

TINY TECHS CLUB

Creativity | Science | Technology

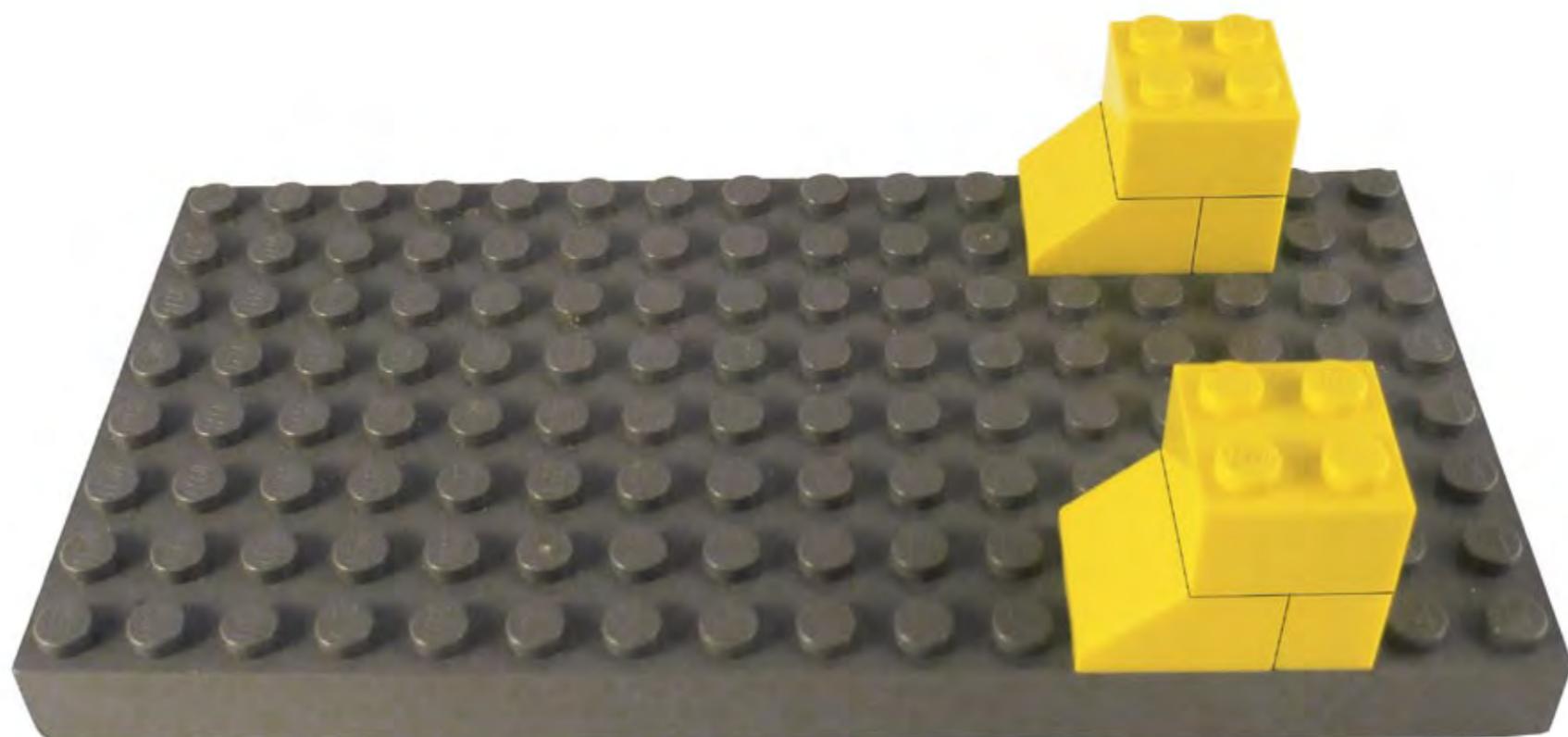


Hippogriff

READY TO FLY!! Build this fantasy creature and program it to raise and lower its wings. Find out how the gears make the wings move.

