

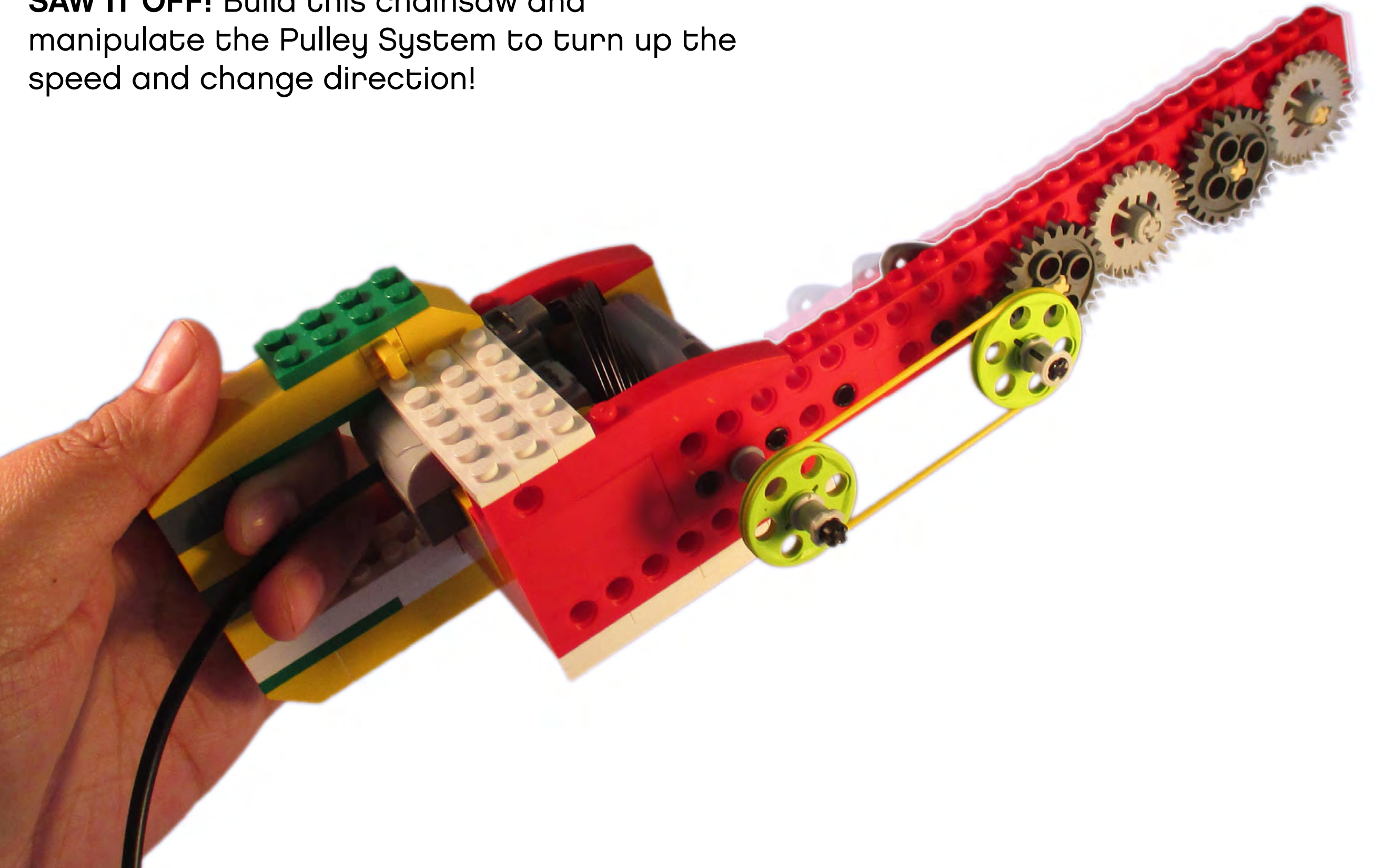
TINY TECHS CLUB

Creativity | Science | Technology



Chainsaw

SAW IT OFF! Build this chainsaw and manipulate the Pulley System to turn up the speed and change direction!



Step 1

You will Need:



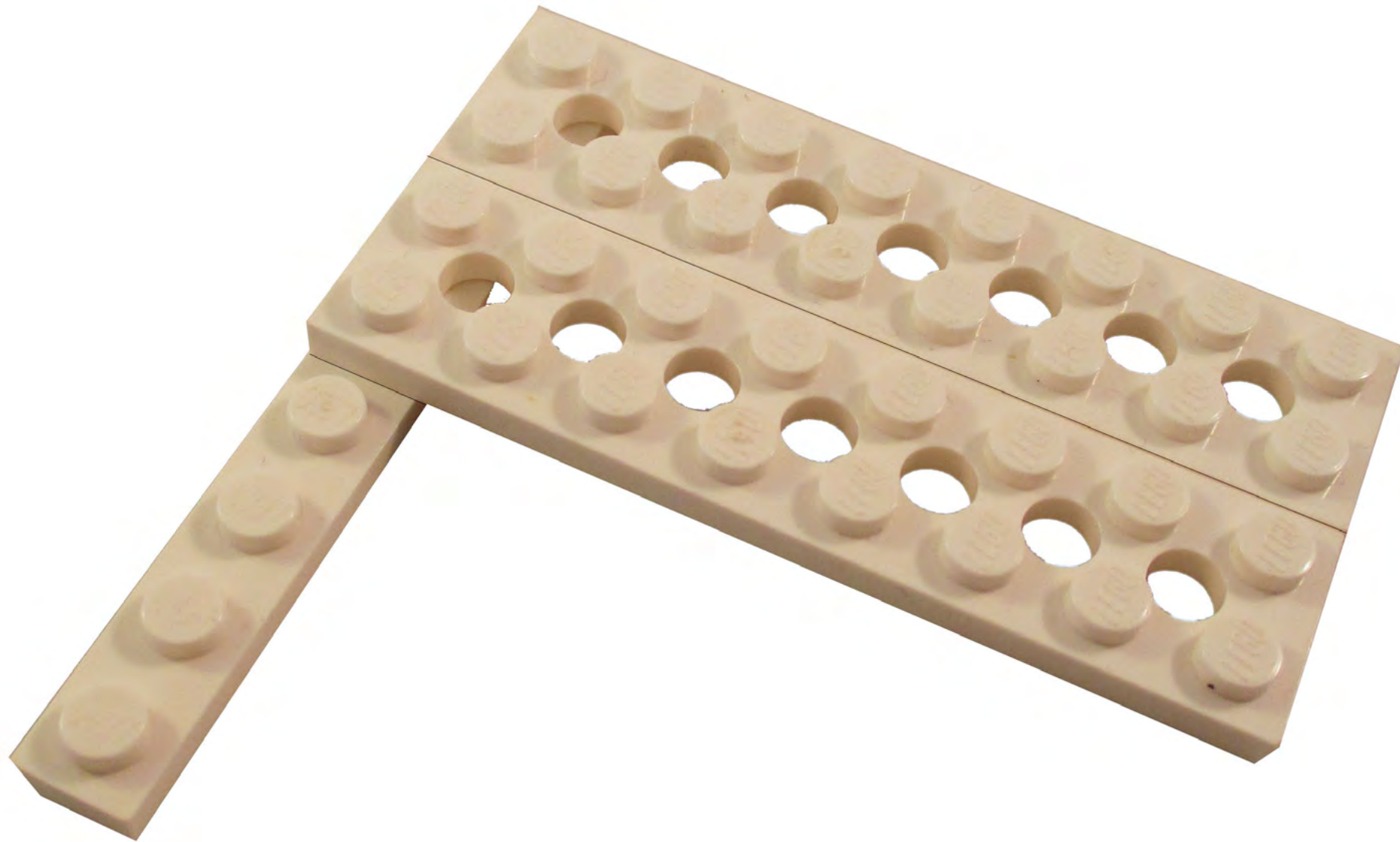
White 1x8
Plate



White 2x8
Plate



White 2x8
Plate



Step 2

You will Need:



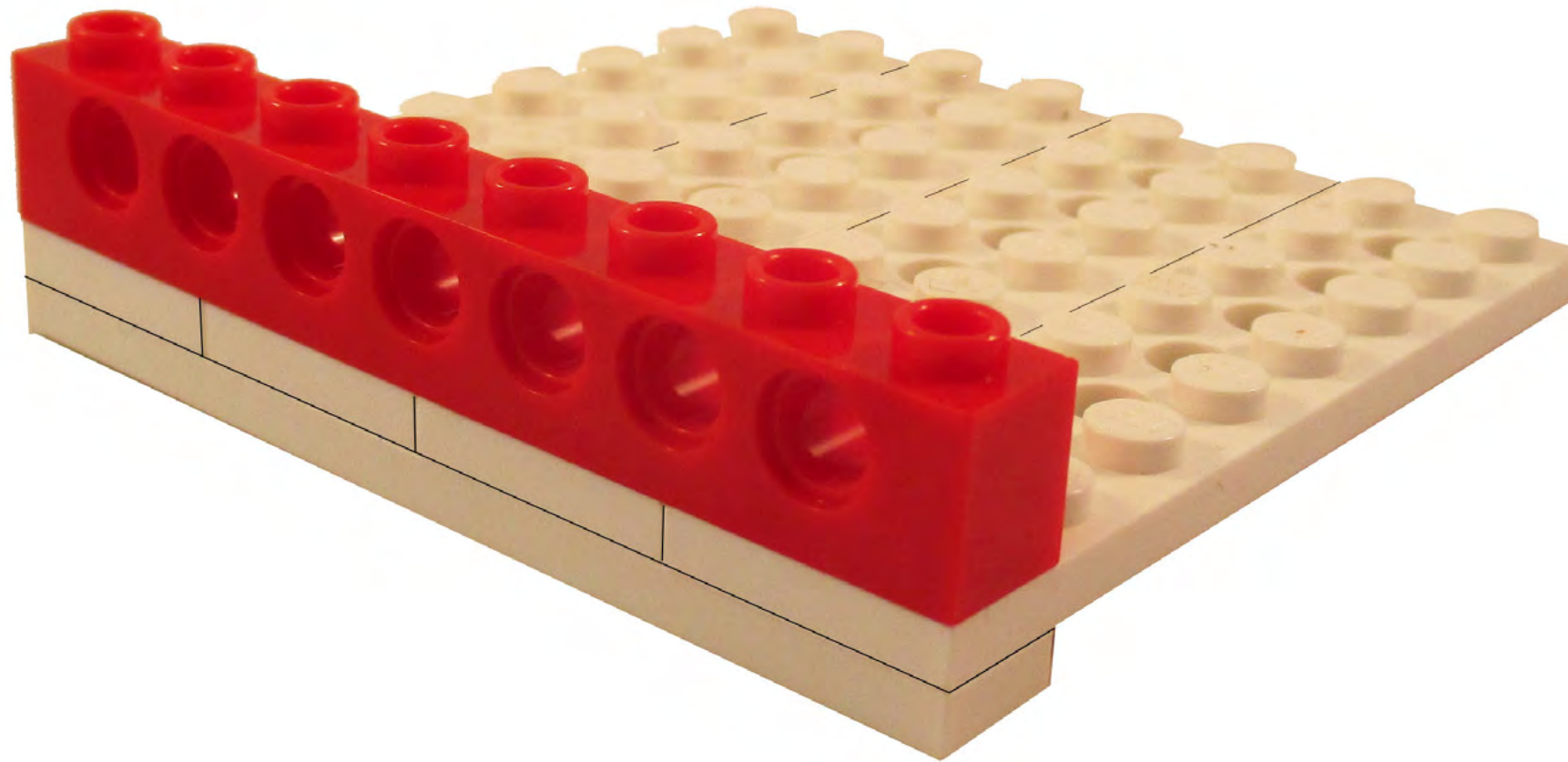
Red 1x8
with Holes



White 2x8
Plate



White 2x8
Plate

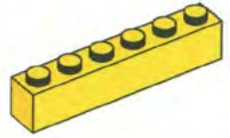


Step 3

You will Need:



