



2027 World GreenMech Contest GMJR-S Teacher Training



GMJR-S: Protect the Ecosystem

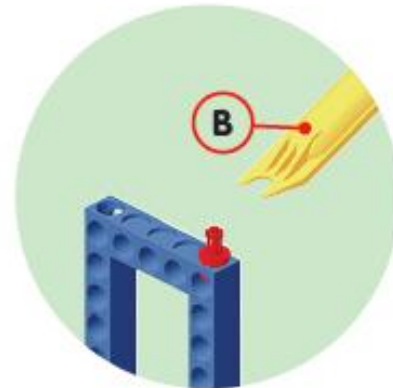
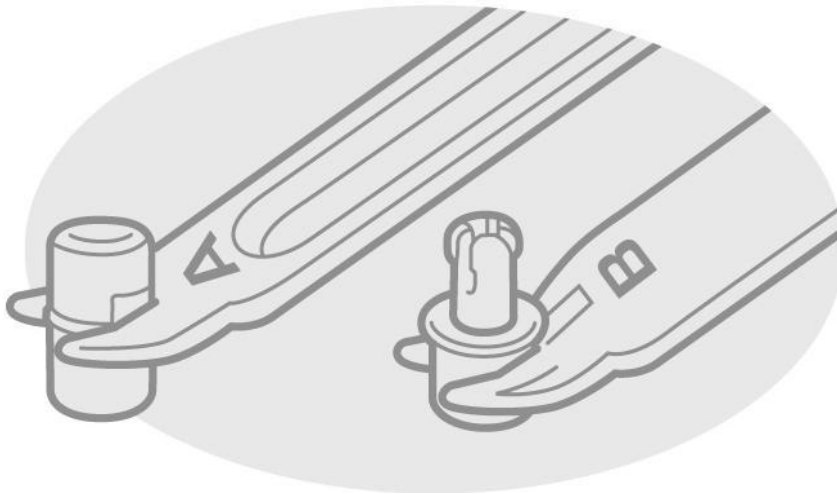


This competition consists of two Challenges:

[Challenge 1: Logistics Supply]

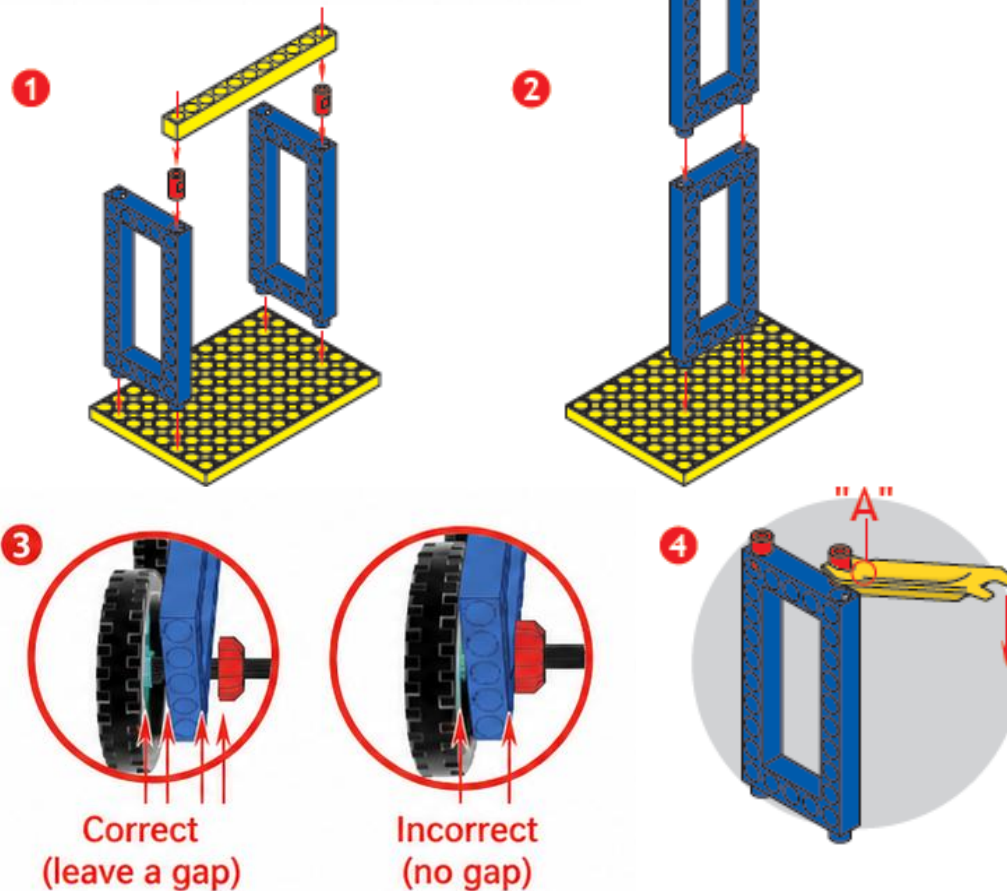
[Challenge 2: Eliminate Invasive Species]

