- Importing images
- Using the pen tool to draw a design
- Using the magic trace tool
- Downloading your design
- Uploading design for 3D Printing via the EPL website



#### Now you try it!

First go to http://www.cookiecaster.com in a web browser. You should see a page like the picture below.



Next click, "Draw your custom cookie cutter." Drop anchors by clicking with the mouse and create curves by dragging the gold dots from the center of the line segments to the shape you wish.

The only "rule" here is that your <u>cookie</u>

<u>cutter design must close</u>. The last anchor should be on top of the first.



### Importing Pictures into Cookie Caster

Another way to design cookie cutters on this site is to upload an image to trace. To do this, first click "New" to clear the design space.

For this, JPG and GIF files work best. PNG files do not work at all on this site. Keep in mind silhouettes are ideal for tracing!

To import a file, click the "Trace" button and select, "Upload an Image." Select "EPL\_leaf\_black.jpg" from your download directory.





#### **Tracing Your Image**

Using the "Pen" tool, trace the design, dropping anchors at the appropriate points. Remember that the last anchor must be on top of the first one. Go back and adjust the curves to match the design by pulling the orange dots out to match the silhouette. Notice a blue 3D rendering will appear in the upper right side of the screen. Click "New" to clear the design space (the silhouette will remain).

### **Using the Magic Trace Tool**

Click the "Magic Trace" button. A plus sign (+) will appear on the design board. Click within the image and a blue outline should appear around the image. If you are satisfied with your design, adjust the settings in the download options. Write down the Max size and height measurements. You will need these measurements for the EPL 3D Print Form.

#### **Magic Trace Tool Troubleshooting**

What happens if the Magic Trace doesn't work? Let's try it. Upload the photo "Oscar" from your downloads directory. Go ahead and attempt to use the Magic Trace.



The Magic Trace is not working, but why? Try clicking outside of the Oscar, but still on the image to find out why.

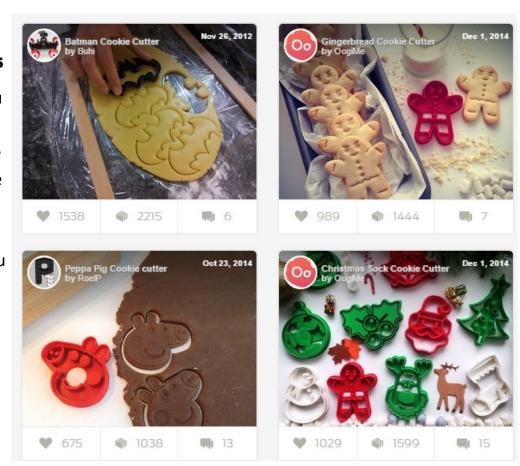


The tool is not working because the image does not join up at the top and bottom. Make sure to try clicking outside your image if clicking inside does not work.

### **READY-MADE COOKIE CUTTERS**

### **Downloading Cookie Cutter Files**

There are many places you can download cookie cutter .stl files from. These are files other people have already created. Try going to thingiverse.com and search "cookie cutter." You will find designs already made and ready to download. From sports team logos to Pokémon to Star Wars—there's so much to discover! Try other sites like yeggi.com,



youmagine.com, and pinshape.com.

#### **Professional Cookie Cutters**

Try going to etsy.com to find professional custom cookie cutters like this shop www.etsy.com/ shop/Copypastry.







Your PORTRAIT, custom cookie cutter \$50.00

COUPLE, custom cookie cutter \$70.00

### 3D PRINTING AT EPL

#### **Submitting 3D Prints**

To print at EPL you will need to submit your print through: <a href="http://elmhurstpubliclibrary.org/">http://elmhurstpubliclibrary.org/</a> about-us/building-information/3d-print-request/3d-form/

Name:
Email:
Library Card #:
PLA Filament Color:
White
Object Dimensions:
Attach File:
Choose File No file chosen
Acceptable file types: stl,obj,maker,thing.
Maximum file size: 25mb.
Additional Information:

Please note that there are a few limitations to printing:

- Elmhurst Public Library cardholders only
- 8-hour print limit
- Maximum size:
  - 25.2 L x 19.9 W x 15.0 H cm
  - 9.9 x 7.8 x 5.9 in
- 10 per gram, with a one dollar minimum
- Printing is done by Library staff and is attended to on a first come, first served basis
- Priority printing given to Library programs and events
- Email will be sent once the print job is complete

### Tips

Files should be submitted as .obj, .stl, or .MakerBot.

If you have any questions about how to submit, exporting your file or anything else feel free to contact us.

The filament we use is corn based and considered food safe plastic, however it is NOT DISHWASHER OR OVEN SAFE.

Do not use it for things that will allow food to sit or soak in for extended periods of time (bowls, plates, etc.).

Submit