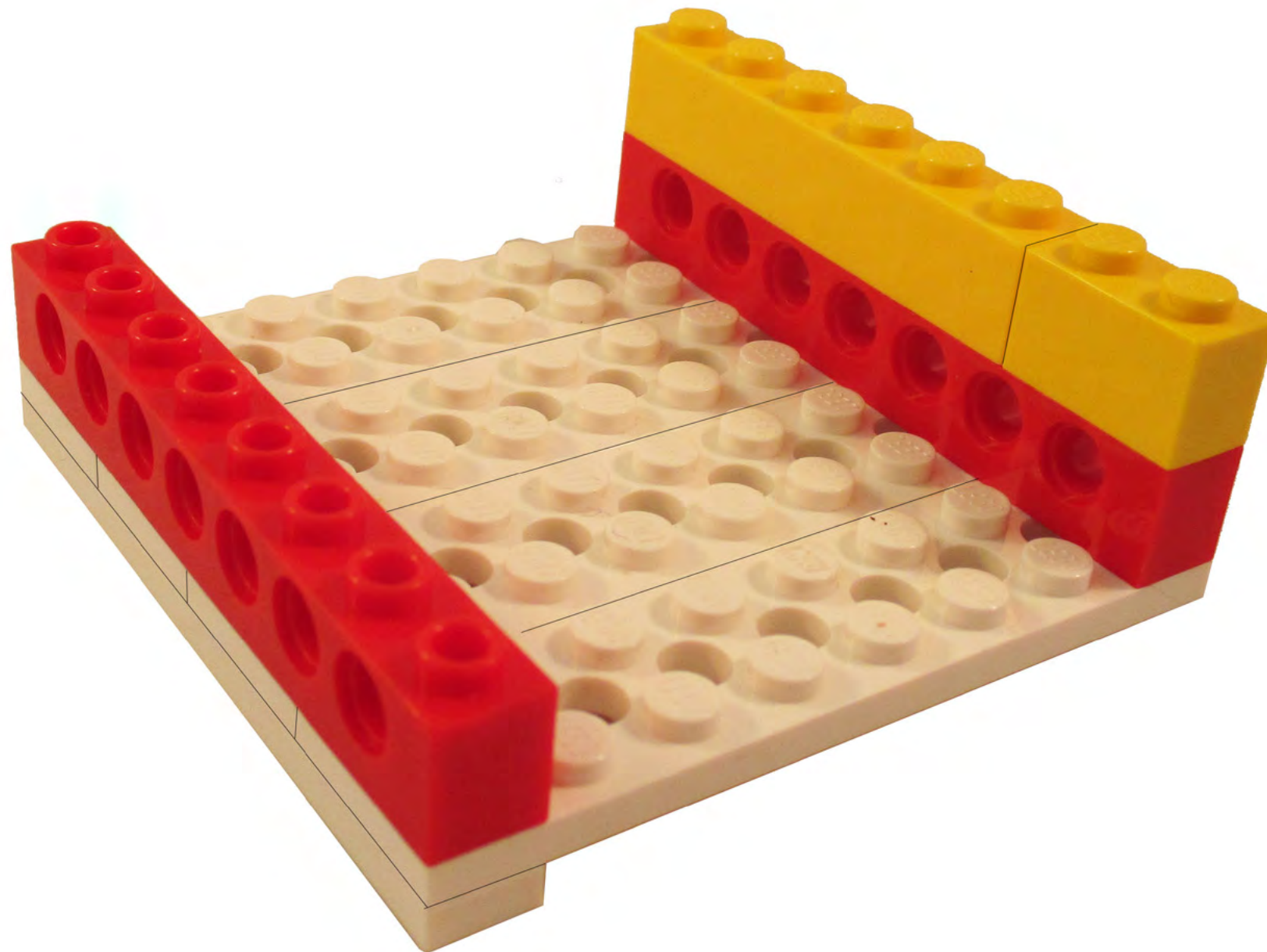
Red 1x8
with Holes



Yellow 1x6
Brick



Yellow 1x2
Brick



Step 4

You will Need:



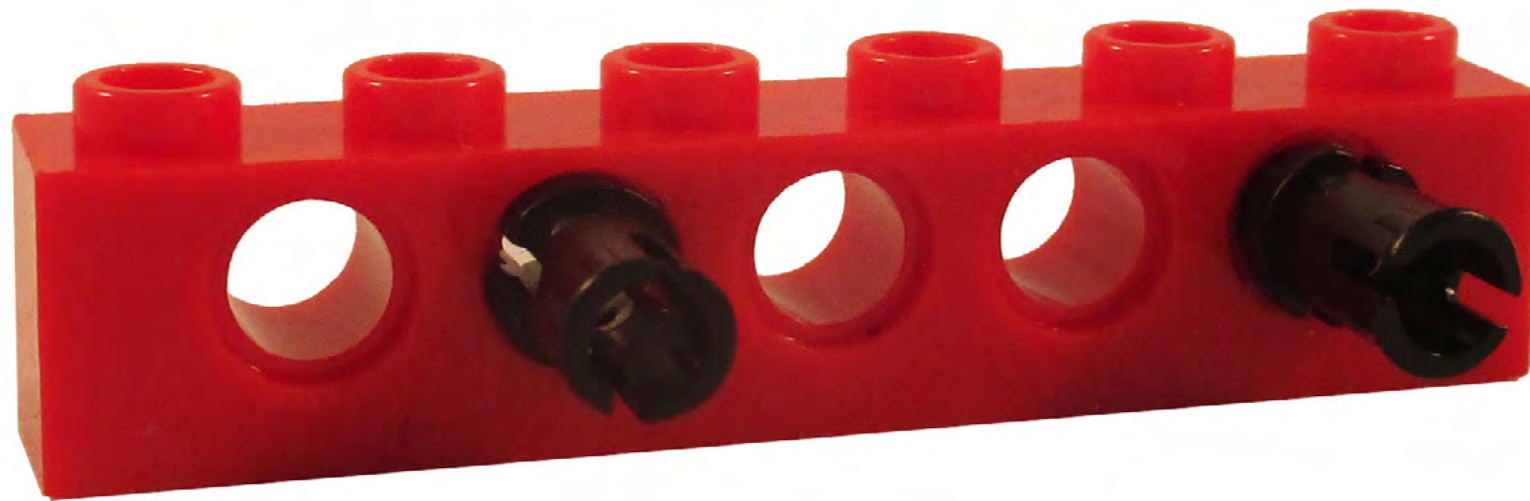
Black Pin



Black Pin



Red 1x6
with holes



Step 5

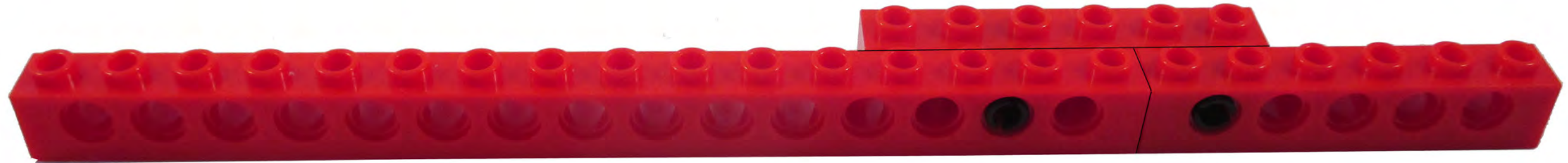
You will Need:



Red 1x6
with holes



Red 1x16
with Holes



Step 6

You will Need:



Red 1x2
with Hole



Red 1x2
with Hole



Red 1x2
with Hole



Red 1x16
with Holes



Step 7

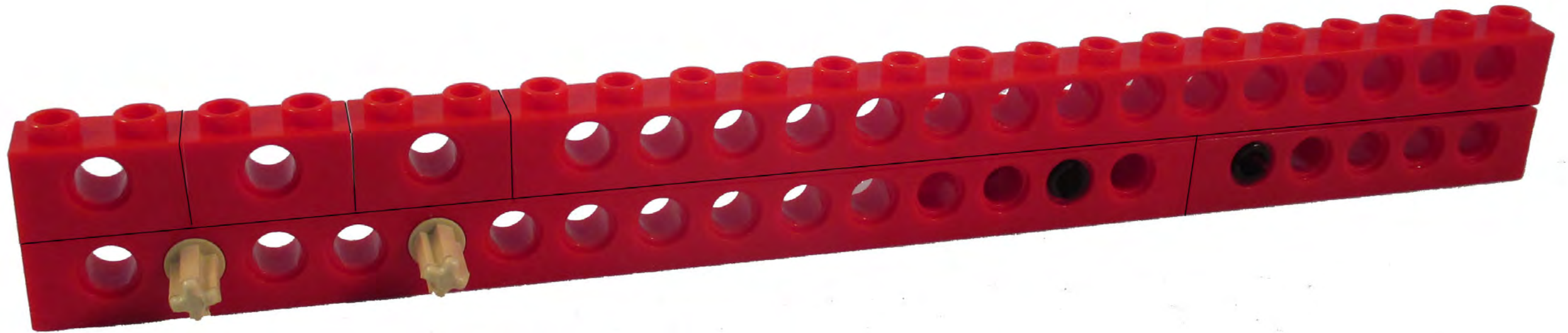
You will Need:



Beige Pin



Beige Pin



Count the holes!