Using Basic Tools

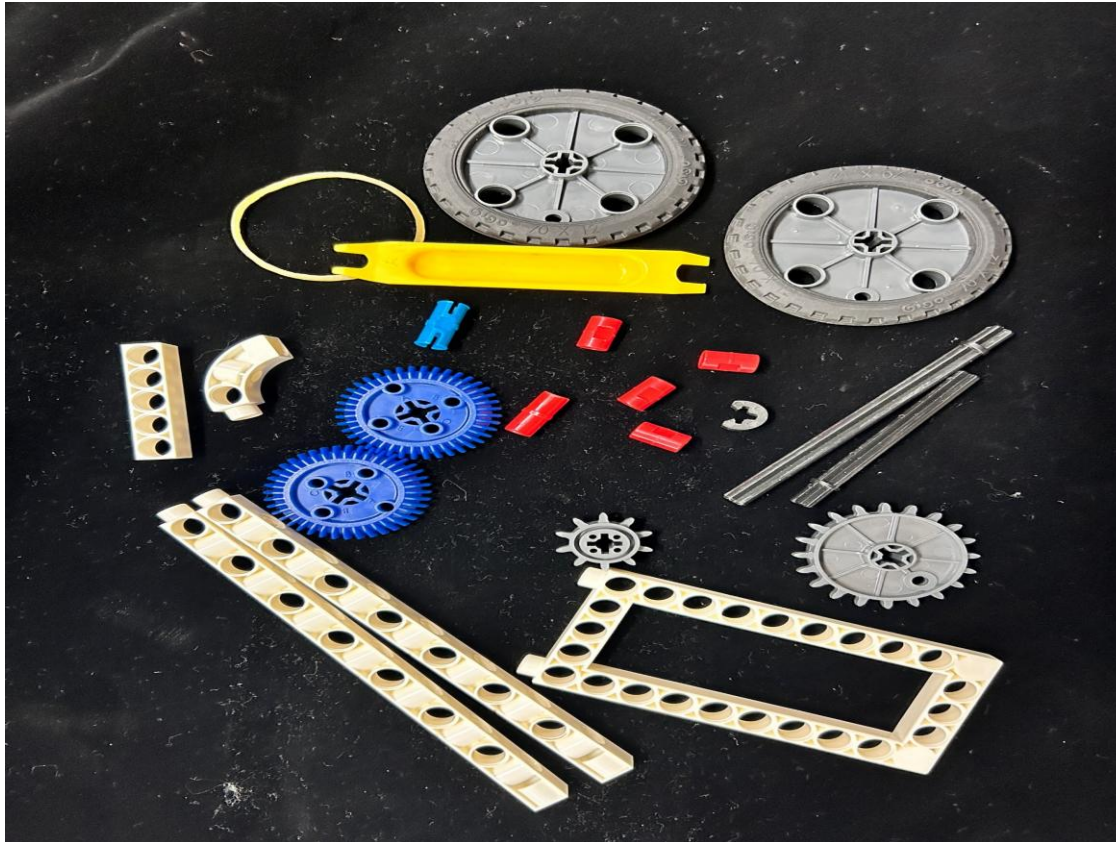


Assembly Method

Connecting the Base Plate, Frames, and Long Rod

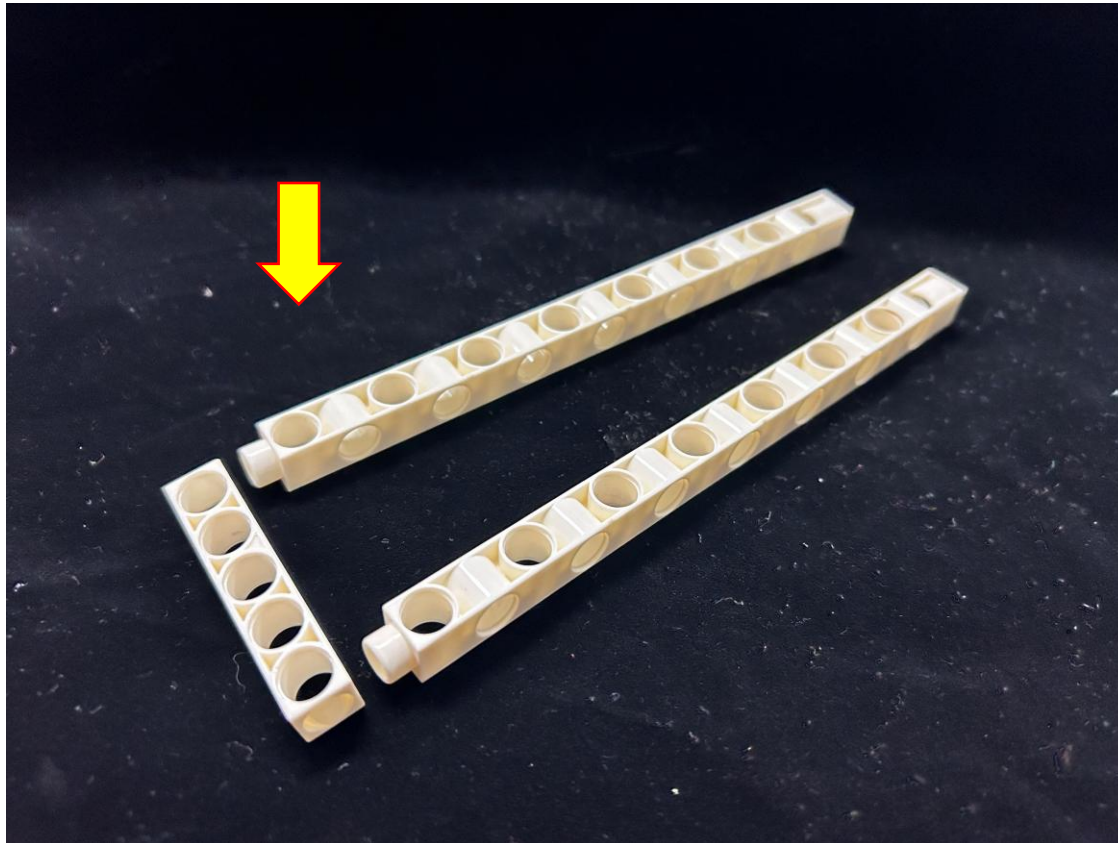


Challenge 1: Logistics Supply



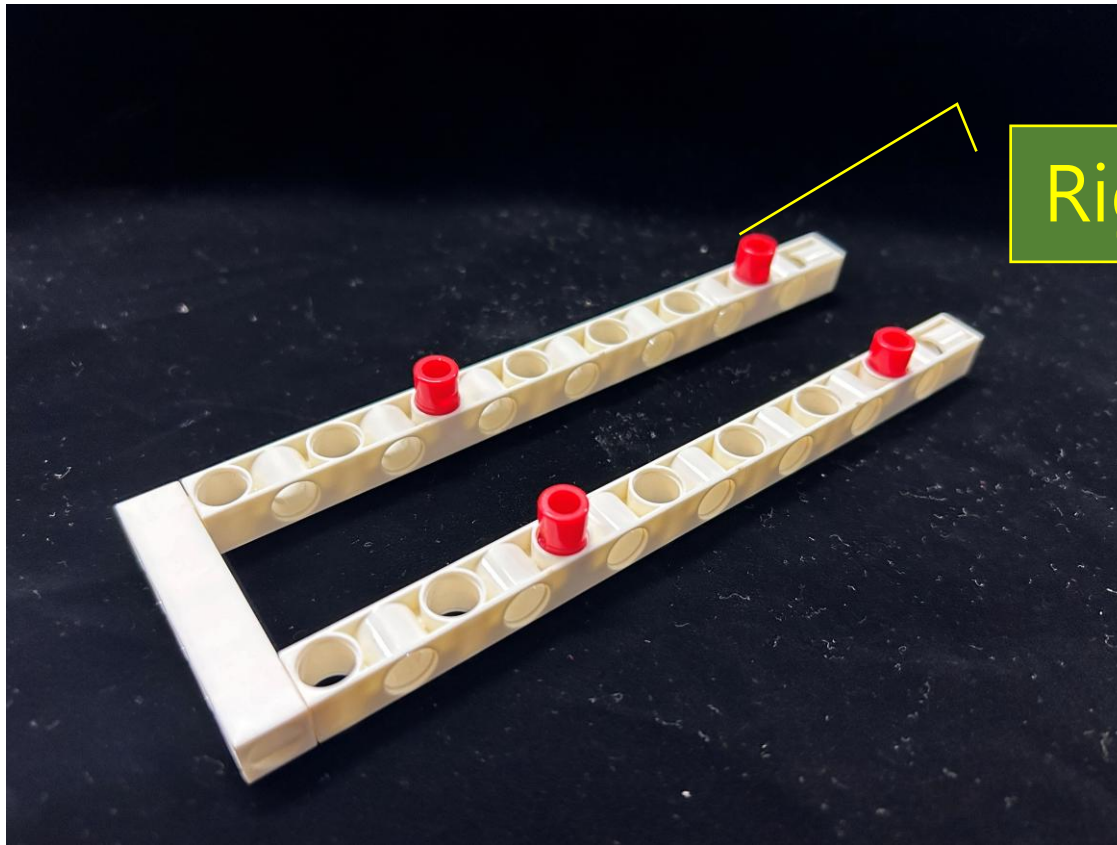
Required Materials

Challenge 1: Logistics Supply



Attach two **15 HOLE DUAL RODs**
to the **5 HOLE ROD**.

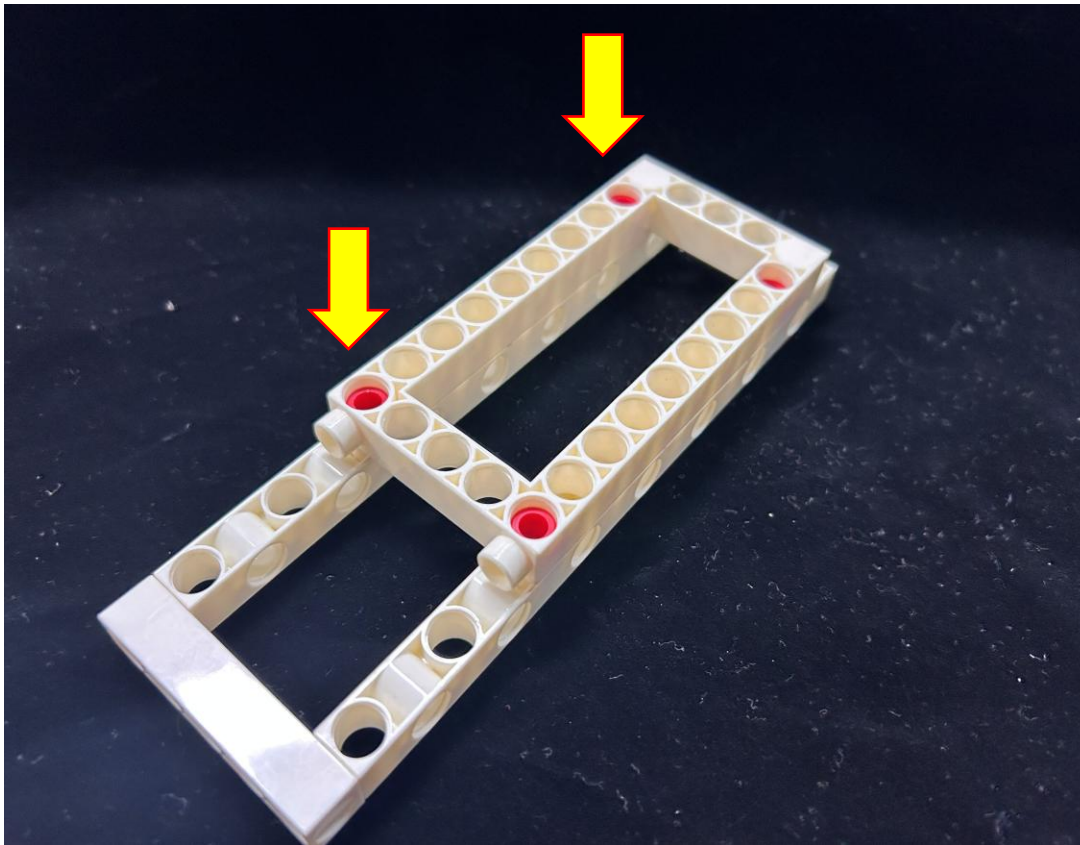
Challenge 1: Logistics Supply



Right: 1, 5

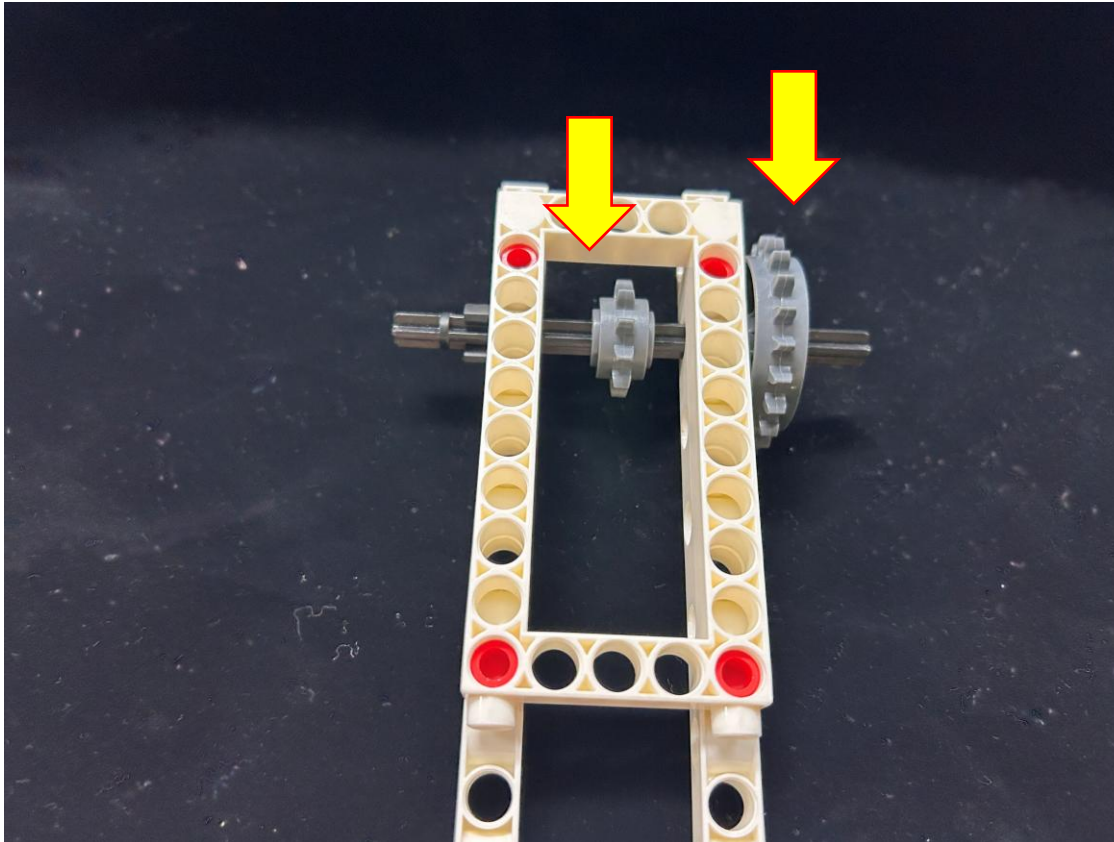
Attach four PEGs to the
15 HOLE DUAL RODs.

Challenge 1: Logistics Supply



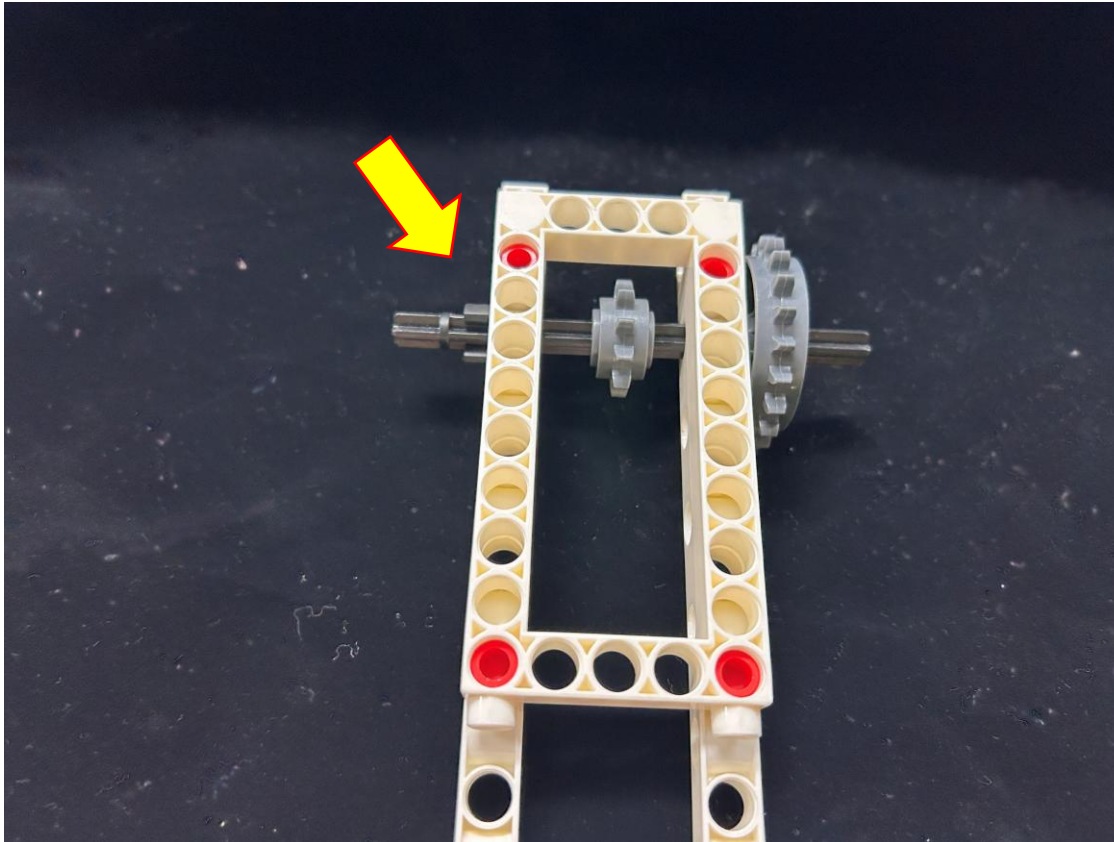
Attach one 5X10 FRAME.

