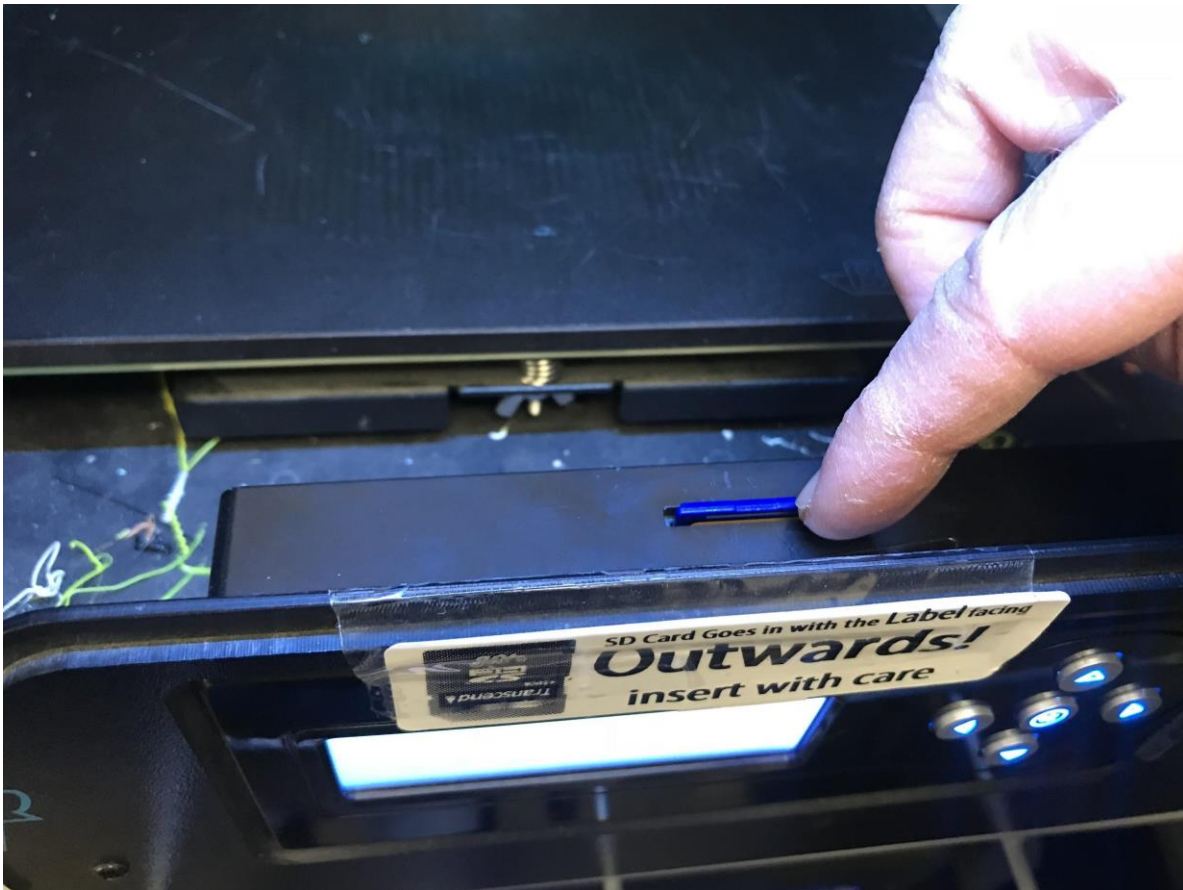


3D Printer Instructions
Created 02/09/18
by Arden Bonzo

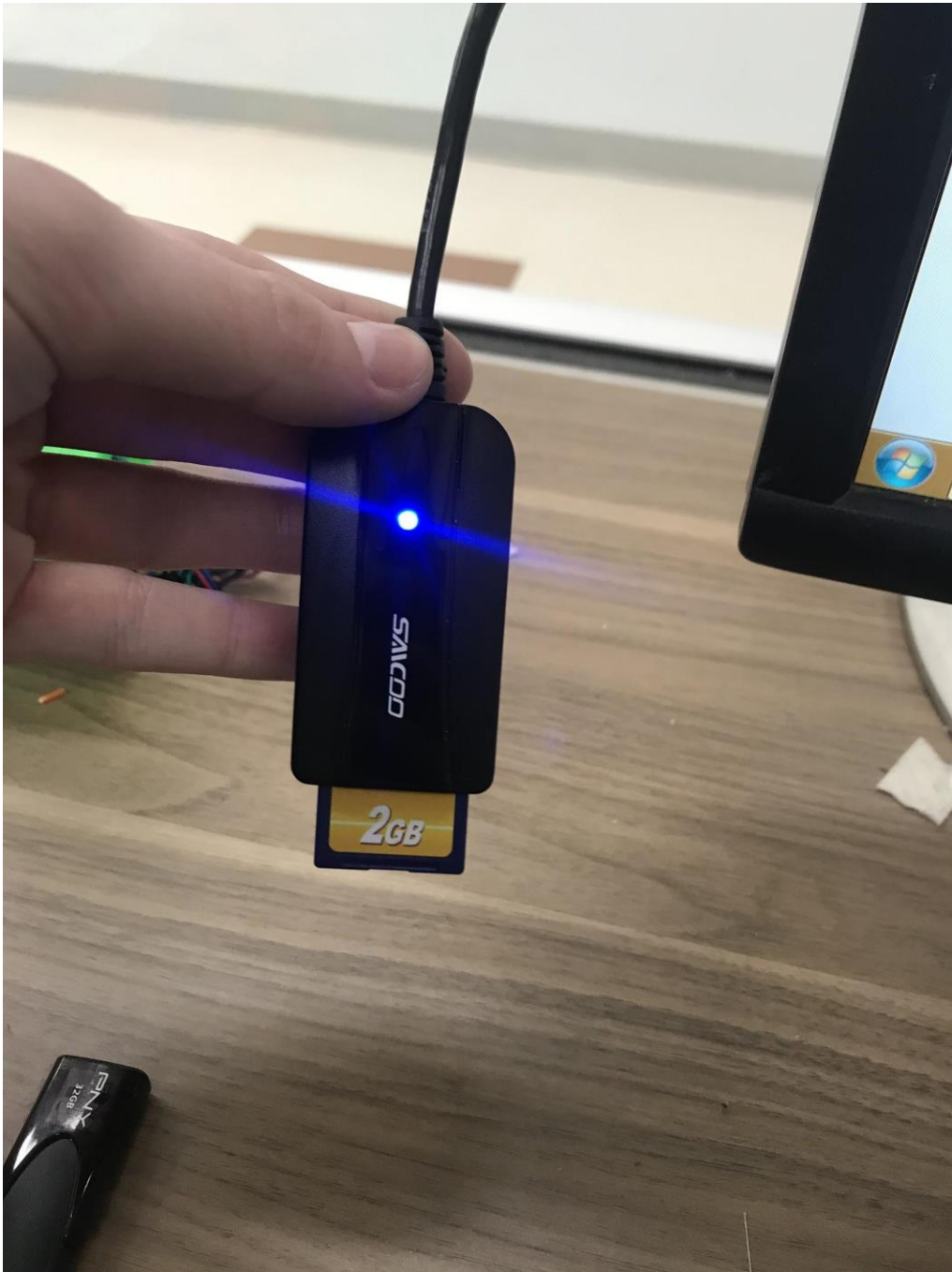
- To begin, find a **.stl** file that you would like to print.
 - ◆ (you can search thingiverse.com, or create one of your own)

- When you have a **.stl** file, on the construct computers, download the file to somewhere that you can find it easily.
 - ◆ Side note: Make sure to swipe RIT ID on construct computer before using facility.

- Find an available printer in the construct, and remove SD card from the inside of the machine



→ Insert the SD card into the card reader in the computer







→ Open up the Cura program which meets the specifications that you are looking for

◆ PLA vs. ABS

(found at <http://hack.rit.edu/index.php/tools-equipment/how-to-use-the-flashforge-creator-pro/>)