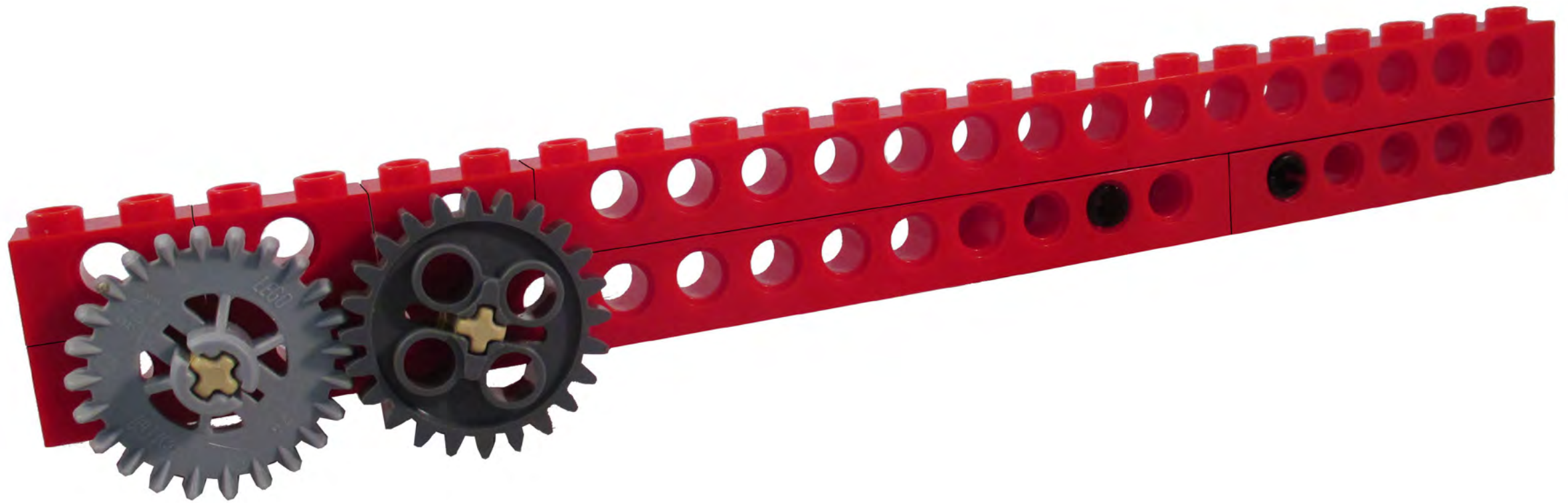
Step 8

You will Need:



Crown Gear

Basic Gear



Step 9

You will Need:



Crown Gear

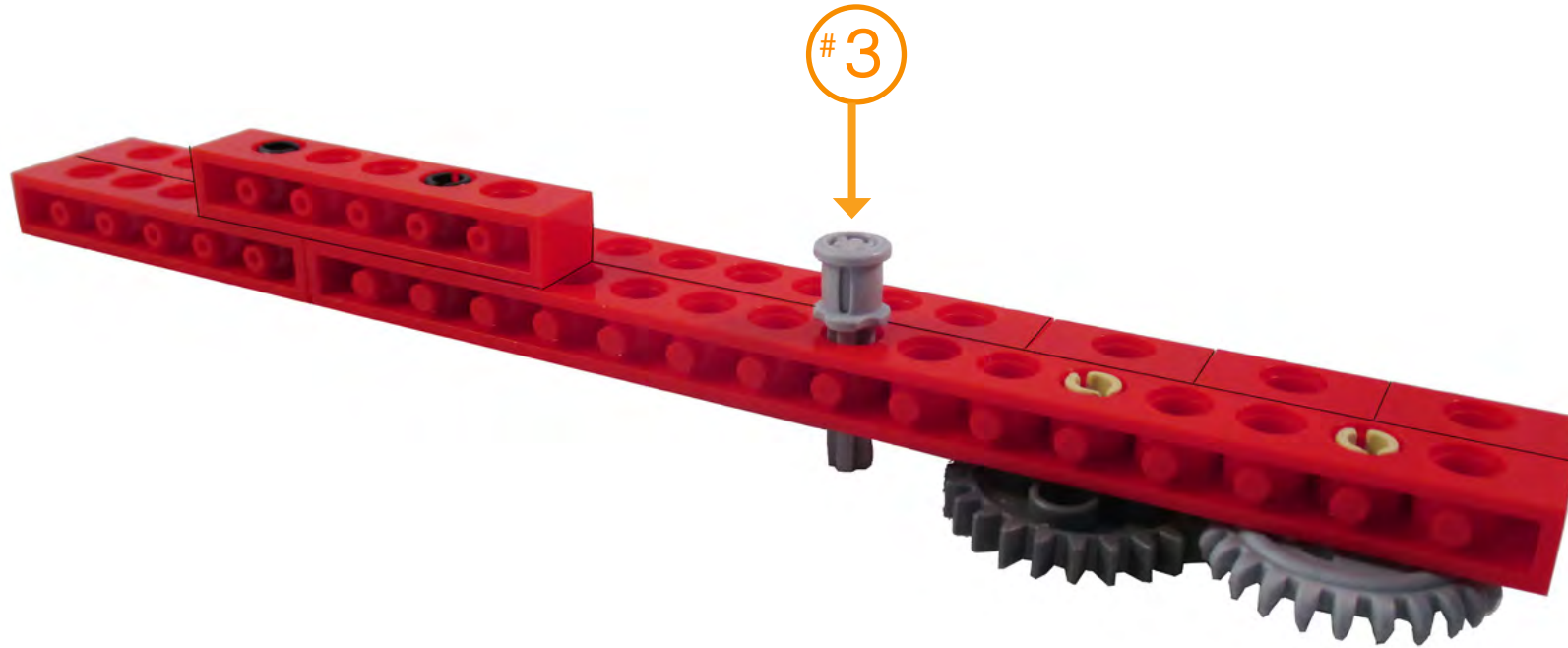


#3 Axle



Bushing

a.



b.



Step 10

You will Need:



Beige Pin



Basic Gear



Step 11

You will Need:



Black Pin



Black Pin



White 2x6
Plate



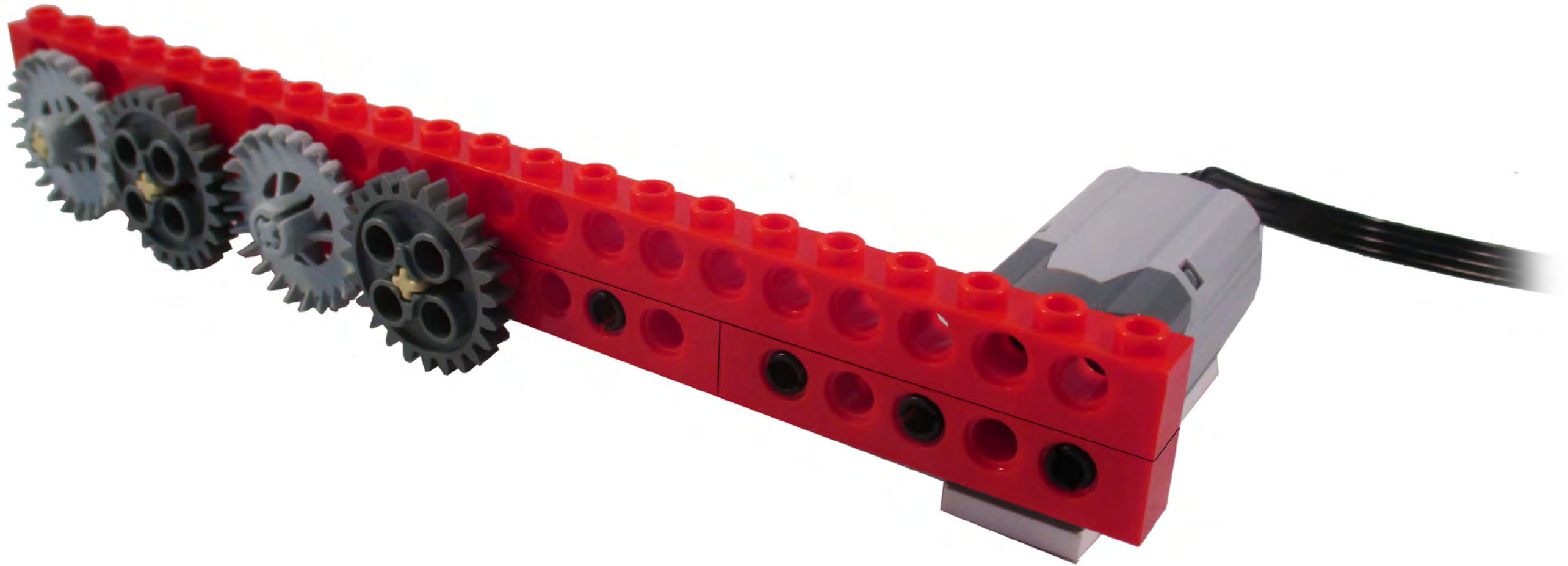
Motor



Step 12



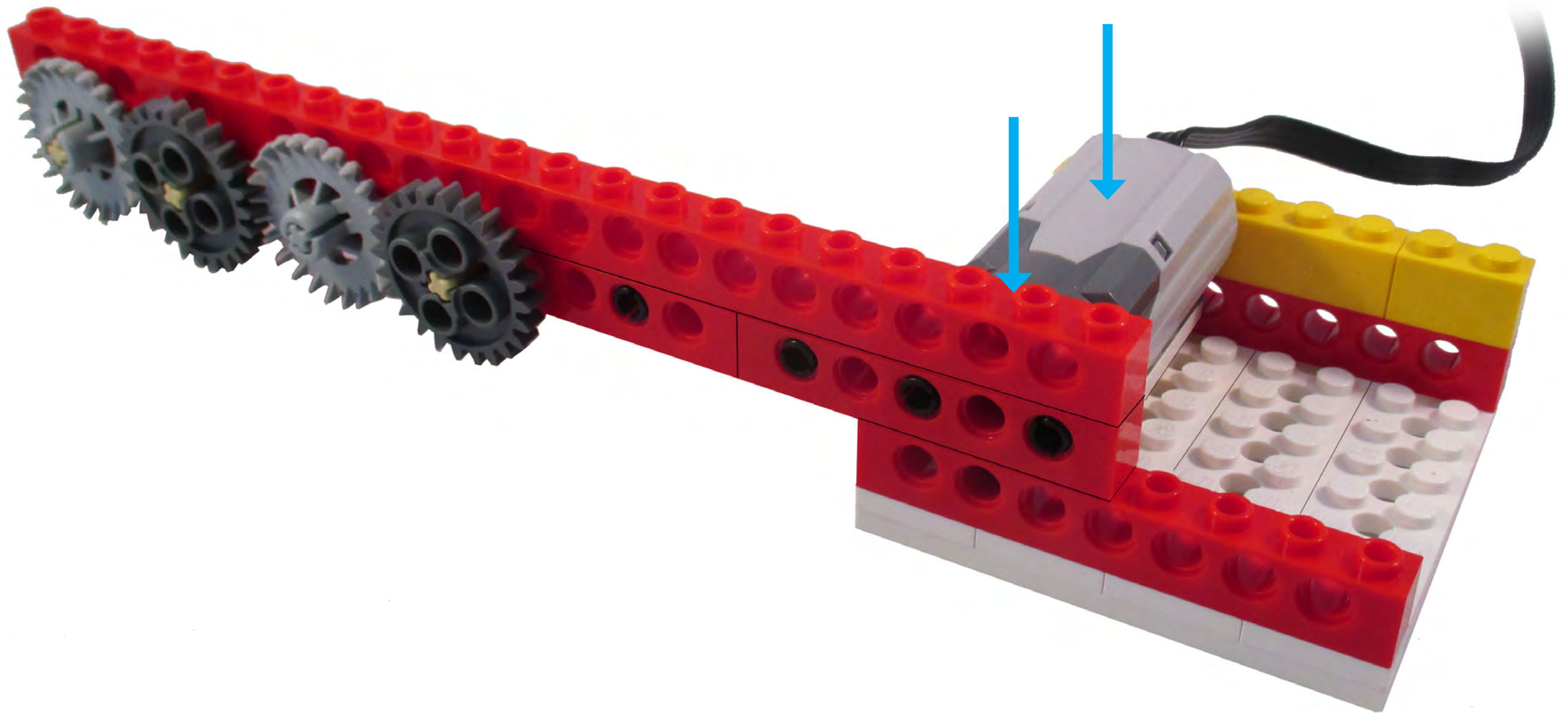
Attach the last step!



Step 13

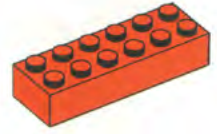


Attach the last step!