Challenge 1: Logistics Supply



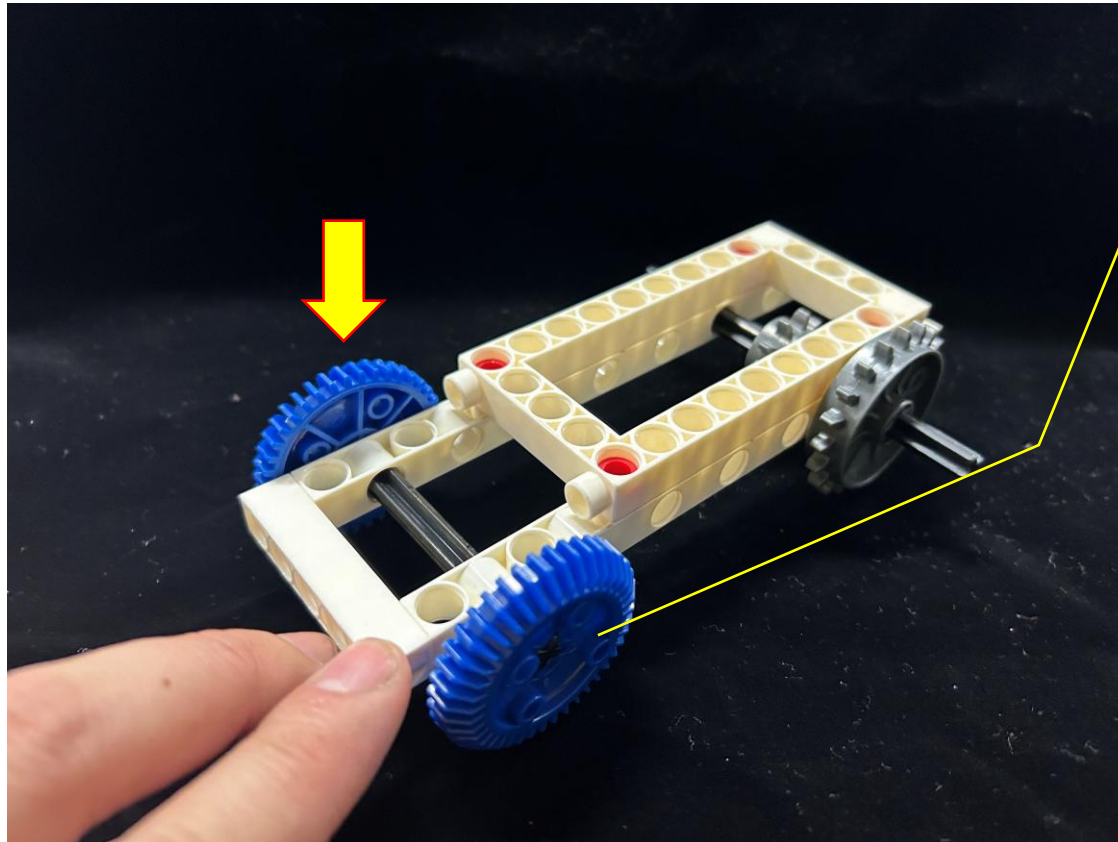
Insert one 10 cm AXLE through the
10T CHAIN GEAR and 10T CHAIN GEAR.

Challenge 1: Logistics Supply



Use an AXLE FIXING to keep the axle stable.

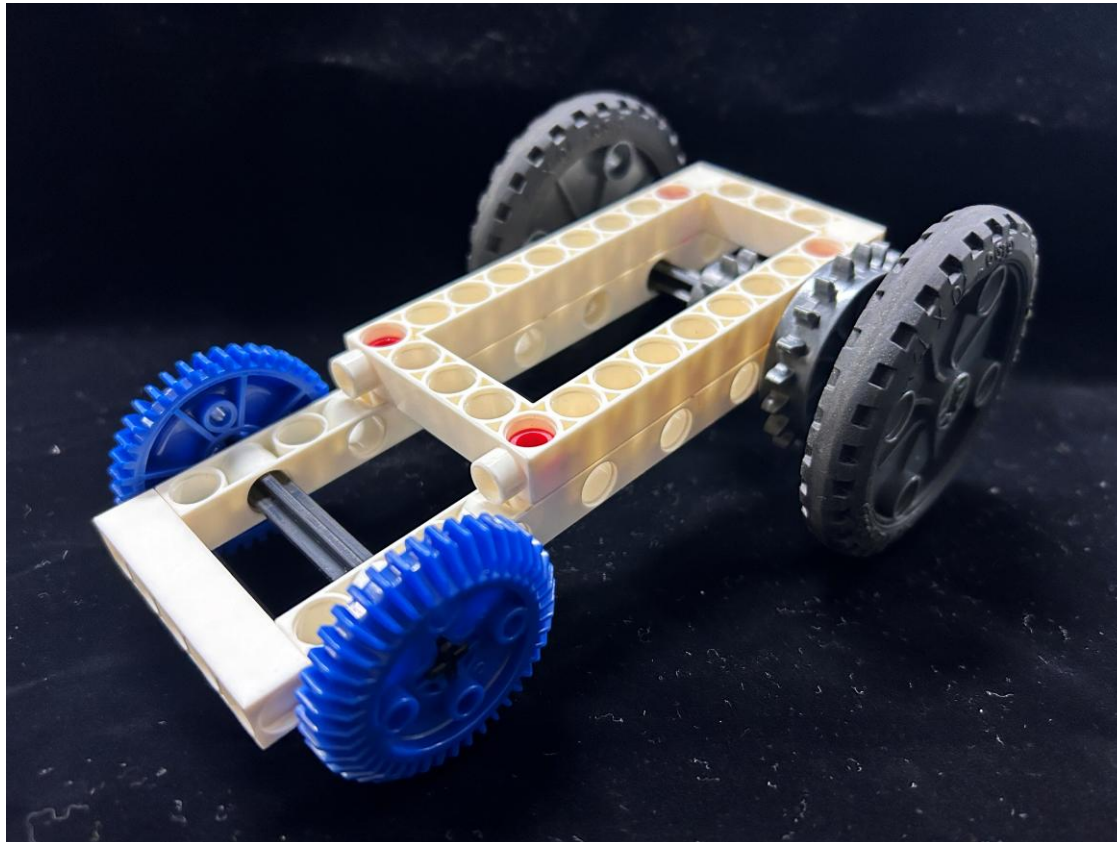
Challenge 1: Logistics Supply



Left: 1

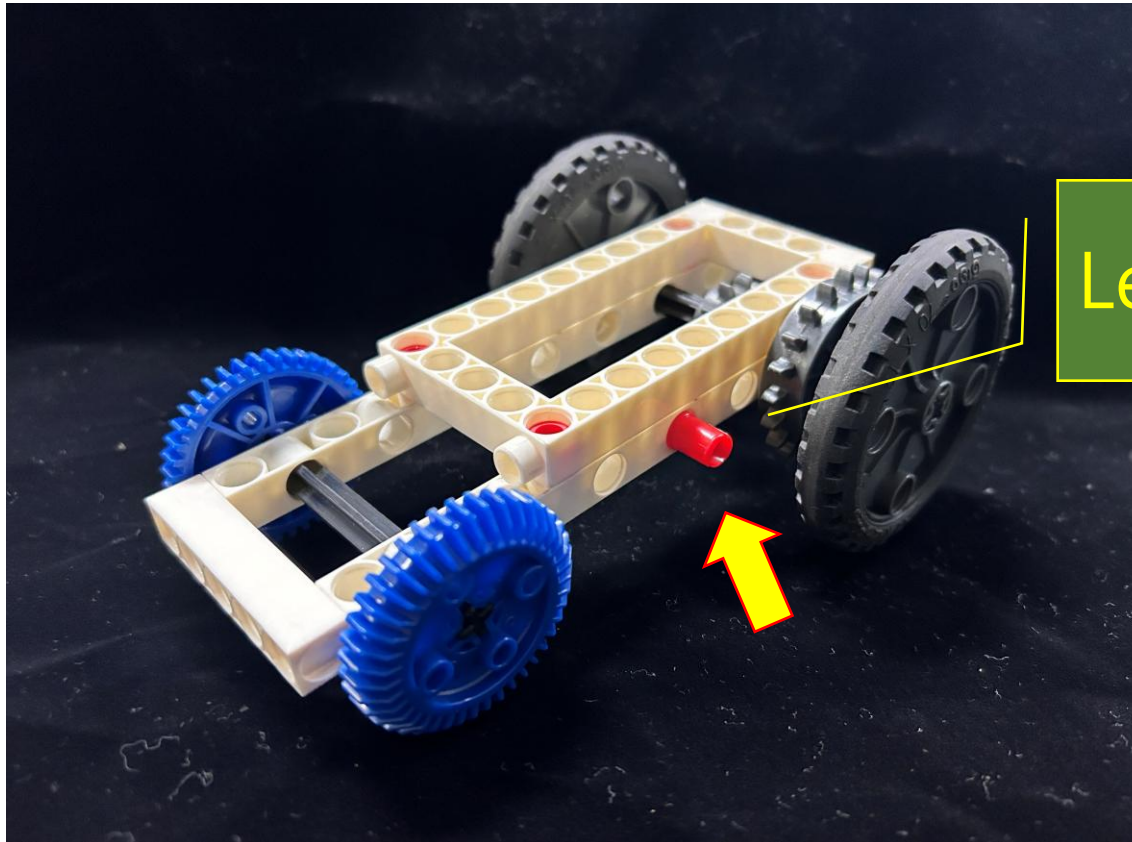
Use a 7 cm AXLE and gears as
the front wheels.

