3D Printing

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   The Basics of 3D Printing @ the Library   3D printing is an exciting form of technology that is only limited by the size of your imagination.   3D printing, or additive manufacturing, is a process in which solid objects are created from various materials based on a 3D digital design. Rather than cutting away material, objects are created by printing layers of material that are combined to produce an object. The 3D printer is versatile in the objects it can print, but the process is not fast. For example, it may take approximately an hour to print a king or queen chess piece.   Printing promotional items, tools, toys, replacement parts, scale models, figurines, jewelry, and prototypes can all be done on our printers.   The Library has two 3D printers available to print objects. They are located at our Darlington and Hartsville branches. To have an objected printed, you must contact the branch and work with a designated staff member due to the complexity of the software and hardware setup to print an object.   To get started, there are a lot of online 3D design tools, apps, and ready to print model sites available. Click here to get a list of all of these resources. The Library does not endorse any of the listed software or provide training for any of the software.   Using the Library’s 3D Printers   A request form must be submitted for each item, with a limit of two print requests per day per person. Click here to download a 3D Print Request Form.   A Darlington County library card or government issued ID is required to request a 3D print.   The Library’s 3D printer(s) may be used only for lawful purposes. The public will not be permitted to use the 3D printer(s) to create material that is: 1)   Prohibited by local, state or federal law. 2)   Unsafe, harmful, dangerous, or poses an immediate threat to the well-being of others, for example: guns or knives. 3)   Obscene or otherwise inappropriate for the Library environment. 4)   In violation of another’s intellectual property rights, such as material that is subject to copyright, patent, or trademark protection.   The Library reserves the right to refuse any 3D print request.   The staff cannot assist in the creation or editing an object file.   The Library cannot guarantee a delivery date for any print.   A parent or legal guardian must be present and sign the request form when printing is requested by a minor.   The design must be on a thumb drive or sent via email in .stl format.   Only PLA filament will be used in printing.   Single color printing only. Color availability is subject to change.   All finishing work required on the item is the requester’s responsibility.   Items must be picked up by the individual(s) who signed the request form.   Items printed that are not picked up within 7 days will become property of the Library.   Only designated Library staff will have hands-on access to the 3D printer.   3D Printing Costs $0.10 per gram   Minimum $1 $1 per hour for any job taking more than four hours   A cost estimate is provided. The finished print, including supports and raft material, is weighed for a completed price.