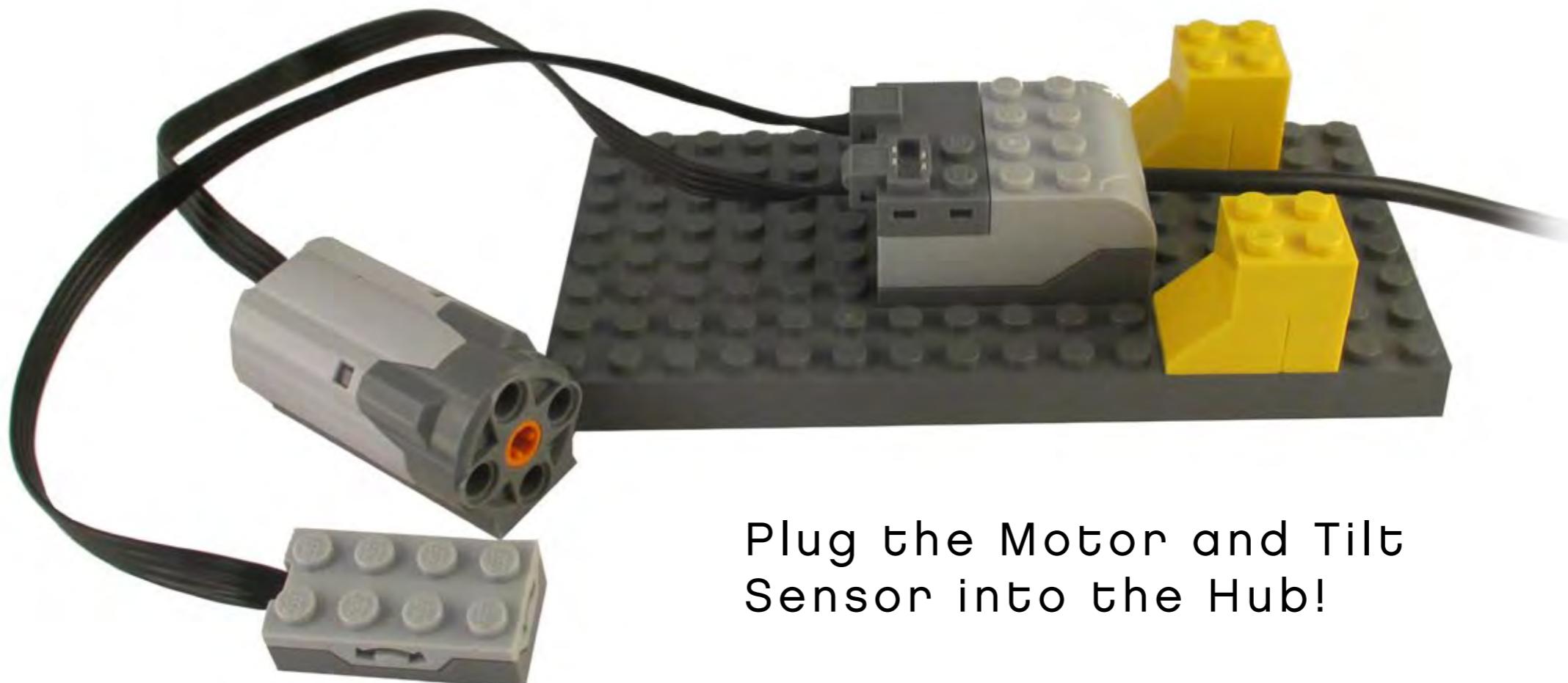


Step 1



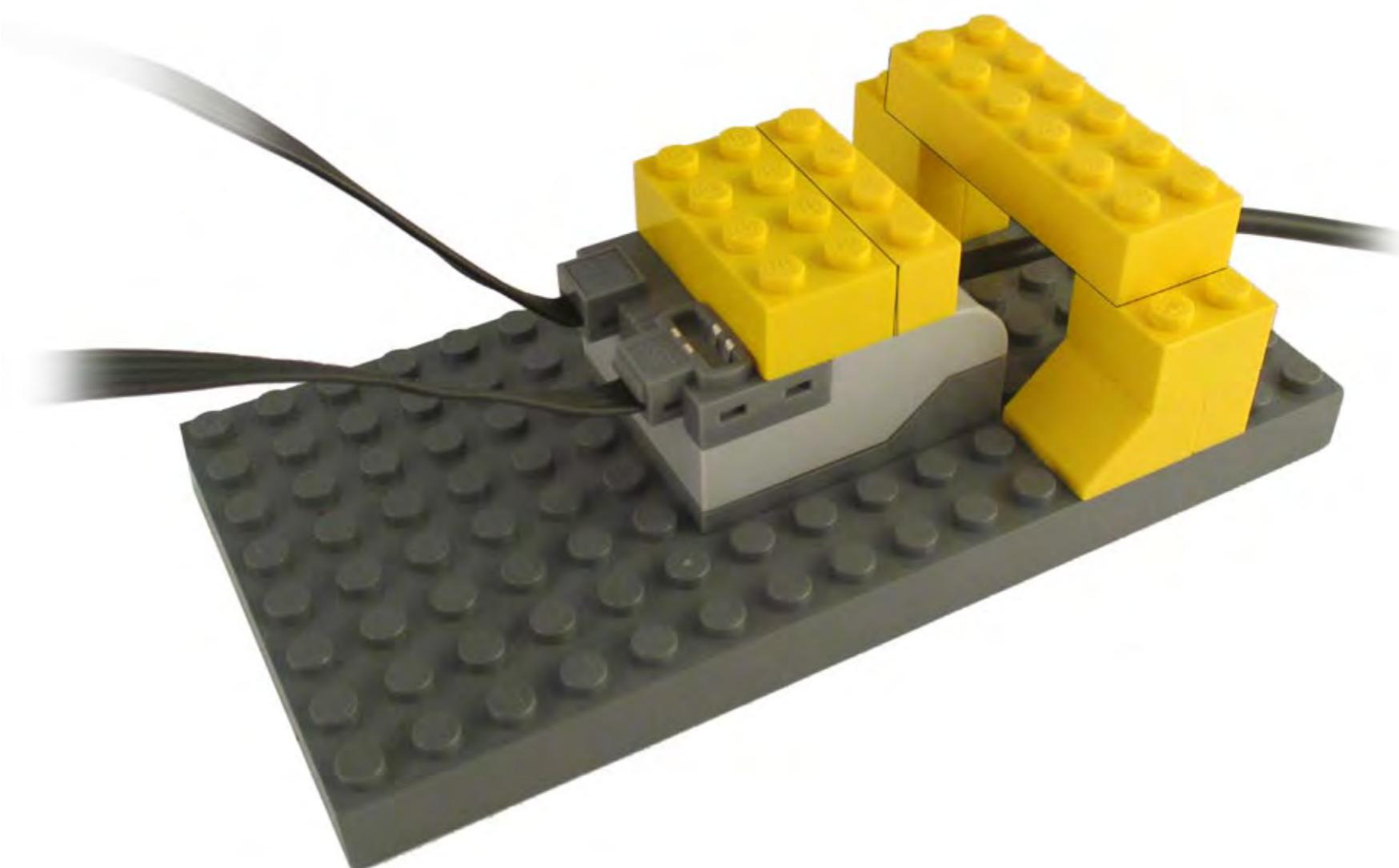
Step 2

You will Need:

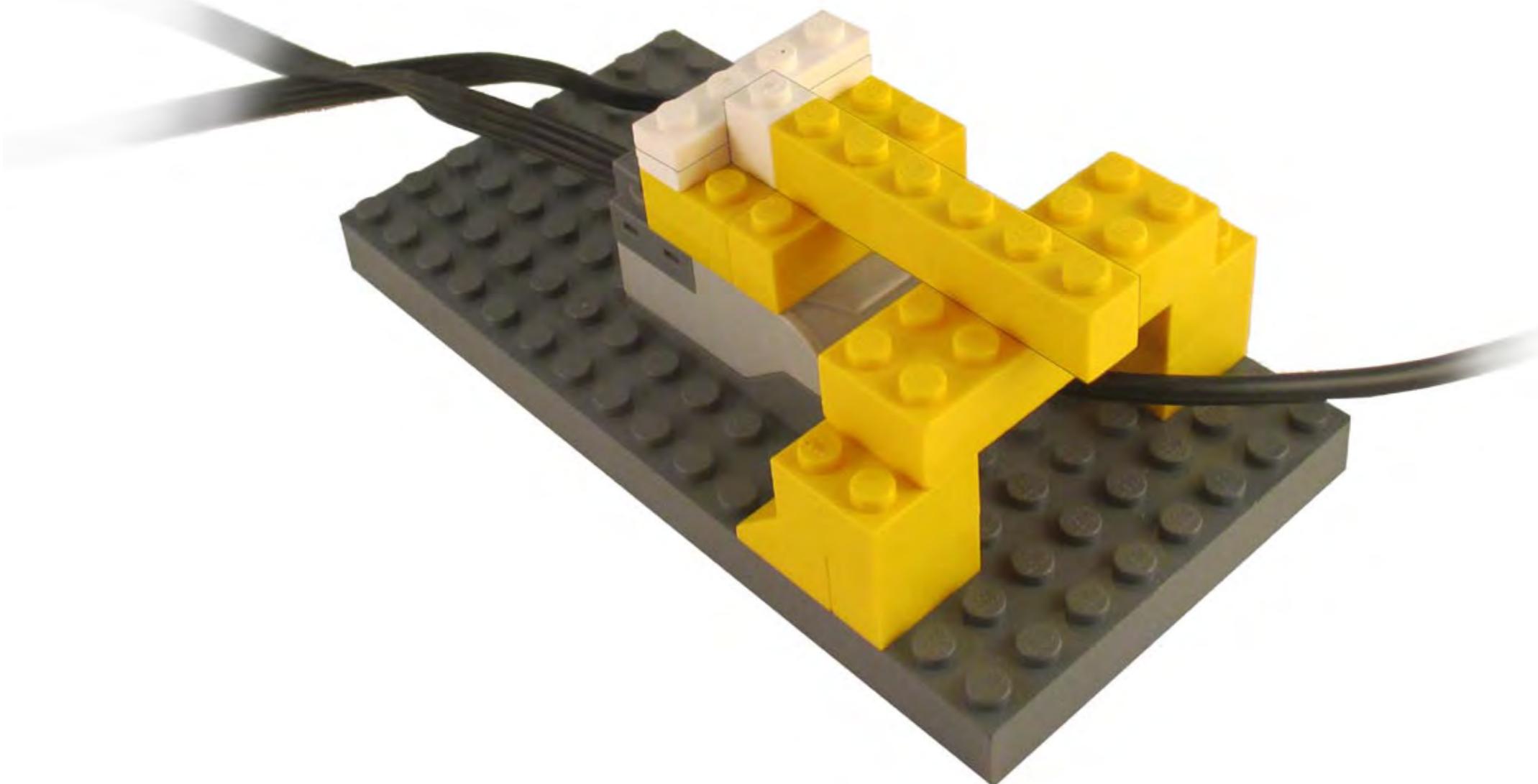


Plug the Motor and Tilt
Sensor into the Hub!

Step 3



Step 4



Step 5

You will Need:



