



## 3D Printed Design Contest

### Important information

- Deadline: April 22, 2018.
- Send your application to Contest3D@LigerBots.com with the application details below.
- The purpose of this contest is to allow you to show off the innovative ways you dealt with problem(s) that occurred or achieved goals you or your team had.
- The part will be judged by two criteria: Your answer(s) to the questions below and the creativity of your solution to the problem you faced.

### Application

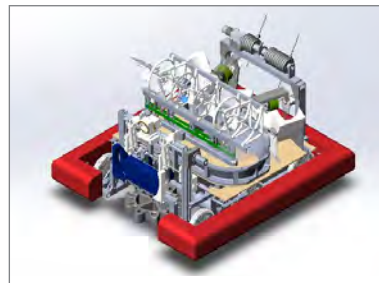
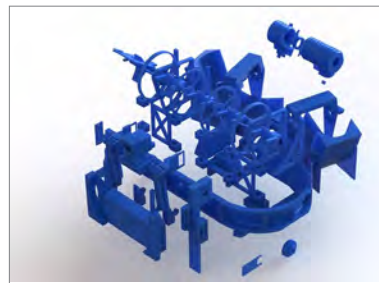
- Title: Firstname\_lastname - Submission of Part X
  - If you are a FIRST Robotics Team, you can replace Firstname\_lastname with FRCTeam#XXXX.
  - Part X is the name of the object.
- Attach a .stp, .prt or a render of the part you created for this year's game or a project.
- Include a brief description of the object, and tell us what advantages and disadvantages 3D printing had versus purchasing or machining the same part (weight, cost, durability, etc.) Please include any relevant information.

**Prizes will be 3D printed trophies!**

### Tips for making a great 3D printed part

- Calibrate your printer.
- Remember that plastic shrinks, so oversize your holes to ensure they'll be printed at the right size.
- Choose the right infill to balance the strength of the 3D print against its weight.
- Design your part with the needs of 3D printing in mind.
- Choose the right material for flexibility and strength
- Don't be afraid to print again.

### 2017 Winner, FRC Team 2702, Rebels



*Team 2702 3D printed mechanisms for their climber, gear mechanism, feeder, shooter, and much more. They tried to apply 3D printing to every part of their 2017 FIRST Steamworks robot. The top image shows all the 3D printed parts on their robot. The bottom image is a CAD render of the robot.*