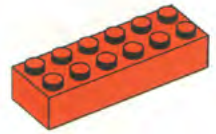


Step 14

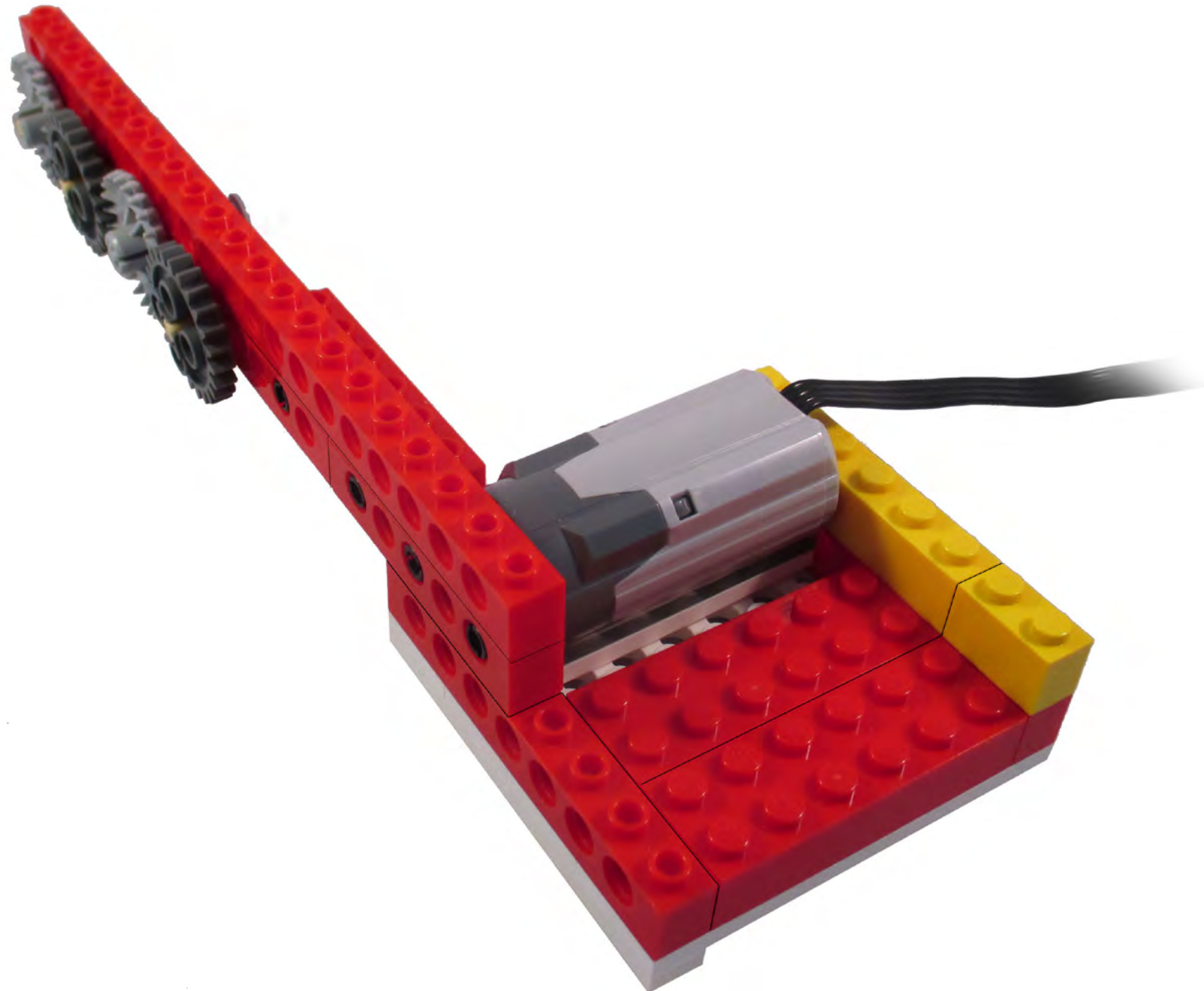
You will Need:



Red 2x6
Brick

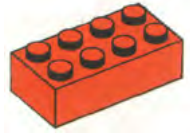


Red 2x6
Brick



Step 15

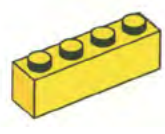
You will Need:



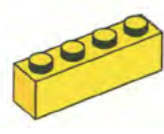
Red 2x4
Brick



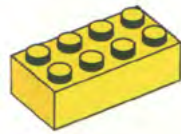
Red 2x4
Brick



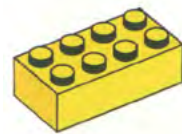
Yellow 1x4
Brick



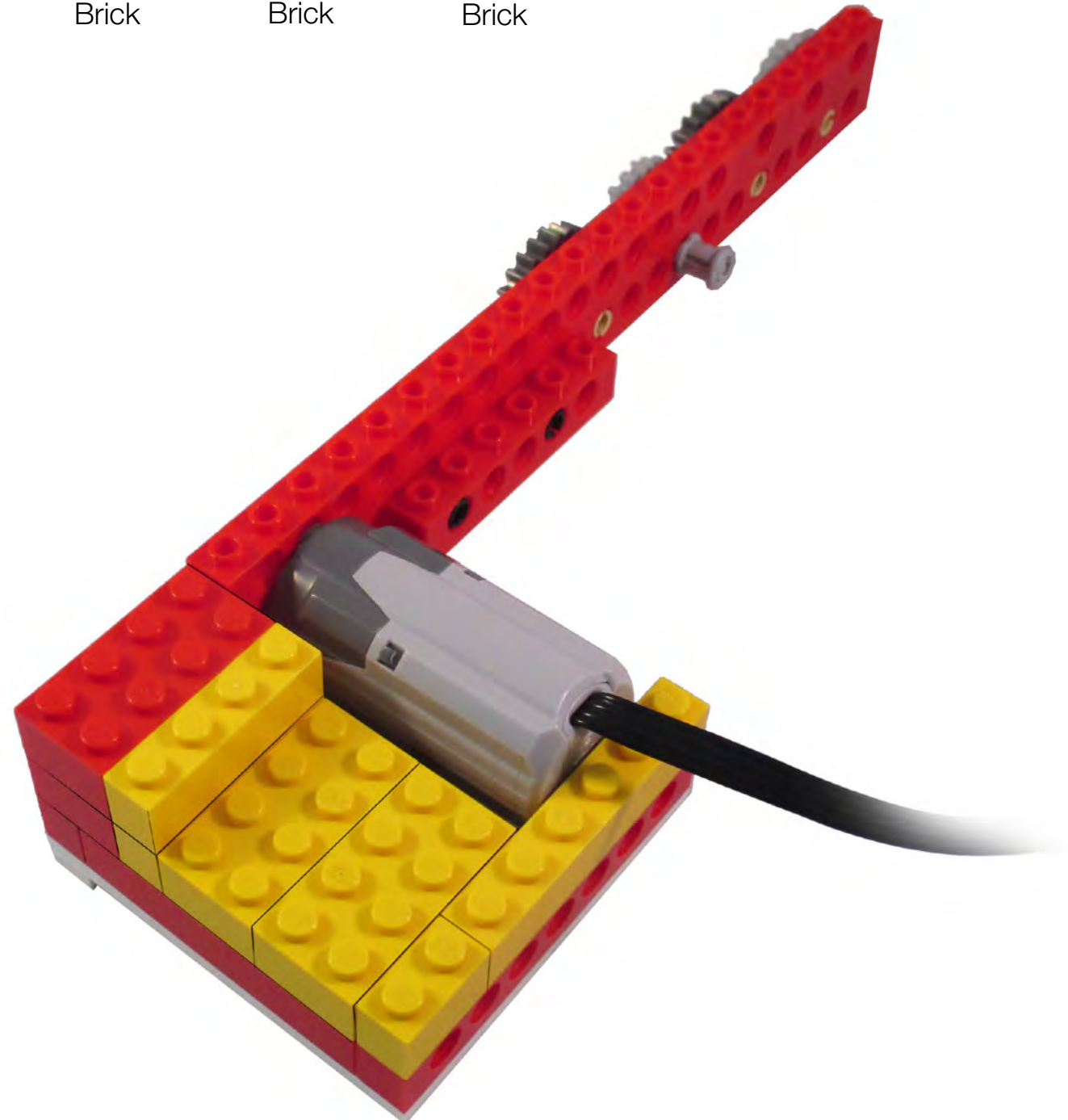
Yellow 1x4
Brick



Yellow 2x4
Brick



Yellow 2x4
Brick



Step 16

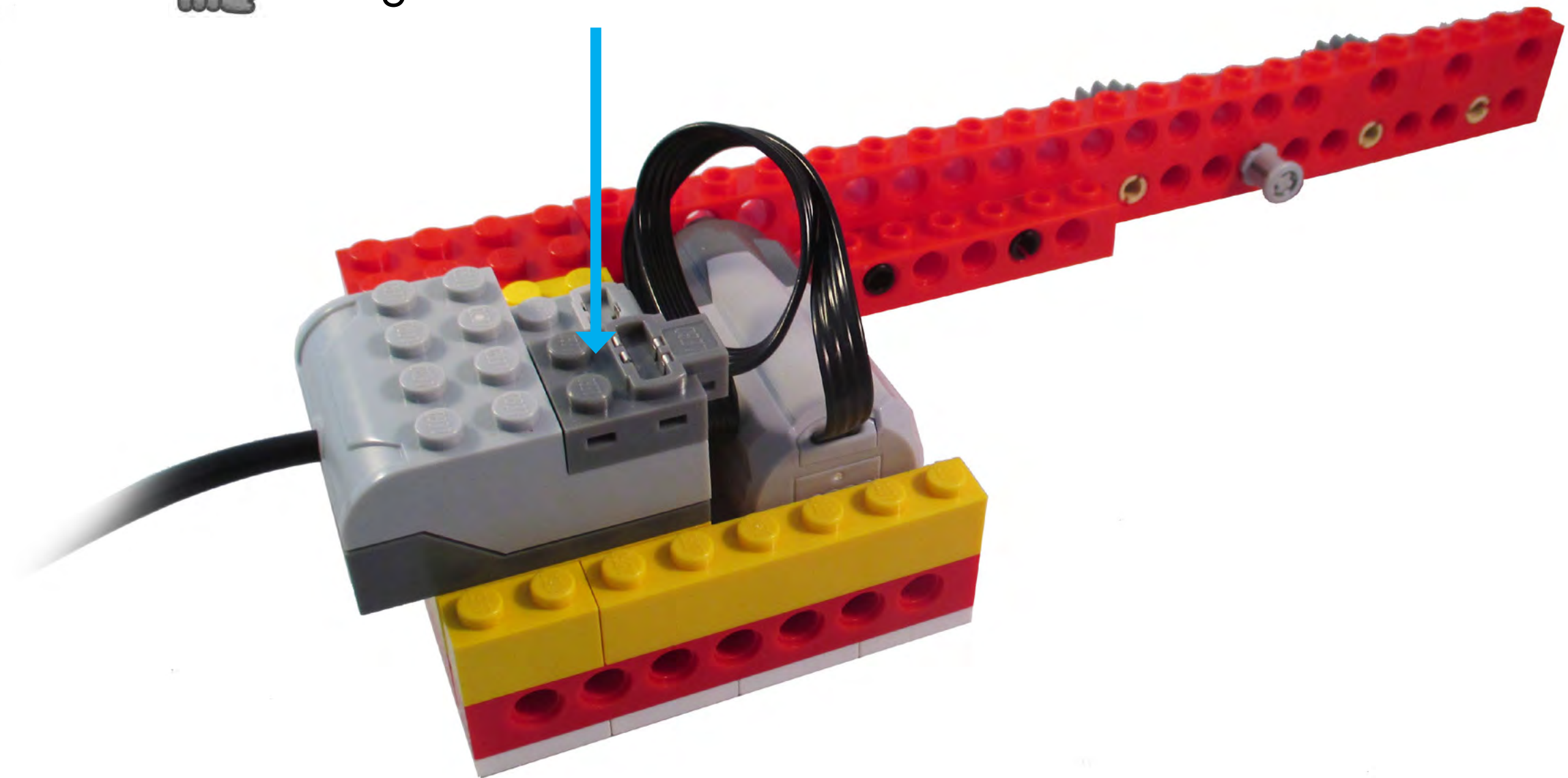
You will Need:



Hub



Plug the Motor into the Hub!