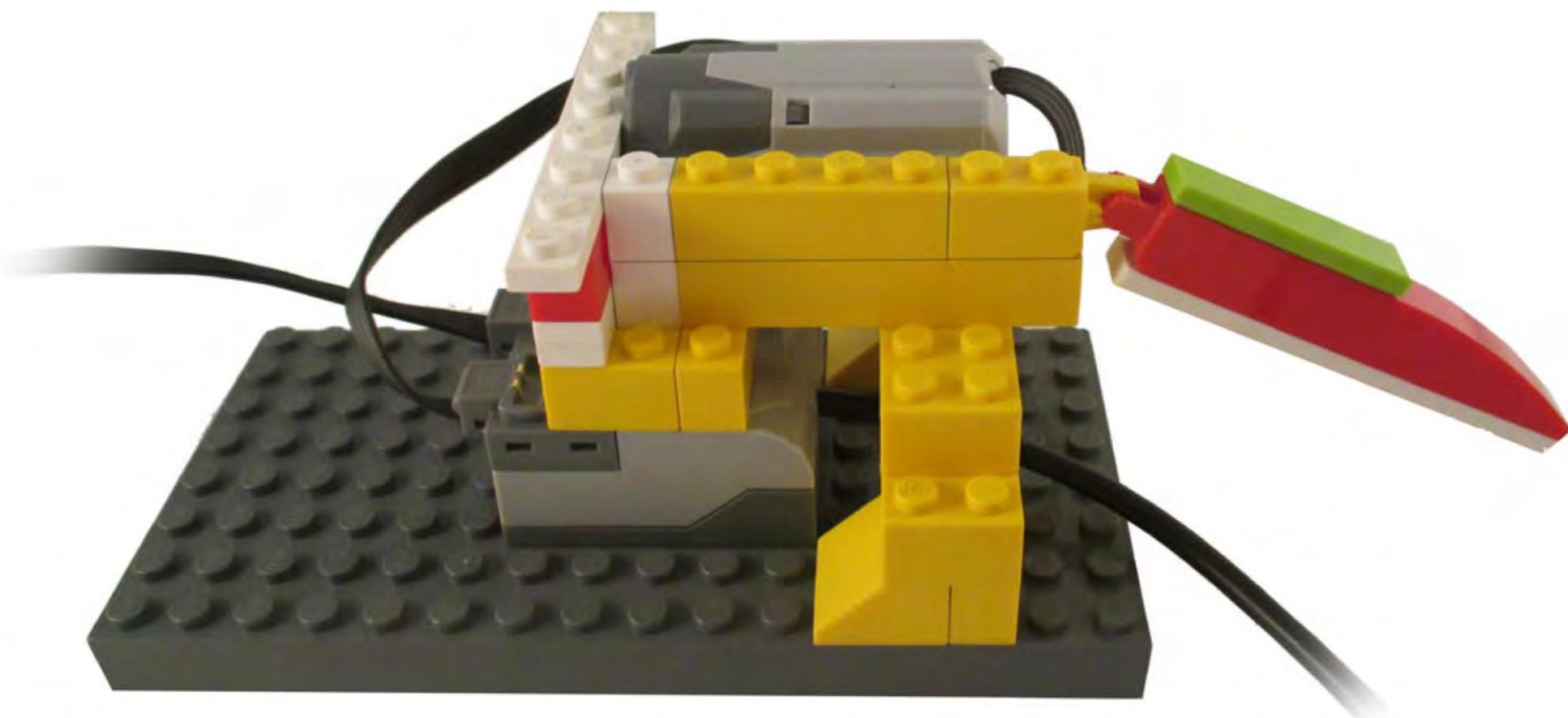
Black Pin

Black Pin

Red 1x6 with
Holes



Step 6

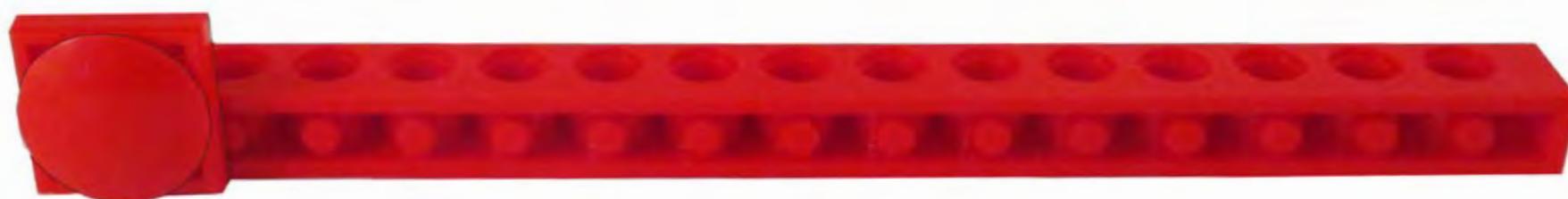


Step 7

Front

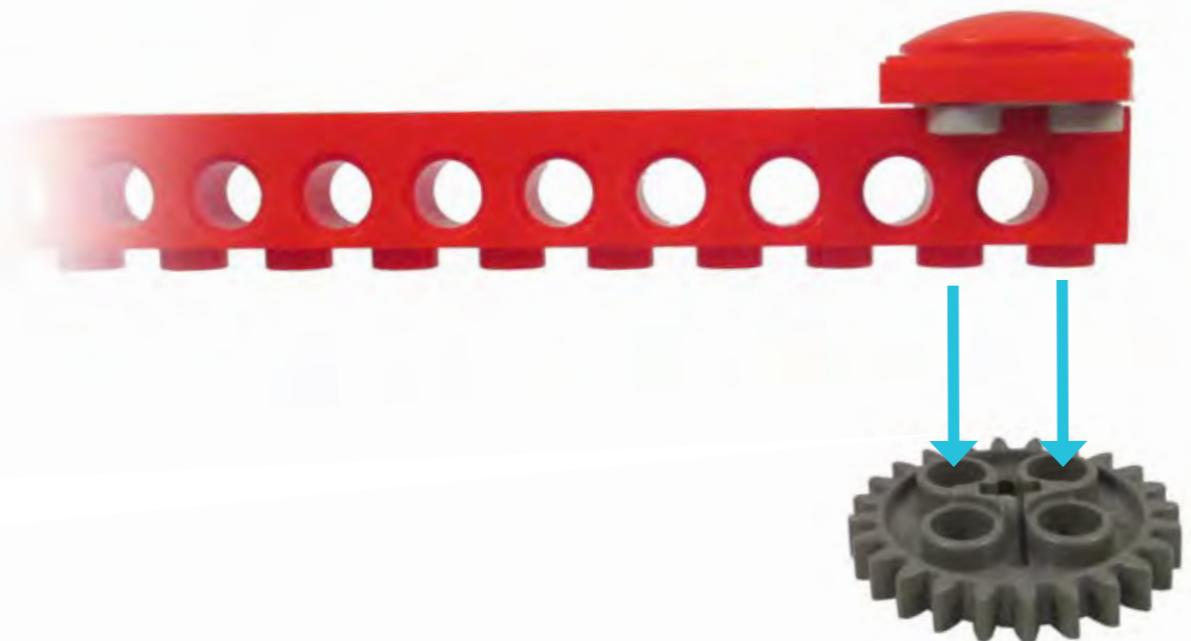


Back

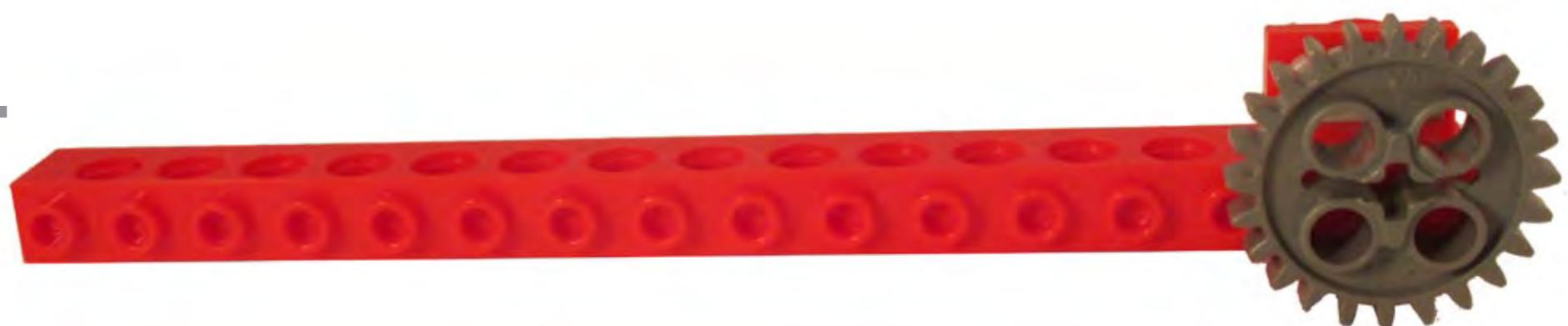


Step 8

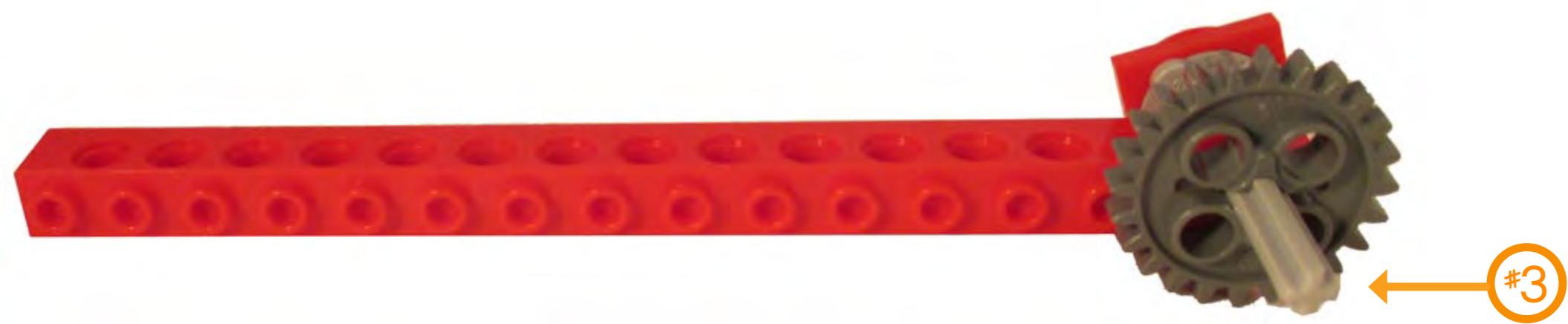
a.



b.

