

FAB LAB

EL PASO

Intro to 3D Printing

3D Printing!!





What is a 3D Printer?

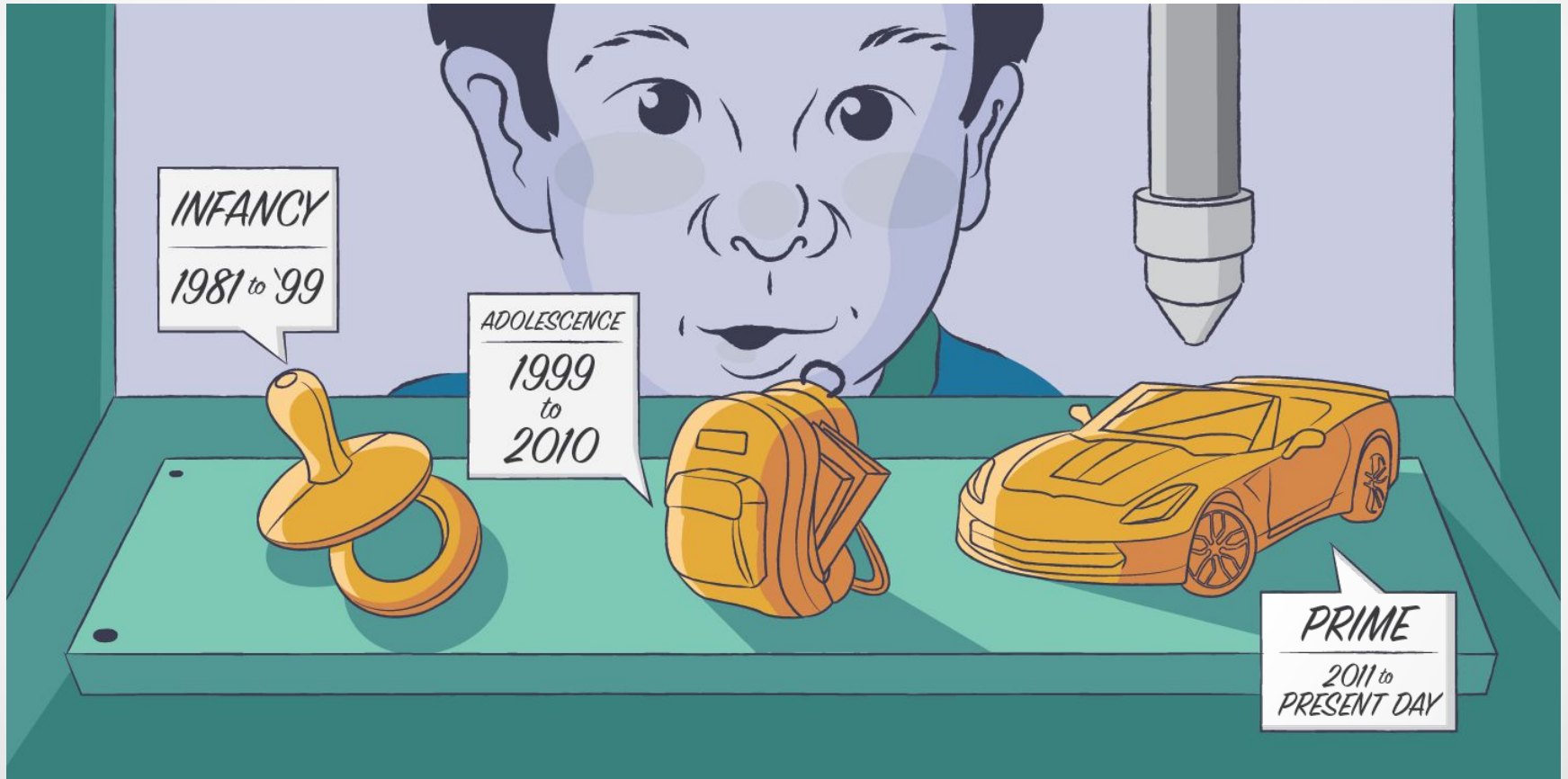
- An additive manufacturing machine that creates 3 dimensional objects from a digital design.

So what is all the fuss?