Challenge 1: Logistics Supply



Attach RACING TIRES as the
rear wheels.

Challenge 1: Logistics Supply

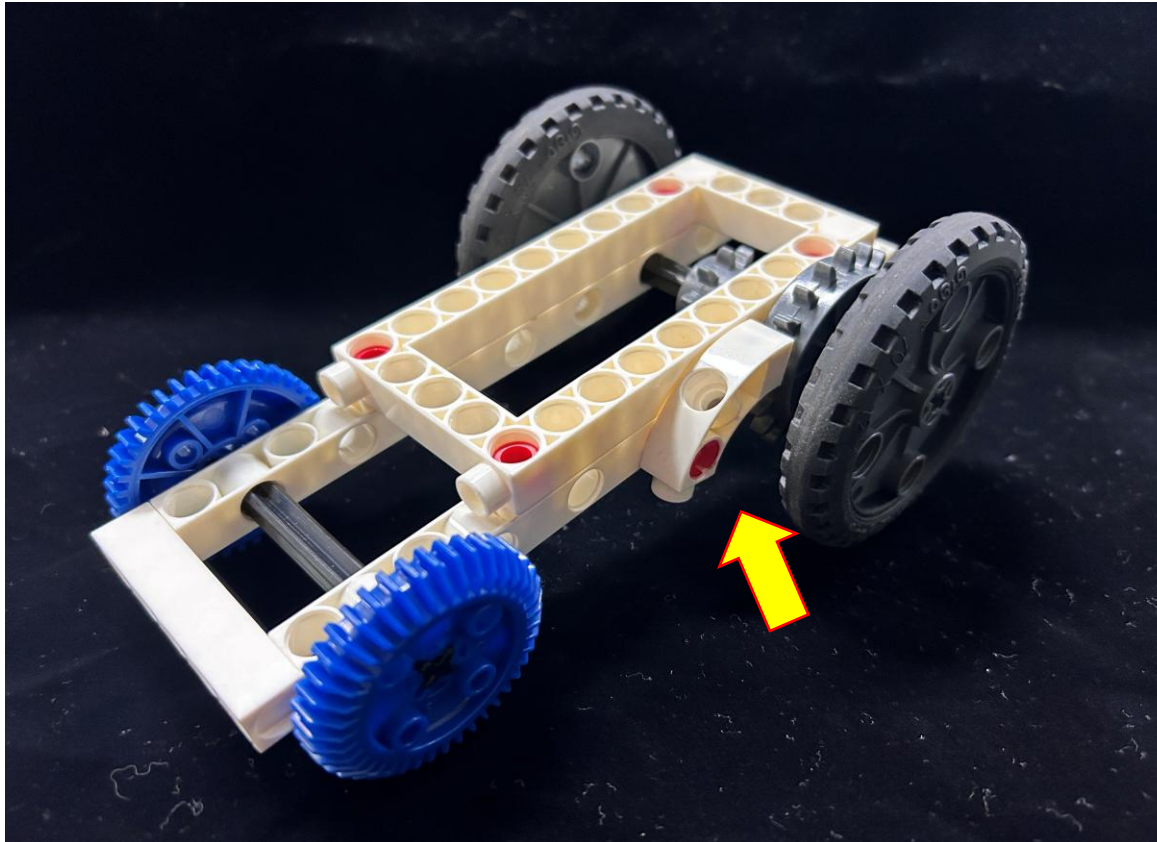


Left



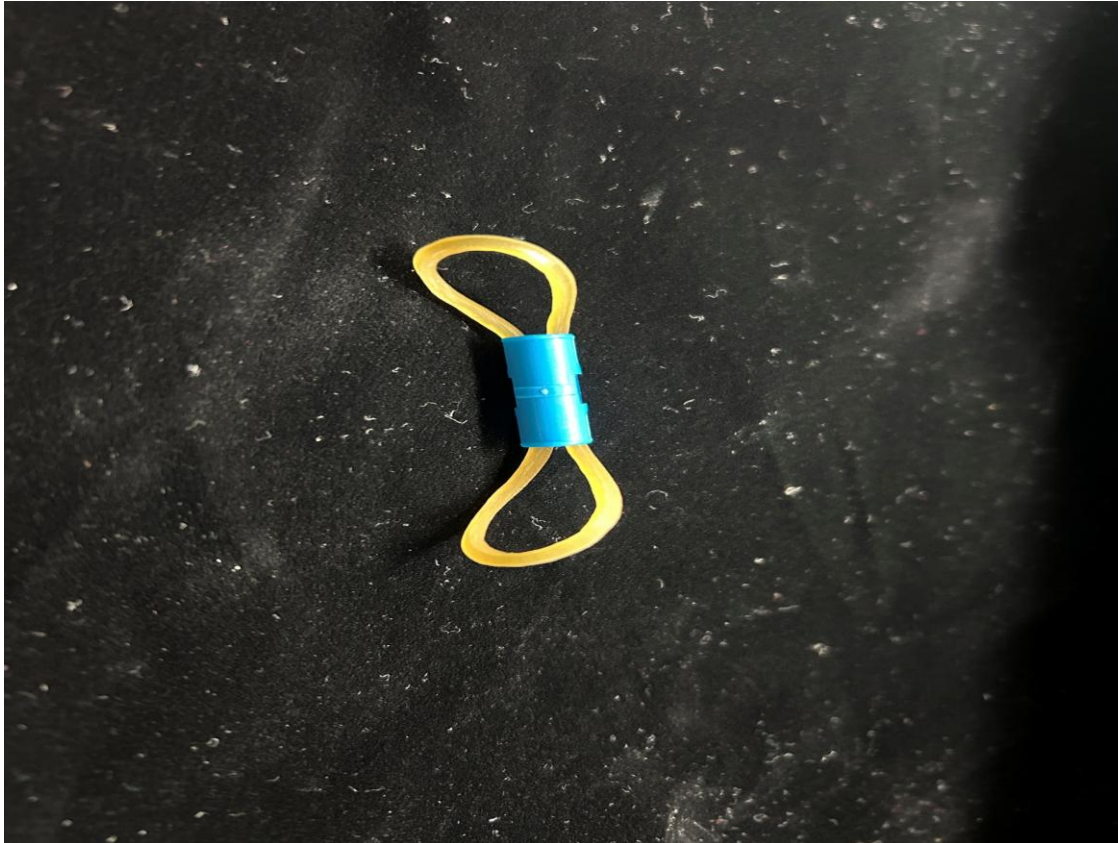
Attach one AXLE CONNECTOR.

Challenge 1: Logistics Supply



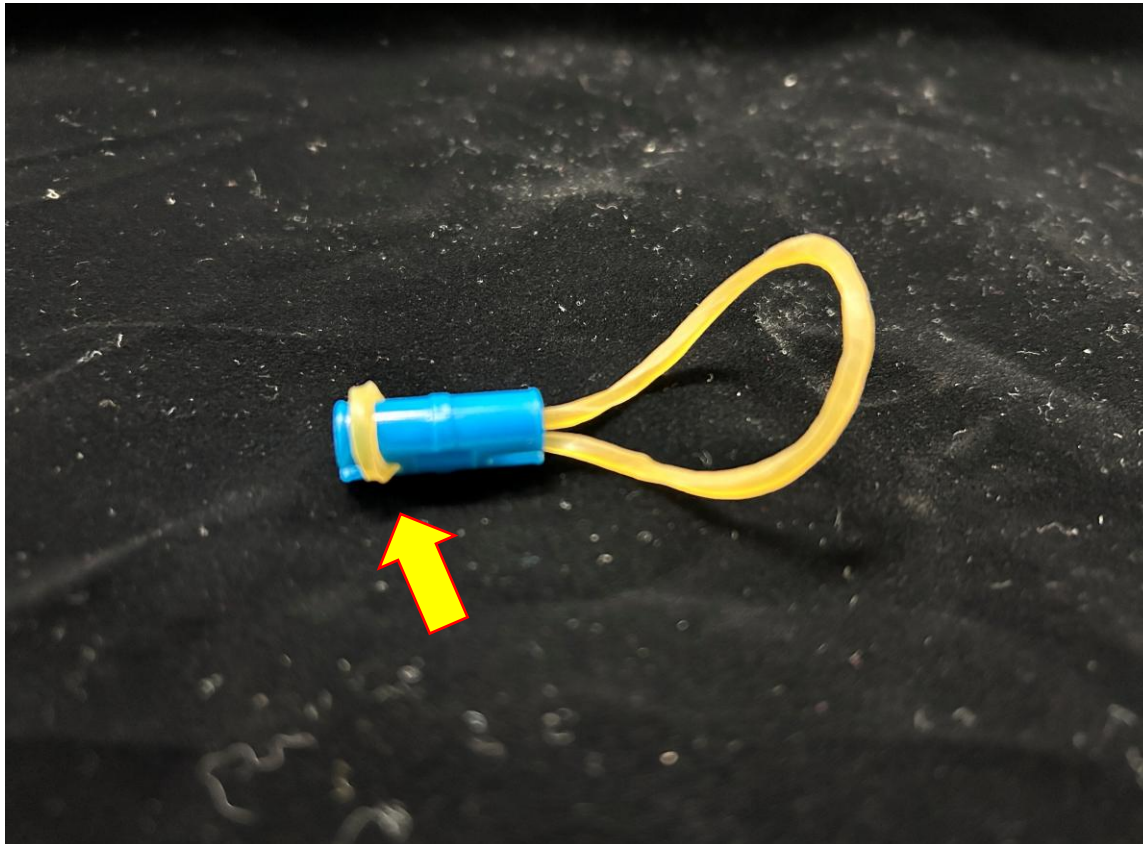
Attach one BENDED ROD
as the switch.

