

# Maker Space Kit Idea Sheet

## Robo 3D Printer

**CONTENTS:** 1 Robo Printer, 1SD card, filament, power cord, USB cord, instructions, putty knife, hair spray, glue stick, heat resistant tape, tweezers



Visit the [Wisconsin Valley Library Service YouTube channel](#) to see the Robo 3D Printer Makerspace Video!

**SOFTWARE:** Download the free software included in the instructions to a library computer or reserve and use the WVLS Dell-2 laptop with pre-installed software.

**SAFETY WARNING:** Adult guidance is required. The printer nozzle is hot!

**BORROWING:** Pick up at WVLS office only due to size.

### DESCRIPTION:

A 3D printer for beginners. Follow alongside the getting started video on the SD card and you will be set up in a matter of minutes. Begin choosing items from the free file library included or from websites like Thingiverse.com. Fabricates parts up to 8Hx9Wx10D inches. Heated print bed prevents uneven cooling and warping of printed parts. Self-leveling and calibration ensures precise prints.

**WEBSITES:** Explore [Thingiverse.com](#) for STL 3D files that are ready to print!

### PROGRAM IDEAS:

**Volunteer/Partner Presenters:** Is there a community member or group who would volunteer to help a library staff member pull off a program?

Science/Science Olympiad Clubs, High School Technology Education Classes, Girl/Boy Scouts, Local 3D printer users, NTC Engineering Professor, Parent/Teacher Organizations, Local Artist, Local Teenager, Story time regular grown up, Friends of the Library, Library Board Member, Red Hatters Club, Church groups, Kiwanis/Rotary/Lions, parents/caretakers/grandparents, more!

### Active Programming:

- Make your own Lego head. Does your library have an existing Lego Club? Children could build a piece of a Lego guy at each session (heads, torso, legs, arms, props, and more!). Print a Lego light switch cover for a Lego Club prize.
- Summer Reading finishers can print their reward at a scheduled time!
- Teen Tech Day: Have groups design a product and schedule a day to print!

- Invite book clubs, sports clubs, Kiwanis/Lions/Rotary, Boy/Girl Scouts, hospital foundations, etc. for specialized programs.
- Work with a local classroom on a 3D object design project.
- Host a technology speaker (or speak yourself) and randomly choose an attendee to print! Offer for schedule print session afterwards.

**Passive Programming:**

- Find a useful or fun STL file that your library can print at the circulation desk or a side-table for the public to see! Use a display to advertise upcoming 3D events at your library.
- Print themed book marks for upcoming book club attendees to promote events.

STEAM and maker space programming clearly show how libraries are providing programs outside of traditional library programs. Additionally, libraries are collaborating with community experts in STEAM learning opportunities. The Aspen Institute, [\*\*“Rising to the Challenge: Re-Envisioning Public Libraries.”\*\*](#)