Getting Started with 3D Printing

What it is:

A process for creating physical objects by printing in layers of material.



"3D Printer - the First Layer" Created by Luke Jones at https://flickr.com/photos/23642145@N00/16661915478

How it works:

Step 1: create a 3D file using a virtual design program, modeling application, or 3D scanner

Step 2: select a printer and printing material – most common are "Fused Deposition Modeling" printers, which print by extruding molten material (ABA or PLA plastic filament)

Step 3: send the file to a printer (usually using a thumb drive or SD card) and start the print

- a 2x4 solid Lego part would take about 4 minutes to print
- a semi-hollow baseball would take about 2 hours to print

Resources:

Tutorial – Lynda.com course, "Up and Running with 3D Printing" <u>http://tinyurl.com/ld4y5le</u> Tinkercad – online application for creating 3D printable objects <u>https://www.tinkercad.com/</u> Thingiverse – community for finding and sharing 3D printable files <u>http://www.thingiverse.com/</u> Denver Public Library 3D Printer – free to the public <u>https://www.denverlibrary.org/idealab3D</u>