Challenge 1: Logistics Supply



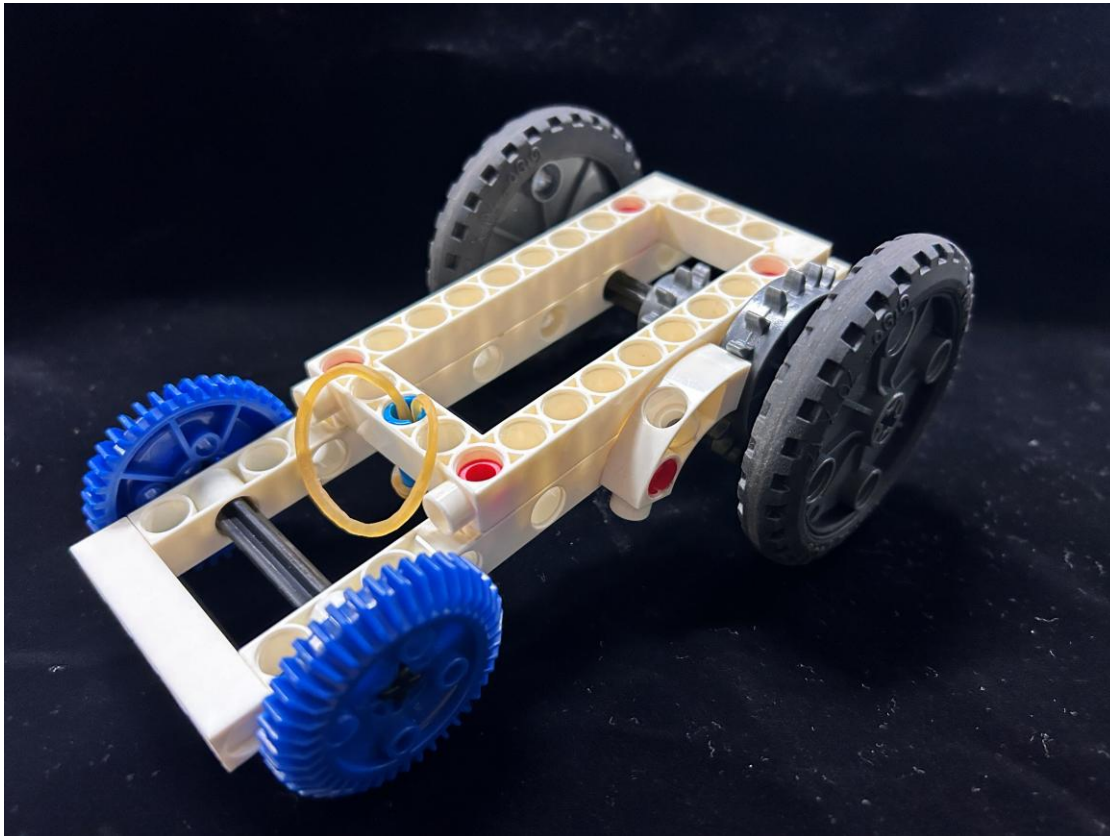
Thread the rubber band
through an AXLE CONNECTOR.

Challenge 1: Logistics Supply



Pull one end and hook the other
end into the groove.

Challenge 1: Logistics Supply



Insert the AXLE CONNECTOR from bottom to top to complete the model!

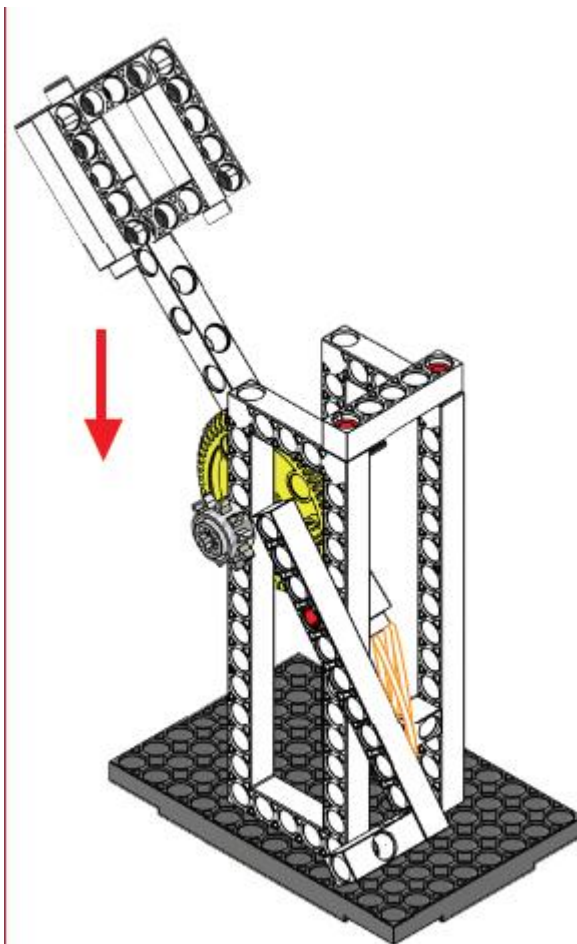


Challenge 1: Logistics Supply

Think About It

1. How should the projectile be loaded?
2. How can the vehicle be modified to travel back and forth more smoothly?
3. Are there any other designs?

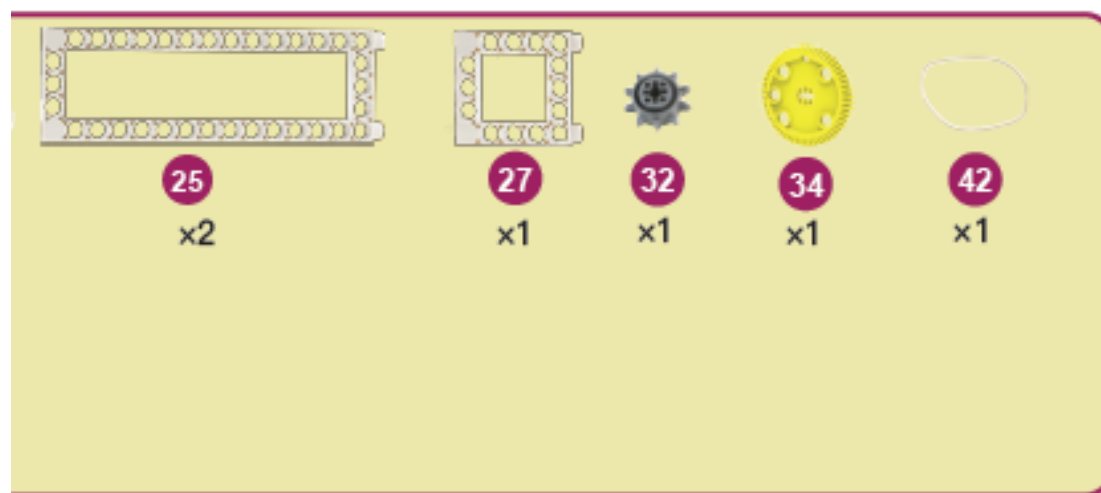
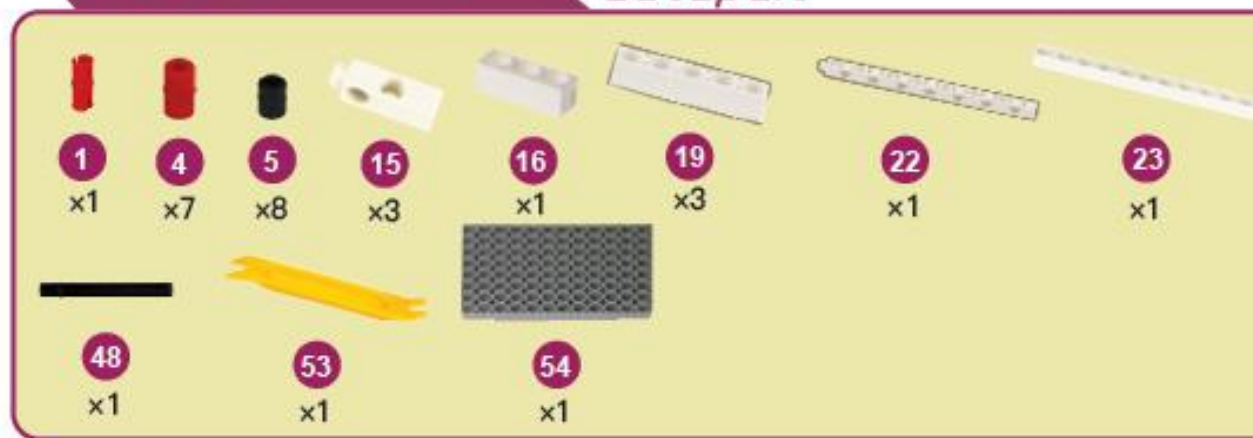
Challenge 2: Eliminate Invasive Species



