# That Robotics Lab

Thanks for joining us today. Find more things to do at the projects table

Don't forget:

Badge Ribbons

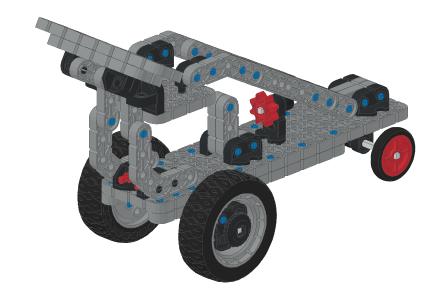
Robot Virtual Worlds

Sensor Labs

Obstacle Course

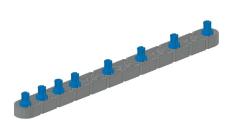
Photo Booth

VEX Bank Shot



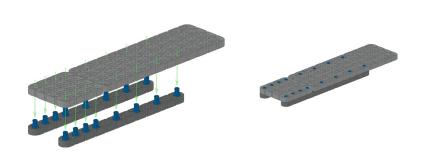
VEX IQ Racer

Step 1 - (Make 2 of these)



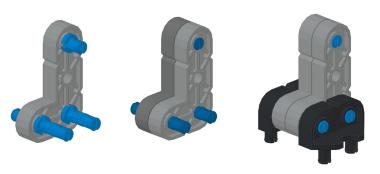
1	Gray	VEX Beam 1 x 12
8	Blue	VEX Pin 1x1

Step 2



1	Gray	VEX Plate 4 x 4
1	Gray	VEX Plate 4 x 12

Step 3 - Driver's Seat



2	Gray	VEX Beam 3 x 2 Bent 90
1	Blue	VEX Pin 1x1
2	Blue	VEX Pin 2x2
2	Black	VEX Connector Wide 2 x 1 Tab

Step 4 - Steering Wheel



1	Metal	VEX Axle 2M
1	Black	VEX Connector Wide 1 x 2 Tab
1	Black	VEX Rubber Axle Bushing
1	Red	VEX Sprocket Wheel 8 Tooth

Step 5 - Roll Cage





2	Gray	VEX Beam 3 x 3 Bent 30
2	Blue	VEX Pin 1x2
4	Blue	VEX Pin 2x2

Step **b** 





2	Gray	VEX Beam 1 x 4
6	Blue	VEX Pin 1x1
2	Gray	VEX Beam 1 x 8

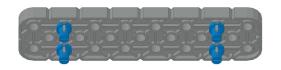
Step 7 & &





2	Gray	VEX Beam 3 x 3 Bent 30
4	Blue	VEX Pin 1x1
4	Black	VEX Connector Wide Base 2 x 1 Tab

Step 9 - Tail Assembly



1	Gray	VEX Beam 2 x 8
4	Blue	VEX Pin 1x1

## Step 10



1	Gray	VEX Beam 2 x 6
4	Black	VEX Connector Corner 1 x 1

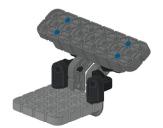
## Step 11



2	Gray	VEX Beam 3 x 3 Bent 60
2	Black	VEX Connector Corner 1 x 1

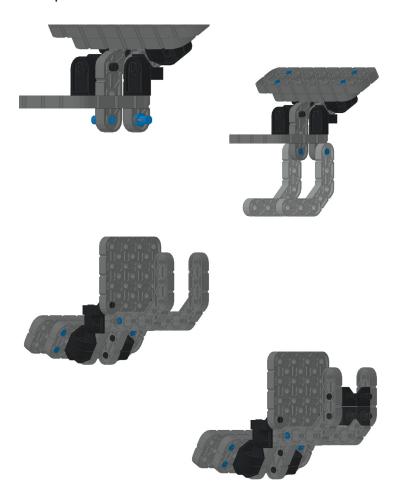
Step 12





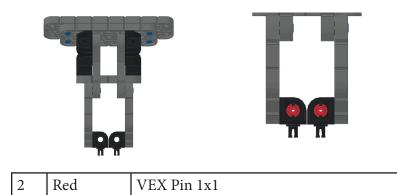
2	Black	VEX Connector 1 x 1.5 Tab
1	Gray	VEX Plate 4 x 4