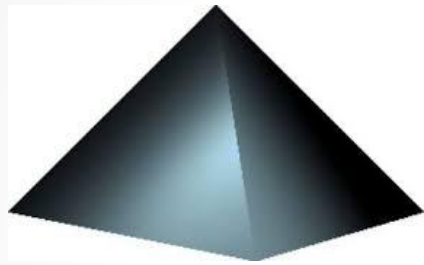
- Allows for rapid prototyping
- Wide range of applications
 - Low cost consumables
- Affordable entry level to advanced professional machines



3D History



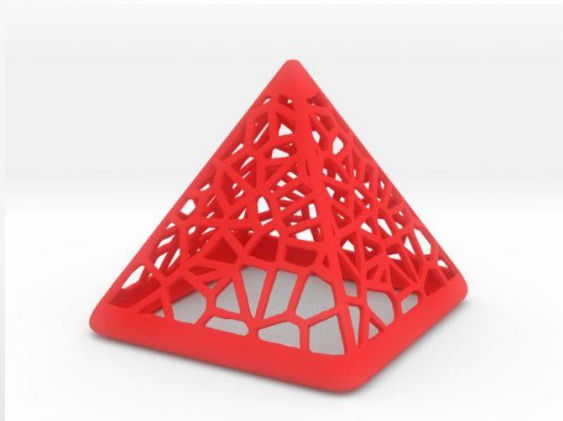
How 3D Printing Works



Program slices
computer model for
printer to use

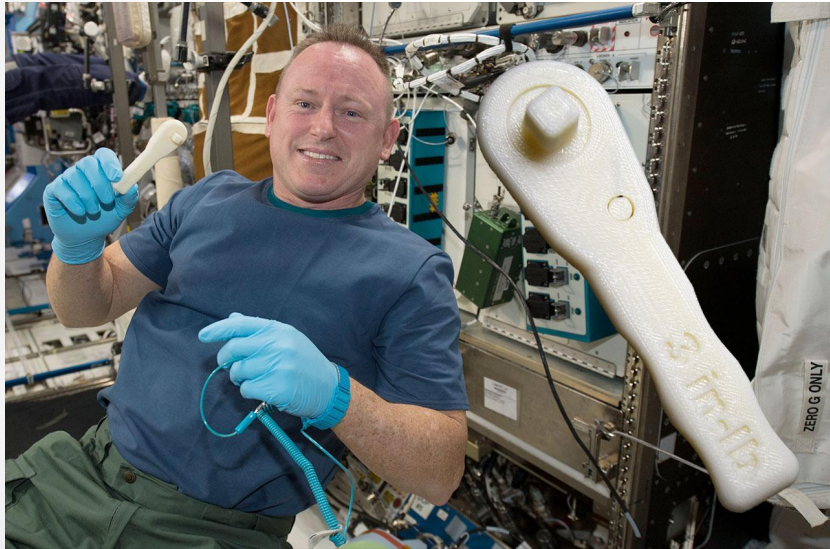


The sliced
model is sent
to the printer



Printer builds the
model layer by layer





And even print in space!

Homes?!



Even Food!