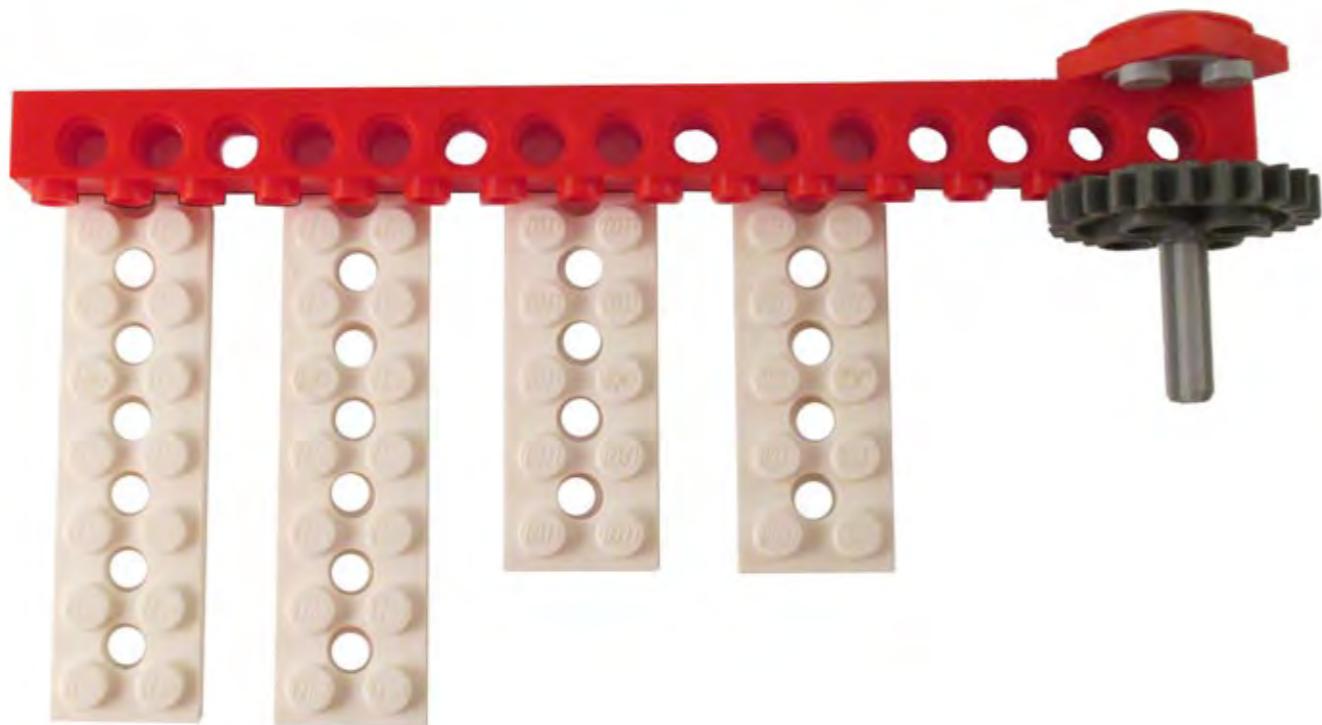


Step 9

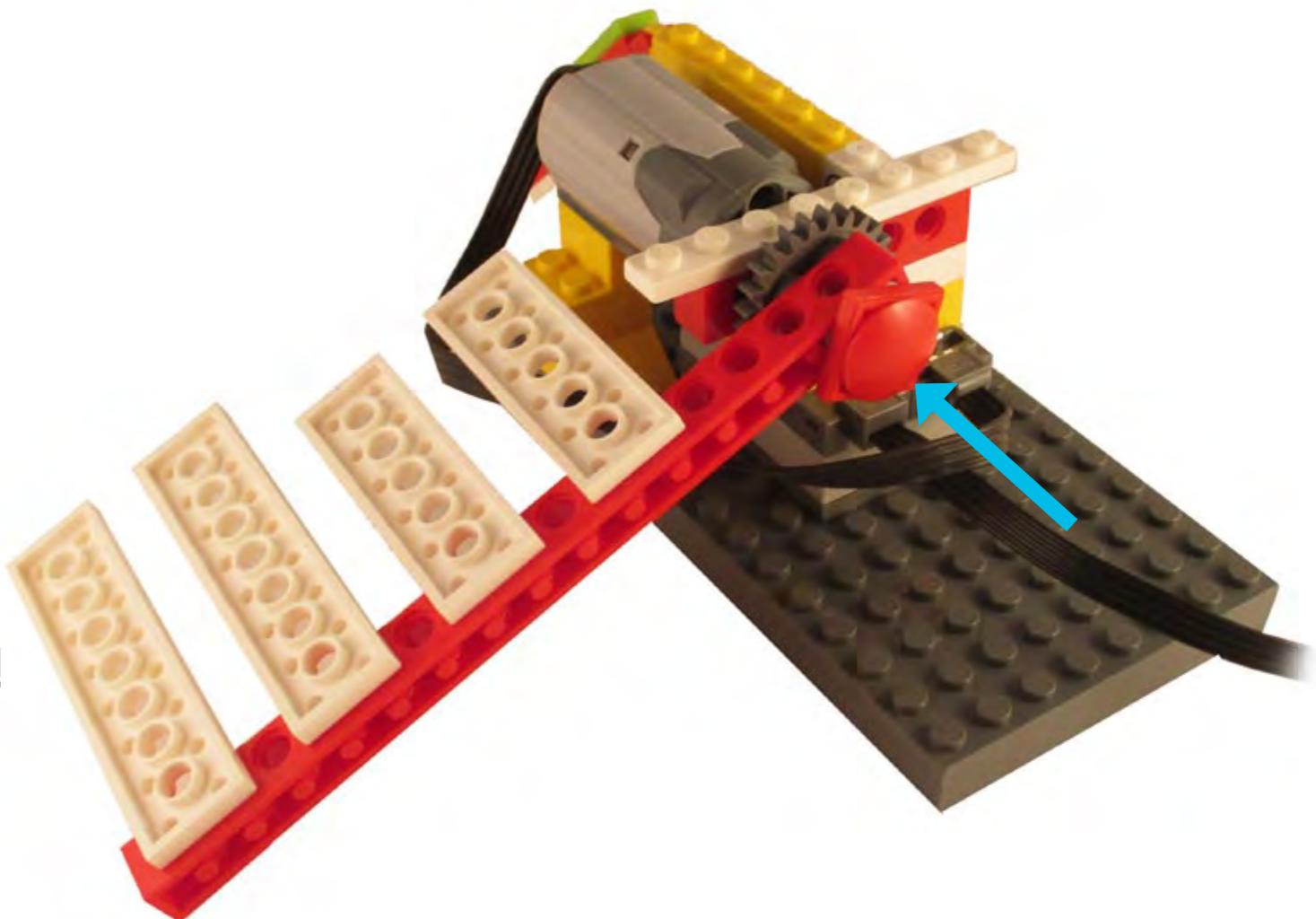


Step 10

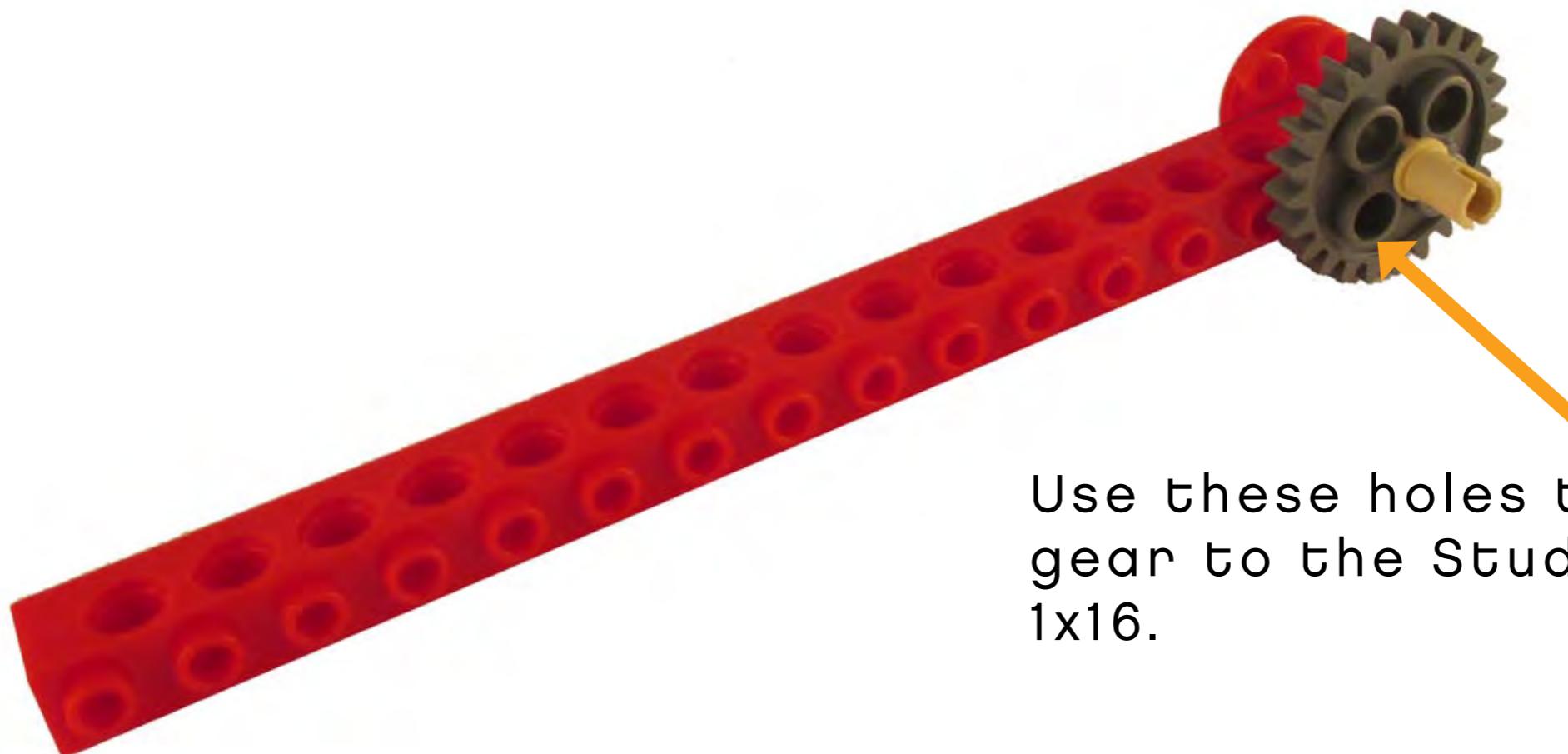
a.



b. Push the Axle