Step 13 & 14

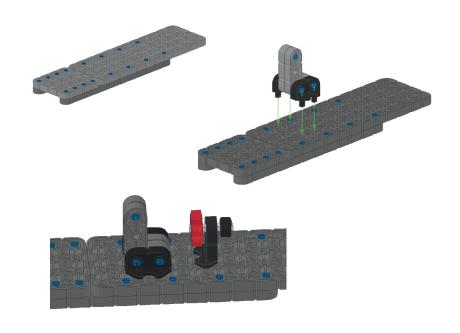


2	Blue	VEX Pin 1x1
2	Gray	VEX Beam 3 x 2.1 x 3 Double Bent 45
4	Black	VEX Connector Corner 1 x 1

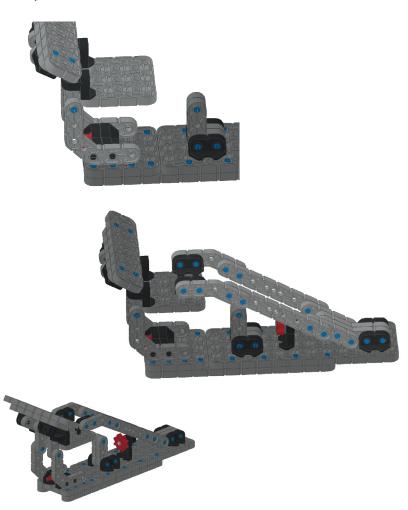
Step 15



Step 16

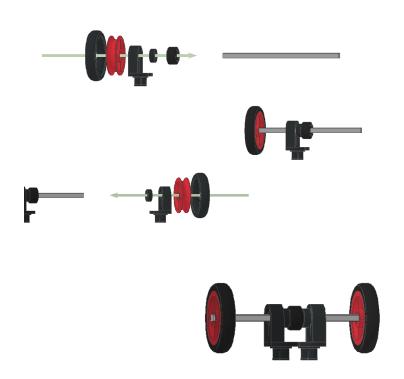


Step 17



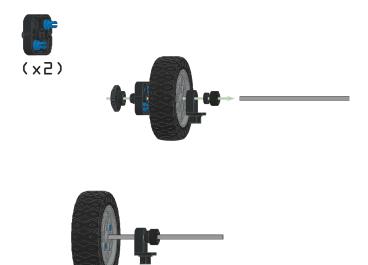
NOTE: Roll cage and top of car will not align perfectly, just snap them together either on the 'outer front' holes of the plate, or one step back and in, whichever you like better.

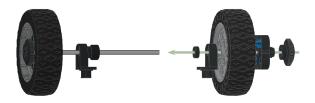
Step 18 - Front Axle



1	Metal	VEX Axle 6 M
2	Black	VEX Axle Spacer
2	Black	VEX Connector 2 Wide Base 1 x 1.5 Tab
2	Red	VEX Pulley 20 mm Diameter
1	Black	VEX Rubber Axle Bushing
2	Black	VEX 100 mm Travel Tire

Step 19 - Rear Axle



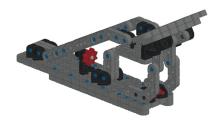




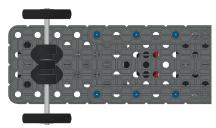
#### Step 19 (Parts)

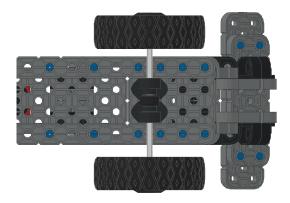
1	Metal	VEX Axle 8 M
2	Black	VEX Axle Spacer
2	Black	VEX Connector 2 Wide Base 1 x 1.5 Tab
2	Gray/Black	VEX Wheel with 200 mm Travel Tire
1	Black	VEX Rubber Axle Bushing
4	Blue	VEX Pin 1x1
2	Black	VEX Beam 2 x 2 with Axle Twist Lock
2	Black	VEX Axle Twist Lock Nut

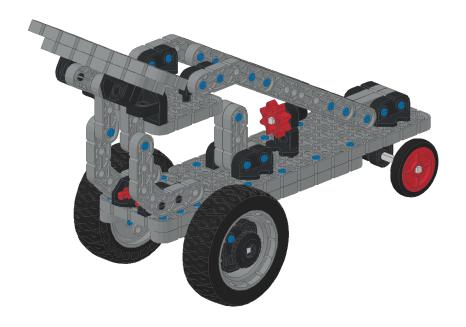
#### Step 20 - Final Assembly











Congratulations, you did it!!!

Now you can:

- Show your creation to the lab staff to get your badge ribbon
- Take a picture with your racer at the photo booth
- Run your racer around the track

Don't forget to turn your racer (and these instructions) back into the 'RETURNS' bin! Our friendly staff will get it ready for the next camper!