The 3D Pancake Printer





Know Your Pen

Forward-
Single tap
and hold/
double tap

Reverse-
single tap
and hold



Speed slider





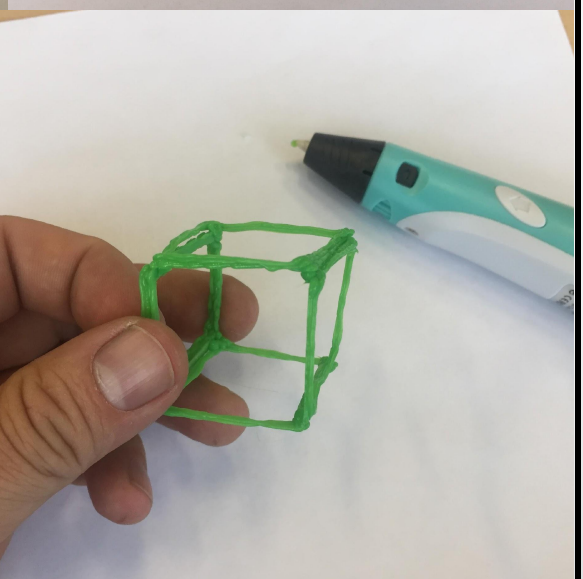
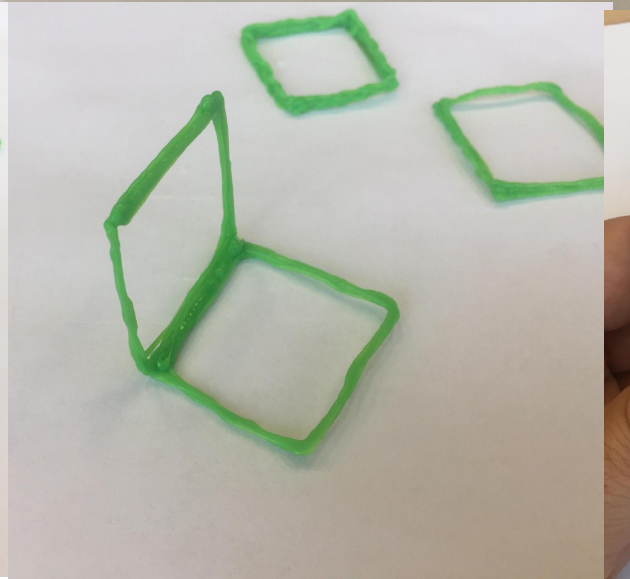
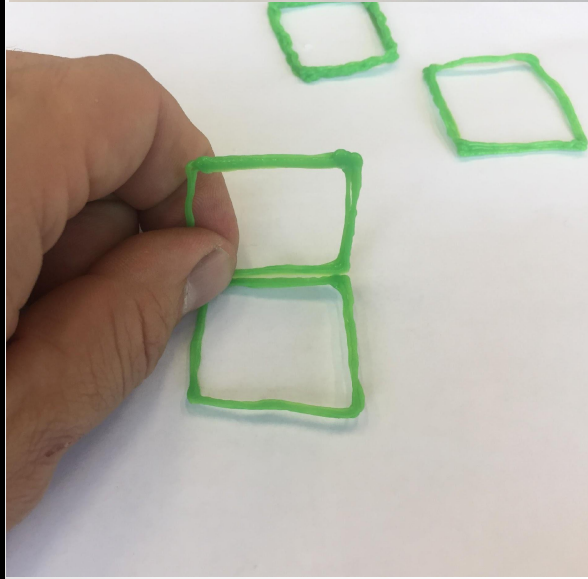
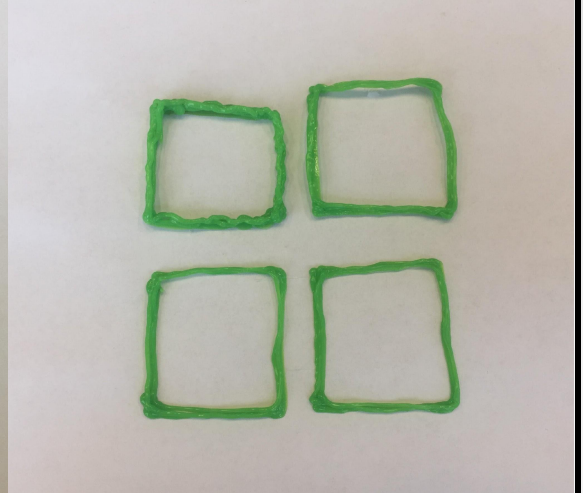
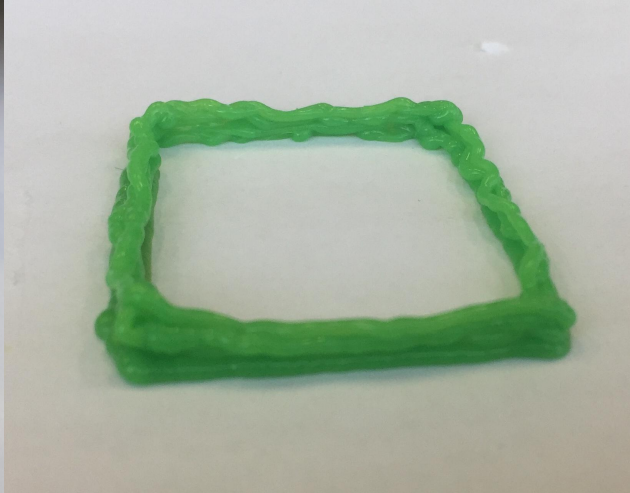
Temp control
190





Procedure

- Single tap the forward button until the led bar reaches 190 degrees and green light turns on
 - Once pen heats up- **DON'T TOUCH THE TIP!!**
 - Begin extruding the filament, lightly drag tip across paper so the filament sticks to the paper.
 - Make four squares, weld them together to make a cube!
- 
- 



Watch your filament! If
it gets too short,
reverse it and load a
new spool!