into the Motor!



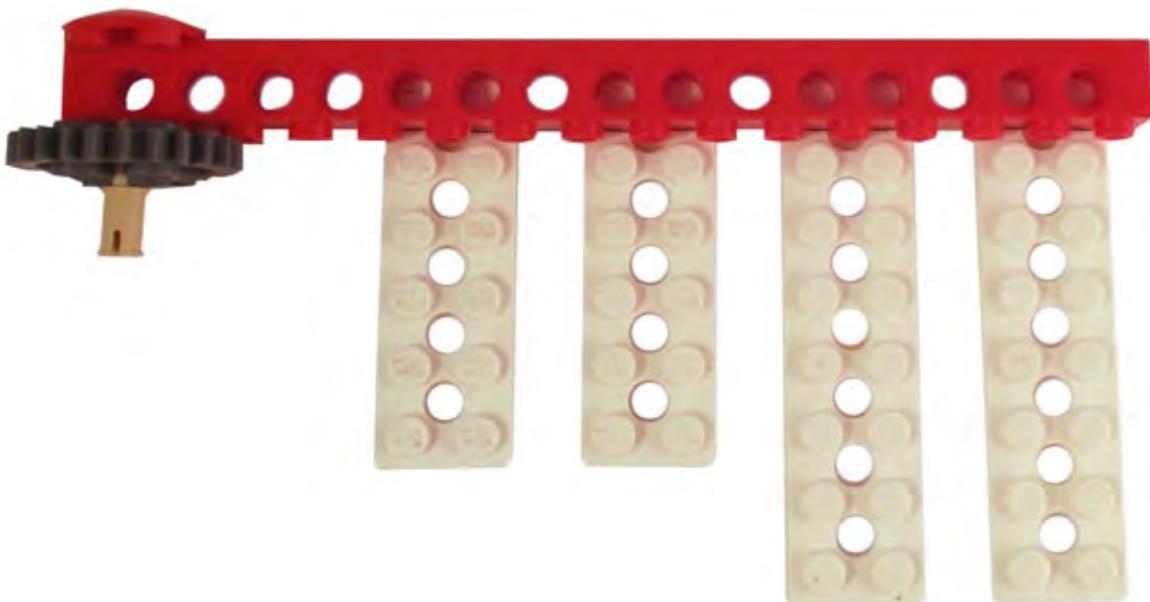
Step 11



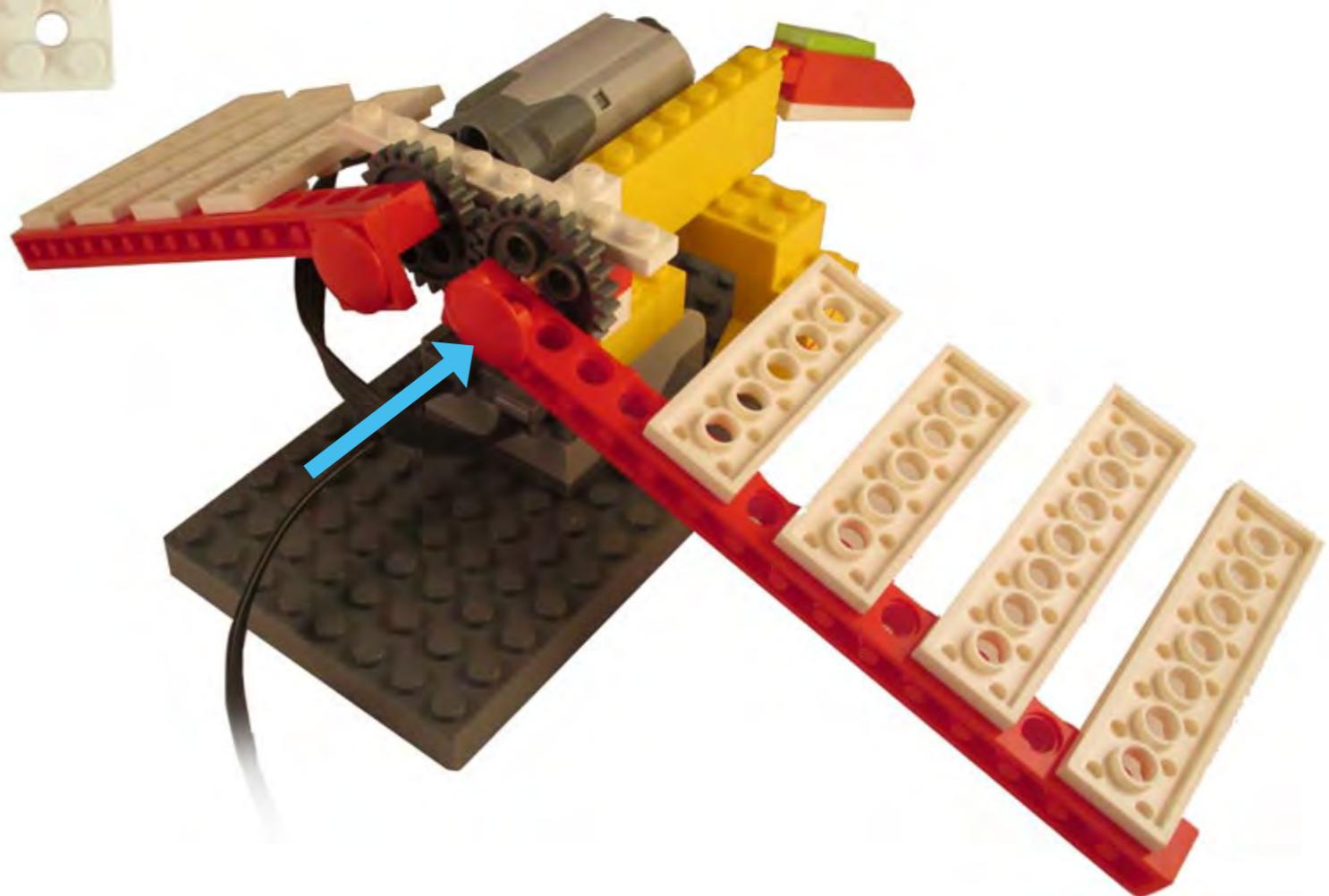
Use these holes to snap the gear to the Studs on the Red 1x16.

