#### FORT FRANCES PUBLIC LIBRARY TECHNOLOGY CENTRE

### **3D PRINTING: GLOSSARY**



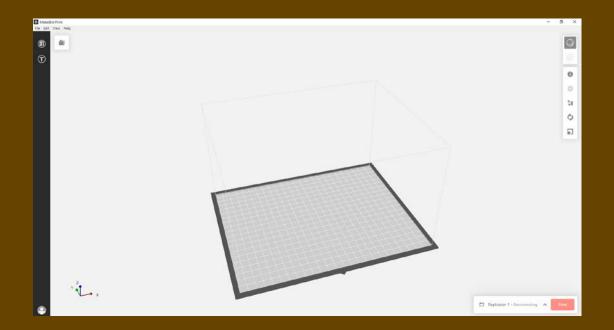
## MAKERSPACE

- The MakerSpace is an area of the FFPLTC filled with technology that lets you make things!
- The MakerSpace currently houses a 3D printer, a rendering computer, 2 button makers, a Cricut machine, and a sewing machine
- 3D printing happens in the MakerSpace



# MAKERBOT PRINT

- MakerBot Desktop is a 3D printing application that transforms a 3D model into a sliced file
- The sliced file tells the 3D printer what steps it must take to produce a physical representation of a 3D model



# **BUILD PLATE**

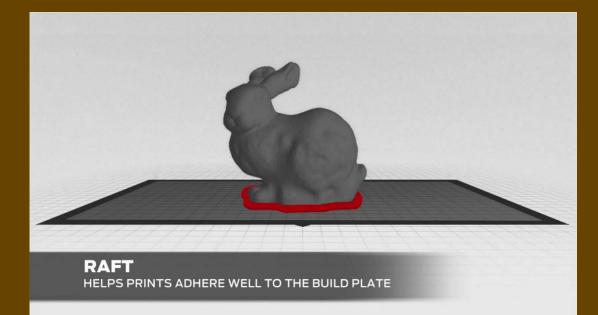
- The build plate is where your item is printed
- 3D prints typically include a raft that separates the print from the build plate
- When a print is complete, it must be removed from the build plate



RAFT

#### • A raft is a base for an object

- It ensures that a print adheres well to the build plate
- Rafts are always recommended



### FILAMENT

- Filament is a slender, threadlike plastic
- Filament is melted to shape an object
- We primarily use PLA filament @ FFPLTC
- PLA stands for polylactic acid, a bioplastic derived from corn
- PLA is a hard, strong material with a low rate of thermal expansion, making it ideal for 3D printing applications



# EXTRUSION

- Extrusion is the process of melted filament being expelled from a print head
- The extruder controls this process, and precisely places the melted plastic to create a print
- Changing filament requires the extruder to extrude any filament remaining inside it