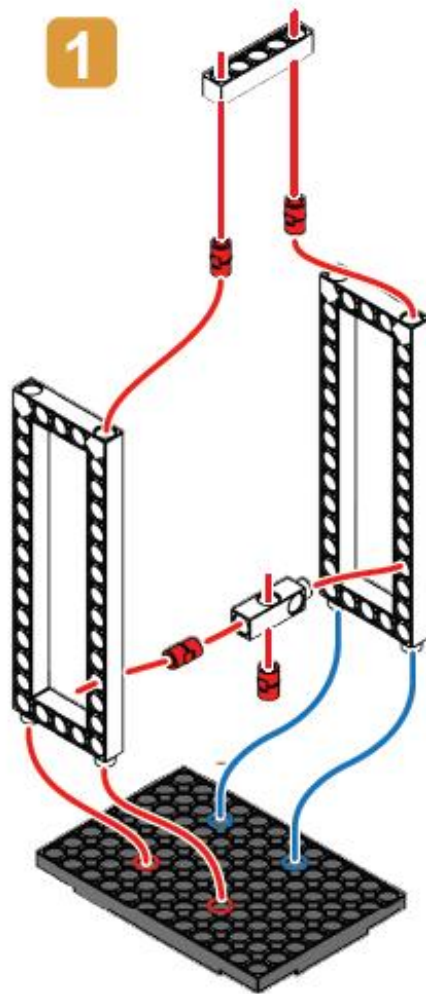
Challenge 2: Eliminate Invasive Species

投石車

Catapult



Challenge 2: Eliminate Invasive Species

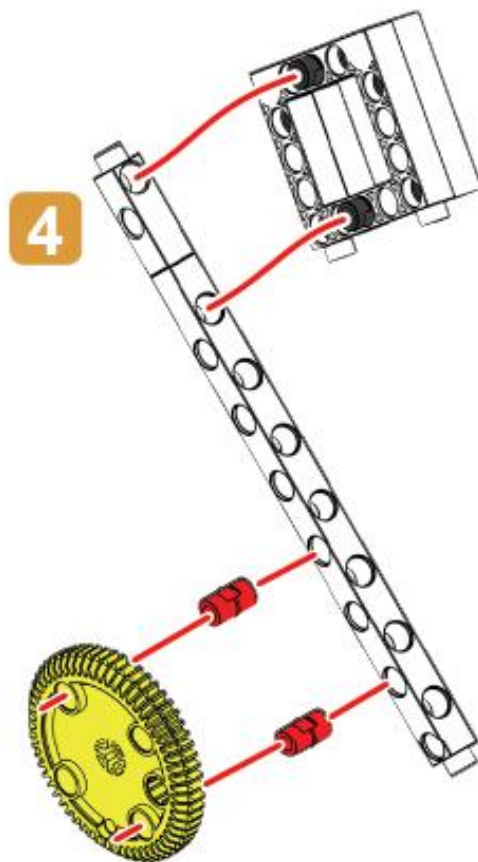




Challenge 2: Eliminate Invasive Species

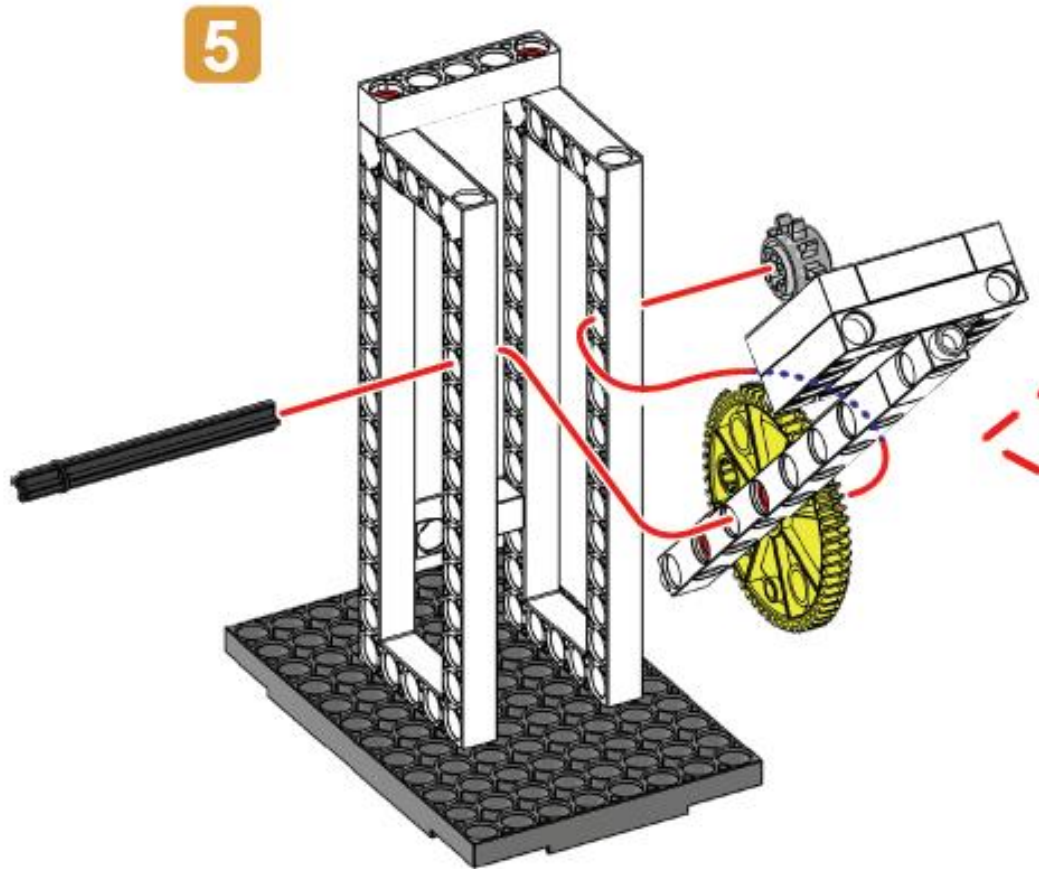


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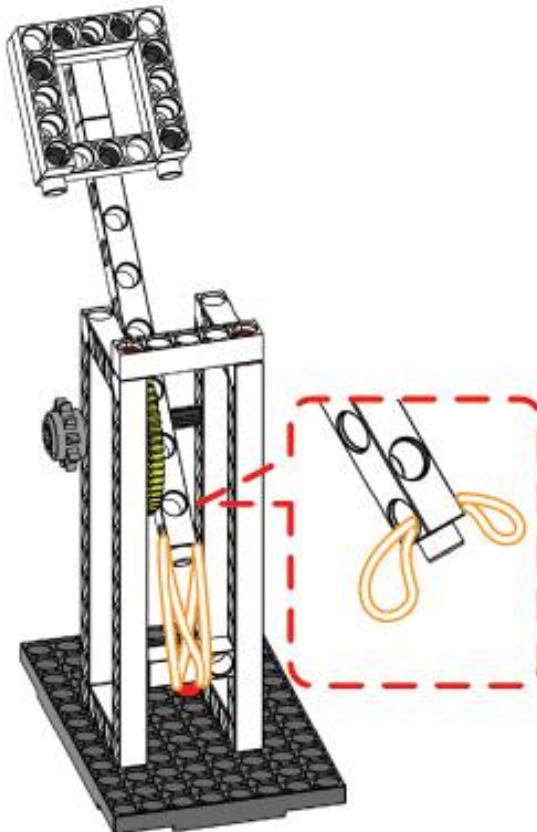
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Challenge 2: Eliminate Invasive Species

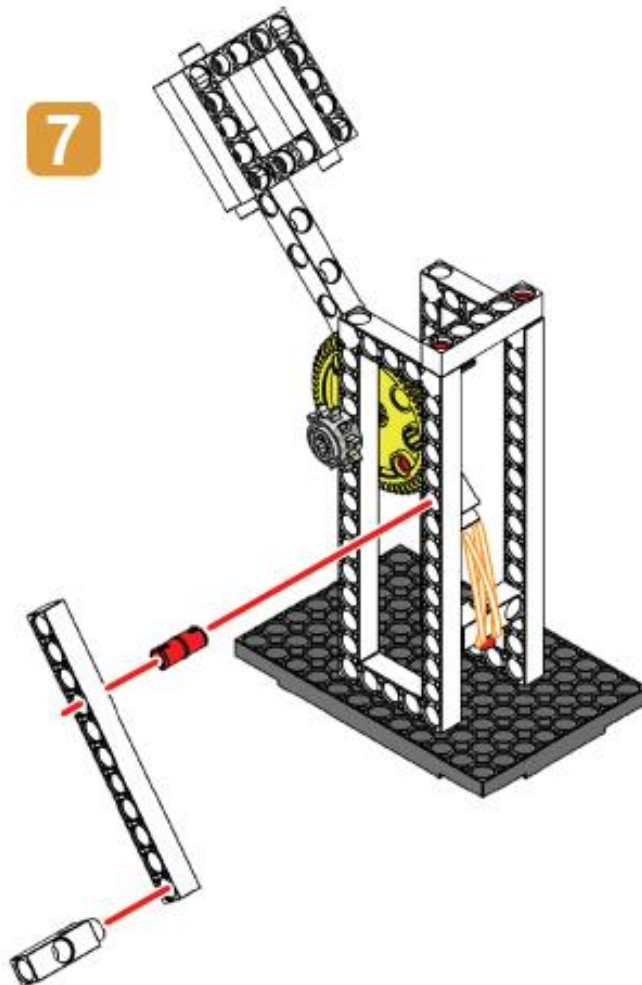


Challenge 2: Eliminate Invasive Species

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Challenge 2: Eliminate Invasive Species





Challenge 2: Eliminate Invasive Species

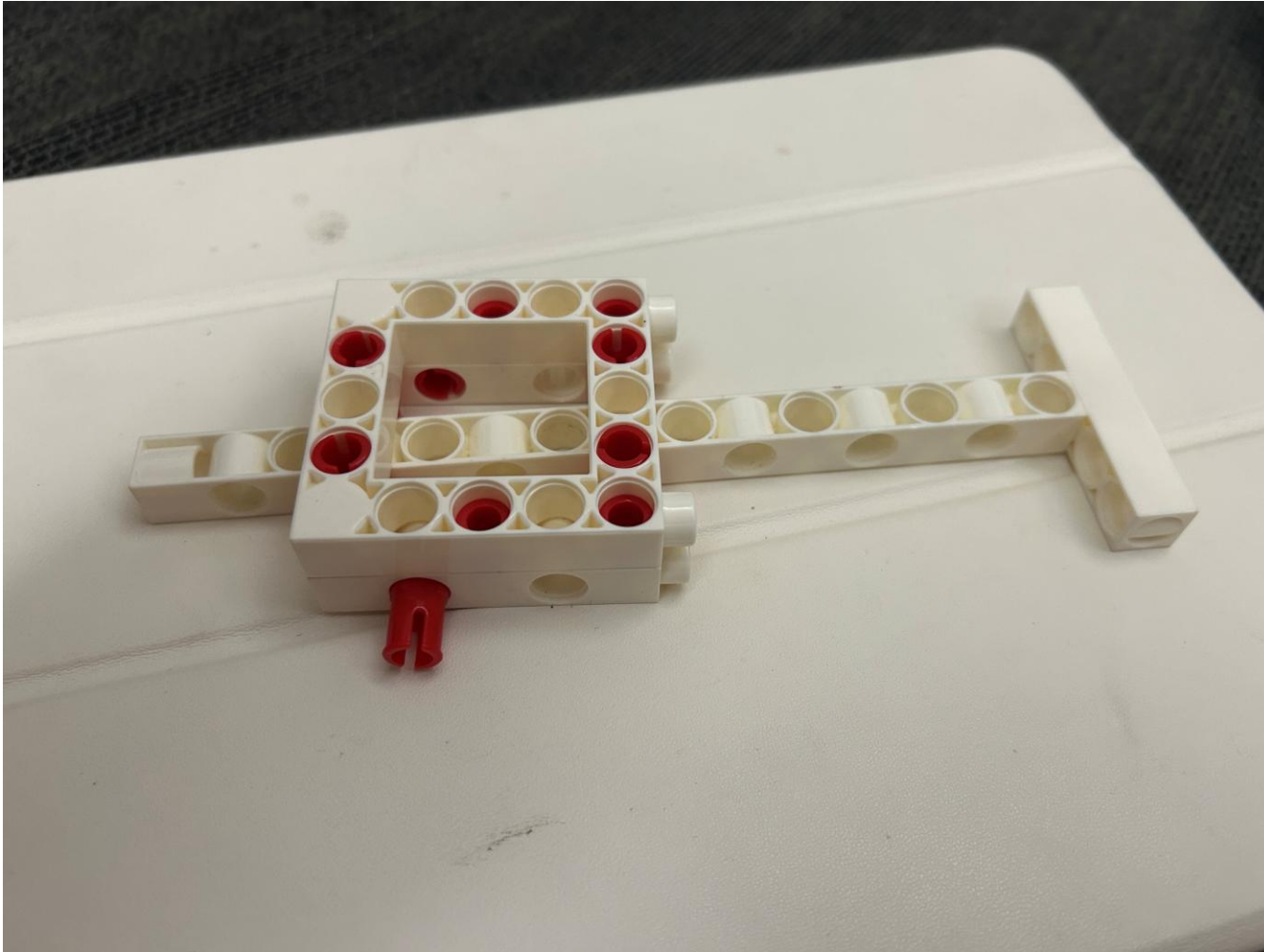
Think About It

1. How can the projectile be secured?
2. How can it be launched into the Target Area?
3. Is the overall design easy to operate?