Step 12

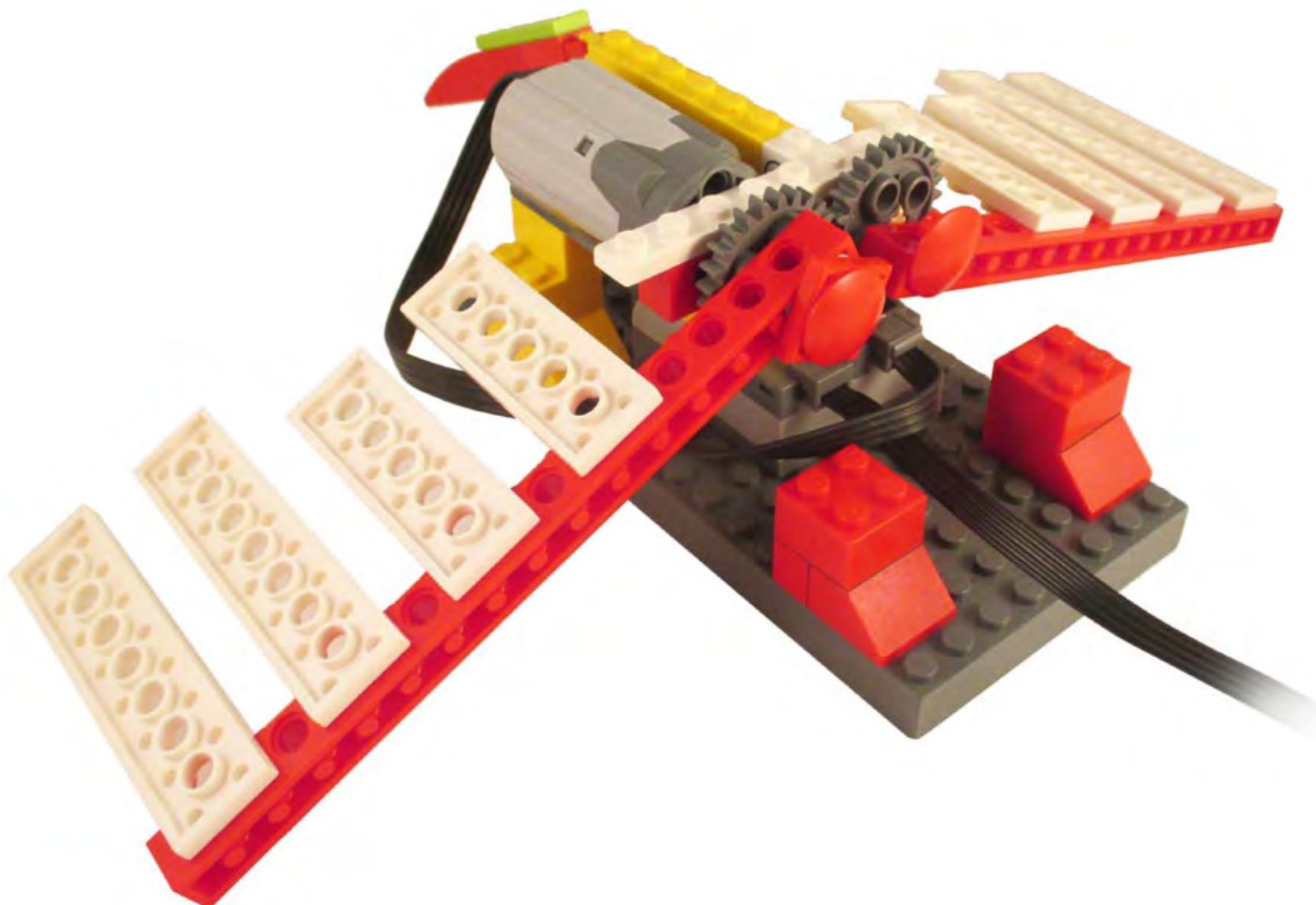
a.



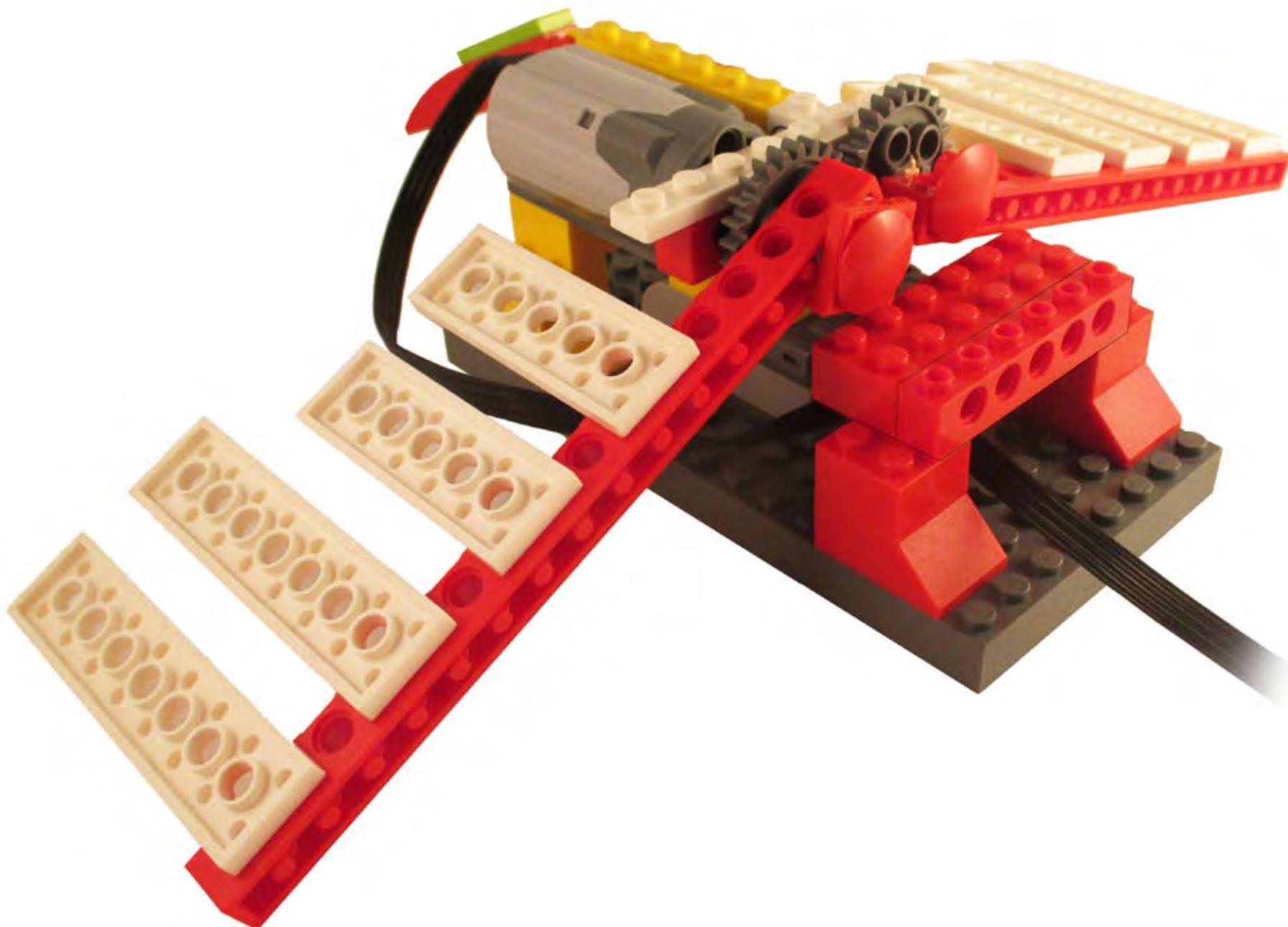
b. Make sure the teeth of
the gears are touching!



