

What is 3D Printing?

3D Printing is the process of making three-dimensional objects in plastic, using a design that is uploaded from a digital computer file. Like a traditional printer, a 3D printer receives digital data from a computer as input. However, instead of printing the output on paper, a 3D printer builds a three-dimensional model out of a custom material.

Why 3D Printing?

A 3D printer is a powerful tool for creativity, innovation, and STEM education for people of all ages. Whether you are an artist, hobbyist, or just curious a 3D printer allows you to expand your creativity by turning an idea into reality.

The Perry County Public Library is excited to make this cutting-edge technology available to the public and promote the inventive creativity it inspires.

What is the cost?


The library will charge only to recover the cost of material required for the printing process of each individual print. Costs may vary depending on type of filament chosen. (i.e. glow-in-the-dark filament will cost more than basic color filament). Payment must be made before items are printed. The average cost of printing is under \$5. An exact amount can be given when your print file is submitted.

Disclaimer

While the Perry County Public Library makes every effort to oversee the use of the equipment when printing an object, the use of the printed object upon completion is not under the direction or control of the library.

The Perry County Public Library is not responsible for any object created with use of the 3D printer, including any harm or injury incurred as a result of any usage of the 3D printer or the object which is printed.



 The Perry County Public Library makes every reasonable effort to provide equal access to all patrons. Please contact library@perrylib.org or call 606-436-2475 at least 72 hours prior to an event to arrange for accomodation. All facilities and meeting rooms are ADA compliant.



PERRY COUNTY PUBLIC LIBRARY

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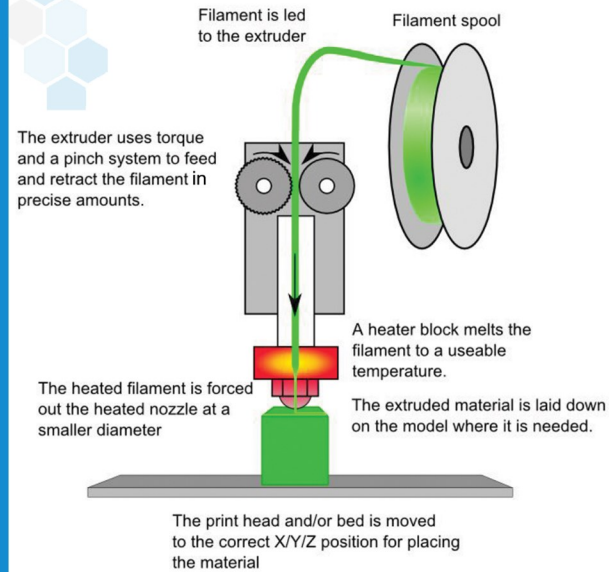
3D PRINTING



The Perry County Public Library is proud to present 3D Printing. Bring your ideas and creations to life!

How does it work?

You can either design your own 3D object or download a pre-existing one from the sites provided under Resources. Save the design in the proper file format and connect it to a 3D printer, press 'print' and then sit back and watch it form before your eyes!



The 3D printer builds the object from the bottom-up in tiny layers using heated filament. Those layers stick together to form a solid object. 3D printers also have the ability to create moving parts: for example it can print a toy car with working wheels or an animal with moveable limbs.

What can I print?

Have you ever lost or broken something, only to find you can't buy a replacement piece? Just print a new one! Do you want a custom jewelry box or container for your headphones? All these items are possible with 3D printing. Whether it is for fun, work, or hobby you are only limited by your imagination!

- toys
- models
- containers
- home decor items
- phone accessories
- replace missing or broken items
- and so much more!



Printing

If you are interested in 3D printing pick up a printing request form at the library's circulation desk, fill the form out, and return it. You will then be contacted by library staff to schedule printing and receive pricing information.

It is the responsibility of the patron to design their own creation and prepare it for printing. The only changes library staff will make to designs are:

- a. Scaling to fit within the 3D print build plane.
- b. Adding supports, rafts, or other stabilizing features, per patron request.

Patrons must submit their 3D print file in .STL, .OBJ, .3MF, or .FPP format on a USB flash drive when arriving at the library on their previously scheduled appointment date and time.

A full copy of our 3D printing policy is available upon request at the library's circulation desk.

Resources

- <http://3dprinting.com/what-is-3d-printing>
- Tinkercad (tinkercad.com)
- Thingiverse (thingiverse.com)
- Youmagine (youmagine.com)