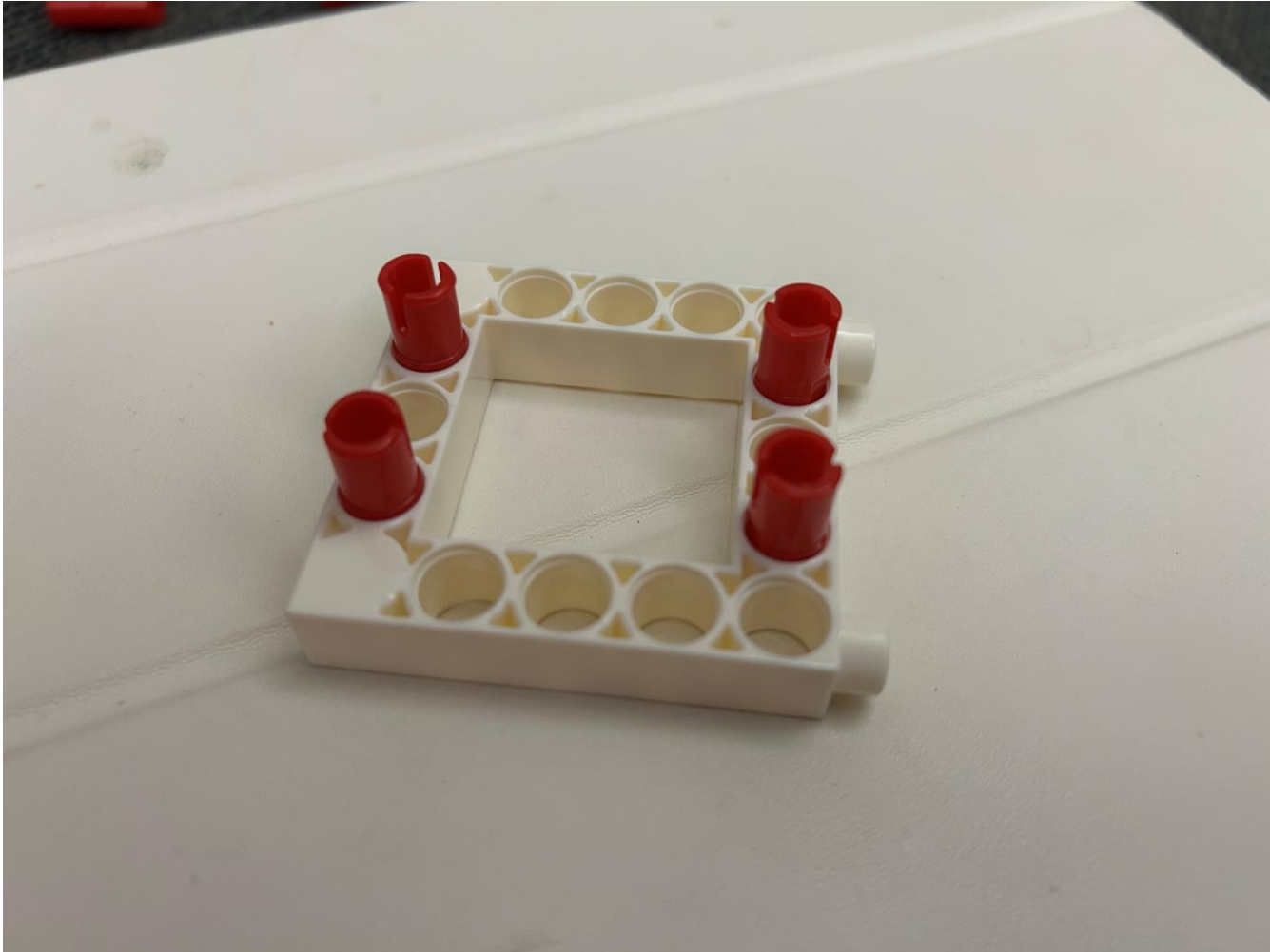
Each team must build a launcher powered by rubber-band elasticity that can launch the hunting projectile. Attempts that do not use this method will not be scored.

