3-D Printer Tips!

Purdue Extension Floyd County

Bed leveling and First Layer

* Keep it level
* Use the paper leveling, it should fit snug
* Go through it a few times to make sure adjustments didn’t screw anything up
* Make sure the first bead adheres well
* The first layer is the most important.
* The flat pancake is too close

Print on glass

* Dense, hard and flat
* Cools easily
* Use mirror tiles they are cheap and give you extra to use
* Using a razor to clean the bed makes it easy

Make it stick

* Aquanet hairspray
* Glue sticks, they leave a mess
* Painters tape
* All good for PLA
* ABS – use acetone and allow a failed print to put on plate

Rafts brims and skirts

* Skirt is an outline of the print, good to check to see if the first layer is going to work
* Brim – gives more area for the print to stick to the bed
* Raft – the print sets on top of the print – acts as a buffer doesn’t give you as a clean print on the bottom.
* Just use a skirt if at all possible

Support

* Builds a temp column to support something that has an overhang.
* Some printers can handle up to 45 degrees overhang. It gets suspect when going over 30 degrees
* Prevents printing on nothing

Octopi

* Like a raspberry pi
* Keep plugged into your printer
* Gives you remote access

Keep an eye on it!

* Webcam hooked up to octopi
* Allows you to access your prints from anywhere
* Good to cancel a print from anywhere!

Materials matter!

* PLA – Most common material, beware of Junk PLA. Stay with a brand that wont clog.
* 1kg of filament 800 meters
* TPU – soft material that can create flexible phone cases
* ABS – Harder to work with. Much stronger and durable. Need an enclosure and heated bed to keep temperature stable
* Wood – Mixture of wood with plastic. Can be sanded and stained like wood.

Access your community

* Use Facebook to access people that have the same printer as you.

Ironing

* Works only on top layer
* Runs heated top end on the top layer to smooth it down
* Works on Cura slicing software
* Do quick search for iron
* Will add to print time

Print profiles

* Work with your software settings.
* Some software has profile settings that can be saved

Slicing matters

* Speed settings. Slower speeds will give a cleaner job
* Play with temperatures to get best results.

It’s a hobby, have fun

* Know that things will go wrong
* It takes time to learn about all of the neat things 3D printing can do!