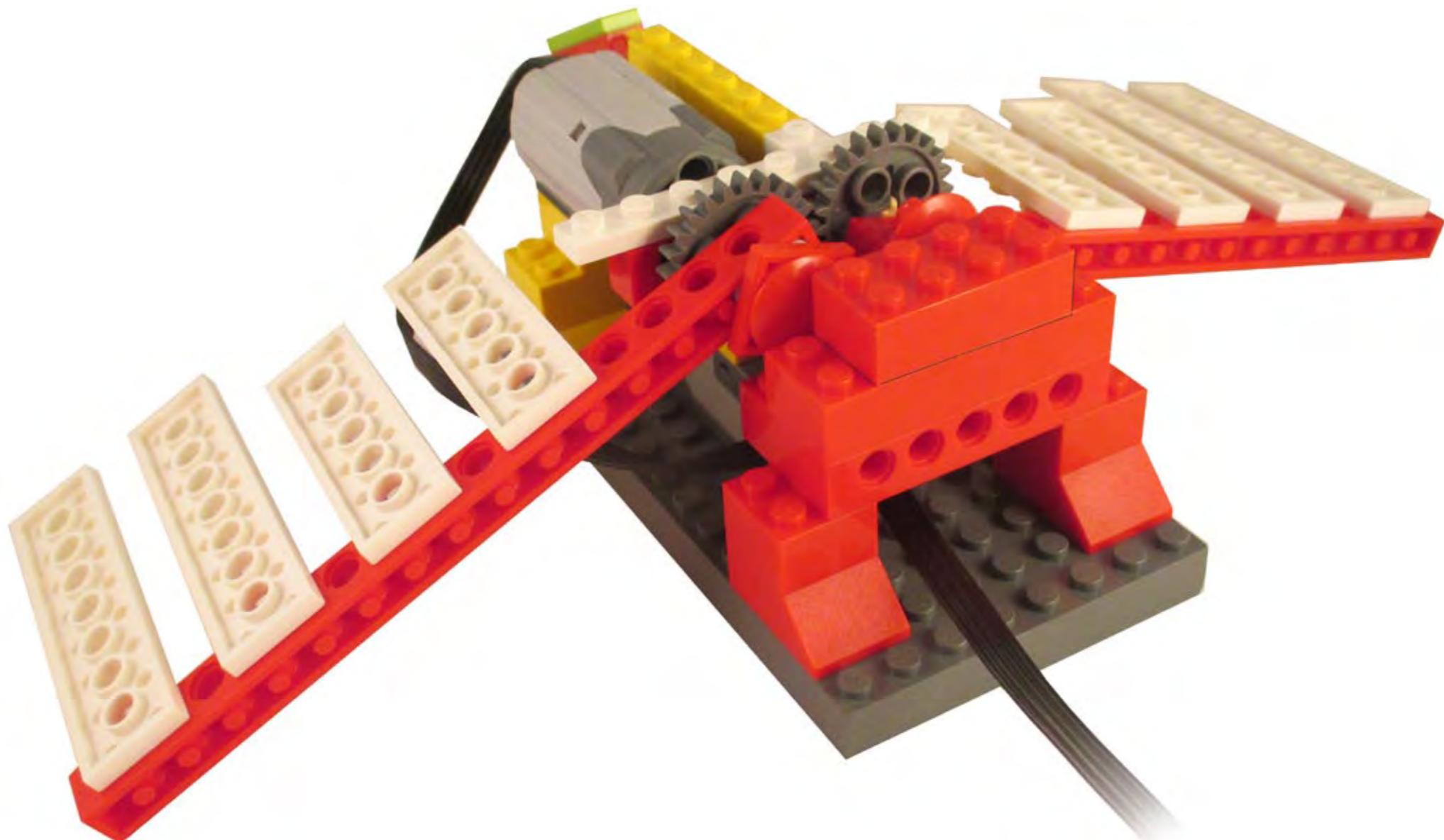
Step 13



Step 14



Step 15

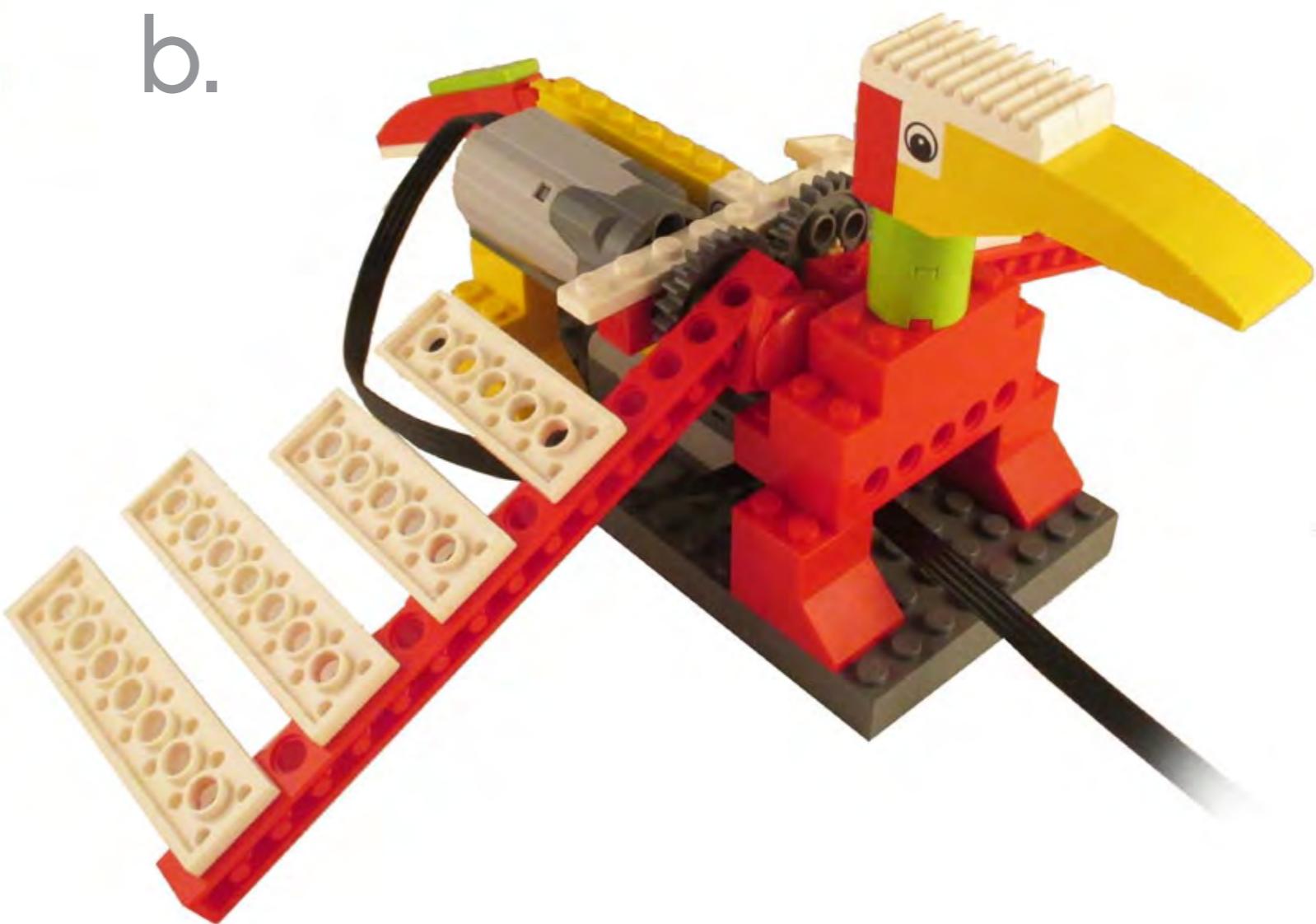


Step 16

a.



b.