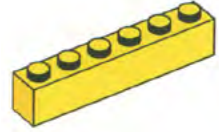


Step 17

You will Need:



Yellow 1x2
Brick



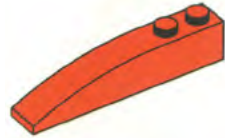
Yellow 1x6
Brick



Red 1x2
with Holes



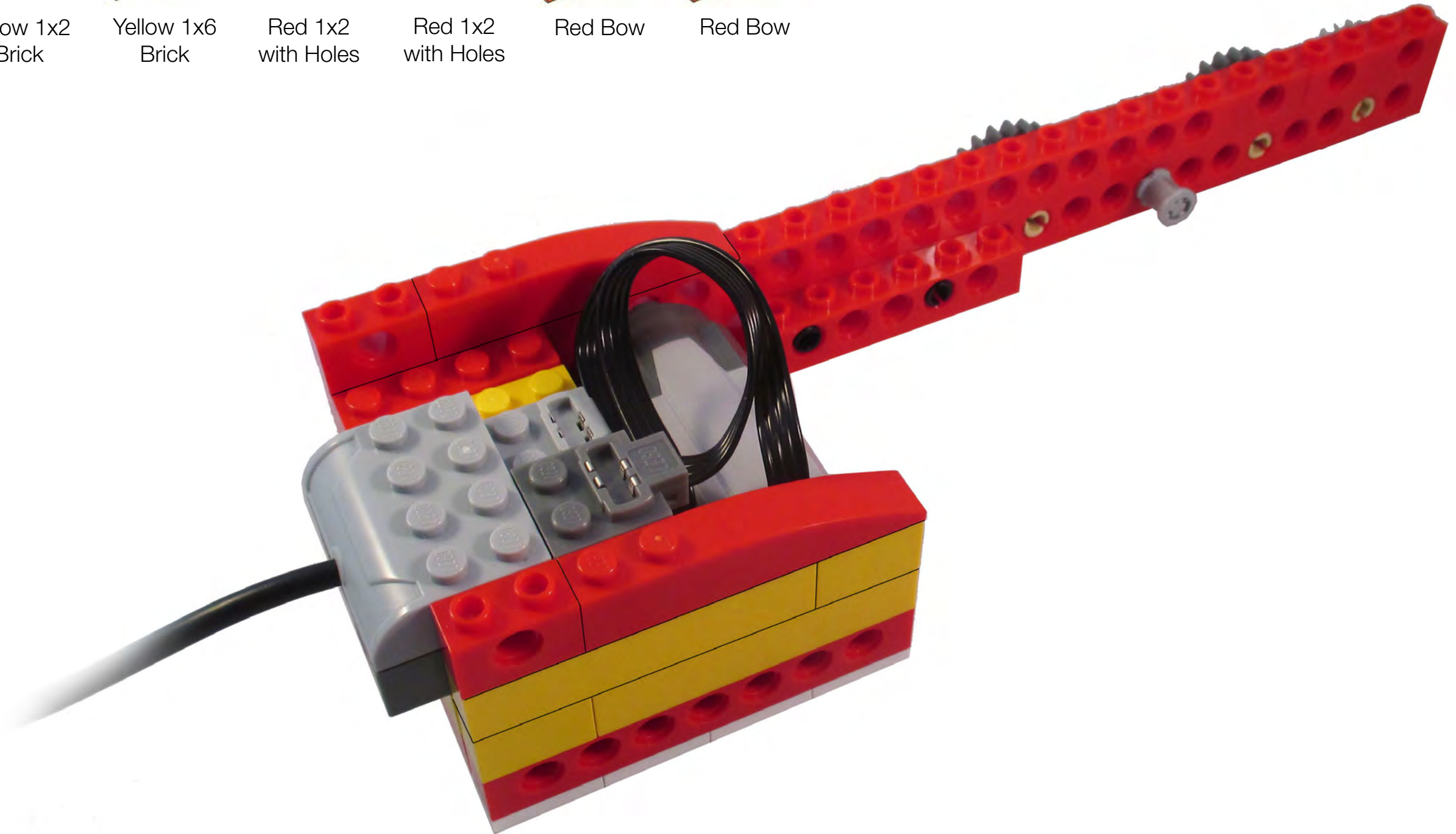
Red 1x2
with Holes



Red Bow



Red Bow



Step 18

You will Need:



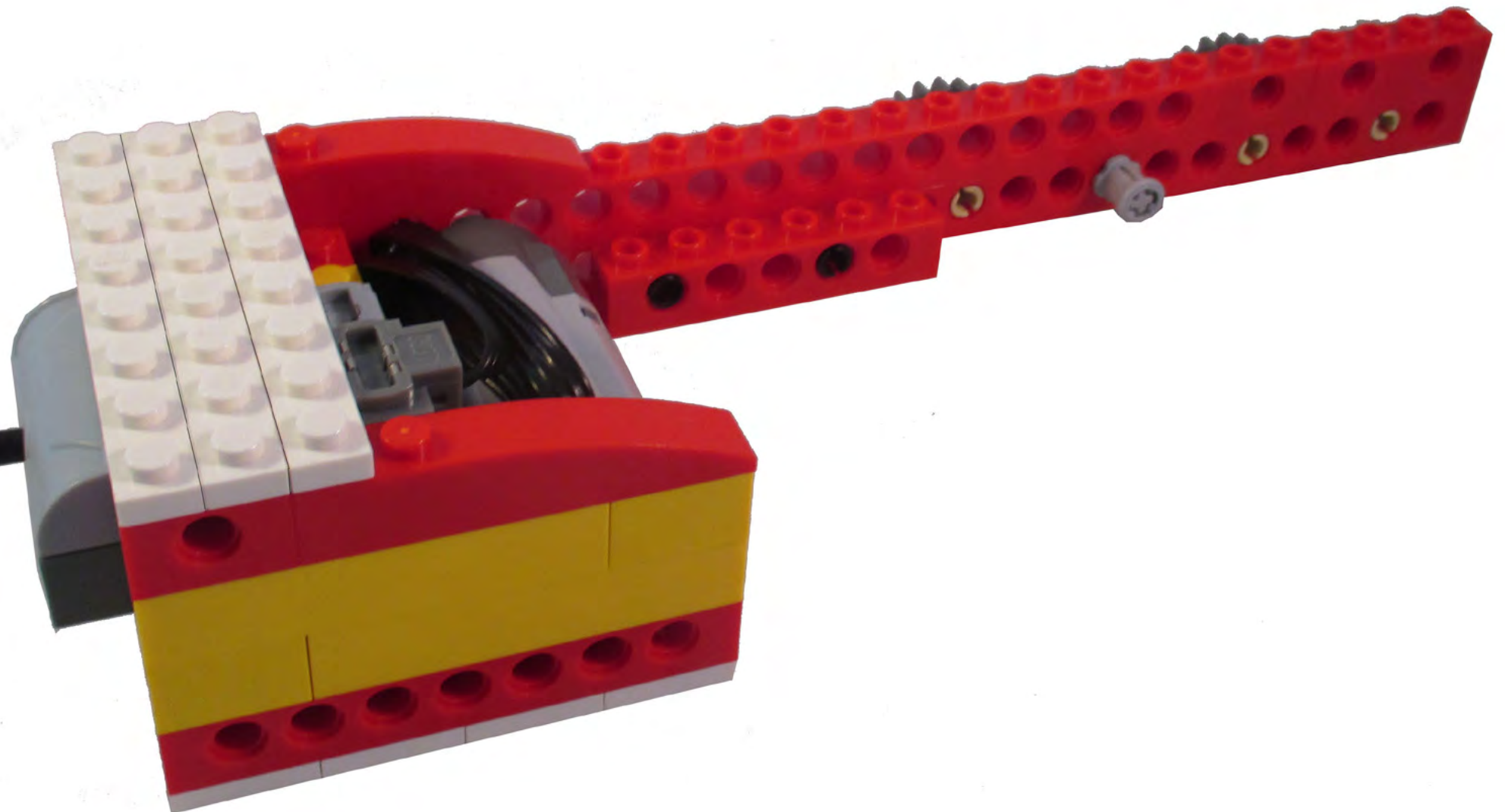
White 1x8
Plate



White 1x8
Plate



White 1x8
Plate

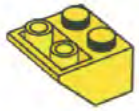


Step 19

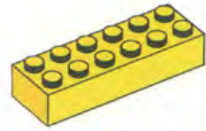
You will Need:



Yellow 2x2
Inverted
Wedge



Yellow 2x2
Inverted
Wedge



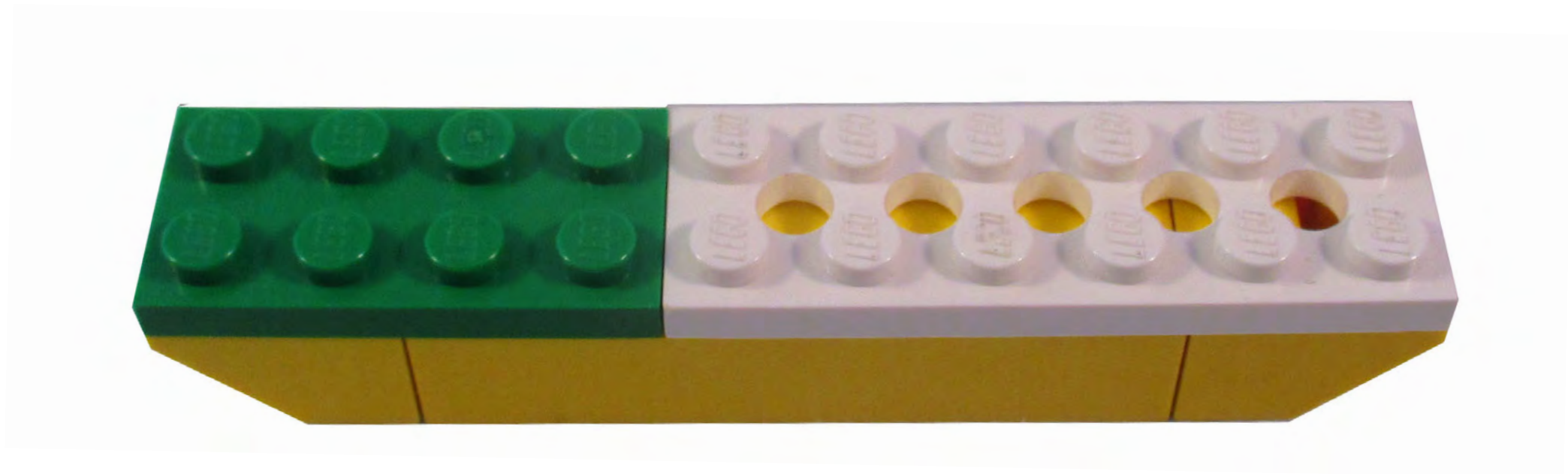
Yellow 2x6
Brick



Green 2x4
Plate



White 2x6
Plate



Step 20

You will Need:



White 2x6
Plate



White 2x6
Plate



Yellow 2x2
Brick



Yellow 2x2
Brick



Grey 1x2
with
Cross Hole



Grey 1x2
with
Cross Hole



Grey 1x2
with
Cross Hole



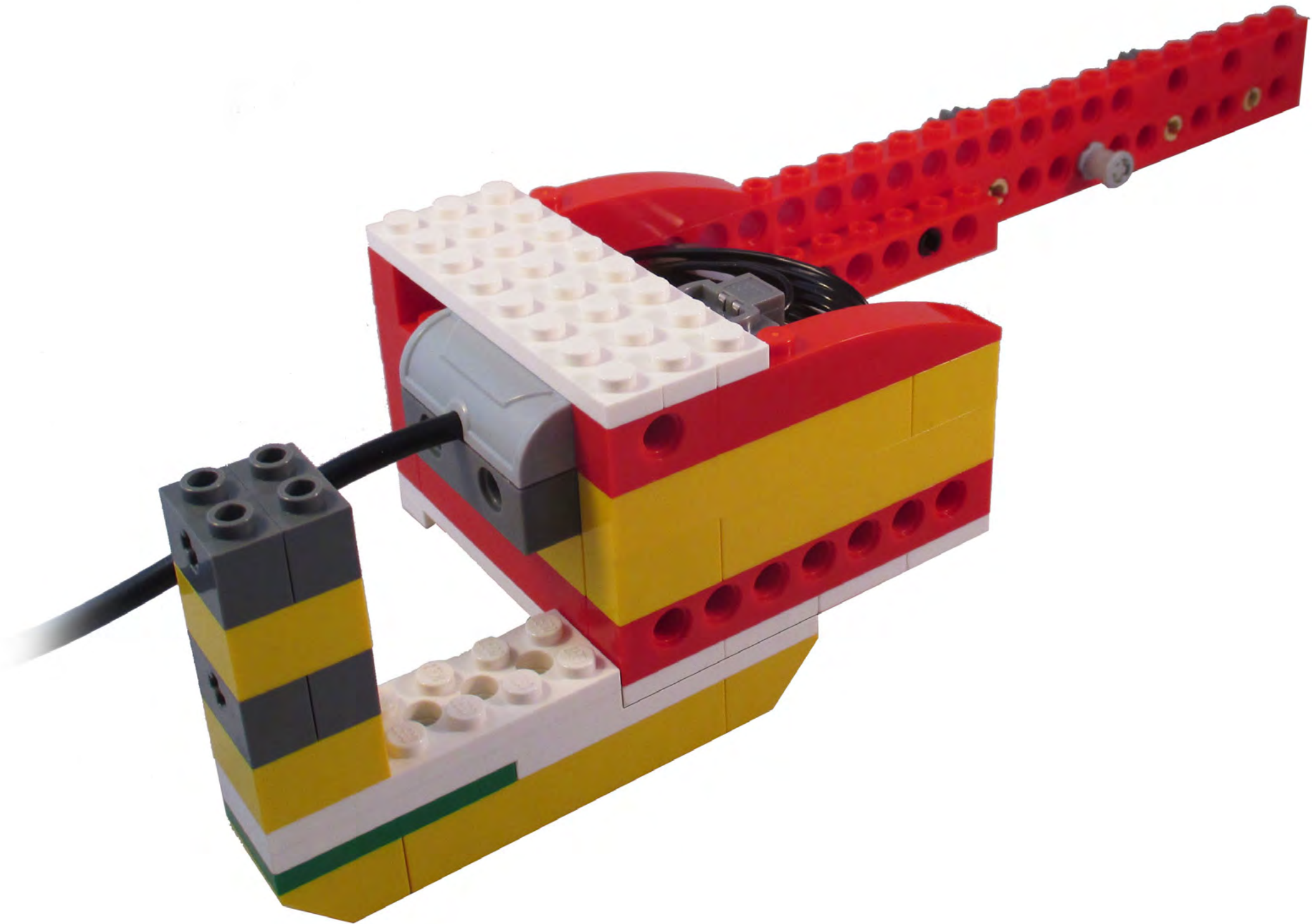
Grey 1x2
with
Cross Hole



Step 21

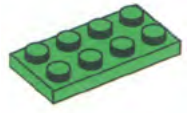


Attach the last step!

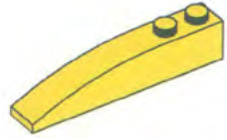


Step 22

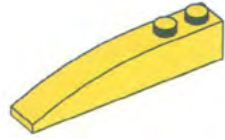
You will Need:



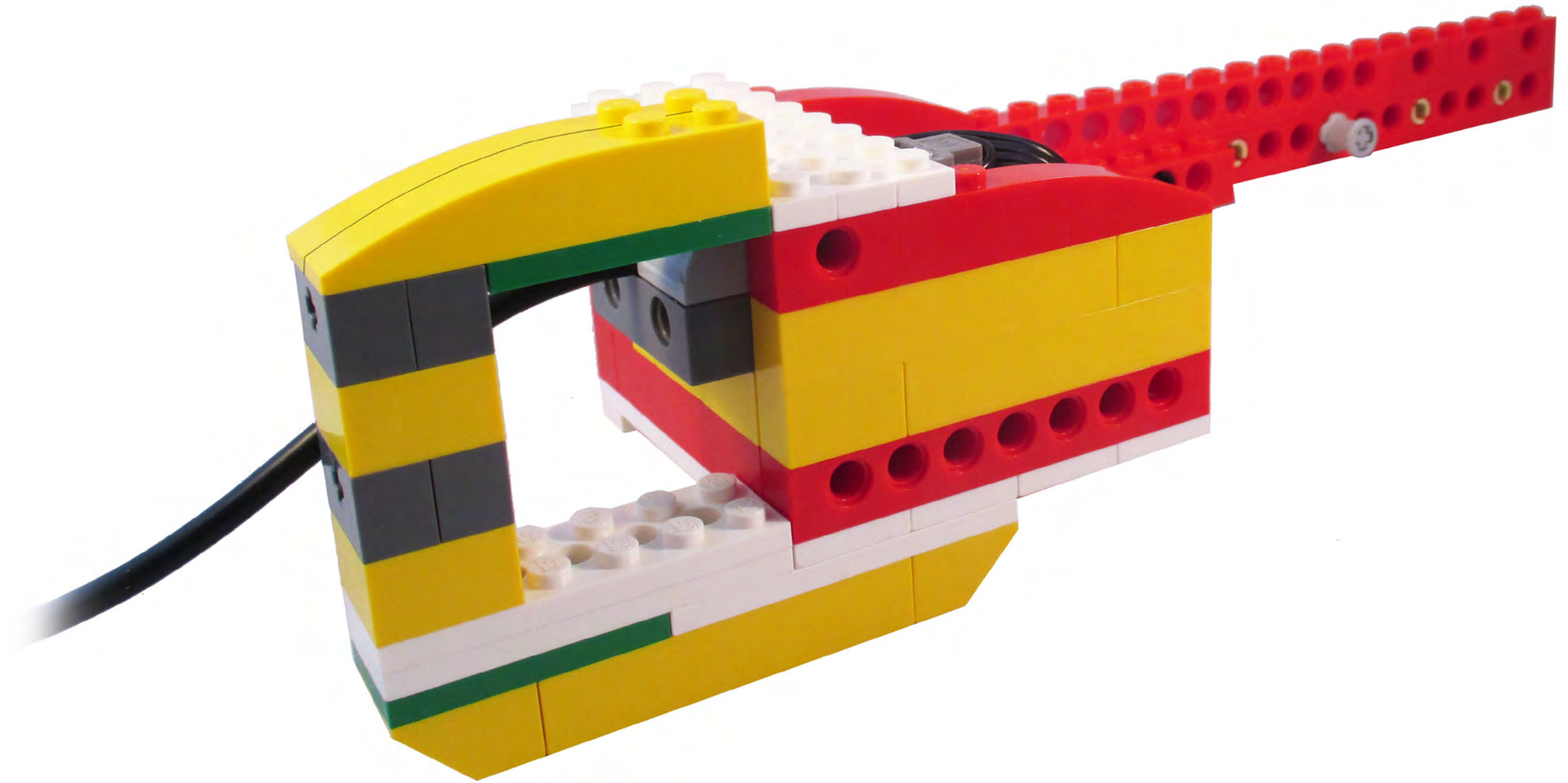
Green 2x4
Plate



Yellow bow

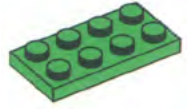


Yellow bow



Step 23

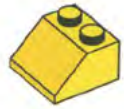
You will Need:



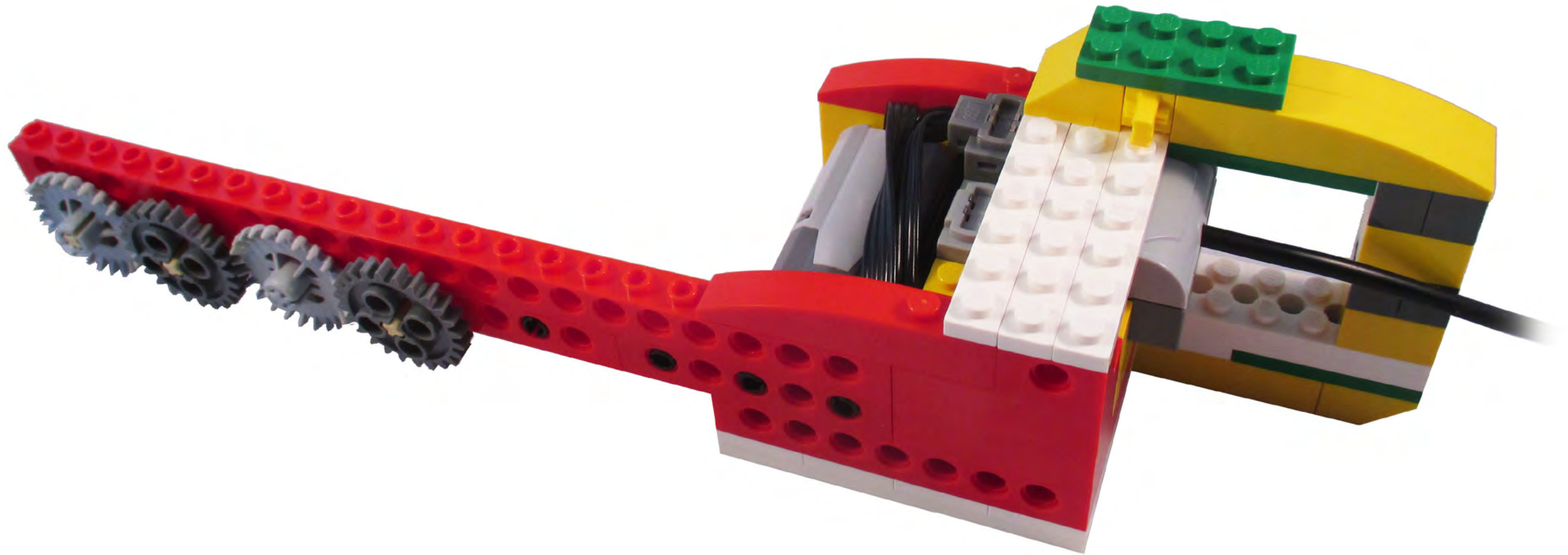
Green 2x4
Plate



Yellow 1x2
with Stub



Yellow 2x2
Wedge



Step 24

You will Need:

