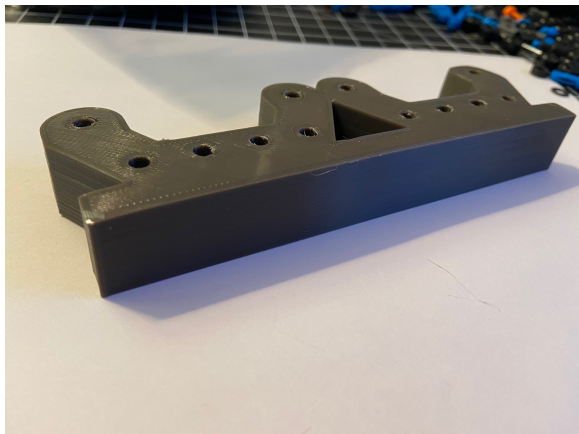
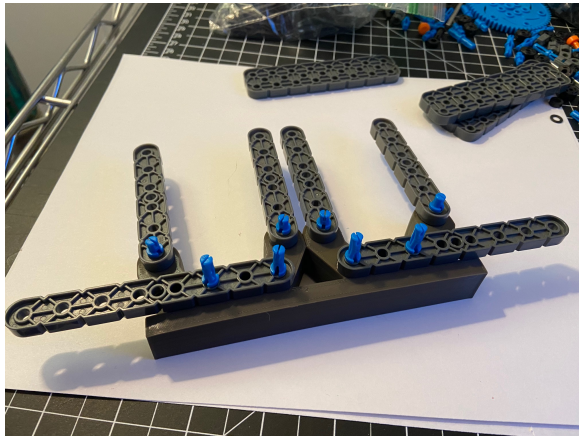


Make It Real Challenge

The Underdogs 25639A



“The Bumper Pro”: Big, Flat Surface Bumper
Team Leader - London... Support Team-
Michael, Julian, Angel, Haileigh, Jason,
Naevon (Team Underdogs)

Brief Introduction

We made this Bumper Pro because of five reasons and it would be awesome!

1. Push - Helps to score in competition.
2. Stop - Helps stop the arm to keep it from breaking.
3. Bumper - To protect the robot
4. Lift - To lift heavy things
5. Line Up - To line object up

How It's Going to be Used

It can be used to do some amazing thing. We can use it by putting one on front and one on the back as bumpers like on a car. We can put one under the arm to stop it from going too far. We can put one or two on the arm to pick up heavy things.

How We Used Tinkercad

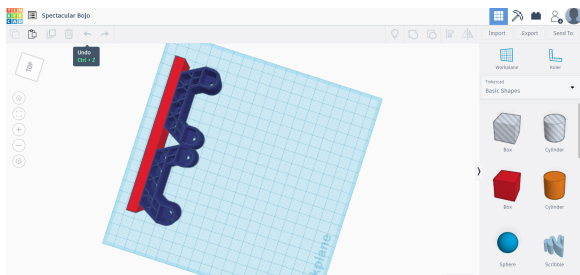
We used Tinkercad Online Design (Version 4.10) to make our design. We used a square and made it long to put it on a vex piece. We made it thick because we want it lift, push, and stop things. We used Tinkercad the part to Cura Version 4.8.0 to slice it. It was going to take 5 hours and 42 minutes. We used the Creality 5 Plus 3d Printer. It printed successfully.

What We Learned

We learned many things. We learned how to make VEX IQ robot parts for our robots. We learned how to 3d print. We learned how to make a new robot. CAD design should be easy and not too complicated because it's hard to make it right. We worked together as a team because it was hard to do it without the team.

Will We Use It Again?

Yes, we'll use Tinkercad for lots of things. We will use it for science projects online like when we build a skeleton. We're going to use it to make objects that we need but are really expensive. We want to use it to help with our wheelchair treadmill and virtual reality (vr) glasses. We want to make more vehicles like a spaceship or a rocket.



Can Tinkercad Help Us?

It will help us on our robotics team because we can build new parts. We want to build angled beams. We also wanted to design a weight to weigh it down. We would love to design some wheels that don't slip. It would be cool to change the colors of the pieces. We would build more game pieces to practice, and lots more!

Our Career Path

Yes it will help us because it will save us money to be able to build things that cost a lot of money for the people we work for. If we're mechanics, we can print out the parts and not have to wait for them. If we're architects, we'd have to make a design for a new building. If we get a job with robots, we now can build parts for them too.