4. Are there any other designs?

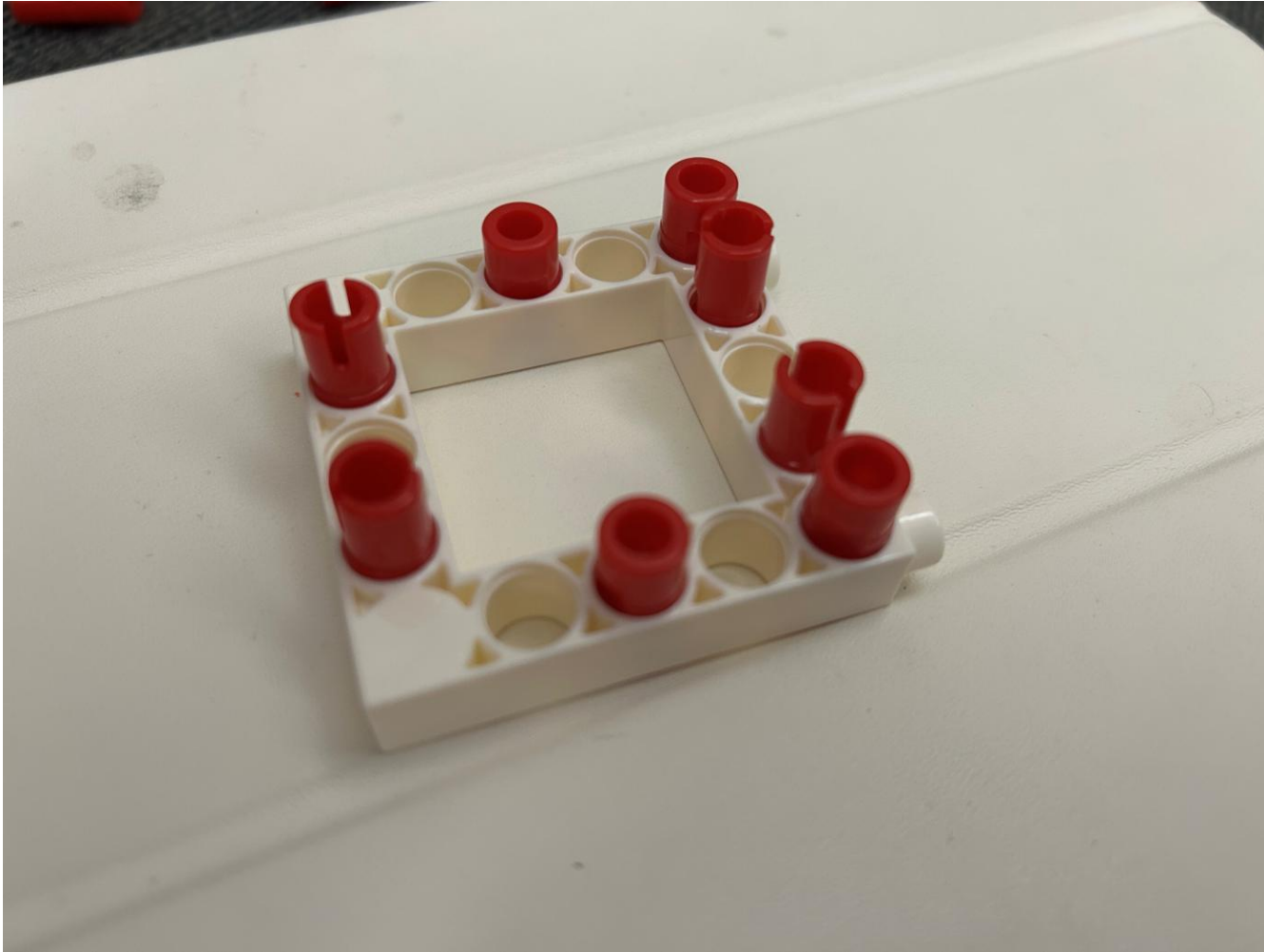
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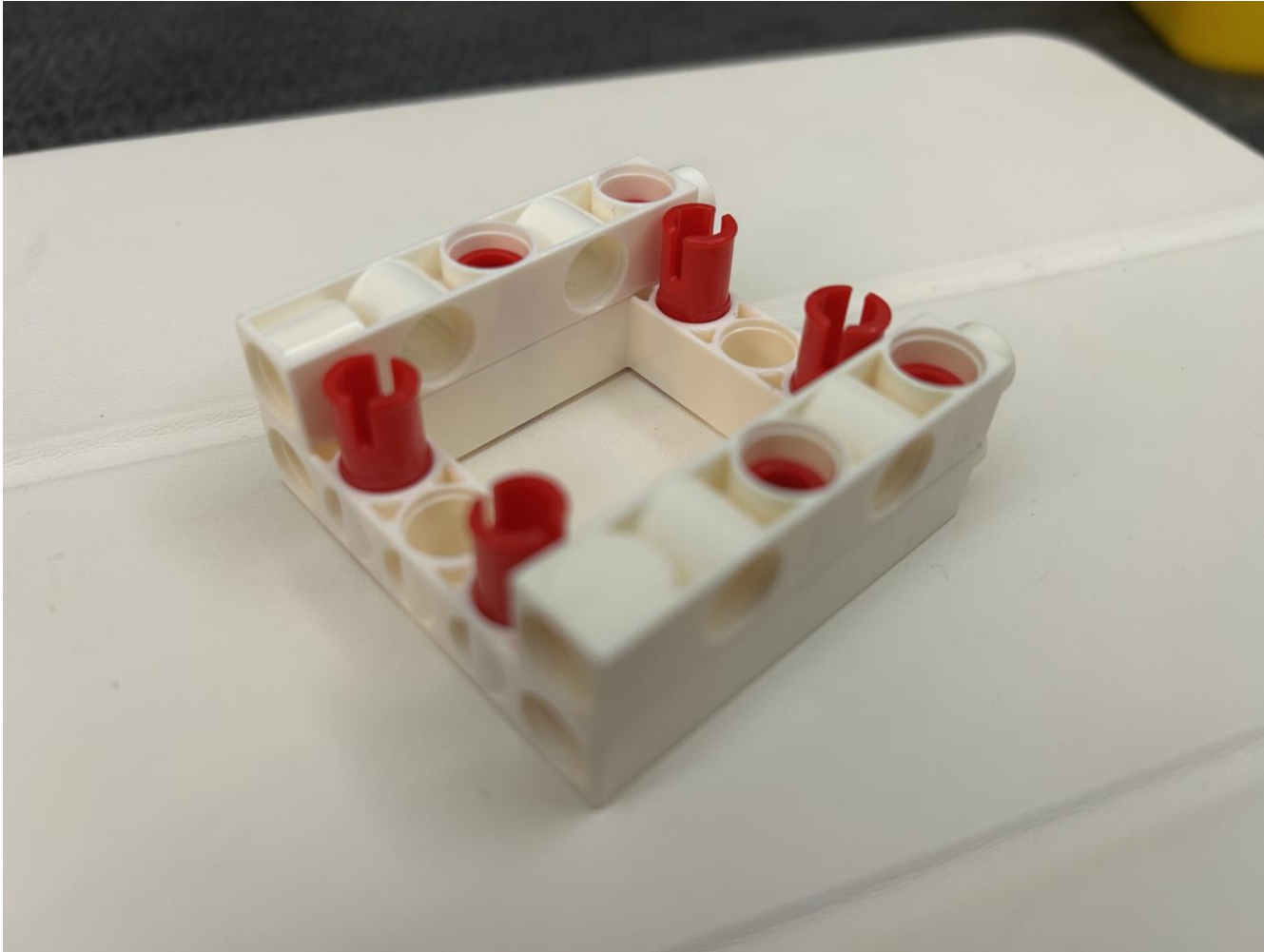
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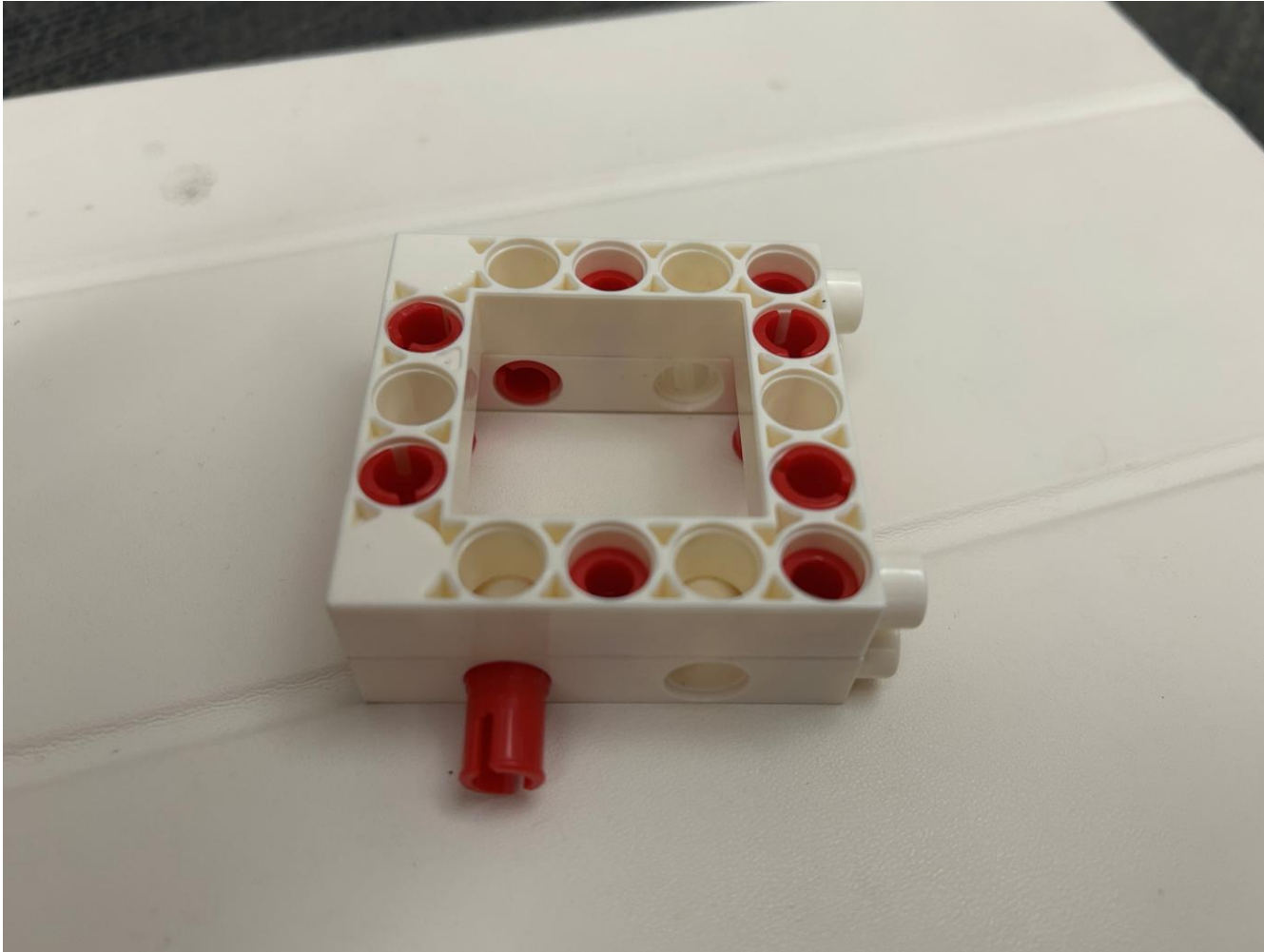
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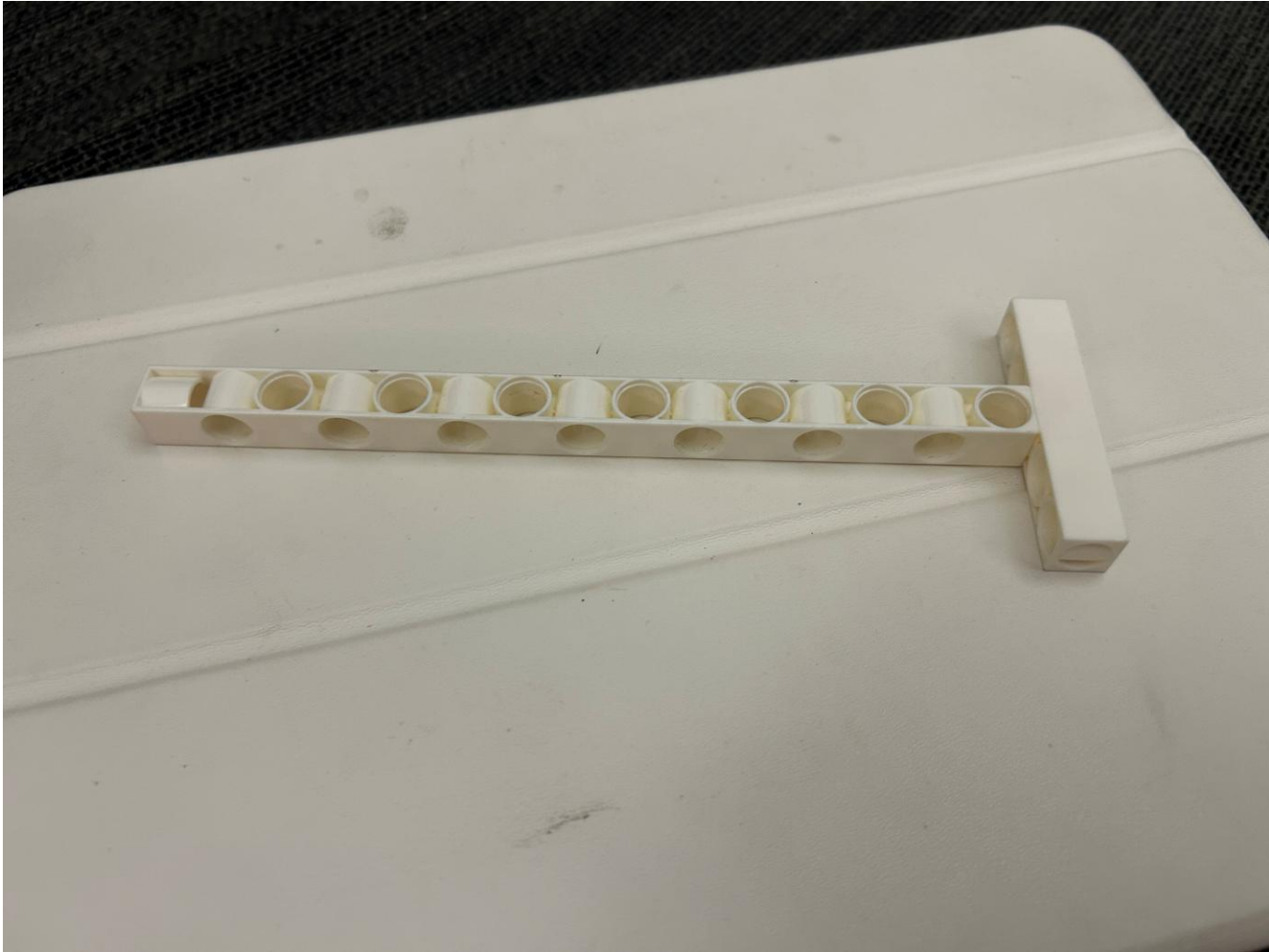
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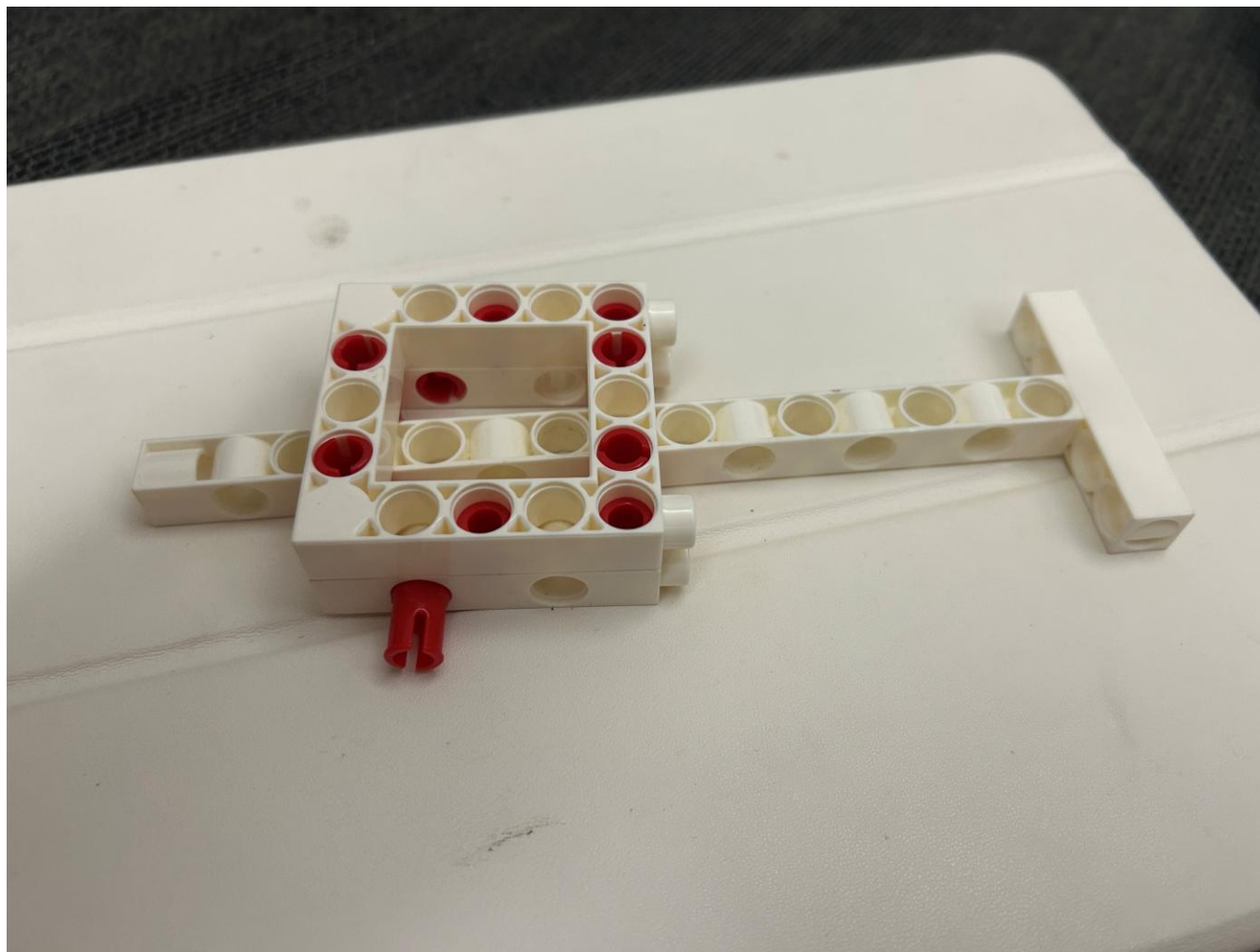
Challenge 2: Eliminate Invasive Species



Challenge 2: Eliminate Invasive Species



Challenge 2: Eliminate Invasive Species





World GreenMech Contest
Thank You