Step 17

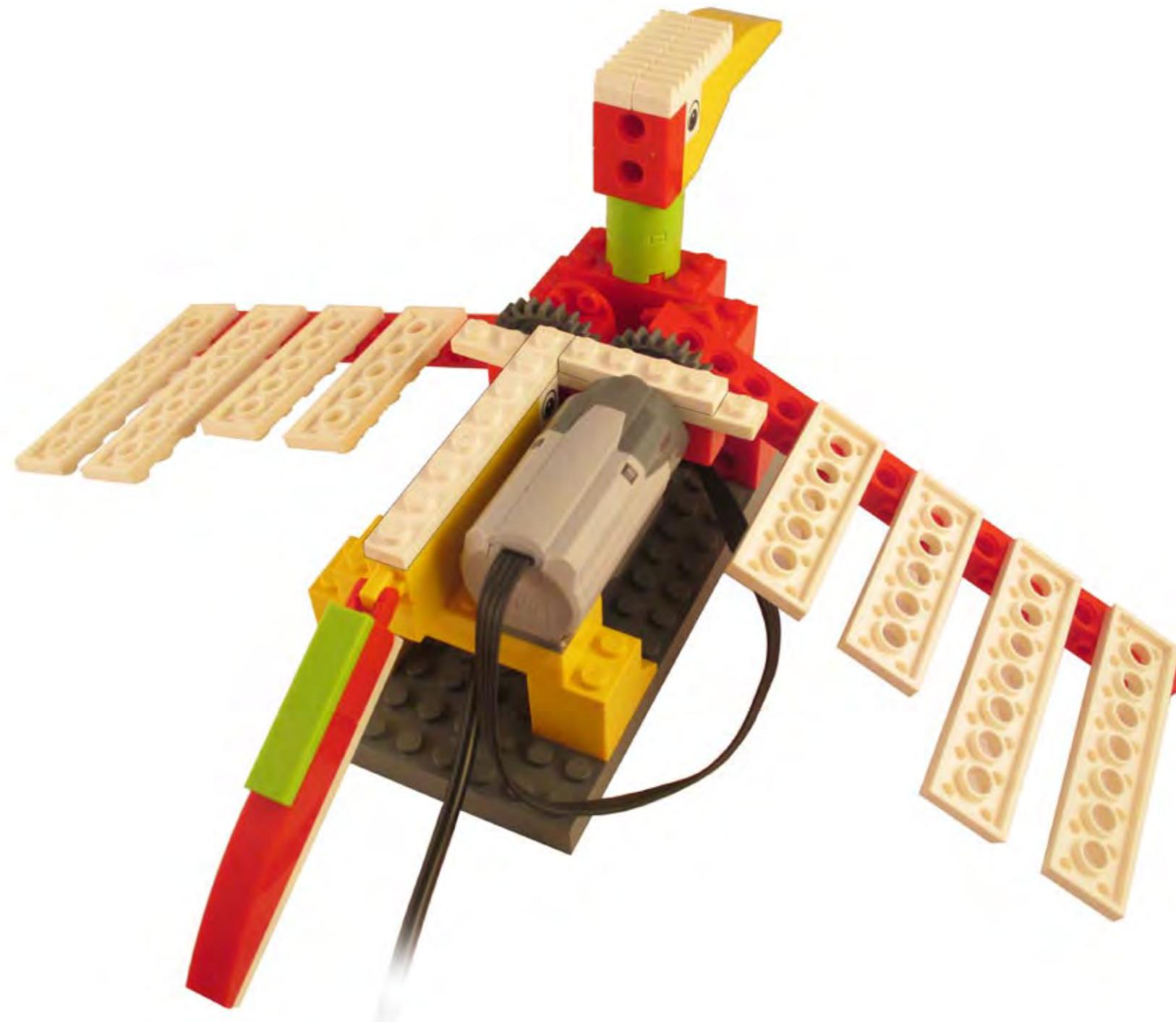
You will Need:



White 1x4
Plate

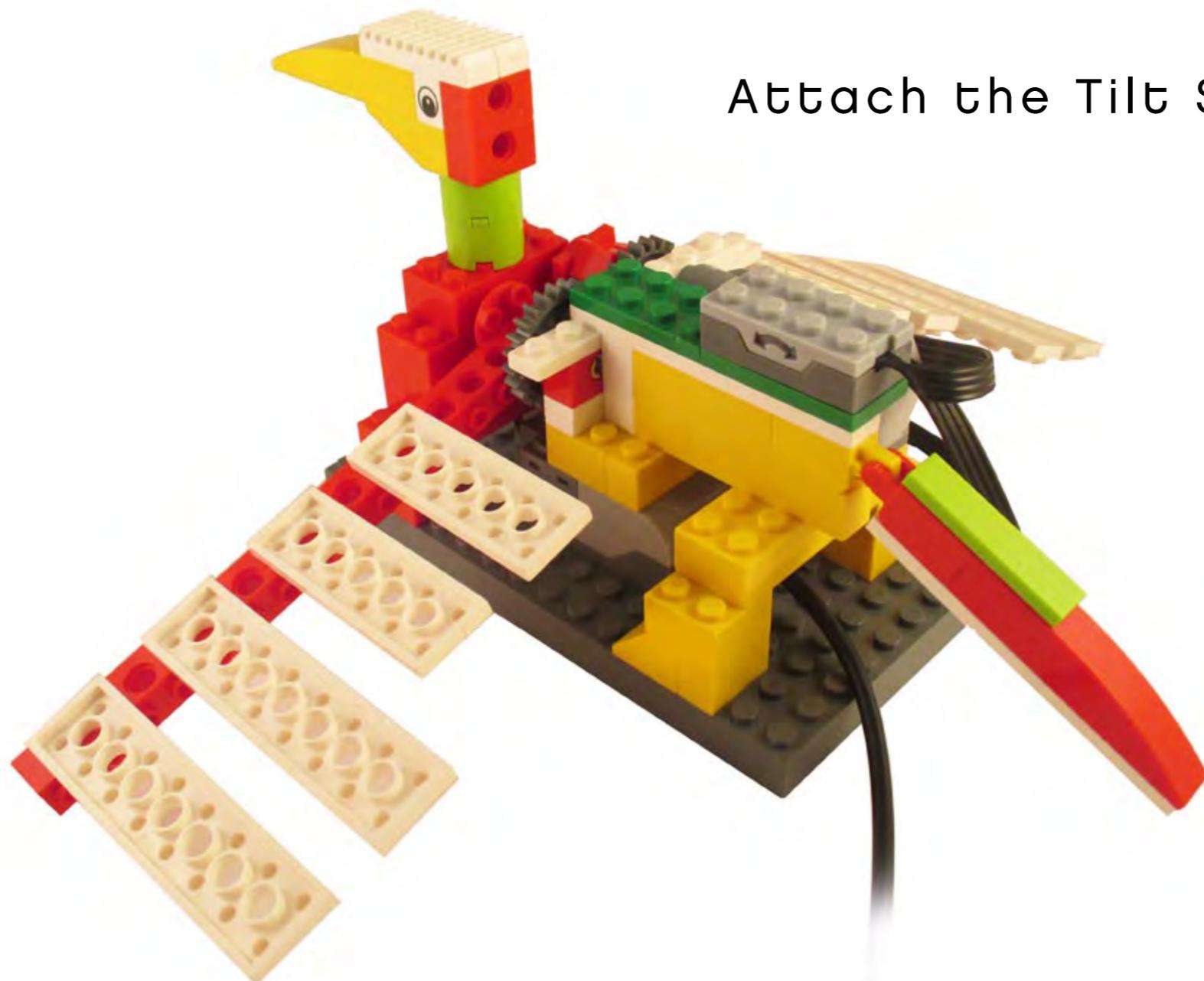


White 1x8
Plate



Step 18

Attach the Tilt Sensor!!



Your Hippogriff is Built!...

Time to Program it!



Programming

These programs turn the motor, rotate the gears, and flap the Hippogriff's wings.



1. Minimize these instructions and open the Lego WEDO software.
2. Program your robot with the program above.
3. If you finish, open the instructions and continue to the extension activities!

Extension 1

This program combines the previous programs and adds the Tilt Sensor to control the motor.