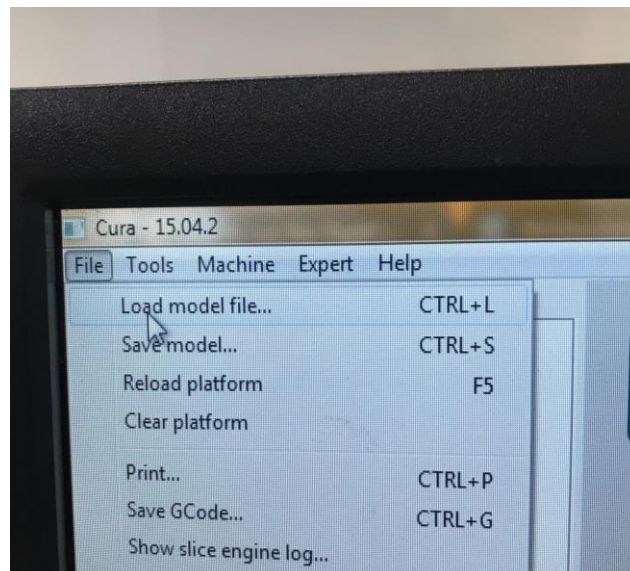
In order to get your files into a printable form, they must be exported from the modelling software in .STL or .obj. STL files do not encode units, so in order to make the part print at correct scale, **export from your CAD software in millimeters (mm).**

- The Construct uses a custom version of Cura to prepare and slice parts. There are four profiles available for Construct users:

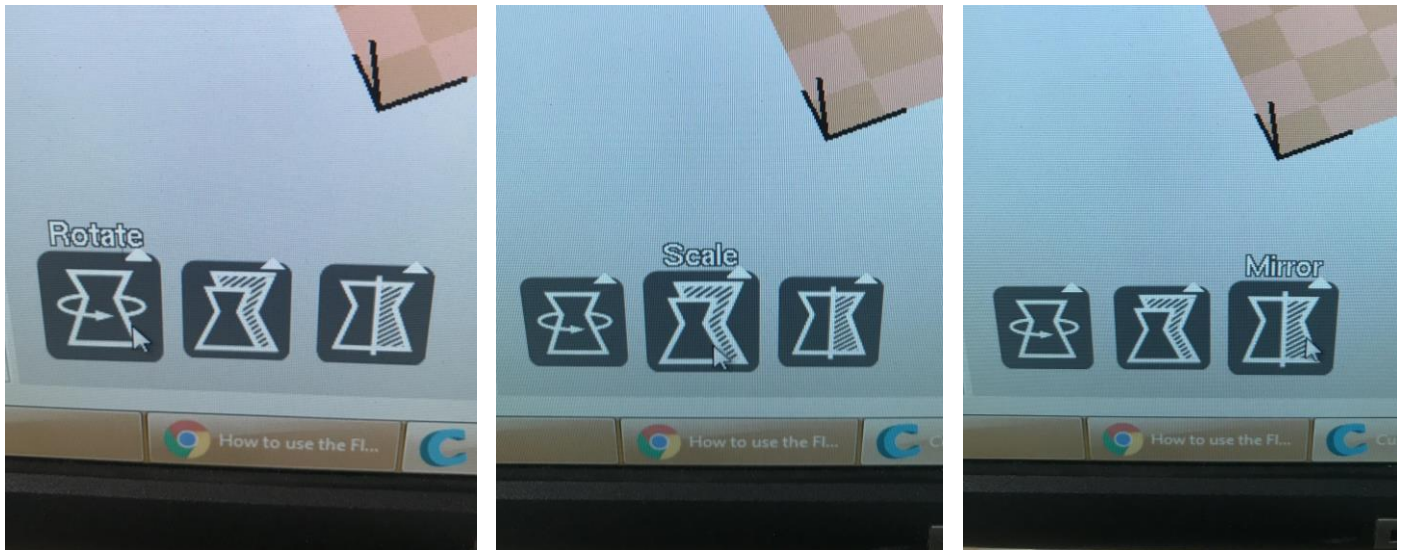
1.  **Cura PLA Standard:** Produces parts **Quickly** with **Thick Layers**, and **Less Support**. Good for mechanical parts and large prints.
2.  **Cura PLA Fine:** Produces parts **Slowly** with **Thin Layers**, and with **Less Support**. Good for high-detailed parts, and parts with text.
3.  **Cura PLA for Fragile Parts:** Produces parts **slowly** with more support. Good for statues and figurines.
4.  **Cura ABS:** General purpose profile for ABS.

- There are currently two choices of print material available in the Construct: **ABS** and **PLA**. Take a look at our [Material Comparison](#) page to decide what material to use for your print.