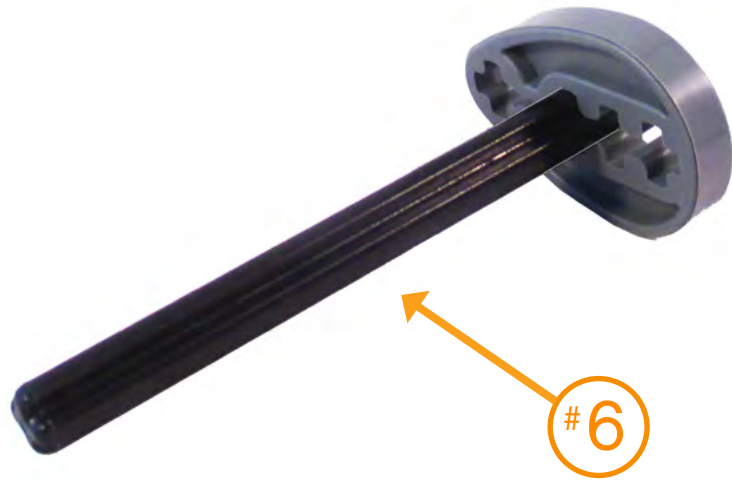


Cam

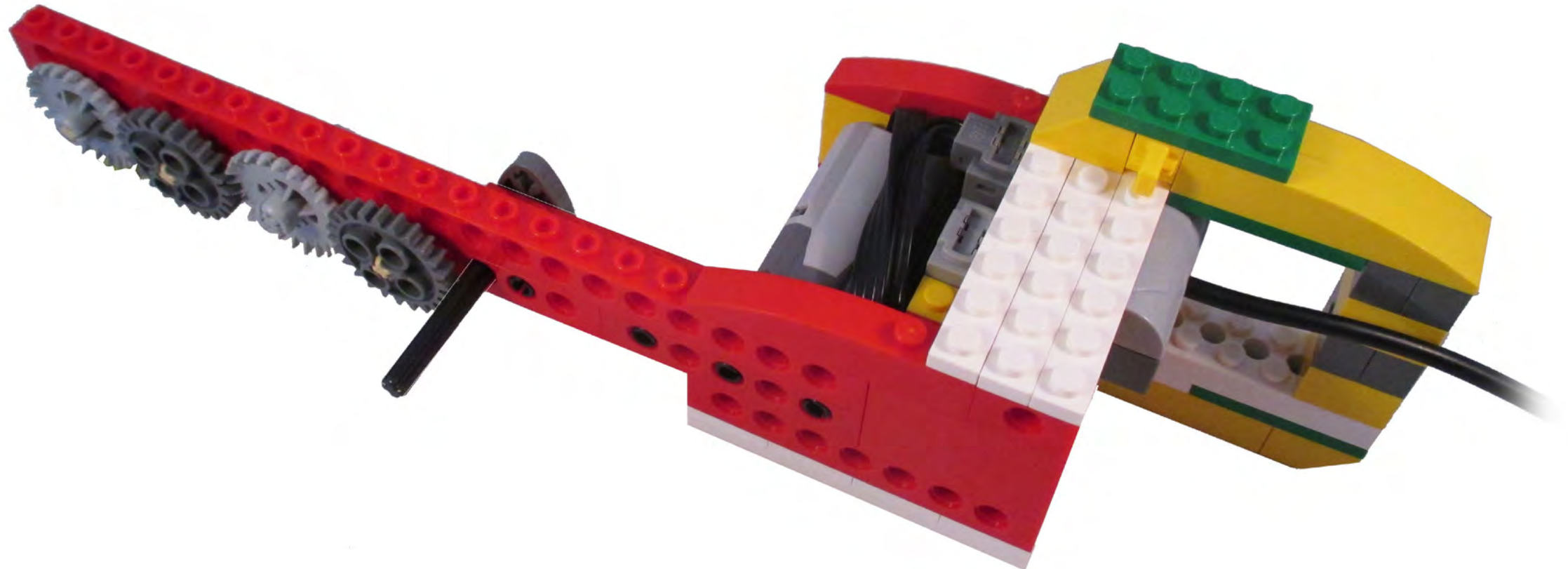


#6 Axle

a.



b.



Step 25

You will Need:



Green Wheel



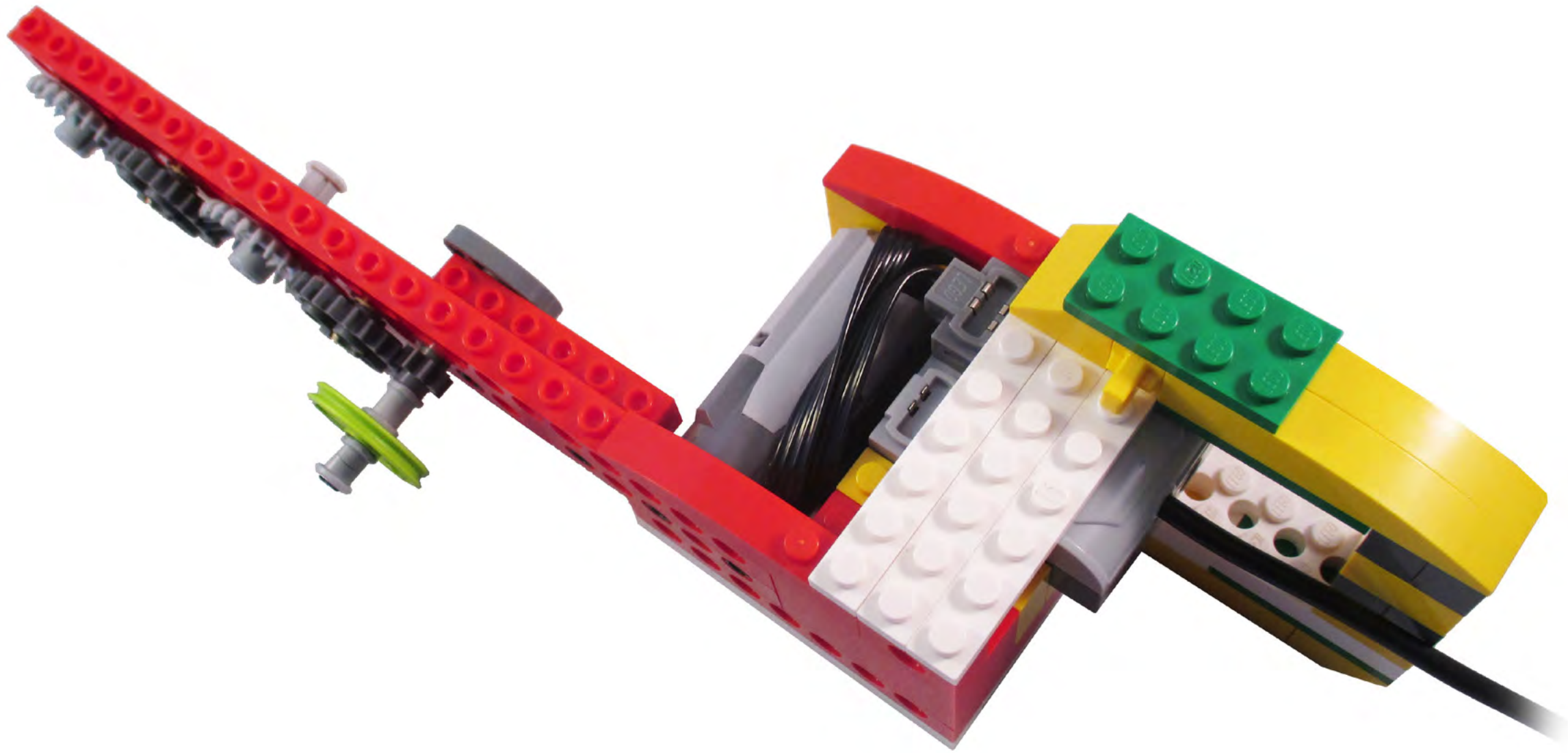
Bushing



Bushing



Pinion gear



Step 26

You will Need:



Green Wheel



Bushing



Bushing

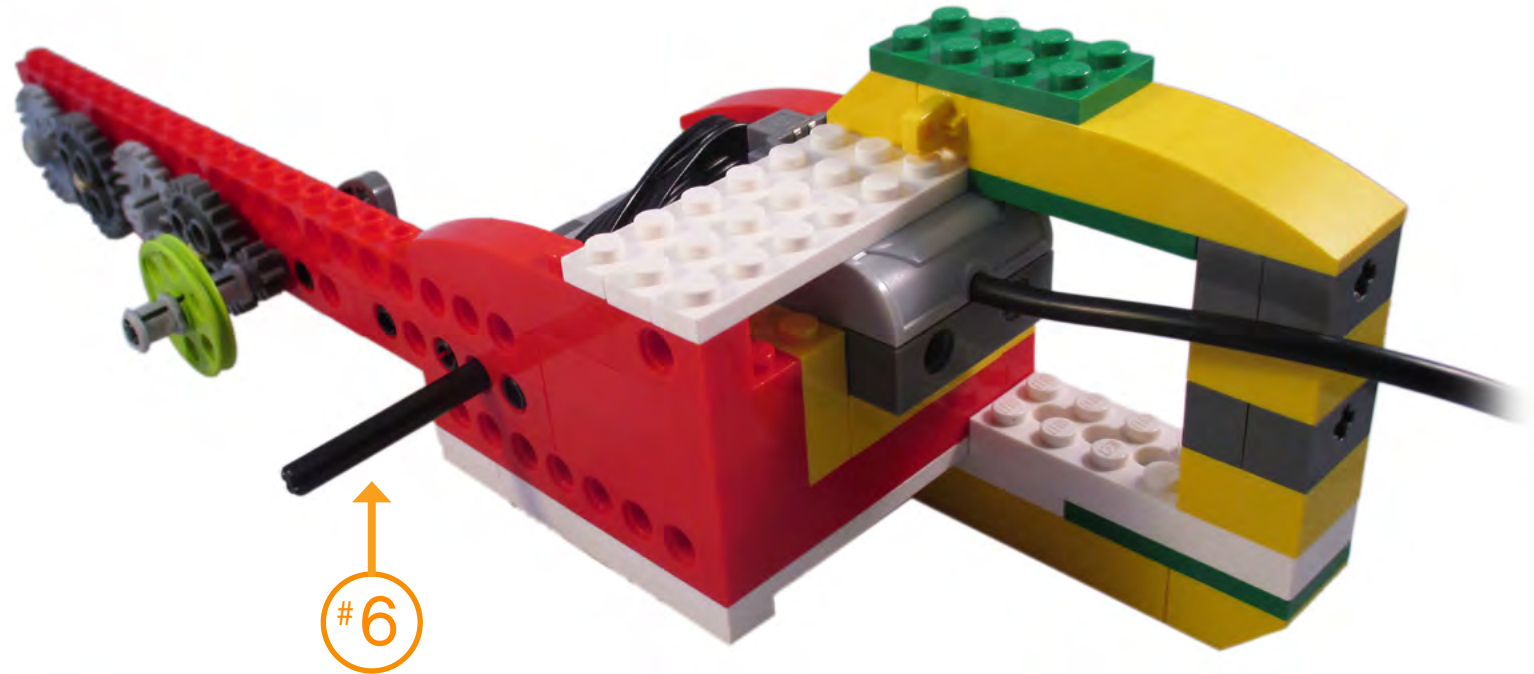


Bushing



#6 Axle

a. Push the Axle into the Motor!



b.

