

Mary E. Bartlett Memorial Library is excited to offer new technology to our patrons: 3D printing with the Dremel 3D40! The 3D printer has many practical functions and is an excellent tool for cultivating experimentation, creativity, and problemsolving. The 3D printer can be used for school projects as well!

"You can't use up creativity. The more you use, the more you have." ~Maya Angelou

### What will you make?

The Dremel 3D40 and all spools of filament were donated by the Friends of the Mary E. Bartlett Memorial Library

## **Quick Facts**

Our 3D printer slicing software is compatible with .stl and .obj files.

The cost of printing is \$0.10/gram.

Print projects must require less than 8 hours to print.

The size of printed objects is limited to 10"  $L \ge 6$ " W  $\ge 6.7$ " H or smaller.

The PLA filament is not suitable for:

\* Use with candles, liquid fuels and other heat sources.

- \* Any food or drink applications.
- \* Any electrical applications.
- \* Chemical storage

A library card is not required to submit a print request.

### **Questions?**

Please email the library staff at brentwoodlibrary@comcast.net

Mary E. Bartlett Memorial Library 22 Dalton Road Brentwood, NH 03833 603-642-3355 www.brentwoodlibrary.org

# **3D PRINTING** Mary E. Bartlett Memorial Library



## How Do I Print?



**1.** Visit www.thingiverse.com to find a project or design your own object using Tinkercad, SketchUp, or Blender.

**NOTE**: Supports for 3D models can be difficult to remove and may affect the quality of the print. Print jobs that require few or no supports as part of the print job tend to turn out better than models with a lot of support material.

2. Save your file in .stl or .obj format.

**3.** Read our 3D printing policy.

**4.** Choose a color: red, purple, orange, pink, white, black, gold, silver, blue, green, or translucent.

**5.** Fill out a 3D Print Request Form.

**6.** Email file to cl.meblib@gmail.com with "your name & 3D Print Request" in the subject line.

**7.** We'll notify you when your project has printed and is ready to be picked up at the library!

#### Mary E. Bartlett Memorial Library 3D Printing Policy

**1.** The Library's 3D printer may be used for lawful purposes only. The public will not be permitted to use the Library's 3D printer to create material that is:

a. Prohibited by state, local, or federal law.
b. Unsafe, harmful, dangerous or
poses an immediate threat to the well-being
of others. Such use may violate the terms of
use of the manufacturer.
c. Obscene or otherwise inappropriate for
the Library environment.
d. In violation of another's intellectual
property rights. For example, the printer
will not be used to reproduce material that
is subject to copyright, patent or trade
mark protection.

2. All 3D print jobs must be submitted online for review by Library Staff.3. The Library reserves the right to review all files before printing and to refuse slicing and/or producing any content at any time.

4. Print projects must require no more than 8 hours to print each piece. Size is limited to  $10^{\circ}$  L x 6<sup> $\circ$ </sup> W x 6.7<sup> $\circ$ </sup>H or smaller. Multi-piece requests will be considered on a case-by-case basis, and may be printed alternately with other requests.

**5.** 3D print jobs can take up to one week to be produced.

**5.** Cost: The cost of printing a 3D model is based on:

a. Material cost of \$0.10 per gram. Patrons will be charged for the weight of the finished print including any rafts, skirts, brims, or supports required in the print process, which are currently required for a successful printing of objects, **PLUS** b. Fee based on wear and tear of the machine, electricity to run the machine, and staff time: \$1 for up to 3 hours; \$2 for 3-5 hours; and \$3 for 5-8 hours.

c. Examples: a print job weighing 3 grams and taking 45 minutes to print will cost \$1.30; a print job weighing 3 grams and taking 3.5 hours to print will cost \$2.30; etc.

The Library Staff reserves the right to change the cost as needed.

6. The patron will be responsible for the full price of the full weight of a print job. Failure to pay will result in suspension of 3D printing privileges.7. If the 3D model fails to print as expected due to a design flaw(s), patron is still

responsible for payment.

**8.** Library staff and trained volunteers will not be responsible for trimming or filing down any excess filament on 3D prints.

9. Print jobs not picked up in two weeks become the property of the Library.10. Files will be deleted after printing is

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**11.** Only designated Library Staff and trained volunteers will have hands-on access to the 3D printer.