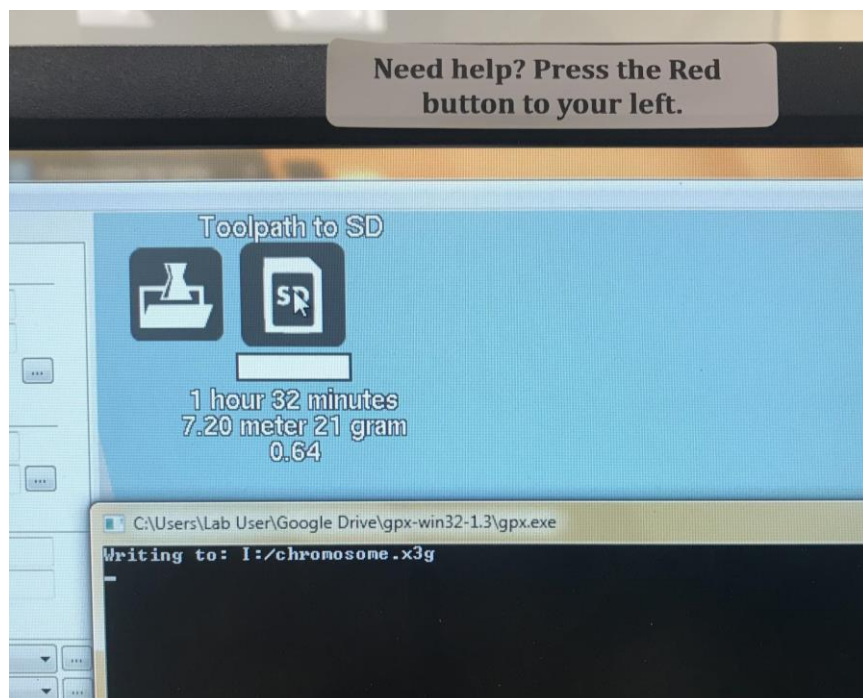
→ When in Cura, file>load model file, choose your **.stl** file, import to program.



→ When the file loads, click on it and manipulate it using the three buttons at the bottom left of the screen



→ Once the object is to size, and feasible for the machine, upload to the SD card.



→ A new window will open up with a google doc to fill out (email, name of part, material, reason).

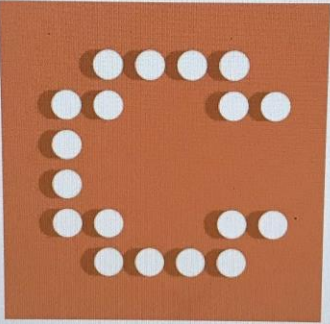
Need help? Press the Red button to your left.

cs.google.com/forms/d/e/1FAIpQLSeIzwHMauMhmj2b-dTKkmsd_XlpTIZ91gtmnX-TZ-z7NgACSw/viewform

The Construct: Flashforge Creator Print Form

Please fill out this form whenever you run a 3D print on th!

* Required



RIT username, or Email *
please use all lower case

aeb2973

Filename of your part (just the name) *

chromosome

material type *

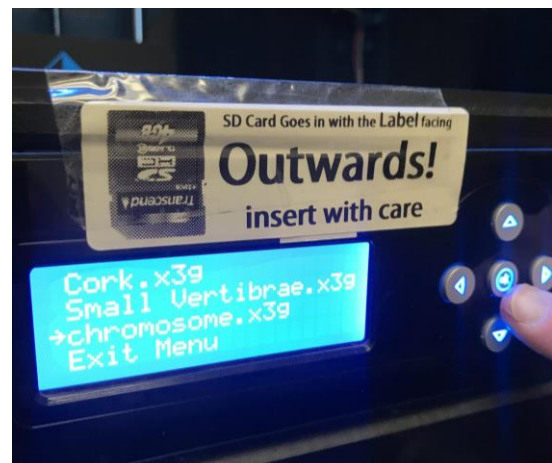
PLA

→ Eject the SD from the computer and insert into the machine it was taken from.



→ Use the keys next to the screen on the printer to select **main menu>print from SD>"your file name"**

- ◆ Watch until the first layer is printed, then return to the printer when it's done.



→ Use the scraper hanging on the shelves to gently wedge under the print, and peel it off the surface.

→ Pull the base layer and supports off of your print (should easily pull off with hands or use clippers) and enjoy!

If you have questions, there are always people working in the construct who can help!