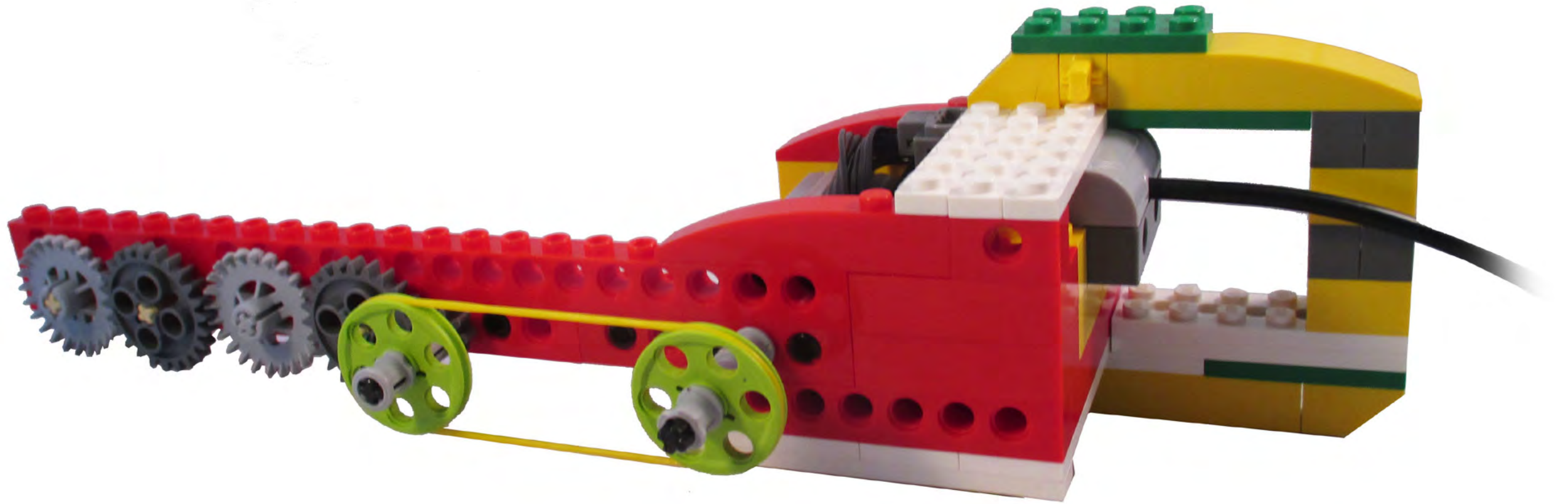


Step 27

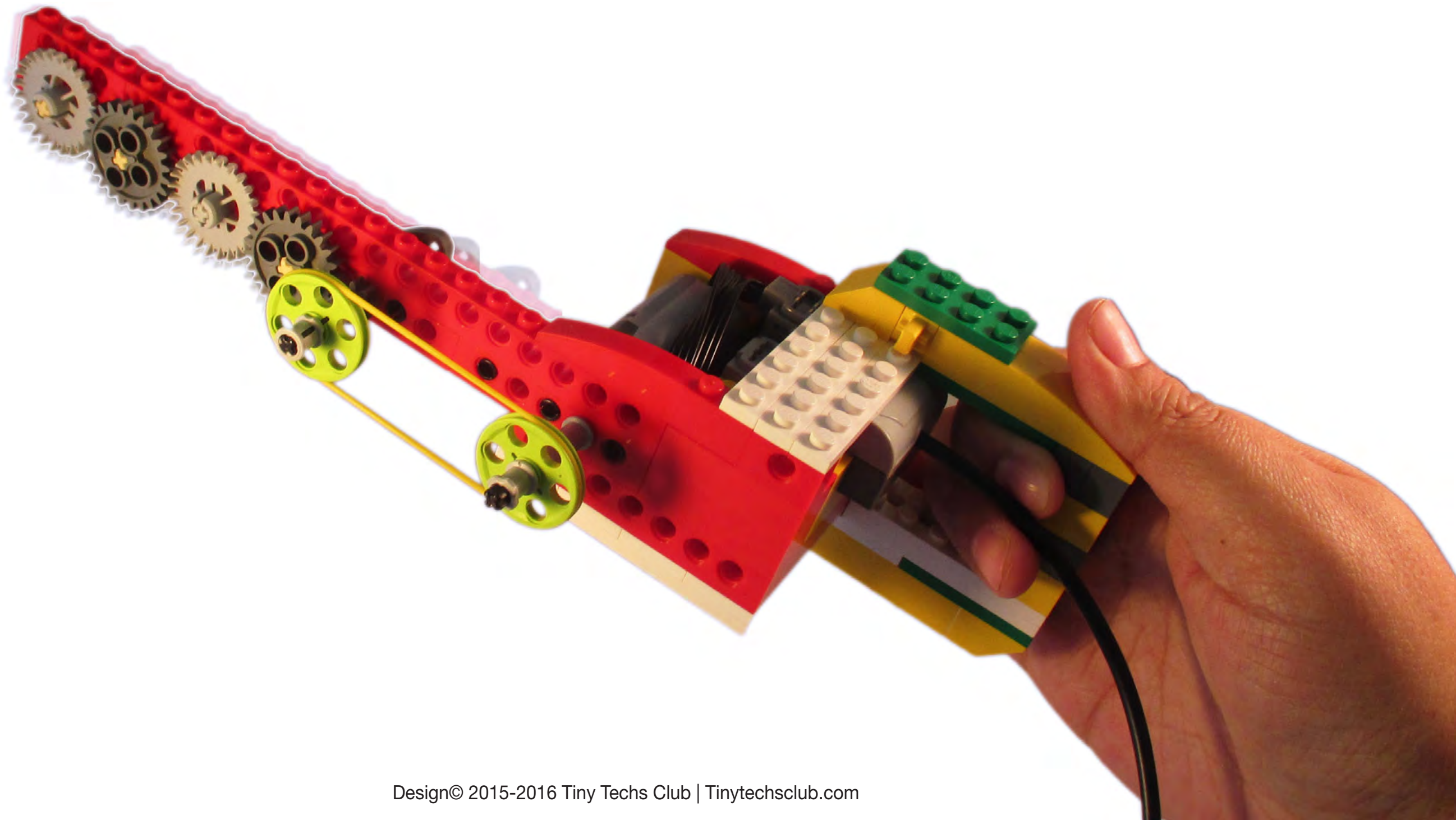
You will Need:



Rubber Band



Your Chainsaw is Built!... Time to Program it!



Programming

This program turns the **Motor** and moves the **Pulley System**.

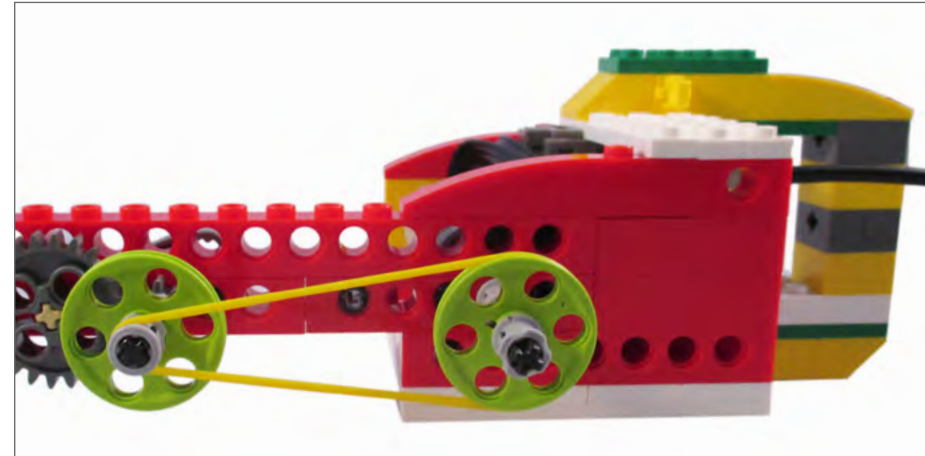


1. Minimize these instructions and open the LEGO® WeDe® software.
2. Program your robot with the program above.
3. IF you finish, open the instructions and continue to the extension activities!

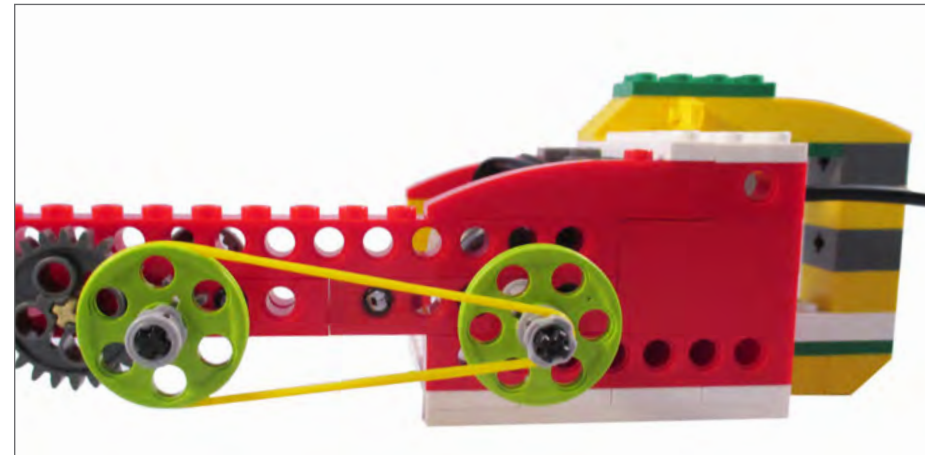
Extension 1

Manipulate the **Pulley System** to change speed and direction!

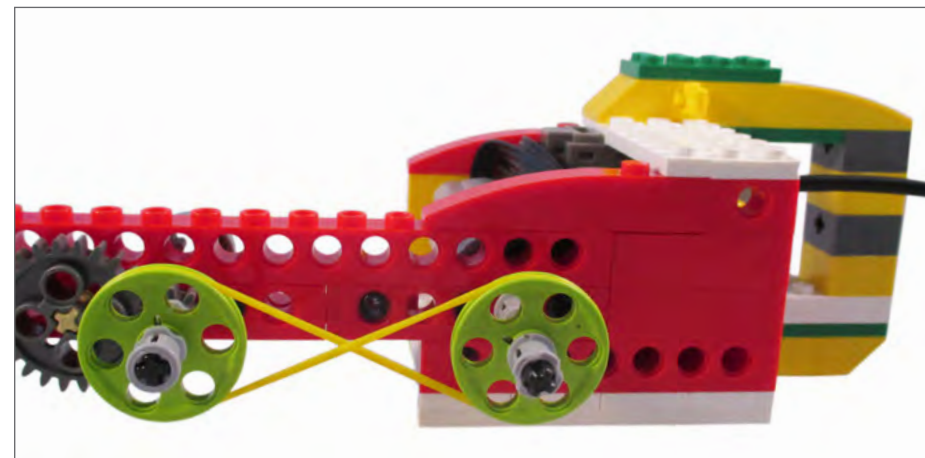
Are the Gears moving
Faster or slower?



Are the Gears moving
Faster or slower?



How are the gears moving
now? Look closely!



Extension 2

This program uses the Display blocks to display images on your screen.

Add a Display!

